CHAPTER 13 – TRANSPORT

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13 TRANSPORT

13.1 Introduction

13.1.1 This Chapter considers the access proposals and potential traffic and transport effects associated with the construction and operation of the Proposed Development on the surrounding public road network and on sensitive receptors. This Chapter (and its associated figures and appendices) is not intended to be read as a standalone assessment, and reference should be made to the introductory Chapters of this EIA Report; **Chapters 1-6.**

13.1.2 Additional information which supports this Chapter is presented in the figures and technical appendices as listed within the Figures and Appendices lists on the previous page (see **Volume 3: Figures** and **Volume 5: Technical Appendices**, respectively).

13.1.3 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.

13.1.4 Refer to **Appendix 5.2: IEMA Quality Mark** for details on the competent experts who undertook the assessment.

13.2 Scope of Assessment and Methodology

Consultation

13.2.1 Full details of the consultation process and responses are included in **Chapter 6: Scope and Consultation** and associated appendices, with specific responses relating to traffic and transport summarised in **Table 13.1: Consultation Responses.**

13.2.2 Each Local Authority has been contacted regarding draft Transport Assessments (TAs) for the pre S37 application. A response was received on the 4th of December 2025 from Moray Council who requested further data to enable it to provide comments. The assessment approach follows Institute of Environmental Management and Assessment (IEMA) Guidelines, hereby known as IEMA Guidelines, this approach has been sent to the Highland Council (THC), Moray Council (MC), and Aberdeenshire Council (AC). To date comments have not been received from the local authorities. The Applicant will engage with the Local Authorities regarding structural capacity of assets along the road network and that discussion may be held.

Table 13.1: Consultation Responses

Organisation	Type of consultation	Response	How response has been considered
The Highland Council – Roads Development and Transportation	Scoping Opinion (24/03064/SCOP / ECU00005165) 22/08/2024	TA Requirement: Requirement to assess the existing local public road networks condition and capability to physically and safely accommodate the predicted traffic impacts, whilst remaining safe for other road users. This will be for all construction traffic, not just any Abnormal Indivisible Load (AIL)s.	A TA which addresses these requirements has been undertaken for each of the three Council areas. These TAs are located with **Appendix 13.1, 13.2 and 13.3.** Abnormal Indivisible Loads (AILs) are considered within **Appendix 13.5: Abnormal Load Route Assessment.**
		TA Contents: THC state that the additional TA required in support of any application will need to justify the adequacy of any temporary or permanent points of construction and ongoing operational access proposed from the local public road network. This will include justifying the adequacy of visibility splays, which may require traffic speed data for those sections of public road impacted. The layout and construction form of all accesses will also need to be clarified, and their suitability justified. THC would also expect any submission to justify why each individual new permanent accesses needs to be retained and if so, in what form.	Three TAs are located within **Appendix 13.1, 13.2 and 13.3.** Within the TAs, consideration is given to the locations for temporary and permanent proposed accesses which provide access to the working areas surrounding the tower locations of the Proposed Development, including providing indicative junction layout.
		Physical Mitigation Measures: THC specifically mention both physical changes to the road network and traffic management measures, as the submitted scoping report only makes reference to traffic management measures. Depending on which local public roads will be impacted and the nature and scale of such impacts, it is probable that physical improvements to some roads may be required.	Potential Physical Mitigation measures are identified within the three TAs located within **Appendix 13.1, 13.2 and 13.3**.

Organisation	Type of consultation	Response	How response has been considered
		Sensitivity of Receptors: Regarding quantifying the scale of traffic impacts and the intention in the EIA to use 30% increases in all or HGV traffic and 10% increases in all or HGV traffic at high sensitivity locations from the IEMA Guidelines, they will require any single-track roads with passing places to be identified as high-sensitivity locations. This reflects the sensitivity of such routes to changes in the quantum and nature of traffic flows along them.	This EIA Transport Chapter prepared has taken cognisance of this requirement within the Baseline Conditions section of this report in **Section 13.3.**
		IEMA Guidelines – Capacity: THC indicate that theoretical route capacity assessments are extremely sensitive to changes in the form and alignment of such roads. Also, theoretical capacities for single-track roads with passing places are meaningless. That is because the capacity of such routes is extremely sensitive to the local quantum and directions of flow, the nature of traffic forming those flows and the topography, alignment and forward visibility of each route. THC indicates that any theoretical route capacity information included in the assessments will be challenged if they believe the assumptions made leading to those assessments is questionable in terms of their representation of the actual routes they are meant to represent.	Noted. The capacity assessment of the road network is considered in **Section 13.4** for each Study Area, which follows the DMRB Guidelines. It is acknowledged that there are limits to quantifying the theoretical capacity of roads due to assumptions on the average carriageway width between white line markings (CWID) and the Percentage of Heavy Vehicles (PHV), and that other factors also contribute to the link capacity of a carriageway. This desktop assessment of link capacity has therefore been undertaken based on manual survey data and based on OS Mapping. Additionally, within **Appendix 13.1, 13.2 and 13.3**, the three TAs in each Study Area consider passing places, the surface condition of the roads, and suggest potential physical mitigation measures to manage the impact of the peak development flows on the local road network.

Organisation	Type of consultation	Response	How response has been considered
		Traffic Flows- 12-hour comparison: THC recommends using 12-hour average traffic flows from 07:00 to 19:00, instead of Annual Average Daily Flows (AADF), for the environmental assessment, as AADF would underestimate the traffic impact during the proposed construction working hours.	This Chapter has taken cognisance of the requirement to compare Proposed Development flows with comparative time-period flows, this approach is reflected within **Section 13.3** and within **Section 13.4**.
		Construction Traffic Calculations: The calculation of predicted construction traffic for the Proposed Development must include traffic from tree felling and removal, as well as the likely traffic required to create the proposed compound areas and the movement of the workforce to and from the development.	It is expected that the greatest number of trips will be associated with the formation of access tracks and compounds and that over the temporal assessment, a significantly reduced number of trips will be associated with timber extraction activities which will be undertaken using existing forestry tracks in advance of the formation of access tracks to support tower installation activities. This EIA has therefore focused on assessing the impact of construction traffic generated by the formation of access tracks and tower installation activities. At present there is no available data with which to base assumptions on the likely trip generation associated with establishing the construction compounds (Yards). However, it is assumed that these gated sites will provide storage for materials and welfare facilities for workers. It has been determined by the Principal Contractor that construction materials and workforce movements would originate from the Yards prior to transport to construction working areas (hereby referred to collectively as the 'site').
		Borrow Pits: THC note the reference that "*Materials required for the construction of any new stone access tracks are likely to be obtained from on-site borrow-pits or imported from local quarries*". If suitable GI work has not been undertaken to identify sources of such gravel material along the route and	Noted. This EIA Transport Chapter prepared has taken cognisance of this requirement within **Section 13.4**. For the avoidance of doubt, the assessment assumes that all aggregate is imported to Site and that temporary and permanent access tracks are considered within the indicative trip generation

Organisation	Type of consultation	Response	How response has been considered
		the separate permissions required for such borrow pits have not been secured, they would expect the TA and EIA work to have reviewed the worst case scenario of all materials needing to be imported to site. Also, the predicted profile of traffic movements needs to reflect that the material from temporary access tracks, plus permanent tracks being reduced in scale after the main works are complete, will need to be exported from site.	located within the Outline CTMP found within **Appendix 3.4: Outline Construction Traffic Management Plan.**
		Cumulative Development: THC note that the submitted scoping document says that projects "*of a similar type*" will be considered in terms of cumulative impacts, and notes that from a traffic impacts perspective, all traffic generating new development should be recognised in such assessment work. Highland Council Planning Service will need to clarify what those potential developments could be, when the impacted routes for access to this development have been determined.	Cumulative developments are considered within **Section 13.7,** which sets out SSEN Transmission Developments, and other third party developments which have the potential to have in-combination impacts on the local road network.
Moray Council – Roads Development and Transportation	Scoping Opinion (24/01085/S36SCO / ECU00005165) 22/08/2024	Construction Phasing: Moray Council (MC) note that: "*Even if the majority of the transport impacts associated with this proposed development would take place during the construction period of the project, the extents of these temporary impacts is considerable with the length of the proposed electric line. Insufficient details have been provided to determine whether the development would take place in a phased manner.* *However, considering the complexity and the numbers of pre construction / construction activities involved in this construction project, Transportation considers that the proposed development would take place in a phased manner."*	It should also be noted that EIA assessments are based on the anticipated number of HGVs required to transport materials to and from the installation sites. As a result, the access tracks for each section of the Proposed Development will be constructed consecutively to ensure efficient access throughout the project.

Organisation	Type of consultation	Response	How response has been considered
		Construction Routes and Mitigation: MC state that details of all roads and access junctions affected by construction traffic or abnormal loads will require to be identified and assessed in order to give consideration to the suitability of the selected routes for construction traffic or abnormal loads deliveries. In particular, any routes where there are pinch points or where the road width is generally less than 6 m wide or at any point where the road widths are less than 5.5 m wide, need to be identified and assessed. Where proposed routes are considered unsuitable, further details would be required either to identify alternative routes or to confirm that an acceptable mitigation can be provided.	Consideration is given to this level of detail within the three TAs located within **Appendix 13.1, 13.2 and 13.3**. AILs are considered within **Appendix 13.5: Abnormal Load Route Assessment.**
		Access Points: MC state that a detailed Access Strategy including the expected traffic interface points with the local road network would be required to identify and assess the impact of this development. Additional details would also be required in relation to the proposed access points to the development sites and the nature of these access points such as permanent or temporary.	Consideration is given to the development of the access strategy within the three TAs located within **Appendix 13.1, 13.2 and 13.3.** Within the TAs, consideration is given to the locations for permanent and proposed accesses which provide access to the working areas surrounding the tower locations of the Proposed Development, including the provision of indicative junction layouts.
		Mitigation Measures: MC state that in principle, it is recommended that any road affected by construction traffic would require some degree of roadway improvements depending on the existing condition and expected construction / abnormal traffic unless it is a 'A' class road. Therefore, it is important to develop the overall Access Strategy to the development considering the current conditions of the existing local road network.	Potential Physical Mitigation measures are identified within the three TAs located within **Appendix 13.1, 13.2 and 13.3.** AILs are considered within **Appendix 13.5: Abnormal Load Route Assessment.**

Organisation	Type of consultation	Response	How response has been considered
		TA Requirement: MC state that the submitted methodology for the 'Traffic and Transport Chapter' does not outline a robust approach to identify the impacts from the Proposed Development. Therefore, Therefore, MC requests a number of aspects to the included in the Chapter 13 'Traffic and Transport. Furthermore, neighbouring local authorities and Transport Scotland should be consulted for further recommendations and Guidelines.	Noted. Methodology for the EIA Transport Chapter is located in **Section 13.2**, within this Transport Chapter To supplement the assessment within this Traffic and Transport Chapter, and to satisfy the recommendations from MC, three TAs have been prepared and are appended to this Chapter. These are included within **Appendix 13.1, 13.2 and 13.3.**
		TA Contents – Policy and Guidelines: MC state that the TA should include discussions on Local / National Transport Policies / Guidelines documents related to this development as indicated in the policies section of this document or as identified by the appointed Transport Consultant to this development project. MC also provide a link to the Scottish Transport Assessment Guidelines published by the Scottish Government.	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.** The Transport Assessment Guidelines published by the Scottish Government highlighted by MC has been considered in preparation of this Transport Chapter and within the TAs appended.
		TA Contents – Phasing: MC state that the TA should include details of the Proposed Development including the Phasing Plan, Access Strategy and Construction Programme	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.** The indicative Construction Programme is included within **Chapter 3: Project Description.**

Organisation	Type of consultation	Response	How response has been considered
		TA Contents Trip Generation: MC state that the TA should include detail of the proposed access routes for each phase of the development including the anticipated construction / operational traffic levels of each access route including daily / weekly / monthly frequency broken down by vehicle type / size and each phase as proposed. Expected construction traffic generation during the peak construction periods would also be required as opposed to the average traffic generation over a period of time. The anticipated timber traffic associated with this development should be included into the assessment and TA report should make refences to the proposed forestry clearance activities associated with this project.	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.**
		TA Contents – Mitigation Measures: MC state that the TA should include details and assessment of the impacted access routes to the development sites in order to understand the level of impact to the local road network during the construction period of the development and proposed mitigatory measures such as new passing places, road widening and edge strengthening. In addition, MC state that the TA should consider road safety and traffic delay implications need to be considered and possible mitigation measures provided where necessary.	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.**

Organisation	Type of consultation	Response	How response has been considered
		TA Contents – Access Points: MC state that the TA should provide details of proposed access locations onto the public road for construction vehicles for each phase, including the required visibility splays and access specifications. Any permanent, access required onto the public road shall be constructed to an adoptable standard over the length of the largest vehicle which will require access, and the first 20 metres shall be wide enough to allow two-way traffic. Technical Approval would be required for the access to demonstrate proposals will prevent water and loose materials from being discharged onto the public road. In addition, MC later state that they have no objections in regard to operational traffic, however, confirm that details should be submitted regarding any retained / permanent access point to be used during the operational period of the project for maintenance purposes.	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.** It is noted that the indicative form of the proposed bellmouth access junctions are identified within the TAs and it consider that the exact location and form could be determined via Condition. Detail regarding the locations of the permanent and temporary access junctions are included within the Outline CTMP found within **Appendix 3.4: Outline Construction Traffic Management Plan**.
		TA Contents – Swept Path Assessment: MC state that the TA should provide swept path assessments for the proposed access arrangements will be required to demonstrate that the largest anticipated vehicle (construction and operation) can be accommodated without over-run of the road verges.	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.**
		TA Contents – Aggregate Movements: MC state that the TA should provide details for the volume and tonnages of materials being transported to each access point on the public road are required. Including number of loads, source of material and route to site. Assessment should be based on assumptions for development with and without borrow pits.	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.** The assessment assumes that all aggregate is imported to Site and that temporary and permanent access tracks are considered within the indicative trip generation located within the Outline CTMP found within **Appendix 3.4: Outline Construction Traffic Management Plan**.

Organisation	Type of consultation	Response	How response has been considered
		TA Contents – Outdoor Access Management: MC state that the TA should provide details of proposed diversion routes for local footpaths / cycle tracks during the construction period and associated signage (to be agreed with the Access Manager).	Noted. Prior to the commencement of any on-site activities, a finalised Outdoor Access Management Plan (OAMP) would be preprepared and agreed with the Local Authorities. The OAMP would include a number of measures to reduce the effects of the construction of the listed PRoW and core paths, crossing points and management of access locations. An outline OAMP is included within **Appendix 14.2: Outdoor Access Management Plan.**
		TA Contents – Crossings: MC state that the TA should provide details of the locations of all electric line and haul road crossings within that phase (assumed to mean 'construction phase') of the development and the proposed works associated with the crossings. In addition, MC state that the TA should provide details of the locations of all electric line crossing points, including their proximity to the public road and details of any temporary fencing or other measures to protect the users of the public road during the construction period.	Noted. This is considered within the TAs, located within **Appendix 13.1, 13.2 and 13.3.** It is noted that while traffic management measures are considered within each of the TAs, where the Proposed Development is anticipated to cross haul roads and other public roads, the management of this area constitutes a working area and will be responsibility of the Principal Contractor to provide suitable Site Safety in relation to the receptors at these locations.
		TA Contents – Parking Provision: MC state that the TA should provide details of parking provision for staff and construction vehicles during the construction period.	Noted. At present there is no available project information to confirm the form and location of parking for staff and other construction vehicles. However, it is confirmed within the TAs located within **Appendix 13.1, 13.2 and 13.3** that no parking will be permitted on the public road network in the vicinity of the Proposed Development. It is also noted that Yard locations will be gated sites providing storage for materials and welfare facilities for workers and therefore it is considered that parking would be made available on the Yard locations.

Organisation	Type of consultation	Response	How response has been considered
		TA Contents – Baseline Assessment: MC state that when considering baseline conditions of the Study Area within the TA, that consideration should be given to whether the Applicant intends to carryout traffic surveys for this study, location / starting date and duration of traffic surveys should be carried out after consultation with MC. MC could provide the recent traffic data for A941 and A940.	Noted. With the current timescales for assessment, a draft TA was submitted to MC on the 3 December 2024 to enable dialogue on the assessment (and the data used) prior to the submission of the application for s37 consent. WSP has provided data on behalf of the Applicant to MC to assist in the review of the draft TA. However, WSP are yet to receive any comments back from MC.
		Cumulative Impacts: MC state that assessment of the cumulative impacts of the construction traffic (should also) consider the already consented major developments (such as Windfarm / Battery Storage) and developments in the construction phase such as Moray West Onshore Transmission Infrastructure project should also be included in the report.	Noted. Cumulative developments are considered within **Section 13.7,** which sets out SSEN Transmission Developments, and other third party developments which have the potential to have in-combination impacts on the local road network. Some of these developments include Battery Energy Storage Systems (BESS), and Onshore Windfarm Grid connections.
		Sensitivity of Receptors: MC state that the submitted scoping report methodology avoids detailed assessment of roads where, according to the sensitivity rules of assessment, the significance of the effects are to be stated as **negligible**. MC states that statistical assessment of narrow rural roads without proper passing facilities / with narrow and weak structures / road pavements with poor structural integrity for HGV traffic, would not give a robust assessment for the suitability of the roads for the additional construction traffic. Therefore, MC Transportation team state that they would not recommend disregarding any road from further assessment solely based on the statistical checks as indicated in the section 12.3.2 of the Scoping report. Any road (other than the 'A' class roads) which is likely to be used by construction traffic should be assessed to identify the impacts from the	This EIA Transport Chapter has taken cognisance of this requirement within the Baseline Conditions section of this report in **Section 13.3** and within the Assessment sections located within **Section 13.4.** For the avoidance of doubt, all roads where there are baseline traffic flows for have been quantitatively and qualitatively assessed. For roads where there are no available baseline traffic flow flows, these have been assessed assuming a 100% worst case scenario.

Organisation	Type of consultation	Response	How response has been considered
		construction traffic and to understand the suitability to use by the HGVs.	
		Access Route Assessment: MC state that an Access Route Assessment for Abnormal Loads should be included in any submission.	Noted. The largest vehicles associated with the development are mobile cranes of 150 tonne (t) and 250 t as necessary. Mobile cranes have been assessed as AILs through an Abnormal Load Route Assessment (ALRA) which is considered within **Appendix 13.5: Abnormal Load Route Assessment.** For the purposes of HGV assessments, the longest vehicle type making the most frequent trips to site will be a 16.5 m artic HGV and this has been used to inform the TAs located within **Appendix 13.1, 13.2 and 13.3.**
		Outline Construction Traffic Management Plan (CTMP): MC state that a CTMP should be included in any submission.	Noted. The Outline CTMP is located within **Appendix 3.4: Outline Construction Traffic Management Plan.**
		Operational Traffic Management Plan (OTMP): MC state that a OTMP would be sought as a condition of any planning consent to know the requirements of permanent access for maintenance purposes of the electric line and towers	Noted.
		Agreements: MC state that the following will be required: • a wear and tear agreement; • road construction consent / road opening permit; and • details of parking. These details will need to be discussed with the Roads Authority and approved once further details of the proposals and requirements have been submitted and considered. Further consideration in terms of the required road bond will be subject to the submission of further details for the	Noted. The Outline CTMP is located within **Appendix 3.4: Outline Construction Traffic Management Plan.** The Outline CTMP is an outline document, fixed at the time of submission to inform the EIA and is in to a detailed CTMP. The indicative measures proposed will be developed as the project progresses up to the construction stage. The Outline CTMP will be further developed by the Principal Contractor, in conjunction with THC, MC and AC and Transport Scotland (TS) and other appropriate stakeholders.

Organisation	Type of consultation	Response	How response has been considered
		Proposed Development and assessments of the road condition.	Therefore, is considered that a wear and tear agreement, Road Construction Consent / Road Opening Permit, and details of Parking (in addition to the aforementioned mitigation measures) can be secured via condition.
		Other Teams to Consult: MC have identified the following teams to consult as part of the s37 application to identify constraints once more details are provided: • Roads maintenance; • Traffic; and • Structures.	Noted. As previously mentioned, MC have been consulted with the draft TA (Proposed TA) on behalf of the Applicant and which WSP are yet to receive feedback on.
Network Rail	Scoping Opinion (211 2024 / ECU00004997) 19/07/2024	Traffic Impact Assessment: Network Rail State that a Traffic Assessment should be included to assess the effects of construction traffic on existing traffic flows and the public road network. Preferred construction traffic routes should be indicated. This will enable Network Rail to assess the possible impacts where / if the traffic crosses over / under our infrastructure and the suitability of these crossings. In addition, Network Rail state that details of proposed construction and engineering works in the vicinity of the railway line. Any works over / adjacent to the railway corridor will be subject to further discussion and agreement with Network Rail.	Noted. This detail has been included within a Technical Note which is included within **Appendix 13.4: Network Rail – Traffic Impact Assessment**.
Aberdeenshire Council – Roads Development and Transportation	Scoping Opinion (211 2024 / ECU00004997) 19/07/2024	Aberdeenshire Council (AC) state that as the proposed corridor will be crossing the Trunk Roads A96 (T) and A90, then Transport Scotland should be consulted throughout this study, where proposed works may impact these roads.	Noted.

Organisation	Type of consultation	Response	How response has been considered
		AC would be in a position to comment on specific locations for any new site compounds, temporary and permanent site accesses once these have been confirmed.	Noted. The locations of the compound (also referred to as Yards), and site accesses are indicative at this stage and which this Chapter has been based on. It is considered that the exact location of these can be agreed in consultation.
		It is understood that construction of the pylon towers would take place on-site, as opposed to the towers being pre constructed and then transported to their intended locations. Although this may have a favourable impact upon the possible number of over-sized loads which will require transportation on the local road network, there will still be the requirement for significant construction movements throughout the construction period. For this it will be necessary for the scheme promoter to submit detailed Construction Traffic Management Plans to Aberdeenshire Council, as well as to Transport Scotland (where proposed construction traffic routes are impacting the Trunk Road Network – i.e. the A90 and A96).	Noted. The largest vehicles associated with the development are mobile cranes of 150 t and 250 t as necessary. Mobile Cranes have been assessed as AILs through an ALRA which is considered within **Appendix 13.5: Abnormal Load Route Assessment.** For the purposes of HGV assessments, the longest vehicle type making the most frequent trips to site will be a 16.5 m artic HGV and this has been used to inform the TAs located within **Appendix 13.1, 13.2 and 13.3.** An Outline CTMP has been included within **Appendix 3.4: Outline Construction Traffic Management Plan** which sets out the proposed construction traffic routes and potential mitigation measures. The Outline CTMP is an outline document, fixed at the time of submission to inform the EIA and is intended to be expanded into a detailed CTMP. The indicative measures proposed will be developed as the project progresses up to the construction stage. The Outline CTMP will be further developed by the Principal Contractor, in conjunction with THC, MC and AC and Transport Scotland (TS) and other appropriate stakeholders.
		At this stage, Roads Development has no objections to the proposed corridor route, although they would welcome the opportunity to comment further as and when construction traffic routes are identified, as well as temporary and permanent work sites and their accesses.	Noted. Draft TA was submitted for comment, however, to date no response has been received.

Organisation	Type of consultation	Response	How response has been considered
Transport Scotland	Scoping Opinion (211 2024 / ECU00004997) 19/07/2024	Transport Scotland (TS) advise that any proposed changes to the trunk road network or any crossing of the trunk road must be discussed and approved (via a technical approval process) by the appropriate Area Managers.	Noted.
		TS considers the sensitivity rule threshold approach to be appropriate.	Noted.
		TS advise that base traffic flows will be obtained from Transport Scotland and the Department of Transport's (DfT) Road Traffic Statistics website. This is considered appropriate; however, they would ask that "estimated" data from the DfT site is not used.	Noted. Where possible manual classified counts have been used and where estimated counts have been used, this is due to manual data being outdated. These estimated classified counts have been supported by qualitative assessment to substantiate any statistical assessment.
		TS advise that base traffic data will require to be factored to the peak construction year flows, using National Road Traffic Forecasts (NRTF) Low Growth.	Noted. Low Growth NRTF97 Factors have been used.
		TS advise that any impacts associated with the operational phase of the development are to be scoped out of the EIA. They would consider this to be acceptable in this instance.	Noted.
		TS advise no mention is made within the Scoping Report of the need for any loads to be delivered using Abnormal Indivisible Loads (AILs). They would state that in the event such loads are required, Transport Scotland will require to be satisfied that the size of loads proposed can negotiate the selected route and that their transportation will not have any detrimental effect on structures within the trunk road route path. A full Abnormal Loads Assessment report should be provided that identifies key pinch points on the trunk road network. Swept path analysis should be undertaken and details provided with regard to any required changes to street	Noted. The largest vehicles associated with the development are mobile cranes of 150 t and 250 t as necessary. Mobile Cranes have been assessed as AILs through an ALRA which is considered within **Appendix 13.5: Abnormal Load Route Assessment.** For the purposes of HGV assessments, the longest vehicle type making the most frequent trips to site will be a 16.5 m artic HGV and this has been used to inform the TAs located within **Appendix 13.1, 13.2 and 13.3.**

Organisation	Type of consultation	Response	How response has been considered
		furniture or structures along the route. If no AILs are required, no further information is required in this regard.	
British Horse Society	Scoping Opinion (211 2024 / ECU00004997) 19/07/2024	The British Horse Society's 'Advice on Construction Sites' (November 2022) provides Guidelines for managing construction near equestrian public rights of way. Key recommendations include briefing staff, displaying warnings, avoiding sudden movements, and halting activity when horses are nearby. Construction traffic should give priority to horses and turn off engines until they are 20 meters away.	Noted. This will be addressed through approporiate traffic management to be identified through CTMP.
Speyside Community Council	Scoping Opinion (211 2024 / ECU00004997) 19/07/2024	Speyside Community Council make note of the need to consider traffic generated by major planning applications in section 14, 15, 16, 17, 18, and 19.	Noted. Assessment of Cumulative Effects can be found in **Section 13.7**.

Scope of the Assessment

13.2.3 The assessment is made with reference to the Proposed Development as described in **Chapter 3: Project Description** and the EIA Scoping Report and Scoping Opinion described in **Chapter 6: Scope and Consultation** and **Appendix 6.3 Scoping Response Matrix.**

13.2.4 The assessment is structured around the consideration of seven potential environmental effects related to traffic and transport within the Study Area (illustrated in **Figure 13.1, Figure 13.4, and Figure 13.7**) as identified by the IEMA Guidelines for Environmental Impact Assessment[1].

13.2.5 A number of the impacts which are identified within the IEMA Guidelines fall out with the scope of this Chapter and are discussed and assessed in detail within relevant Chapters of Volume 2 of the EIA Report. These include:

- Landscape and Visual (**Chapter 7: Landscape and Visual Impact**);
- Ecology (**Chapter 8: Ecology**);
- Cultural Heritage (**Chapter 12: Cultural Heritage**); and
- Noise and Vibration (**Chapter 16: Noise and Vibration**).

13.2.6 Local air quality and dust / dirt impacts have not been assessed in detail, however actions to ensure appropriate management of these impacts is included in **Appendix 3.3: Outline Construction Environmental Management Plan (CEMP).**

Structure of this Transport Chapter

13.2.7 The assessment has fully considered the potential transport and access effects arising from the construction phase 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.

13.2.8 The Study Area for the Proposed Development has been divided into the three local authority areas and includes a total of 25 defined construction traffic access routes (hereafter known as Sections), which have been determined through the three Transport Assessments (TAs), found within **Appendix 13.1, 13.2 and 13.3**. Each Section has been broken down into Study Links. The Study Links are defined segments representing a continuous stretch of a single road between two key points, such as intersections with major roads or other study links. These Study Areas are shown in **Figure 13.1, Figure 13.4 and Figure 13.7**, and are described as follows:

- Study Area 1: The Highland Assessment - Fanellan (at Beauly) to Cairn Duhie (at Ferness), Section 1 - 11;
- Study Area 2: The Moray Assessment - Cairn Duhie (at Ferness) to Coachford (west of Keith), Section 12 - 19; and
- Study Area 3: The Aberdeenshire Assessment - Coachford (west of Keith) to Netherton (at Peterhead), Section 20 – 25.

13.2.9 This assessment considers the impacts on each road link throughout each of the Study Areas separately. As there would be an overlap of construction activities between each of the Study Areas, the total combined development traffic trips are considered when assessing the impact on each of these road links.

1 Institute of Environmental Management and Assessment (IEMA), (2023). Environmental Assessment Traffic and Movement - July 2023. Available at: https://www.isepglobal.org/resources/blogs/2023/07/12/iema-guidance-ea-of-traffic-and-movement/ [this, and all subsequent links, were accessed on [August, 2025]].

Legislation, Policy and Guidelines

13.2.10 The assessment has been undertaken in accordance with the planning policy and the specific Guidelines:

- The Scottish Government – Planning Advice Note (PAN) 75 – Planning for Transport[2] (2005);
- Transport Scotland (TS) – Transport Assessment Guidelines[3] (2012);
- The Scottish Government - The National Planning Framework 4 (February 2023)[4];
- Scotland Government – National Transport Strategy (2023)[5]
- IEMA - Environmental Assessment Traffic and Movement[6] (2023); and
- National Highways et. al. (various dates). Design Manual for Roads and Bridges, Volume 15, Section 1, Part 1 The Nesa Manual
- The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017[7]

Study Area

13.2.11 Access to the Proposed Development will be taken from a number of access points across the Study Area. For the purposes on this assessment, an access point is defined as the location where construction traffic is anticipated to leave the public road network. It is anticipated that access can be made via upgrades to existing junctions, and creation of new temporary and permanent access junctions. These access point locations are shown in such detail within **Figure 3.1: Site Layout Plan**.

13.2.12 While the Proposed Development crosses a number of classified roads, including the A9 (T) and A96 (T) which form part of the strategic road network, the nature of the Proposed Development results in it passing through predominantly rural areas. Construction activities would be supported by the use of existing roads and forestry tracks where practicable, with new stone tracks constructed where necessary.

13.2.13 The Proposed Development crosses the following roads, detailed within **Table 13.2**, and it is intended that these roads form the basis of the Study Area for the purpose of the assessment.

13.2.14 The extent of the Study Area for each of the Proposed Development sections is shown in **Figure 13.1, Figure 13.4 and Figure 13.7.**

2 Scottish Government, (2005) Planning Advice Note (PAN) 75 – Planning for Transport. Available at: https://www.gov.scot/publications/planning-advice-note-pan-75-planning-transport/

3 Transport Scotland, (2012). Transport Assessment Guidance (July 2012). Available at: https://www.transport.gov.scot/media/4589/planning_reform_-_dpmtag_-_development_management__dpmtag_ref__17__-_transport_assessment_guidance_final_-_june_2012.pdf

4 Scottish Government, (2023). National Planning Framework 4 (February 2023). Available at: https://www.gov.scot/publications/national-planning-framework-4/

5 Transport Scotland, (2023). National Transport Strategy: Third Annual Delivery Plan 2023-24. (Online). Available at: https://www.transport.gov.scot/media/h5omsrtk/national-transport-strategy-third-annual-delivery-plan-2023-24.pdf

6 Institute of Environmental Management and Assessment (IEMA), (2023). Environmental Assessment: Traffic and Movement (July 2023). Available at: https://marketplace.mimeo.co.uk/IEMAonlinepublicationsshop#name=13

7 legislation.gov.uk, (2017). The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017. (Online). Available at: https://www.legislation.gov.uk/ssi/2017/102/contents

Table 13.2: Study Area

Local Authority	Section	Section Link	Study Area
Highland	Section 1	HC-C1106-01	HC-C1106-01: C1106 between Fanellan and the U1604
		HC-C1106-02	HC-C1106-02: C1106 between the U1604 and A831
		HC-U1604-01	HC-U1604-01: U1604 between the C1106 and the C1108
		HC-C1108-01	HC-C1108-01: C1108 between the A833 and the U1604
		HC-A831-01	HC-A831-01: A831 between the A862 and C1106
		HC-A833-01	HC-A833-01: A833 between the A862 and C1108
		HC-A862-01	HC-A862-01: A862 between the A831 and C1116
	Section 2	HC-A862-02	HC-A862-02: A862 between the C1116 and Inchmore
		HC-C1116-01	HC-C1116-01: C1116 between A862 and U2395
		HC-U2395-01	HC-U2395-01: U2395 between C1116 and Achnagairn
		HC-C1100-01	HC-C1100-01: C1100 between A862 and Cairn
		HC-C1102-01	HC-C1102-01: C1102 between A862 and U1568
		HC-U1568-01	HC-U1568-01: U1568 between C1102 and U2362
		HC-U2362-01	HC-U2362-01: U2362 between U1568 and Newtonhill
		HC-U1556-01	HC-U1556-01: U1556 between A862 and Newtonhill
	Section 3	HC-C1097-01	HC-C1097-01: C1097 between A862 and Newtonhill
		HC-U1797-01	HC-U1797-01: U1797 between A862 and C1097
		HC-C1118-01	HC-C1118-01: C1118 between A862 and U1160
		HC-U1160-01	HC-U1160-01: U1160 between C1118 and U125S
		HC-U1255-01	HC-U1255-01: U1255 between U1160 and Leachkin
		HC-U2370-01	HC-U2370-01: U2370 between A862 and U2374
		HC-U2374-01	HC-U2374-01: U2374 between U2370 and Lentran House
		HC-A862-03	HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness
		HC-A862-04	HC-A862-04: A862 between Scorguie Rd, Inverness and the A82 (T)
		HC-C1114-01	HC-C1114-01: C1114 between A862 and U1560
		HC-C1114-02	HC-C1114-02: C1114 between U1560 and Kirkton Muir
		HC-U1560-01	HC-U1560-01: U1560 between C1114 and Bunchrew Burn
	Section 4	HC-C1060-01	HC-C1060-01: C1060 between A82 (T) and Kirkhill and Bunchrew
		HC-U2268-01	HC-U2268-01: U2268 between A82 (T) and Loch Ness Country House
	Section 5	HC-A8082-01	HC-A8082-01: A8082 between the A9 (T) and A82 (T)
		HC-B862-01	HC-B861-01: B861 (southwest of Inverness) between Scaniport and Cullaird
		HC-C1040-01	HC-C1040-01: C1040 between the C1064 and B862
		HC-C1064-01	HC-C1064-01: C1064 between the A8082 and U1096
		HC-U1096-01	HC-U1096-01: U1096 between C1064 and Holm Burn
	Section 6	HC-B851-01	HC-B851-01: B851 between Inverarnie and the A9

Local Authority	Section	Section Link	Study Area
		HC-B861-01	HC-B861-01: B861 between Cairn and the B851
		HC-C1068-01	HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie
	Section 7	HC-B851-02	HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot
		HC-C1056-01	HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich
		HC-B9154-01	HC-B9154-01: B9154 between the A9 (T) and C1056
	Section 8	HC-B9090-01	HC-B9090-01: B9090 between the A96 (T) and C1056 (including B9006)
		HC-C1056-02	HC-C1056-02: C1056 between B9090 and Culloden Viaduct
		HC-U1169-01	HC-U1169-01: U1169 east of the C1056
	Section 9	HC-B9090-02	HC-B9090-02: B9090 between C1056 and Cawdor
		HC-U3151-01	HC-U3151-01: U3151 between U1169 and B9090
		HC-U1169-02	HC-U1169-02: U1169 between the U3151 and Drummournie
		HC-U1169-03	HC-U1169-03: U1169 between U3138 and Glengoullie
		HC-U3138-01	HC-U3138-01: U3138 between U1169 and Lochanshelloch
	Section 10	HC-C1154-01	HC-C1154-01: C1154 between B9090 and C1161
		HC-C1154-02	HC-C1154-02: C1154 between C1161 and Bruachmary
		HC-C1161-01	HC-C1161-01: C1161 between C1154 and Achavraat
		HC-U3114-01	HC-U3114-01: U3114 between C1161 and Clunas Wood
	Section 11	HC-B9090-03	HC-B9090-03: B9090 between Cawdor and the B9091
		HC-B9091-01	HC-B9091-01: B9091 between the B9090 and A939
		HC-A939-01	HC-A939-01: A939 (south of Nairn) at Achamore
		HC-C1173-01	HC-C1173-01: C1173 south of A939 to Drussie Wood
		HC-B9007-01	HC-B9007-01: B9007 between A939 and Auchnabechan Wood
Moray	Section 12	MC-A940-01	MC-A940-01: A940 within Forres
		MC-A940-02	MC-A940-02: A940 Between Forres to Tomdow
		MC-C11E-01	MC-C11E-01: C11E between the A940 and Dusach
		MC-U88E-01	MC-U88E-01: U88E between the A940 and Little Corshellach
		MC-U88E-02	MC-U88E-02: U88E between the A940 and Bridge of Newton
	Section 13	MC-B9011-01	MC-B9011-01: B9011 between the A96 (T) and the C37E
		MC-C37E-01	MC-C37E-01: C37E between the B9011 and B9010
		MC-B9010-01	MC-B9010-01: B9010 between the C37E and C12E
		MC-C12E-01	MC-C12E-01: C12E between the B9010 and U109E
		MC-U109E-01	MC-U109E-01: U109E between the C12E and Rhinagoup
	Section 14	MC-B9010-02	MC-B9010-02: B9010 between the A96 (T) and the C12E
		MC-C12E-01	MC-C12E-01: C12E between the B9010 and C13E

Local Authority	Section	Section Link	Study Area
		MC-C13E-01	MC-C13E-01: C13E between the C12E and Coldwells
	Section 15	MC-A941-01	MC-A941-01: A941 between the A96 (T) and Culzean Road
		MC-A941-02	MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry
	Section 16	MC-B9103-01	MC-B9103-01: B9103 between the A96 (T) and the U129E
		MC-B9103-02	MC-B9103-02: B9103 between the U129E and Altonside
		MC-U129E-01	MC-U129E-01: U129E between the B9103 and Greenside
		MC-U20E-01	MC-U20E-01: U20E between the B9103 and Westerton
	Section 17	MC-B9015-01	MC-B9015-01: B9015 between the A96 (T) and Cairnend
		MC-U22E-01	MC-U22E-01: U22E between the B9015 and U19E
		MC-U19E-01	MC-U19E-01: U19E between the U22E and Burnside of Dipple
	Section 18	MC-U14E-01	MC-U14E-01: U14E between the Upper Ordquish and Aultdearg
		MC-U13E-01	MC-U13E-01: U13E northeast of the A96 (T) at Forgie Hill
		MC-U13E-02	MC-U13E-02: U13E southwest of the A96 (T) at Forgie Hill
		MC-U65H-01	MC-U65H-01: U65H between the A96 (T) and Blackfold
	Section 19	MC-B9016-01	MC-B9016-01: B9016 between the A96 (T) and Auchinderran
		MC-C74H-01	MC-C74H-01: C74H between the B9016 and U41H
		MC-U41H-01	MC-U41H-01: U41H between the C74H and Auchairn
		MC-B9017-01	MC-B9017-01: B9017 between the A96 (T) and C75H
		MC-B9017-02	MC-B9017-02: B9017 between the A95 and U51H
		MC-C74H-02	MC-C74H-02: C74H between the B9017 and Auchairn
		MC-U41H-02	MC-U41H-02: U41H between the C74H and Broomhill
		MC-U50H-01	MC-U50H-01: U50H between the B9017 and Foulford
		MC-U51H-01	MC-U51H-01: U51H between the B9017 and Brunthall
		MC-A95-01	MC-A95-01: A95 between the A96 (T) and B9017
		MC-A95-02	MC-A95-02: A95 between the B9017 and B9018
		MC-U35H-01	MC-U35H-01: U35H between the A96 (T) and Meikle Ardrone
		MC-U44H-01	MC-U44H-01: U44H between A96 (T) and Mains of Auchoynanie
Aberdeenshire	Section 20	AC-U111S-01	AC-U111S-01: U111S between A96 (T) and Coachford
		AC-C111S-01	AC-C111S-01: C111S between the A96 (T) and Hollowdyke
		AC-U108S-01	AC-U108S-01: U108S between the C106S and West Riggins

Local Authority	Section	Section Link	Study Area
		AC-C106S-01	AC-C106S-01: C106S between A96 (T) and Ruthven
		AC-B9022-01	AC-B9022-01: B9022 between A96 (T) and Haddoch
	Section 21	AC-C100S-01	AC-C100S-01: C100S between A97 and Milburn
		AC-U103S-01	AC-U103S-01: U103S between C1005 and Broomfold
		AC-U104S-01	AC-U104S-01: U104S between C100s and Course of Kinnoir
		AC-A97-01	AC-A97-01: A97 between the A96 (T) and B9001
		AC-C82S-01	AC-C82S-01: C82S between the A97 and Meikleton
		AC-U102S-01	AC-U102S: U102S between A97 and Boghead of Cobairdy
		AC-C88S-01	AC-C88S-01: C88S between A97and U89S
		AC-U89S-01	AC-U89S-01: U89S between the C88S and Gariochsburn
		AC-B9001-01	AC-B9001-01: B9001 between the A97 and B9024
		AC-B9001-02	AC-B9001-02: B9001 between the B9024 and Burnside
		AC-C87S-01	AC-C87S-01: C87S between B9001 and U91S
		AC-U90S-01	AC-U90S-01: U90S between the C87S and Bogcoup
		AC-U91S-01	AC-U91S-01: U91S between C87S and Frendraught
		AC-B9024-01	AC-B9024-01: B9024 between B9001 and U33S
		AC-U94L-01	AC-U94L-01: U94L between B9024 and Reidswell
		AC-U93bL-01	AC-U93bL-01: U93bL between U94L and Haremoss
		AC-U33S-01	AC-U33S-01: U33S between B9024 and Carlincraig
	Section 22	AC-B9024-02	AC-B9024-02: B9024 between U33S and A947
		AC-C22S-01	AC-C22S-01: C22S between B9024 and Brownhill
		AC-U24S-01	AC-U24S-01: U24S between C22S and Denfield
		AC-C25S-01	AC-C25S-01: C25S between C22S and U24S
		AC-U24S-02	AC-U24S-02: U24S between C25S and Denfield
		AC-A947-01	AC-A947-01: A947 between B9024 and B9170
		AC-U25S-01	AC-U25S-01: U25S between A947 and Hill of Darra
		AC-C21S-01	AC-C21S-01: C21S between B9170 and Little Colp
		AC-C21S-02	AC-C21S-02: C21S between B9170 and Hill of Ardin
		AC-B9170-01	AC-B9170-01: B9170 between the A947 and Cuminestown
		AC-C26S-01	AC-C26S-01: C26S between B9170 and U1S
		AC-U1S-01	AC-U1S-01: U1S between C26S and Greeness
	Section 23	AC-U1S-02	AC-U1S-02: U1S between C29S and Berryhill
		AC-C29S-01	AC-C29S-01: C29S between C1S and B9170
		AC-U130S-01	AC-U130S-01: AC-U130S-01 between B9170 and Newton
		AC-C125B-01	AC-C125B-01: C125B between B9170 and North Commonty
		AC-B9170-02	AC-B9170-02: B9170 between the A948 and Cairncake
		AC-A948-01	AC-A948-01: A948 between B9170 and B9028
		AC-A981-01	AC-A981-01: A981 between B9029 and A950

Local Authority	Section	Section Link	Study Area
		AC-B9028-01	AC-B9028-01: B9028 between A981 and A948
		AC-B9029-02	AC-B9029-01: B9029 between the A981 and Craigmill
		AC-C123B-01	AC-C123B-01: C123B between A981 and Milton of Culsh
		AC-U122B-01	AC-U122B-01: U122B between C127B and Collageford
		AC-C127B-01	AC-C127B-01: C127B between A981 and Stevensburn
		AC-A950-01	AC-A950-01: A950 between A981 and B9106
	Section 24	AC-A950-02	AC-A950-02: A950 between B9106 and Mintlaw
		AC-B9106-01	AC-B9106-01: B9106 between Drymuir and the A950
		AC-B9029-01	AC-B9029-01: B9029 between the B9106 and C103B
		AC-C103B-01	AC-C103B-01: C103B between the B9029 and Meikle Kirkhill
		AC-C102B-01	AC-C102B-01: C102B between the C103B and Bruntbrae
		AC-B9030-01	AC-B9030-01: B9030 between the A950 and Upper Crichie
		AC-C97B-01	AC-C97B-01: C97B between B9030 and C100B
		AC-C100B-01	AC-C100B-01: C100B between C97B and Upper Crichie
	Section 25	AC-A950-03	AC-A950-03: A950 between Mintlaw and A90 (T)
		AC-C56B-01	AC-C56B-01: C56B between A950 and C38B
		AC-U55B-01	AC-U55B-01: U55B between C56B and Invereddie
		AC-C38B-01	AC-C38B-01: C38B between C56B and A952
		AC-C39B-01	AC-C39B-01: C39B between C39B and Braeside of Ludquharn
		AC-U52B-02	AC-U52B-02: U52B between the C38B and Newton of Ludquharn
		AC-A952-01	AC-A952-01: A952 between C38B and U52B
		AC-U52B-01	AC-U52B-01: U52B between the A952 and West Newton
		AC-U70B-01	AC-U70B-01: U70B between A952 and Easter Pettymarcus

Determining Baseline

Method of Baseline Data Collation

Desk Study

13.2.15 The desk study included the following:

- review of relevant transport policy;
- review of local road network including traffic flows;
- review of personal injury accident data;
- identification of any other traffic sensitive receptors in the area (Core Paths, walking routes, communities, etc.);
- review of Ordnance Survey (OS) plans;

- determination of the potential origin locations of construction staff and supply locations for construction materials to inform extent of local area road network to be included in the assessment; and
- identification of constraints to the movement of Heavy Goods Vehicles (HGV) traffic and larger loads.

Traffic Data

13.2.16 Baseline traffic flow data has been gathered for each of the following local authority areas as detailed below.

13.2.17 To establish baseline traffic flows, Automatic Traffic Counters (ATCs) were installed at the following locations:

Highland

- ATC 1: C1106 between Fanellan and the U1604;
- ATC 3: U1604 between the C1106 and the C1108;
- ATC 4: C1108 between the U1604 and the A833;
- ATC 5: A833 between the U1604 and the A862;
- ATC 6: B862 (southwest of Inverness) between Scaniport and Cullaird;
- ATC 7: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie;
- ATC 8: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot;
- ATC 9: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich; and
- ATC 10: A939 (south of Nairn) at Achamore.

Moray

- ATC 11: A940 (southeast of Forres) at Dunphail;
- ATC 12: B9010 (southwest of Elgin) at Kellas;
- ATC 13: A941 (between Longmorn and Fogwatt);
- ATC 14: B9103 (southeast of Elgin) at Redbog;
- ATC 15: B9015 (southwest of Fochabers) at Westerton; and
- ATC 16: B9016 (northwest of Keith) at Aultmore.

Aberdeenshire

- ATC 19: B9001 (northeast of Huntly) between the A97 and Glen Dronach at Forgue;
- ATC 20: B9170 (northwest of New Deer) at Brucehill;
- ATC 21: B9106 (southwest of Maud) at Mains of Old Maud; and
- ATC 22: B9030 (southeast of Stewartfield) at Crichie.

13.2.18 To supplement the ATC survey data, traffic survey data has been obtained from the Department for Transport (DfT)[8], and Scottish Traffic Count Data[9] for the road network within the Study Area. The most recent 'manual and automatic count' data available on the DfT website has been used and extrapolated to 2024, as this is considered a more accurate approach than using the more recently available 'estimated' flows. The following count points and years were used.

Highland

13.2.19 Traffic count locations are shown on **Figure 13.2: Highland Council - Traffic Count Site Locations**.

- DfT Traffic Count ID – 30950, Estimated Count 2023: A862 between the A831 and the A833;

8 Department for Transport, (2022). Road traffic statistics. Available at: https://roadtraffic.dft.gov.uk/#6/55.254/-11.107/basemap-regions-countpoints
9 Transport Scotland, (2024). Scottish Traffic Count Data. Available at: https://ts.drakewell.com/multinodemap.asp

- DfT Traffic Count ID – 80011, Estimated Count 2023: A862 between the A833 and Inchmore;
- DfT Traffic Count ID – 80331, Manual Count 2022: A862 between Inchmore and Scorguie Rd, Inverness;
- DfT Traffic Count ID – 80330, Manual Count 2018: A862 between Scorguie Rd, Inverness and King Brude Road roundabout;
- TS Traffic Count ID – 09611, Live Count 2024: A8082 between the A9 (T) and the Slackbuie Distributor Road; and
- TS Traffic Count ID – 00136, Live Count 2024: B9090 Cawdor - Nairn Road, east of Brackla Distillery.

Moray

- TS Traffic Count ID - ATC00335 - Live Count 2024: B9011, Victoria Road, Forres, between the A96 (T) and the B9010;
- DfT Traffic Count ID - 78576 - Manual Count 2018: A941, New Elgin Road, Elgin, between the A96 (T) and Thornhill Rd;
- DfT Traffic Count ID - 805372 – Manual Count 2018 – U19E, Dipple, between the B9015 and U19E Dipple

Aberdeenshire

- DfT Traffic Count ID 804969 - Manual Count 2018: B9022 (northwest of Huntly);
- DfT Traffic Count ID 40870 – Manual Count 2011: A97 (southwest of Cruchie);
- DfT Traffic Count ID 804729 – Manual Count 2018: B9170 (northwest of Cuminestown);
- DfT Traffic Count ID 1180 – Manual Count 2009: A948 (southeast of New Deer);
- DfT Traffic Count ID 41009 – Manual Count 2019: A981 (north of B9029) at Main of Culsh; and
- DfT Traffic Count ID 20990 – Manual Count 2012: A950 (north of Waterhill of Bruxie).

13.2.20 This data was provided as Average Annual Daily Traffic (AADT) total flows (in both directions), by vehicle type including HGVs.

13.2.21 In addition to the ATC Survey and DfT Count Data, the following traffic data has been obtained from Green Volt Offshore WindFarm onshore grid connection (Reference: APP/2023/1454[10]), a consented development in the area. The traffic data has been referred to as the following throughout the assessment:

- ATC 23: A950 (east of Mintlaw, west of Longside).

13.2.22 This data is provided as two-way AADT flows, by vehicle type including HGVs.

Personal Injury Accident Data

13.2.23 Personal Injury Accident data for the most recently available five-year period, covering 2018 to 2022, was obtained from the online resource Crashmap.co.uk[11] which uses data collected by Police Scotland.

Methodology for the Assessment of Impacts

Characterisation of Effect

13.2.24 The IEMA Guidelines identify the key impacts that are most important when assessing the magnitude of traffic impacts from an individual development. Those key impacts are as follows:

- severance of communities;
- road vehicle driver and passenger delay;

[10] Aberdeenshire Council Planning Portal, (2024). *APP/2023/1454*. Available at: https://upa.aberdeenshire.gov.uk/online-applications/applicationDetails.do?activeTab=documents&keyVal=RYTOJ0CAII400

11 Crashmap, (2024). crashmap.co.uk. Available at: https://www.crashmap.co.uk/

- non-motorised user delay;
- non-motorised user amenity;
- fear and intimidation on and by road users;
- road user and pedestrian safety; and
- hazardous / large loads.

13.2.25 The evaluation methodologies for each of the seven traffic related impacts are discussed individually in turn in the following sections.

Severance of Communities

13.2.26 Severance is described by the IEMA Guidelines as:

> *"The perceived division that can occur within a community when it becomes separated by major transport infrastructure … severance may result from the difficulty of crossing a heavily trafficked road or a physical barrier created by infrastructure",* (IEMA, 2023).

13.2.27 The IEMA Guidance refers to the following historical thresholds which should be considered when assessing the likely level of severance:

- ≤30% increase in traffic equates to a **negligible** change in severance;
- >30% ≤60% increase in traffic equates to a **low** change in severance;
- >60% ≤90% increase in traffic equates to a **medium** change in severance; and
- >90% increase in traffic equates to a **high** change in severance.

13.2.28 It is considered common industry practice that where there is no available traffic information, as a worst-case assessment, to assume that the percentage increase in total flows and HGV flows equate to 100%.

13.2.29 The IEMA Guidelines outlines that when assessing severance, the assessor should consider any physical infrastructure barriers, road width, traffic flow, traffic composition, traffic speed, crossing facilities and likely crossing movements (e.g. defining facilities to which access may be impaired and the potential total users and user groups), along with considering the impact on vulnerable groups.

13.2.30 Therefore, while the assessment suggests that all links could experience an impact on severance, the IEMA guidelines note that the original 30, 60, 90% DfT thresholds identified above for assessment do not take into account instances where there are low baseline flows and the local context of the link. The thresholds are therefore applied above as a starting point for the assessment.

13.2.31 The IEMA Guidelines recommend use of professional judgement to determine significance. Therefore, both quantitative and qualitative assessment of severance within **Section 13.4** is undertaken, with the qualitative assessment explaining the significance of the construction traffic impact on each link.

13.2.32 It is considered that the following terminology which used throughout the qualitative assessment (when determining the proximity of receptors to the construction traffic) applies:

- **On Route** – means the receptor shares the carriageway;
- **Adjacent to the route** – means the receptor is not on the carriageway, but within 2 m of it; and
- **Close to the route** – means the receptor is not on the carriageway and is beyond 2 m of it.

13.2.33 It is generally accepted that footway widths should be a minimum of 2 m to allow for 'sufficient distance' between pedestrians and traffic. The presence of street furniture including property boundary walls, fences and guardrails, also play a role in acting as a barrier between pedestrians and traffic. These are therefore considered to reduce the magnitude of impact on transport effects that may otherwise result from increases in traffic flows.

Road Vehicle Driver and Passenger Delay

13.2.34 The IEMA Guidelines state that:

> "*Driver delay is only likely to be significant when traffic on the network surrounding the site is already at, or close to, the capacity of the system*", (IEMA, 2023).

13.2.35 The IEMA Guidelines confirms that impacts may be 'beneficial' or 'adverse' depending on whether the change in traffic results in an increase or decrease in driver delay. The effect on driver delay on links (excluding junctions), has been based on the change in traffic volume that would occur on key links as a result of the Proposed Development. In this case, professional judgement has been used to determine whether there would be a significant impact.

13.2.36 In order to calculate the capacity of the system, a capacity assessment of road links can be undertaken to determine the effects of the temporary increase in traffic flow generated by the Proposed Development. Theoretical road capacities are based on the DMRB, Volume 13, Section 1, Part 5: Speeds on Links 2002[12]. The theoretical road capacity equates to the maximum traffic volumes which a road can accommodate. Above this level, traffic conditions would become unstable and queuing along the road section would occur.

Non-Motorised User Delay

13.2.37 Changes in the volume, composition or speed of traffic may affect the ability of people to cross roads. In general, increases in traffic levels are likely to lead to greater increases in delay. However, delays would also depend upon the general level of non-motorised Use (NMU) activity, visibility and general physical condition of the road.

13.2.38 The IEMA Guidelines do not support the use of threshold assessments to quantify the magnitude of impacts due to changes in delay. Therefore, the magnitude of this impact has been determined using professional judgement based on the predicted increase in traffic levels and the predicted level of pedestrian activity.

13.2.39 Whilst the IEMA Guidelines does not support the use of thresholds, the IEMA guidelines do refer to a predictive method for determining pedestrian mean delay within a report published by the Transport Research Laboratory[13] (TRL SR356, Goldschmidt, 1976) as providing a useful approximation for determining pedestrian delay. This predictive method, alongside professional judgement, has informed the assessment. Whilst this method does not mention NMUs, historically research on NMU is 'pedestrian-led'.

Non-Motorised User Amenity

13.2.40 The IEMA Guidelines describe NMU amenity in pedestrian terms, stating that pedestrian amenity describes the relative pleasantness of a journey, and is considered to be affected by traffic flow, traffic composition and pavement width / separation from traffic.

13.2.41 The IEMA Guidelines considers that a suitable starting point for judging the significance of changes in pedestrian amenity would be where the traffic flow (or HGV component) is halved or doubled. Therefore, the magnitude of impact in pedestrian amenity has been determined based on the level of increase in traffic flows on a particular road link and the level of pedestrian activity on that link.

13.2.42 The IEMA Guidelines state that although the above rule is established in case law, that assessment of amenity should pay full regard to the specific local conditions and cautions use of threshold analysis. The IEMA Guidelines refers to Transport for London's 'Guide to the Healthy Streets Indicators: Delivering the healthy streets approach'[14]

12 DMRB, (2002). Volume 13, Section 1, Part 5: Speeds on Links - May 2002. Available at: http://www2.westsussex.gov.uk/handt/poe/n.pdf.

13 Transport Research Library, (1997). *Pedestrian Delay and Traffic Management.* Available at: https://www.trl.co.uk/publications/pedestrian-delay-and-traffic-management

14 Transport for London, (2017). *Transport for London's 'Guide to the Healthy Streets Indicators: Delivering the healthy streets approach'.* Available at: https://content.tfl.gov.uk/guide-to-the-healthy-streets-indicators.pdf.

which provides indicators, or factors that affect the healthiness of a street. It is considered that the following seven are somewhat relevant to this assessment:

- Easy to cross;
- People feel safe;
- Places to stop and rest;
- People feel relaxed;
- Not too noisy;
- Clean air; and
- Shade and shelter.

13.2.43 Therefore, it is considered that while taking into account the established threshold method, that the assessor should also regard the special local conditions baseline within the Study Area for these factors when assessing the temporary impact of the construction traffic, and that the magnitude of impact is determined based on professional judgement.

Fear and Intimidation

13.2.44 Danger is recognised as an important environmental impact and the IEMA Guidelines suggests a set of thresholds for estimating fear and intimidation caused by traffic based on the following:

- degree of hazard;
- level of fear and intimidation; and
- resulting magnitude of impact reviewed in relation to the change in traffic flows.

13.2.45 The IEMA guidelines states that, the extent of fear and intimidation is dependent on:

- the total volume of traffic;
- the heavy vehicle composition;
- the speed these vehicles are passing; and
- the proximity of traffic to people and / or the feeling of the inherent lack of protection created by factors such as a narrow pavement median, a narrow path or a constraint (such as a wall or fence) preventing people stepping further away from moving vehicles.

13.2.46 The IEMA guidelines also note that special consideration should be given to areas where there are likely to be:

- high-speed sections of road;
- locations of turning points and accesses;
- narrow pavement median, narrow footway and / or constraints such as fences;
- areas frequented by road users unfamiliar with the location such as tourist spots; and
- areas frequented by vulnerable groups.

13.2.47 The IEMA guidelines also confirm that the assessment should be defined by the degree of hazards to pedestrians by average traffic flow over an 18-hour heavy vehicle flow and average speed (mph) over an 18-hour day.

13.2.48 **Table 13.3** identifies the criteria as extracted from the IEMA Guidelines, which has been used to review the Proposed Development's impact in relation to Fear and Intimidation.

Table 13.3: Fear and Intimidation Degree of Hazard

Average traffic flows over 18-hour day – all vehicles / hour 2-way (a)	Total 18-hour heavy vehicle flow (b)	Average vehicle speed (mph) (c)	Degree of Hazard (DoH) Score
>1,800	>3,000	->40	30
1,200 – 1,800	2,000 – 3,000	30 – 40	20
600 – 1,200	1,000 – 2,000	20 – 30	10
<600	<1,000	<20	0

Source: Table 3.1 of the IEMA Guidelines: Environmental Assessment of Traffic and Movement

13.2.49 The IEMA Guidelines suggests that assessors should consider the Total Hazard Score for each link within the Study Area base on a review of the total traffic flow, the level of HGVs using the link and the typical vehicle speeds to determine the level of Fear and Intimidation in comparison with Guidelines summarised in **Table 13.4.**

Table 13.4: Level of Fear and Intimidation

Level of Fear and Intimidation (LoFI)	Total Hazard Score – (a) + (b) + (c)
Extreme	71+
Great	41 – 70
Moderate	21 – 4
Small	0 – 20

Source: Table 3.2 of the IEMA Guidelines: Environmental Assessment of Traffic and Movement

13.2.50 **Table 13.5** summarises the magnitude of impact which has been used to assess Fear and Intimidation taking cognisance of the criteria shown in **Table 13.3** and **Table 13.4**.

Table 13.5: Fear and Intimidation Magnitude of Impact

Magnitude of Impact	Change in step / traffic flows (AADT) from baseline conditions
High	Two step changes in level
Medium	One step change in level, but with >400 vehicle increase in average 18-hour average two-way all vehicle flow: and / or >500 Heavy Vehicle (HV) increase in total 18-hour HV flow
Low	One step change in level, but with <400 vehicle increase in average 18-hour average two-way all vehicle flow: and / or <500 HV increase in total 18-hour HV flow
Negligible	No change in step changes

Source: Table 3.3 of the IEMA Guidelines: Environmental Assessment of Traffic and Movement

Road User and Pedestrian Safety

13.2.51 The IEMA Guidelines recommends that at locations where clusters of Personal Injury Accidents (PIAs) are recorded, accident statistics should be used to provide an estimate of the existing road link's accident rate. An assessment of the Proposed Development's construction traffic in addition to baseline traffic flows can then be used to undertake a statistical assessment of the likely increase in accident rates based on the increase in vehicle-kilometres (Veh-km)[15]. The statistical assessment can also be compared to national averages, derived from DfT reported road casualties for Great Britain as presented in RAS0302: national accident rate per million vehicle kms by road classification[16].

13.2.52 It is also considered that collision cluster analysis be undertaken to identify potential impacts at a more detailed level. Collision clusters are identified by a detailed review of the baseline characteristics to determine the road safety sensitivity of discrete areas of the road network. The collision cluster criterion is typically based on a definition of number of personal injury collisions occurring within a defined period in a given spatial radius. Impacts are assessed by examining STATS19[17] collision data to identify any emerging patterns or factors that could be exacerbated by traffic or movement generation.

Hazardous / Large Loads

13.2.53 The IEMA Guidelines states that should a development involve the transportation of hazardous loads, these would need to be considered under the Carriage of Dangerous Goods and the use of Transportable Pressure Equipment Regulations[18] 2009 (as amended).

13.2.54 The IEMA Guidelines recommends that the traffic and movement assessment needs to clearly outline the estimated number and composition of such loads. Where the number of movements is considered to be significant, the assessment should include a risk or catastrophe analysis to illustrate the potential for an accident to happen and the likely effect of such an event. The extent of such analysis should clearly reflect the nature of the load being transported. For instance, much more detail is required for a development that involves the transportation of nuclear products than for one that involves the delivery of petroleum.

13.2.55 It is therefore best practice to include transport related hazard and accident assessment in a wider environmental assessment that contains a project-wide accident and disaster assessment. The IEMA publication 'Major Accidents and Disasters in EIA: A Primer'[19] (2020) provides guidelines on the process for identifying, assessing and mitigating hazards.

13.2.56 The IEMA Guidelines states that should large or AILs be anticipated:

> "*The traffic and movement expert must consider appropriate routes for abnormal load movements and mitigation strategies to secure safe passage. If frequent abnormal load movements are anticipated (e.g. heavy plant movements), the traffic and transport expert should consider if other traffic impacts could be induced (e.g. fear and intimidation, driver delay, etc*", (IEMA, 2023).

[15] Per million vehicle-kilometres is a unit of measurement used in transportation statistics to express quantities like crash rates or emissions relative to the distance travelled by vehicles. Specifically, it measures the number of incidents (e.g., crashes) or emissions per million kilometres travelled by vehicles on a given road or network.

[16] Department for Transport (2023). Reported road collisions, vehicles and casualties tables for Great Britain - RAS0302 - Urban and rural roads. (online). Available at: https://www.gov.uk/government/statistical-data-sets/reported-road-accidents-vehicles-and-casualties-tables-for-great-britain

17 DfT, (2024). Statistical data set Road safety statistics: data tables Available at: https://www.gov.uk/government/statistical-data-sets/reported-road-accidents-vehicles-and-casualties-tables-for-great-britain

18 Legislation.gov.uk, (2009). Carriage of Dangerous Goods and the use of Transportable Pressure Equipment Regulations 2009 (as amended). Available at: https://www.legislation.gov.uk/uksi/2009/1348/contents

[19] IEMA, (2020). *Major Accidents and Disasters in EIA: A Primer - September 2020.* Available at: https://www.iema.net/content/major-accidents-and-disasters-in-eia-an-iema-primer-october-2020/

13.2.57 Transport Scotland specify that an Abnormal Indivisible Load Vehicle (AILV) is classified as larger than 2.9 m overall width by 18.3 m rigid length or exceeding 44 t gross weight[20]. Movement of AILVs is subject to separate agreement with the relevant road authority and police via notification or an Electronic Service Delivery for AILs (ESDAL) system. The extent of such analysis should clearly reflect the nature of the load being transported.

13.2.58 Local air quality and dust / dirt impacts have not been assessed in detail, however actions to ensure appropriate management of these impacts will be included in a CEMP which will be drafted and refined by the Principal Contractor in conjunction with the local authority access officer.

Sensitive Receptors

13.2.59 The following receptors, including groups and special interests, have been assessed for the identified Study Area in line with the IEMA Guidelines, to determine the sensitivity of receptors:

- non-motorised users;
- public right of way users;
- motorists and freight vehicles;
- public transport; and
- emergency services.

13.2.60 The receptors above can broadly be grouped as the following affected parties; 'Users of Roads', and 'Users / Residents of Locations'. The following list identifies special interests that should be considered when defining sensitive receptor geographic locations, and the sensitive locations will inform the assessment of effect significance when the development traffic is assigned to the network:

- people at home;
- people at work;
- sensitive groups include individuals of young age, older age, varying income levels, different health statuses, social disadvantages, and factors related to access and geographic location.
- locations with concentrations of vulnerable users (e.g. hospitals, places of worship, schools);
- recreational and shopping areas;
- recreation areas including ecological / nature conservation sites;
- tourist / visitor attractions;
- collision clusters and routes with road safety concerns; and
- junctions and road links at (or over) capacity.

13.2.61 Based on the sensitive receptors identified above, the IEMA Guidelines suggests that the sensitivity of receptors should be assessed based on assignment to the nearest link. Following these IEMA Guidelines, 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 13.6**.

13.2.62 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.

20 Transport Scotland (2007). *Abnormal Load Movements - A brief guide to Notification and Authorisation requirements. Available* at: https://www.transport.gov.scot/media/33621/abnormal-load-movements-guide-to-regulations.pdf.

Table 13.6: Receptor Sensitivity

Receptor		Users of Roads	Users / Residents of Locations
Sensitivity	High	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, and frequent bus services.	Where a location contains receptors with the greatest sensitivity to traffic flows: schools, colleges, playgrounds, collision clusters, retirement homes, roads without footways that are used by pedestrians.
	Medium	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, and bus services.	Where a location contains receptors with medium sensitivity to traffic flow: congested junctions / links, doctors' surgeries, hospitals, shopping area with roadside frontage, roads with narrow footways, recreation facilities.
	Low	Where the road is a Trunk or A-class, constructed to accommodate significant HGV composition. Includes roads with little or no traffic calming or traffic management measures, and bus services.	Where a location contains receptors with low sensitivity to traffic flow links: with adjacent land-uses such as public open space, nature conservation areas, listed buildings and residential areas with adequate footway provision and limited pedestrian / cycle users.
	Negligible	Where roads have few adjacent settlements, and bus services. Includes strategic trunk roads (T) that would be little affected by additional traffic and suitable for construction type vehicles, including Abnormal Loads and new strategic trunk road junctions capable of accommodating similar types of vehicles.	Where a location includes individual dwellings or few settlements with no facilities. Including farmland usage and where receptors are sufficiently distant from affected roads and junctions and no / very limited number of pedestrian and cyclists.
	No Receptors	Where roads have no adjacent settlements. Includes routes where there are no bus services.	Where roads have no adjacent settlements. Includes farmland.

Magnitude of Impact

13.2.63 The IEMA Guidelines recommend the following two rules to be considered when assessing the impact of development traffic on a road link:

- **Rule 1:** Include road links where traffic flows will increase by more than 30% (or the number of HGVs will increase by more than 30%); and
- **Rule 2:** Include any other specific environmental or population sensitive areas where traffic flows have increased by 10% or more.

13.2.64 The IEMA guidelines go on to state that any increases in traffic flows of less than 10% are generally accepted as having no discernible environmental impact as daily variance in traffic flows can be of this magnitude.

13.2.65 The 30% threshold is used within IEMA Guidelines to indicate a reasonable threshold for noticeable change in traffic flows affecting receptors. Increases above this threshold do not directly correlate to significant impact, on traffic flows; it only indicates that further consideration is required to assess the significance.

13.2.66 It is also considered prudent to assess all links regardless of the threshold for assessment, as many of the links pass through villages. The impact of the Proposed Development has therefore been assessed on all links included in the Study Area and the assessment section describes the effects of the temporary increase in traffic.

13.2.67 The criteria for assessing the magnitude of the predicted impact on traffic and transport effects is given in **Table** 13.7.

Table 13.7: Magnitude of Impact

Transport effect	Magnitude of Impact			
	High	Medium	Low	Negligible
Severance	Change in total traffic or HGV flows of >90%	Change in total traffic or HGV flow of >60% ≤90%	Change in total traffic or HGV flows of >30% ≤60%	Change in total traffic or HGV flows of ≤30%
	Where severance is thought likely to require more detailed investigation, it is recommended the assessment involves: a) defining the facilities to which access is potentially impaired; b) defining facility catchment areas from which users may be drawn; and c) estimating the populations within those both in total and in vulnerable groups. This is determined by professional judgement.			
Driver and Passenger delay	High increase in queuing at junctions and / or congestion on road links.	Medium increase in queuing at junctions and / or congestion on road links.	Low increase in queueing at junctions and / or congestion on road links.	Low or no increase in queuing at junctions and / or congestion on road links.
	This is determined by professional judgement.			
Non-motorised user delay	Generally, increases in traffic may lead to greater delay, though is dependent on the level of non-motorised users' activity in the area. Assessed based on pedestrian delay experienced when crossing highways links considering a range of factors including crossing type, pedestrian flows, traffic levels, visibility and general highway condition. This is determined by professional judgement.			
Non-motorised users' amenity	A halving or doubling of traffic flow (or HGV flow) can be used as a broad threshold when considered in the local context and applied with caution. This is determined by professional judgement.			
Fear and intimidation	Assessed as per **Table 13.3, Table 13.4** and **Table 13.5.** Note that AILV movements may heighten the perception of fear and intimidation.			
Road safety	Assignment informed by a review of existing collision patterns and trends based upon the existing personal injury accident records and the forecast increase in traffic that may change the risk of serious and fatal injuries.			
Hazardous Loads	Based on the probability of a personal injury collision, categorised as fatal or serious, involving a hazardous load occurring.			
Large Loads	Generally, the movements of large loads may have an effect on other traffic impacts (e.g. fear and intimidation, driver delay). The number, composition, frequency, timing and nature of the load may induce an effect of the other six traffic impacts.			

13.2.68 The magnitude of each impact has subsequently been determined in accordance with the IEMA Guidelines and based on professional judgement.

Assessment of Significance of Effects

13.2.69 **Table 13.8** sets out the significance effects matrix adopted based on the receptor sensitivity and magnitude of impact in **Table 13.6** and **Table 13.7.**

Table 13.8: Significant Effects Matrix

		Receptor Sensitivity (Environmental Value)			
		High	Medium	Low	Negligible
Magnitude of Impact	High	**Major**	**Major**	**Moderate**	Negligible
	Medium	**Major**	**Moderate**	Minor	Negligible
	Low	**Moderate**	Minor	Minor	Negligible
	Negligible	Negligible	Negligible	Negligible	Negligible

13.2.70 The combination of the receptor sensitivity and magnitude of impact due to the effect of the Proposed Development, enables the significance of effects to be determined.

13.2.71 The likely effects can be:

- **Beneficial (positive):** meaning that the changes produce benefits in terms of transportation and access (such as reduction of traffic, travel time or patronage, or provision of a new service, access or facility);
- **Negligible (neutral):** meaning that there is no measurable effect; or
- **Adverse (negative):** meaning that changes produce disbenefits in terms of transportation and access (such as increase of traffic, travel time, patronage or loss of service or facility).

13.2.72 The significance grading criteria are summarised in **Table 13.9**. It is these criteria that have been used in the assessment.

Table 13.9: Significance Criteria

Significance Criteria	Description
Major (Beneficial)	Major improvement in transport terms. This has been deemed a **significant** effect.
Moderate (Beneficial)	Moderate improvement in transport terms. This has been deemed a **significant** effect.
Minor (Beneficial)	Minor improvements in transport terms. This has been deemed a **not significant** effect.
Negligible (Neutral)	No appreciable impact in transport terms. This has been deemed a **not significant** effect.
Minor (adverse)	Minor adverse impact in transport terms. This has been deemed a **not significant** effect.
Moderate (adverse)	Moderate adverse impact in transport terms. This has been deemed a **significant** effect.
Major (adverse)	Major adverse impact in transport terms. This has been deemed a **significant** effect.

13.2.73 Following the classification of an effect using the significance criteria identified in **Table 13.9**, a clear statement is then made as to the temporal and spatial scale of the effects on the basis of the following criteria:

- **'Temporary'** – where the effect occurs for a limited period of time (e.g. the construction period) and the change for a defined receptor can be reversed;
- **'Permanent** '– where the effect represents a long-lasting change for a defined receptor;
- '**Local'** effects are those affecting neighbouring receptors;
- **'District'** effects are those which are likely to occur to receptors within the administrative boundaries of Moray, Aberdeenshire and The Highland Council;
- **'Sub-regional'** effects are those affecting areas adjacent to the administrative areas of the administrative boundaries of Moray, Aberdeenshire and The Highland Council;
- '**Regional'** effects are those affecting receptors across the Northern region of Scotland; and
- **'National'** effects are those affecting receptors within the Scotland.

Limitations and Assumptions

13.2.74 The following topics summarise the assumptions for the assessment:

- **Indicative Construction Programme**: It is anticipated that construction and commissioning of the Proposed Development would commence in 2026, with estimated energisation in Quarter 4 of 2030. Dismantling of existing OHLs and reinstatement would follow and is anticipated to be completed by Quarter 2 of 2032. The length of the main construction work is expected to take approximately four years to 2030, with construction traffic likely to peak in 2026. Working hours are currently anticipated seven days a week between approximately 07:00 to 19:00 during British Summer Time (BST) and 07:00 to 18:00 during Greenwich Mean Time (GMT). To ensure a robust assessment, the construction impact analysis has been based on the peak daily traffic flows of site deliveries over a 11-hour period, within the assumed GMT working hours.
- **Timing Restrictions:** As identified in the Outline CTMP, located within **Appendix 3.4: Outline Construction Traffic Management Plan,** it is anticipated that all heavy construction traffic entering and leaving site will be reduced / restricted during peak school times, where practicable, to minimise / avoid conflict with children and pedestrians.
- **Traffic Generation**: The estimated number of traffic movements has been extracted from the CTMP found in **Appendix 3.4: Outline Construction Traffic Management Plan** and the trip generation on each link for each section, has been derived from the TAs found in **Appendix 13.1, 13.2, and 13.3**.
- **HGV Distribution**: The information on routing has therefore been based on a first principles approach from the traffic numbers provided in **Appendix 3.4: Outline Construction Traffic Management Plan**. Where information has not been available it has been necessary to make assumptions on the potential construction vehicle generation and routing. It has been assumed that the following indicative 'Yard' locations will inform the HGV distribution:
  - Yard 1 - Croy;
  - Yard 2 - Elgin;
  - Yard 3 - Keith;
  - Yard 4 - Turriff; and
  - Yard 5 - Peterhead.
- **Calculation Averages:** The assessment is based upon average traffic flows over the duration of each of the Sections of the Proposed Development (i.e. Sections 1 to 25). 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). Variances may occur in the calculations due to rounding. These variances are not considered significant.
- **Kellas Alternative Alignment:** For this assessment it is assumed that the Kellas Drum Windfarm is consented, and it is the alternative alignment shown within **Figure 4.7: Proposed Alignment** that has been assessed. However, should the windfarm application be refused by the Scottish Government, the proposed alignment would be taken forward.
- **Mitigation Measures:** It is assumed that all mitigation measures are embedded to the Proposed Development and therefore there are no additional mitigation measures and no residual effects to be assessed.

Issues Scoped Out

13.2.75 The following topic areas have been scoped out:

- **The effects of construction traffic out with the Study Area**: It is anticipated that the volume of traffic associated with the construction of the Proposed Development would not have a discernible effect on roads and sensitive receptors out with the Study Area, as the effects of traffic are reduced with increasing distance from the point of origin.

- **The effects of traffic associated with the operational stage**: Once the Proposed Development is operational, it is expected that the Proposed Development would require minimal maintenance trips. Therefore, the amount of traffic generated would be minimal (substantially less than the construction stage) and would generally relate to monitoring and maintenance activities, and on-site permanent staff. Vehicles used are likely to be a small number of private cars and / or utility vehicles (typically 4x4s or light goods vehicles). With respect to traffic and transport, the operational stage of the Proposed Development is therefore not assessed in this Chapter.
- **The effects of traffic associated with the decommissioning stage:** Traffic associated with the decommissioning stage is anticipated to be significantly less than that generated during construction. Due to the timescales involved and the likelihood for changes to the baseline situation during this period, the traffic and transport effects are not assessed in this Chapter.
- **The effect of construction traffic on junction capacity**: It is highly unlikely construction traffic will have a significant effect on congestion along the road network with respect to traffic flows both in isolation and cumulatively. It is therefore considered that detailed junction capacity assessments are not required and have subsequently not been carried out.
- **The effect of hazardous loads**: The form of the Proposed Development would not generate hazardous movements in association with its construction or operation and this impact has therefore not been considered as part of this assessment.

13.3 Baseline Conditions

Baseline 1: The Highland Council

Extent of the Highland Study Area

13.3.1 **Figure 13.1: Highland Council - Traffic and Transport Study Area** shows the Proposed Development's location in relation to the local road network which is included within the Study Area as defined within section **13.2.6** and detailed in **Table 13.10**.

Table 13.10: Extent of Highland Study Area

Road	Description
Trunk Road Network	
A9 (T)	The A9 (T) forms part of Scotland's trunk road network, connecting Stirling with Thurso, via Inverness. The A9 (T) is made up of single and dual carriageway sections and is generally subject to the national speed limit.
A82 (T)	The A82 (T) is a two-way single carriageway which forms part of the trunk road network and provides a connection between Glasgow and Inverness via Fort William. The A82 (T) is generally subject to the national speed limit, which reduces when passing through towns and villages.
A96 (T)	The A96 (T) is a two-way single carriageway which forms part of the trunk road network and provides the main road connection between Aberdeen and Inverness. The A96 (T) is generally subject to the national speed limit, which reduces to 30 miles per hour (mph) when passing through towns and villages.
Local Road Network	
A8082	The A8082, also known as the Inverness Southern Distributor Road, is a two-way single carriageway road which provides a connection between the A82 (T) and the A9 (T). The A8082 is generally subject to a 40-mph speed limit.
A831	The A831 is a two-way single carriageway road which provides a connection between the A82 (T) in Drumnadrochit and the A862. The A831 is generally subject to the national speed limit.

Road	Description
A833	The A833 forms a junction with the A862 at Phoineas towards Milton via the C1108 as a two-lane single carriageway approximately 6 m – 6.5 m in width and subject to the national speed limit. Land use is generally rural agricultural in nature with few residential properties along its length.
A862	The A862 is a single carriageway road which provides a connection between Fort Augustus and Dingwall, via Inverness. The A862 is generally subject to the national speed limit, which reduces when passing through villages.
A939	The A939 is a two-way single carriageway road providing a connection between the A96 (T) in Nairn to the A95 (T) in Grantown-on-Spey. The A939 is generally subject to the national speed limit which reduces when passing through towns and villages.
B851	The B851 provides a connection between the B9006 and the B862, via the A9 (T). The B851 to the northeast of the A9 (T) is a single-track road of approximately 4 m in width that is supported by passing places. This section of the B851 is has a signed weight restriction of 17 t except for access. The section of the B851 to the east of the A9 (T) is a single two-way carriageway road subject to the national speed limit.
B861	The B861 is a two-way single carriageway road providing a connection from the A82 (T) in Inverness to the B851. To the south of Inverness, the B861 is a single carriageway road of approximately 4.5 m in width that is not supported by passing places. This section of the B861 is subject to the national speed limit.
B862	The B862 is a single two-way carriageway road that provides a connection between the B865 in Inverness and the A82 (T). The B862 is subject to the national speed limit, which reduces when passing through towns and villages.
B9006	The B9006 is a single two-way carriageway road that provides a connection between the B865 in Inverness and Fort George. The B9006 crosses both the A9 (T) and the A96 (T) and is subject to the national speed limit that reduces when passing through urban areas.
B9007	The B9007 is a single carriageway road which provides a connection between the A940 near Logie and the A938, via the A939. The B9007 is subject to the national speed limit, which reduces when travelling through towns and villages.
B9090	The B9090 is a single two-way carriageway road that provides a connection between the B9006 and the A96 (T) in Nairn. The B9090 is mainly subject to the national speed limit which reduces when passing through towns and villages.
B9091	The B9091 is a single two-way carriageway road that provides a connection between Croy and the B9090 in Nairn. The B9091 is mainly subject to the national speed limit which reduces when passing through towns and villages.
B9154	The B9154 is a two-way single carriageway road that connects into the A9 (T) at both its northern and southern end. The B9154 is subject to the national speed limit.
C1040	The C1040, also known as Torbreck Road, is a single-track road of approximately 3.5 m in width connecting the B862 with the C1064. The C1040 is subject to the national speed limit and is supported by passing places.
C1056	The C1056 is a single-track road which is approximately 3 m in width, which connects to the B9154 and the B9090. The C1056 is subject to the national speed limit and supported by passing places. The road is currently signed as unsuitable for HGVs.
C1060	The C1060 is a single-track road which is approximately 3 m in width and provides a connection between the A82 (T) and the C1072. The C1060 is subject to the national speed limit and is supported by passing places.

Road	Description
C1064	The C1064 provides a connection between the B8082 and B862. Within Inverness, the C1064 is a two-way single carriageway road subject to a 30mph speed limit. Upon leaving Inverness, the road narrows to a single-track road of approximately 3 m in width. This section of the road is subject to the national speed limit and is supported by passing places.
C1068	The C1068 is a two-way single carriageway between the A9 (T) and Daviot Quarry. To the south of the quarry the road narrows to a single-track road approximately 3 m that is supported by passing places. The C1068 is subject to the national speed limit.
C1097	The C1097 is a singletrack road of approximately 3 m in width that runs south off the A862 towards Lentran. The C1097 is subject to the national speed limit and is not currently supported by passing places.
C1100	The C1100 is a single-track road of approximately 3 m in width that runs southeast from the A862 and is subject to the national speed limit and is supported by passing places.
C1102	The C1102 is a single-track road of approximately 4 m in width, providing a connection between the A862 and the C1072. The C1102 is subject to the national speed limit and is not currently supported by passing places.
C1106	The C1106 provides a connection between the A831 and the C1108. Between the A831 and the U1604 the C1106 is a two-way single carriageway road, which reduces to a single-track road of approximately 3 m supported by passing places after this point. The C1106 is subject to the national speed limit.
C1108	The C1108 runs through Kiltarlity from the A833 at Brodie's Corner, located approximately 2.5 km east of the proposed access point. The road is a two-lane single carriageway and is subject to a 30 mph speed limit from Allarburn Drive to Post Office Brae where the speed limit increases to 60 mph. Between these locations there are residential houses either side of the carriageway and beyond is agricultural land.
C1114	The C1114 is a single-track road of approximately 3 m in width that runs south from the A862. The C1114 is subject to the national speed limit and is not currently supported by passing places.
C1116	The C1116 is a single-track road of approximately 5 m in width that runs east from the A862. The C1116 is subject to the national speed limit and is not currently supported by passing places.
C1118	The C1118 (King Brude Road) is a two-way single carriageway road running southwest off the A862 through Scorguie. The C1118 is generally subject to a 30-mph speed limit.
C1154	The C1154 is approximately 5 m in width between the B9090 and the C1161, reducing to approximately 3 m in width for a short section in the vicinity of Ordbreck and to the south of Mains of Clunas, with the reduction in width supported by passing places. The C1154 is subject to the national speed limit.
C1161	The C1161 is a single-track road of approximately 3 m in width, providing a connection between the A939 and the C1154. The C1161 is subject to the national speed limit and is supported by passing places.
C1173	The C1173 is a single-track road of approximately 3 m in width, connecting from the A939 and the C1154. The C1173 is subject to the national speed and is supported by passing places.
U1096	The U1096 is a single carriageway road which provides a connection between the C1064 and the C1068. The U1096 is subject to the national speed limit and is supported by passing places.
U1160	The U1160 also known as Leachkin Road is two-way single carriageway road which runs southwest off the C1118. The U1160 is subject to the national speed limit.

Road	Description
U1169	The U1169 is a single-track road of approximately 4 m in width, providing a connection between the C1056 and U3138. The U1169 is subject to the national speed and is supported by passing places.
U1255	The U1255 also known as Leachkin Brae is a single carriageway of approximately 3.5 m in width which runs southwest off the U1160. The U1255 is subject to the national speed limit and is supported by passing places.
U1556	The U1556 is a single-track road of approximately 3 m in width, which runs south from the A862. The U1556 is subject to the national speed and is supported by passing places.
U1560	The U1560 is a single-track road of approximately 3 m in width, which runs south from the C114. The U1560 is subject to the national speed limit and is supported by passing places.
U1568	The U1568 is a single-track road of approximately 3 m in width, providing a connection between the C1102 and the U2362. The U1568 is subject to the national speed limit and is supported by passing places.
U1604	The U1604 runs between the C1108 at Culburnie Burn to the C1106 at Hill View. The road is approximately 4-5 m in width, subject to a 60-mph speed limit, and either side of the carriageway there is mostly agricultural land use with few holiday cottages.
U1797	The U1797 (Inchberry Road) is approximately 3.5 m in width and runs south off the A862 towards Lentran. The U1797 is subject to the national speed limit and is supported by passing places.
U2268	The U2268 (Dunaincroy Road) is approxiamtly 3.5 m in width and runs southeast off the A82 (T). The U2268 is subject to the national speed limit and is supported by passing places.
U2362	The U2362 is a single-track road of approximately 3 m in width, providing a connection between the U1556 and the U1568. The U2362 is subject to the national speed and is supported by passing places.
U2370	The U2370 is a single-track road of approximately 3 m in width, providing a connection between the A862 and Lentran Home Farm road. The U2370 is subject to the national speed.
U2374	The U2374 is approxiamtly 3 m in width and runs southwest from the U2370. The U2374 is subject to the national speed limit.
U2395	The U2395 is a single-track road of approximately 4.5 m in width running south off the C1116. The U2395 is subject to the national speed and is supported by passing places.
U3114	The U3114 is a single-track road of approximately 3 m in width, providing a connection between the C1161 and C1154. The U3114 is subject to the national speed and is supported by passing places.
U3138	The U3138 single-track road of approximately 3 m in width, providing a connection between the C1154 and the U1169. The U3138 is subject to the national speed and is not currently supported by passing places.
U3151	The U3151 is a single-track road of approximately 3 m in width, providing a connection between the A9090 and the U1169. The U3151 is subject to the national speed and is supported by passing places.

Existing Traffic Conditions

13.3.2 As previously outlined in **Paragraphs 13.2.16 -13.2.19** two sources of traffic data have been used to establish baseline flows, including ATC surveys and DfT count data.

13.3.3 This data was provided as two-way AADT flows by vehicle type including HGVs. A summary of the 2024 two-way flows on the road links contained in the Study Area is provided in **Table 13.11**, with the locations of the traffic count sites shown in **Figure 13.2: Highland Council - Traffic Count Site Locations.**

Table 13.11: Highland - 2024 Annual Average Daily Two-Way Traffic Flows (24-hour)

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
Section 1	HC-C1106-01: C1106 between Fanellan and the U1604	2024	ATC 1	1	239	0.42%
	HC-U1604-01: U1604 between the C1106 and the C1108	2024	ATC 3	8	299	2.68%
	HC-C1108-01: C1108 between the A833 and the U1604	2024	ATC 4	7	441	1.59%
	HC-A833-01: A833 between the A862 and C1108	2024	ATC 5	47	3067	1.53%
	HC-A862-01: A862 between the A831 and C1116	2020	30950	126	4396	2.87%
Section 2	HC-A862-02: A862 between the C1116 and Inchmore	2023	80011	81	4484	1.80%
	HC-C1102-01: C1102 between A862 and U1568	2024	812143	6	481	1.25%
Section 3	HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness	2022	80331	78	5287	1.48%
	HC-A862-04: A862 between Scorguie Rd, Inverness and the A82	2018	80330	479	18274	2.62%
Section 5	HC-A8082-01: A8082 between the A9 (T) and A82 (T)	2024	09611	453	16191	2.80%
	HC-B862-01: B862 (southwest of Inverness) between Scaniport and Cullaird	2024	ATC 6	15	2378	0.63%
Section 6	HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	2024	ATC 7	6	232	2.59%
Section 7	HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot	2024	ATC 8	11	704	1.56%
	HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	2024	ATC 9	3	130	2.31%
Section 8	HC-B9090-01: B9090 between the A96 (T) and C1056 (including B9006)	2024	00146	239	1612	14.83%
Section 11	HC-B9090-03: B9090 between Cawdor and the B9091	2024	00136	370	2699	13.71%
	HC-A939-01: A939 between the B9091 and Ferness	2024	ATC 10	12	1039	1.15%

13.3.4 The links included below in **Table 13.12** are included within **Figure 13-1: Highland Council - Traffic and Transport Study Area**. As traffic data is not available for these Study Links, they have not been quantitatively analysed at this stage. However, assuming that the addition of construction traffic results in a 100% impact throughout the assessment, these links have been qualitatively assessed.

Table 13.12: Highland Study Area Links without Traffic Data

Section	Link	Description
Section 1	HC-C1106-02	HC-C1106-02: C1106 between the U1604 and A831
	HC-A831-01	HC-A831-01: A831 between the A862 and C1106
Section 2	HC-C1100-01	HC-C1100-01: C1100 between A862 and Cairn
	HC-U1568-01	U1568 between C1102 and U2362
	HC-U2362-01	U2362 between U1568 and Newtonhill
	HC-U1556-01	U1556 between A862 and Newtonhill
	HC-C1116-01	C1116 between A862 and U2395
	HC-U2395-01	U2395 between C1116 and Achnagairn
Section 3	HC-C1114-01	C1114 between A862 and U1560
	HC-C1114-02	C1114 between U1560 and Kirkton Muir
	HC-U1560-01	U1560 between C1114 and Bunchrew Burn
	HC-C1097-01	C1097 between A862 and Newtonhill
	HC-U1797-01	U1797 between A862 and C1097
	HC-U2370-01	HC-U2370-01: U2370 between A862 and U2374
	HC-U2374-01	HC-U2374-01: U2374 between U2370 and Lentran House
	HC-C1118-01	C1118 between A862 and U1160
	HC-U1160-01	U1160 between C1118 and U125S
	HC-U1255-01	U1255 between U1160 and Leachkin
Section 4	HC-C1060-01	C1060 between A82 (T) and Kirkhill and Bunchrew
	HC-U2268-01	HC-U2268-01: U2268 between A82 (T) and Loch Ness Country House
Section 5	HC-C1064-01	C1064 between the A8082 and U1096
	HC-U1096-01	U1096 between the C1064 and Holm Burn
	HC-C1040-01	C1040 between the C1064 and B862
Section 6	HC-B851-01	B851 between Inverarnie and the A9
	HC-B861-01	B861 between Cairn and the B851
Section 7	HC-B9154-01	B9154 between the A9 (T) and C1056
Section 8	HC-C1056-02	C1056 between B9090 and Culloden Viaduct
	HC-U1169-01	HC-U1169-01: U1169 east of the C1056
Section 9	HC-B9090-02	B9090 between the C1056 and Cawdor
	HC-U3151-01	U3151 between the U1169 and B9090
	HC-U1169-02	U1169 between the U3151 and Drummournie
	HC-U1169-03	U1169 between U3138 and Glengoullie

Section	Link	Description
	HC-U3138-01	U3138 between U1169 and Lochanshelloch
Section 10	HC-C1154-01	C1154 between B9090 and C1161
	HC-C1154-02	C1154 between C1161 and Bruachmary
	HC-C1161-01	C1161 between C1154 and Achavraat
	HC-U3114-01	U3114 between C1161 and Clunas Wood
Section 11	HC-B9091-01	B9091 between B9090 and A939
	HC-C1173-01	C1173 south of A939 to Drussie Wood
	HC-B9007-01	B9007 between A939 and Auchnabechan Wood

13.3.5 To provide a robust assessment, and to align with the current information provided by the Principal Contractor, it is assumed that site deliveries would take place over an 11-hour day (between 07:00 and 18:00). Conversion factors have been derived from DfT Road Traffic Statistics – Table TRA0308: 'Traffic distribution on all roads by time of day and day of the week, for selected vehicle types in Great Britain'[21] for the latest data available, 2023, to convert the DfT and ATC AADT flows to 11-hour flows.

13.3.6 The following factors have been derived for cars, light vehicles and HGVs:

- HGVs – 0.7124; and
- all vehicles – 0.7435.

13.3.7 **Table 13.13** shows the resulting 11-hour flows following application of the derived factors.

Table 13.13: Highland - 2024 Annual Average Daily Two-Way Traffic Flows (11-hour)

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
Section 1	HC-C1106-01: C1106 between Fanellan and the U1604	2024	ATC 1	1	178	0.40%
	HC-U1604-01: U1604 between the C1106 and the C1108	2024	ATC 3	6	222	2.56%
	HC-C1108-01: C1108 between the A833 and the U1604	2024	ATC 4	5	328	1.52%
	HC-A833-01: A833 between the A862 and C1108	2024	ATC 5	33	2281	1.47%
	HC-A862-01: A862 between the A831 and C1116	2020	30950	90	3268	2.75%
Section 2	HC-A862-02: A862 between the C1116 and Inchmore	2023	80011	58	3334	1.73%

[21] Department for Transport, (2024). Road Traffic Statistics – Annual Daily Traffic Flow and Distribution (TRA03). (Online) Available at: https://www.gov.uk/government/statistical-data-sets/road-traffic-statistics-tra#annual-daily-traffic-flow-and-distribution-tra03

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
	HC-C1102-01: C1102 between A862 and U1568	2024	812143	4	358	1.20%
Section 3	HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness	2022	80331	56	3931	1.41%
	HC-A862-04: A862 between Scorguie Rd, Inverness and the A82	2018	80330	341	13587	2.51%
Section 5	HC-A8082-01: A8082 between the A9 (T) and A82 (T)	2024	09611	323	12038	2.68%
Section 6	HC-B862-01: B862 (southwest of Inverness) between Scaniport and Cullaird	2024	ATC 6	11	1768	0.60%
	HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	2024	ATC 7	4	172	2.48%
Section 7	HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot	2024	ATC 8	8	523	1.50%
	HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	2024	ATC 9	2	97	2.21%
Section 8	HC-B9090-01: B9090 between the A96 (T) and C1056 (including B9006)	2024	00146	170	1199	14.21%
Section 11	HC-B9090-03: B9090 between Cawdor and the B9091	2024	00136	264	2007	13.14%
	HC-A939-01: A939 between the B9091 and Ferness	2024	ATC 10	9	772	1.11%

Pedestrian, Cyclist and Public Rights of Way Facilities

Pedestrian Facilities

13.3.8 The Proposed Development's alignment results in it passing through an area which is predominantly rural in nature, with limited pedestrian facilities provided out with towns and villages.

13.3.9 There are pedestrian facilities provided by way of footways adjacent to carriageway on several sections of the access routes, predominantly within the vicinity of the towns of Inverness and Nairn. These towns are served by comprehensive pedestrian networks supported by controlled pedestrian crossings.

13.3.10 Pedestrian facilities are also present in the villages of Croy, Inchmore, Newlands of Culloden, Wester Balblair and Daviot, which support local pedestrian access.

Public Rights of Way

13.3.11 A review of the Public Rights of Way (PRoW) and Core Paths within Highland indicates that a number of routes are located within the vicinity of the proposed access routes, and these are detailed in **Chapter 14: Recreation and Tourism**, within **Figure 14.2: Public Access Routes**.

Cycle Facilities

13.3.12 Inverness has a comprehensive cycle network with facilities being provided both on and off road. Nairn has a number of local cycling facilities within the town predominantly located away from the primary road network.

13.3.13 Local cycle facilities are also provided within the areas of Wester Balblair, Inchmore, Culloden and Cawdor, with these predominantly located remote from the primary road network. Local cycle routes consisting of shared-use and recreational facilities can be found in the following locations:

- adjacent to the A862, in sections between Wester Balblair and the Inchmore;
- adjacent to the B862 between Scaniport and Inverness;
- a mountain bike trail through Drumashie Plantation to Inverness via Scaniport;
- wide shared-use footways either side of the A8082 (Inverness link road) for the majority of the route; and
- adjacent to the carriageway Forres Road between Tom Semple Road and Aldearn.

13.3.14 Other long-distance trails that are part of the core path and cycle network include the Great Glen Way that comprises a combination of on-road and traffic free sections running from An Aird (Fort William) to Inverness Castle, passing between Cnoc na Moine and Craig Leach through which the Proposed Development would be accessed via access points 16-19.

13.3.15 As shown in **Figure 13.1: Highland Council - Traffic and Transport Study Area** and following a review of Sustrans' National Cycle Network (NCN) map, the NCN Route 1 passes through Nairn and Inverness, with the route supported by both on-road and traffic free cycle facilities. NCN Route 78 runs from Inverness to Dores via the B862 at Scaniport while NCN Route 7 runs from Newlands of Culloden to Carrbridge via the C1056. NCN 78 and 7 are therefore located in the vicinity of the Proposed Development.

Accident Review

13.3.16 PIA data for the most recently available five-year period, covering 2018 to 2022, was obtained for the Study Area links. The locations and severity of the PIAs reported in the Study Area are shown in **Figure 13.3: Highland Council – Personal Injury Accident Locations** and are summarised in **Table 13.14.** The table also identifies the accident rate associated with each link, comparing this with the national average as identified by the DfT for the road type.

Table 13.14: Highland Personal Injury Accident Summary (2018-2022)

PIA Study Area	Road Type	Slight	Serious	Fatal	Total	PIA Rate (per Million Veh Km[12])	National Average (per Million Veh Km[13])	Above or Below National Average
A831 between the C1106 and the A862	Urban A Roads	1	0	0	1	0.13	0.43	Below
A862 between the A831 and Scorguie Rd, Inverness	Rural A Roads	7	0	2	9	0.05	0.12	Below

PIA Study Area	Road Type	Slight	Serious	Fatal	Total	PIA Rate (per Million Veh Km[12])	National Average (per Million Veh Km[13])	Above or Below National Average
A862 between Scorguie Rd, Inverness and the A82	Urban A Roads	3	1	0	4	0.09	0.43	Below
A82 (T) Dochgarroch to Inverness	Rural A Roads	2	1	1	4	0.06	0.12	Below
A8082 between the A9 (T) and the Slackbuie Distributor Road	Urban A Roads	5	1	0	6	0.04	0.43	Below
A8082 between the A82 (T) and the Slackbuie Distributor Road	Urban A Roads	4	4	0	8	0.10	0.43	Below
B862 (southwest of Inverness) between Scaniport and Cullaird	Rural other road	3	0	0	3	0.19	0.20	Below
C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	Rural other road	0	0	0	0	0.00	0.20	Below
B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot	Rural other road	3	2	0	5	0.62	0.20	Above
C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	Rural other road	0	0	0	0	0.00	0.20	Below
B9090 between the B9091 and A939	Rural other road	2	1	0	3	0.06	0.20	Below
A939 between the B9101 and south of Ferness	Rural A Roads	2	4	0	6	0.18	0.12	Above

13.3.17 As shown in **Table 13.14**, of the local roads that experienced the highest number of accidents, the majority of the road network is shown to have annual accident rates that are mostly below the respective national average for each of the roads characteristics. This suggests that there are no existing safety concerns on the majority of the network.

13.3.18 All reported accidents have been attributed to driver / pedestrian / rider error, and further analysis of the accident data confirms that there are no specific safety concerns on the local road network which would support access to the tower installation sites from the trunk road network.

13.3.19 The accident data review has therefore confirmed that there are no specific safety concerns within the Study Area.

Future Baseline

13.3.20 Construction of the Proposed Development within Highland would commence during 2026 if consent is granted. In order to provide a robust assessment, the future baseline year has been adjusted to cover the peak period of construction movements. The Principal Contractor currently anticipates that the busiest construction period would take place during 2026, and the assessment has therefore been undertaken for a 2026 future baseline to coincide with the peak period.

13.3.21 To assess the likely effects during the construction phase, 2026 base year traffic flows were determined by applying a National Road Traffic Forecast 1997 (NRTF97) low growth factor (1.011) to the 2024 traffic flows. The resulting 2026 base traffic flows are presented in **Table 13.15.**

Table 13.15: Highland - 2026 Annual Average Daily Two-Way Traffic Flows (11-hour)

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
Section 1	HC-C1106-01: C1106 between Fanellan and the U1604	2024	ATC 1	1	180	0.40%
	HC-U1604-01: U1604 between the C1106 and the C1108	2024	ATC 3	6	225	2.56%
	HC-C1108-01: C1108 between the A833 and the U1604	2024	ATC 4	5	331	1.52%
	HC-A833-01: A833 between the A862 and C1108	2024	ATC 5	34	2305	1.47%
	HC-A862-01: A862 between the A831 and C1116	2020	30950	91	3303	2.75%
Section 2	HC-A862-02: A862 between the C1116 and Inchmore	2023	80011	58	3369	1.73%
	HC-C1102-01: C1102 between A862 and U1568	2024	812143	4	361	1.20%
Section 3	HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness	2022	80331	56	3973	1.41%
	HC-A862-04: A862 between Scorguie Rd, Inverness and the A82	2018	80330	345	13731	2.51%
Section 5	HC-A8082-01: A8082 between the A9 (T) and A82 (T)	2024	09611	326	12166	2.68%
	HC-B862-01: B862 (southwest of Inverness) between Scaniport and Cullaird	2024	ATC 6	11	1787	0.60%
Section 6	HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	2024	ATC 7	4	174	2.48%
Section 7	HC-B851-02: B851 (southeast of Inverness)	2024	ATC 8	8	529	1.50%

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
	north of the junction with the A9 (T) at Mains of Daviot					
	HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	2024	ATC 9	2	98	2.21%
Section 8	HC-B9090-01: B9090 between the A96 (T) and C1056 (including B9006)	2024	00146	172	1211	14.21%
Section 11	HC-B9090-03: B9090 between Cawdor and the B9091	2024	00136	266	2028	13.14%
	HC-A939-01: A939 between the B9091 and Ferness	2024	ATC 10	9	781	1.11%

13.3.22 The data in **Table** 13.15 has been used to support the impact assessment.

Sensitive Receptor Identification

13.3.23 **Table 13.16** provides a summary of the sensitive receptors identified on each link, with the locations of the links shown in **Figure 13.1: Highland Council- Traffic and Transport Study Area**.

13.3.24 The IEMA Guidelines suggests how the sensitivity of receptors should be assessed. Professional judgement was subsequently used to develop a classification of sensitivity for users based on the characteristics of roads and locations. This is summarised in **Table 13.16.**

13.3.25 Where a road passes through a location, users are considered subject to the level of sensitivity defined by either the road or location characteristics.

Table 13.16: Highland Sensitive Receptor Identification

Section	Road	Sensitivity Classification	Sensitivity Rationale
1	A Roads	Low for majority, medium through Beauly	These sections of the A862, A831 and A833 are wide, high standard carriageways running through predominantly rural areas. With limited sensitive receptors, these sections has been classed as low sensitivity.
	Classified Roads	Medium	The C1108 and C1106 are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U1604 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
2	A Roads	Low	The A862 is a wide, high standard carriageway with properties set back from carriageway. With limited sensitive receptors, this section has been classed as low sensitivity.
	Classified Roads	Medium	The C1102, C1100 and C1116 are single carriageways and do not commonly experience high levels of traffic.

Section	Road	Sensitivity Classification	Sensitivity Rationale
			As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U1568, U1556, U2395 and U2362 are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
3	A Roads	Low for majority, medium through Bunchrew, Inchmore, and Scorguie	The A862 is generally rural in nature with few sensitive receptors. Therefore, the majority of the road has been classified as having low sensitivity. It is noted that the A862 passes through the villages of Inchmore and Bunchrew, as well as the area of Scorguie which are urban in nature and therefore these sections of road have been classed as having medium sensitivity.
	Classified Roads	Medium	The C1097, C1118, and C1114 are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U1560, U1797, U1160, U1255, U2370 and U2374 are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
4	Classified Roads	Medium	The C1060 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
	Unclassified Roads	Medium	The U2268 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
5	A Roads	Medium	The A8082 is a wide, high standard carriageway. This section runs through areas with sensitive receptors. The carriageway runs close proximity to areas of leisure, schools, residential areas, and businesses. This section has been classed as having medium sensitivity.
	B Roads	Low	The B862 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.
	Classified Roads	Medium	The C1064 and C1040 are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U1096 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
6	B Road	Low	The B861 and B851 are wide, high standard roads with properties set back from the carriageway. They are predominantly rural in nature with few sensitive receptors. As such, this section has been classified as low sensitivity.
	Classified Roads	Medium	The C1068 is a single carriageway and does not commonly experience high levels of traffic. This section

Section	Road	Sensitivity Classification	Sensitivity Rationale
			also runs in close proximity to a primary school. As such, this section has been classified as medium sensitivity.
7	B Roads	Low	The B851 and B9154 are wide, high standard carriageways with properties set back from the carriageway. These sections are rural and have very few sensitive receptors. As such, these sections have been classified as low sensitivity.
	Classified Roads	Medium	The C1056 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
8	B Road	Low	The B9090 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.
	Classified Roads	Medium	The C1056 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
	Unclassified Roads	Medium	The U1169 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
9	B Road	Low	The B9090 is a wide, high standard carriageway. While this section runs through Cawdor, residential properties and limited businesses in this area are set back from carriageway. With limited sensitive receptors, this section has been classed as low sensitivity.
	Unclassified Roads	Medium	The U3151, U1169, and U3138 are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Classified Roads	Medium	The C1154 and C1161 are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U3114 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
11	A Roads	Low	The A939 is a wide, high standard carriageway running through a predominantly rural area. With limited sensitive receptors, this section has been classed as low sensitivity.
	B Road	Low	The B9090 and B9091 are wide, high standard roads with properties set back from the carriageway. They are predominantly rural in nature with few sensitive receptors. As such, these sections have been classified as low sensitivity. Although the B9007 passes through Ferness there are limited sensitive receptors and therefore this section has also been classed as having low sensitivity.

Section	Road	Sensitivity Classification	Sensitivity Rationale
	Classified Roads	Medium	The C1173 is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.

13.3.26 Based on professional judgement it is considered that the following links are subject to Rule 2 as having 'medium' sensitivity overall:

- HC-C1106-01: C1106 between Fanellan and the U1604;
- HC-C1106-02: C1106 between the U1604 and A831;
- HC-U1604-01: U1604 between the C1106 and the C1108;
- HC-C1108-01: C1108 between the A833 and the U1604;
- HC-C1116-01: C1116 between A862 and U2395;
- HC-U2395-01: U2395 between C1116 and Achnagairn;
- HC-C1100-01: C1100 between A862 and Cairn
- HC-C1102-01: C1102 between A862 and U1568;
- HC-U1568-01: U1568 between C1102 and U2362;
- HC-U2362-01: U2362 between U1568 and Newtonhill;
- HC-U1556-01: U1556 between A862 and Newtonhill;
- HC-C1097-01: C1097 between A862 and Newtonhill;
- HC-U1797-01: U1797 between A862 and C1097;
- HC-C1118-01: C1118 between A862 and U1160;
- HC-U1160-01: U1160 between C1118 and U125S;
- HC-U1255-01: U1255 between U1160 and Leachkin;
- HC-U2370-01: U2370 between A862 and U2374
- HC-U2374-01: U2374 between U2370 and Lentran House
- HC-C1114-01: C1114 between A862 and U1560;
- HC-C1114-02: C1114 between U1560 and Kirkton Muir;
- HC-U1560-01: U1560 between C1114 and Bunchrew Burn;
- HC-C1060-01: C1060 between A82 (T) and Kirkhill and Bunchrew;
- HC-U2268-01: U2268 between A82 (T) and Loch Ness Country House
- HC-A8082-01: A8082 between the A9 (T) and the A82 (T);
- HC-C1040-01: C1040 between C1064 and the B862;
- HC-C1064-01: C1064 between the A8082 and U1096;
- HC-U1096-01: U1096 between C1064 and Holm Burn;
- HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie;
- HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich;
- HC-C1056-02: C1056 between B9090 and Culloden Viaduct;
- HC-U3151-01: U3151 between U1169 and B9090;
- HC-U1169-01: U1169 east of the C1056
- HC-U1169-02: U1169 between the U3151 and Drummournie
- HC-U1169-03: U1169 between U3138 and Glengoullie

- HC-U3138-01: U3138 between U1169 and Lochanshelloch
- HC-C1154-01: C1154 between B9090 and C1161;
- HC-C1154-02: C1154 between C1161 and Bruachmary;
- HC-C1161-01: C1161 between the C1154 and U3114;
- HC-U3114-01: U3114 between C1161 and Clunas Wood; and
- HC-C1173-01: C1173 south of A939 to Drussie Wood.

13.3.27 Based on professional judgement it is considered that the following links are subject to Rule 1 as having 'low' sensitivity overall:

- HC-A833-01: A833 between the A862 and C1108;
- HC-A831-01: A831 between the A862 and C1106
- HC-A862-01: A862 between the A831 and C1116;
- HC-A862-02: A862 between the C1116 and Inchmore;
- HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness;
- HC-A862-04: A862 between Scorguie Rd, Inverness and the A82;
- HC-B862-01: B862 (southwest of Inverness) between Scaniport and Cullaird;
- HC-B851-01: B851 between Inverarnie and the A9;
- HC-B861-01: B861 between Cairn and the B851;
- HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot;
- HC-B9154-01: B9154 between the A9 (T) and C1056;
- HC-B9090-01: B9090 between the A96 (T) and C1056 (including B9006);
- HC-B9090-02: B9090 between C1056 and Cawdor;
- HC-B9090-03: B9090 between Cawdor and the B9091;
- HC-B9091-01: B9091 between B9090 and A939;
- HC-A939-01: A939 between the B9091 and Ferness; and
- HC-B9007-01: B9007 between A939 and Auchnabechan Wood.

13.3.28 The results of the classification of receptors on each link reflect the generally rural nature of the local road network, with the greatest amount of sensitivity located at villages along each link.

Baseline 2: Moray Council

Extent of the Moray Study Area

13.3.29 **Figure 13.4: Moray Council - Traffic and Transport Study Area** shows the Proposed Development location in relation to the local road network which is included within the Study Area and detailed in **Table 13.17**.

Table 13.17: Extent of Moray Study Area

Road	Description
Trunk Road Network	
A96 (T)	For the majority of the Study Area the is a two-way single carriageway which forms part of the trunk road network and provides the main road connection between Aberdeen and Inverness. The A96 (T) is generally subject to the national speed limit, which reduces to 30 mph when passing through towns and villages. On the Fochaber bypass there is both two lane single carriageway and one lane single carriageway.

Road	Description
A95 (T)	The A95 (T) within the Study Area is a two-way single carriageway which provides a connection between Keith and the A98. The A95 (T) is generally subject to the national speed limit, which reduces when passing through towns and villages.
Local Road Network	
A940	The A940 is a two-way single carriageway road which provides a connection between Forres and Ballater. The A940 is generally subject to the national speed limit, which reduces when passing through villages.
A941	The A941 is a two-way single carriageway road which and provides a connection between Lossiemouth and Rhynie, via Elgin. The A941 is generally subject to the national speed limit, which reduces when passing through villages.
B9010	The B9010 is a single carriageway road which provides a connection between the A96 (T) in Elgin and the B9011 in Forres, and is generally subject to the national speed limit, which reduces when passing through villages.
B9011	The B9011 provides a connection between the A96 (T) and Findhorn. Within the Study Area, the B9011 is a single two-way carriageway road which forms the main street through Forres. The B9011 is subject to a 30 mph speed limit within Forres.
B9015	The B9015 is a two-way single carriageway road providing a connection from the A96 (T) to the A941 in Rothes. Within the Study Area, the B9015 is subject to the national speed limit out with settlements.
B9016	The B9016 is a single two-way carriageway road that provides a connection between the A96 (T) and the A98 (near Enzie). The B9016 is mainly subject to the national speed limit, however, this reduces to 40 mph when passing through Aultmore within the Study Area.
B9017	The B9017 is a single carriageway road that provides a connection between the A96 (T) and the A95 (T) via Newmill. The B9017 is mainly subject to the national speed limit, however, this reduces to 30 mph when passing through Newmill.
B9103	The B9103 is a two-way single carriageway which provides a connection between Lossiemouth and Mulben. Within the Study Area, the B9103 is primarily subject to the national speed limit. There are signed height restrictions found adjacent to the carriageway where the main Inverness – Aberdeen rail line which crosses above the B9103 carriageway, approximately 350m southwest of the A96 (T). The B9103 crosses under the same rail line at a second location approximately 30 m east of the B9103 junction with the B9015. The restrictions in place at this secondary location is a max height of 15'0". Motorists are advised of these height constraints in advance of the two structures at the following locations at the A96 (T) / B9103 junction and on the B9103 approximately 70 m in advance of the bridge respectively.
C11E	The C11E is a rural single-track road which is approximately 3 m in width, providing a connection between the B9007 and the A940, within the Study Area. The C11E is supported by passing places and subject to the national speed limit.
C12E	The C12E is a rural single-track road which is approximately 4 m in width, which connects to the B9010 at both its western and eastern end. The C12E is mainly subject to the national speed limit, however this reduces to 30 mph when passing through Dallas. The C12E is supported by passing places.
C13E	The C13E is a rural single-track road which is approximately 4 m in width, which provides a connection between Dallas and the B9102. Within the Study Area, the C13E is subject to the national speed limit and is supported by passing places.

Road	Description
C37E	The C37E is a two-way single carriageway road within Forres, which provides a connection between the B9011 and B9010. The C37E is subject to a 30 mph speed limit, with a part-time 20 mph speed limit in place within the vicinity of the Andersons Primary School.
C74H	The C74H is a rural single-track road of approximately 3 m in width, providing a connection from the B9016 and the B9017. The C74H is subject to the national speed and is supported by passing places.
U109E	The U109E is a rural single-track road which is approximately 3 m in width, which connects the C12E with the C13E near Dallas. The U109E is subject to the national speed and is supported by passing places.
U129E (Teindland Road)	The U129E is a rural single-track road of approximately 3 m in width, providing a connection from the B9103 to Teindland Farm. The U129E is subject to the national speed and is supported by passing places.
U13E (Forgiehill Road)	The U13E is a rural single-track road of approximately 3 m in width, providing a connection between C49H and the B9016 near Raefin, crossing the A96 (T). Within the Study Area, the U13E is subject to the national speed and is supported by passing places.
U14E (Ordiequish Road)	The U14E is a single carriageway road a provides a connection between the B9104 in Fochabers and the B9103. Within Fochabers, the U14E is subject to a 30 mph speed limit, with a part-time 20 mph speed limit in place within the vicinity of Milnes Primary and High Schools. To the south of Fochabers the U14E reduces to a width of approximately 3 m and is subject to the national speed limit. The U14E is supported by passing places.
U19E (Dipple Road)	The U19E is a rural single-track road of approximately 3 m in width that connects into the A96 (T) and the B9015 near Orton. The U19E is subject to the national speed limit and is not currently supported by passing places.
U22E (Hatton Road)	The U22E is a rural single-track road approximately 3 m in width which connects the B9015 and the U19E. The U22E is subject to the national speed limit and is not currently supported by passing places.
U20E (Badentinan Road)	The U20E is a rural single-track road of approximately 3 m in width, providing a connection between the B9103 and the B9015. The U20E is subject to the national speed limit and is supported by passing places to the west of the railway line.
U35H (Drum Road)	The U35H is a single carriageway road which provides a connection from the A96 (T) to Meikle Ardrone. Within Keith the U35H is subject to a 30 mph speed limit. To the east of Keith, the U35H reduces to a width of approximately 3 m and is subject to the national speed limit. The U35H is not currently supported by passing places.
U41H	The U41H is a single-track road of approximately 3 m in width, providing a connection between the C74H and Whitestones. The U41H is subject to the national speed limit.
U44H (Auchoynanie Road)	The U44H is a single-track road of approximately 3 m in width, providing a connection between the A96 (T) and Wester Herricks. The U44H is subject to the national speed limit and is supported by passing places.
U50H	The U50H is a single-track road of approximately 3 m in width, providing a connection between the B9017 and Burn of Fernking. The U50H is subject to the national speed limit.

Road	Description
U51H (High Glen Road)	The U51H is a rural single-track road of approximately 3 m in width, connecting from the B9017 and Wellside. The U51H is subject to the national speed limit but is not currently supported by passing places.
U65H (Drakemyres Road)	The U65H is a rural single-track road of approximately 3 m in width, providing a connection from the A96 (T) to Blackfold. The U65H is subject to the national speed limit but is not currently supported by passing places.
U88E (Diveside Road)	The U88E is a rural single-track road of approximately 3 m in width, providing a connection between the A940 at to Tomcork. The U88E is subject to the national speed limit and is supported by passing places.

Existing Traffic Conditions

13.3.30 As previously outlined in in **Paragraphs 13.2.15- 13.2.18** two sources of traffic data have been used to establish baseline flows, including ATC surveys and DfT count data.

13.3.31 The most recent 'manual and automatic count' data available on the DfT website has been used and extrapolated to 2024 where necessary to align with the ATC data. A summary of the 2024 two-way flows on the road links contained in the Study Area is provided in **Table 13.18**, with the locations of the traffic count sites shown in **Figure 13.5: Moray Council - Traffic Count Site Locations**.

Table 13.18: Moray - 2024 Annual Average Daily Two-Way Traffic Flows (24-hour)

Section	Description	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
Section 12	MC-A940-02: A940 Between Forres to Tomdow	2024	ATC 11	46	1189	3.87%
Section 13	MC-B9011-01: B9011 between the A96 (T) and the C37E	2024	ATC0033	418	5297	7.89%
Section 14	MC-B9010-02: B9010 between the A96 (T) and the C12E	2024	ATC 12	5	303	1.65%
Section 15	MC-A941-01: A941 between the A96 (T) and Culzean Road	2018	78576	310	20849	1.49%
	MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry	2024	ATC 13	235	6401	3.67%
Section 16	MC-B9103-02: B9103 between the A96 (T) and the U129E	2024	ATC 14	10	1245	0.80%
Section 17	MC-B9015-01: B9015 between the A96 (T) and Cairnend	2024	ATC 15	164	1389	11.81%
	MC-U22E-01: U22E between the B8015 and U19E	2018	805372	7	39	17.95%
Section 19	MC-B9016-01: B9016 between the A96 (T) and Auchinderran	2024	ATC 16	85	2604	3.26%

13.3.32 The links included below in **Table** 13.19 are included within **Figure 13.4: Moray Council - Traffic and Transport Study Area**. As traffic data is not available for these Study Links, they have not been quantitatively analysed at this stage. However, assuming that the addition of construction traffic results in a 100% impact throughout the assessment, these links have been qualitatively assessed.

Table 13.19: Moray Study Area Links without Traffic Data

Section	Link	Description
Section 12	MC-A940-01	MC-A940-01: A940 within Forres
	MC-C11E-01	C11E between the A940 and Dusach
	MC-U88E-01	U88E between the A940 and Little Corshellach
	MC-U88E-02	U88E between the A940 and Bridge of Newton
Section 13	MC-C37E-01	C37E between the B9011 and B9010
	MC-B9010-01	B9010 between the C37E and C12E
	MC-C12E-01	C12E between the B9010 and U109E
	MC-U109E-01	U109E between the C12E and Rhinagoup
Section 14	MC-C12E-01	C12E between the B9010 and C13E
	MC-C13E-01	C13E between the C12E and Coldwells
Section 16	MC-B9103-01	MC-B9103-01: B9103 between the A96 (T) and the U129E
	MC-U129E-01	U129E between the B9103 and Greenside
	MC-U20E-01	U20E between the B9103 and Westerton
Section 17	MC-U19E-01	U19E between the U22E and Burnside of Dipple
Section 18	MC-U14E-01	U14E between the B9104 and Aultdearg
	MC-U13E-01	U13E northeast of the A96 (T) at Forgie Hill
	MC-U13E-02	U13E southwest of the A96 (T) at Forgie Hill
	MC-U65H-01	U65H between the A96 (T) and Blackfold
Section 19	MC-C74H-01	C74H between the B9016 and U41H
	MC-U41H-01	U41H between the C74H and Auchairn
	MC-B9017-01	B9017 between the A96 (T) and C75H
	MC-B9017-02	B9017 between the A95 and U51H
	MC-C74H-02	C74H between the B9017 and Auchairn
	MC-U41H-02	U41H between the C74H and Broomhill
	MC-U50H-01	U50H between the B9017 and Foulford
	MC-U51H-01	U51H between the B9017 and Brunthall
	MC-A95-01	A95 (T) between the A96 (T) and B9017
	MC-A95-02	A95 (T) between the B9017 and B9018
	MC-U35H-01	U35H between the A96 (T) and Meikle Ardrone
	MC-U44H-01	U44H between A96 (T) and Mains of Auchoynanie

13.3.33 To provide a robust assessment, and to align with the current information provided by the Principal Contractor, it is assumed that site deliveries would take place over an 11-hour day (between 07:00 and 18:00). Conversion factors have been derived from DfT Road Traffic Statistics – Table TRA0308: 'Traffic distribution on all roads by time of day and day of the week, for selected vehicle types in Great Britain'[22] for the latest data available, 2023, to convert the DfT and ATC AADT flows to 11-hour flows.

[22] Department for Transport, (2024). Road Traffic Statistics – Annual Daily Traffic Flow and Distribution (TRA03). Available at: https://www.gov.uk/government/statistical-data-sets/road-traffic-statistics-tra#annual-daily-traffic-flow-and-distribution-tra03

13.3.34 The following factors have been derived for cars, light vehicles and HGVs:

- HGVs – 0.7124; and
- all vehicles – 0.7435.

13.3.35 **Table 13.20** shows the resulting 11-hour flows following application of the derived factors.

Table 13.20: Moray - 2024 Annual Average Daily Two-Way Traffic Flows (11-hour)

Section	Description	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
Section 12	MC-A940-02: A940 Between Forres and Tomdow	2024	ATC 11	33	884	3.71%
Section 13	MC-B9011-01: B9011 between the A96 (T) and the C37E	2024	ATC0033	298	3938	7.56%
Section 14	MC-B9010-02: B9010 between the A96 (T) and the C12E	2024	ATC 12	4	225	1.58%
Section 15	MC-A941-01: A941 between the A96 (T) and Culzean Road	2018	78576	221	15501	1.42%
	MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry	2024	ATC 13	167	4759	3.52%
Section 16	MC-B9103-02: B9103 between the U129E and Altonside	2024	ATC 14	7	926	0.77%
Section 17	MC-B9015-01: B9015 between the A96 (T) and Cairnend	2024	ATC 15	117	1033	11.31%
	MC-U22E-01: U22E between the B9015 and U19E	2018	805372	5	29	17.20%
Section 19	MC-B9016-01: B9016 between the A96 (T) and Auchinderran	2024	ATC 16	61	1936	3.13%

Pedestrian, Cyclist, and Public Rights of Way Facilities

Pedestrian Facilities

13.3.36 The Proposed Development's alignment results in it passing through an area which is predominantly rural in nature, with limited pedestrian facilities provided out with towns and villages.

13.3.37 There are pedestrian facilities provided by way of footways adjacent to carriageway on several sections of the access routes, predominantly along the A96 (T) and within the vicinity of the towns of Elgin, Forres and Keith. These towns are served by comprehensive pedestrian networks supported by controlled pedestrian crossings.

13.3.38 Pedestrian facilities are also present in the villages of Fochabers, Newmill, Dallas, Alves and Brodie, which support local pedestrian access.

Public Rights of Way

13.3.39 A review of the Public Rights of Way (PRoW) and Core Paths within Moray indicates that a number of routes are located within the vicinity of the proposed access routes, and these are detailed in **Chapter 14: Recreation and Tourism**, within **Figure 14.2: Public Access Routes**.

Cycle Facilities

13.3.40 Local cycle facilities are provided within Elgin, Forres and Fochabers but these are predominantly located remote from the primary road network. A local cycle route consisting of a shared-use and on road facility is provided adjacent to the A96 (T) between Elgin and Fochabers.

13.3.41 The Speyside Way, a long-distance trail that comprises a combination of on-road and traffic-free sections running from Buckie to Aviemore, passes through Fochabers.

13.3.42 A review of Sustrans' National Cycle Network (NCN) map indicates that NCN Route 1 passes through Elgin and north of Forres, with the route supported by both on-road and traffic-free cycle facilities. The NCN 1 does not cross the Study Area as shown in **Figure 13.4: Moray Council Traffic and Transport Study.**

Accident Review

13.3.43 PIA data for the most recently available five-year period, covering 2018 to 2022, was obtained for the Study Area links. The locations and severity of the PIAs reported in the Study Area are shown in **Figure 13.6: Moray Council – Personal Injury Accident Locations** and are summarised in **Table 13.21**. The table also identifies the accident rate associated with each link, comparing this with the national average as identified by the DfT for the road type.

Table 13.21: Moray Personal Injury Accident Summary (2018-2022)

PIA Study Area	Road Type	Sight	Serious	Fatal	Total	PIA Rate (per Million Veh Km[12])	National Average (per Million Veh Km[13])	Above or Below National Average
A941 (south of Elgin to Access point)	Rural A Roads	4	5	1	10	0.06	0.12	Below
B9015 (south of B9013 to the A941)	Rural other road	2	2	1	5	0.14	0.20	Below

13.3.44 As shown in **Table 13.21**, the A941 and the B9015 links have annual accident rates that are below the respective national average for each of the roads characteristics, suggesting that there are no existing safety concerns on the A941 or B9015 which were reported to experience the highest number of accidents on the local road network.

13.3.45 All reported accidents have been attributed to driver error, and further analysis of the accident data confirms that there are no specific safety concerns on the local road network which would support access to the tower installation sites from the trunk road network.

Future Baseline

13.3.46 Construction of the Proposed Development within Moray would commence during 2026 if consent is granted. In order to provide a robust assessment, the future baseline year has been adjusted to cover the peak period of construction movements. The Principal Contractor currently anticipates that the busiest construction period would take place during 2026, and the assessment has therefore been undertaken for a 2026 future baseline to coincide with the peak period.

13.3.47 To assess the likely effects during the construction phase, 2026 base year traffic flows were determined by applying a National Road Traffic Forecast 1997 (NRTF97) low growth factor (1.011) to the 2024 traffic flows. The resulting 2026 Base traffic flows are presented in **Table 13.22.**

Table 13.22: Moray - 2026 Annual Average Daily Two-Way Traffic Flows (11-hour)

Section	Description	Manual / Automatic Survey Year	Survey Location	Survey Year Two-Way Flows		HGV Proportion
				HGV	Total	
Section 12	MC-A940-02: A940 Between Forres and Tomdow	2024	ATC 11	33	893	3.71%
Section 13	MC-B9011-01: B9011 between the A96 (T) and the C37E	2024	ATC0033	301	3980	7.56%
Section 14	MC-B9010-02: B9010 between the A96 (T) and the C12E	2024	ATC 12	4	228	1.58%
Section 15	MC-A941-01: A941 between the A96 (T) and Culzean Road	2018	78576	223	15665	1.42%
	MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry	2024	ATC 13	169	4810	3.52%
Section 16	MC-B9103-02: B9103 between the U129E and Altonside	2024	ATC 14	7	935	0.77%
Section 17	MC-B9015-01: B9015 between the A96 (T) and Cairnend	2024	ATC 15	118	1044	11.31%
	MC-U22E-01: U22E between the B9015 and U19E	2018	805372	5	29	17.20%
Section 19	MC-B9016-01: B9016 between the A96 (T) and Auchinderran	2024	ATC 16	61	1957	3.13%

Sensitive Receptor Identification

13.3.48 **Table 13.23** provides a summary of the sensitive receptors identified on each link, with the locations of the links shown in **Figure 13.4: Moray Council - Traffic and Transport Study Area.**

13.3.49 The IEMA Guidelines suggests how the sensitivity of receptors should be assessed. Professional judgement was subsequently used to develop a classification of sensitivity for users based on the characteristics of roads and locations. This is summarised in **Table 13.23.**

13.3.50 Where a road passes through a location, users are considered subject to the level of sensitivity defined by either the road or location characteristics.

Table 13.23: Moray Sensitive Receptor Identification

Section	Road	Sensitivity Classification	Sensitivity Rationale
12	A Roads	Low for majority, medium through Forres	The A940 runs through the town of Forres on its northern section. While this is a wide carriageway with pedestrian facilities, there are many sensitive receptors through this urban area and therefore, this section of the road is being classified as medium sensitivity. The southern section of the road is through more rural areas and thus is being classified as low sensitivity.
	Classified Roads	Medium	The C11E is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.

Section	Road	Sensitivity Classification	Sensitivity Rationale
	Unclassified Roads	Medium	The U88E is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
13	B Road	Low for majority, medium through Forres	The B9011 and the northern section of the B9010 run through the town of Forres. While both roads are wide with pedestrian facilities, there are many sensitive receptors through this urban area and therefore, they have been classified as medium sensitivity. The southern section of the B9010 is through more rural areas and thus has been classified as low sensitivity.
	Classified Road	Medium	The C37E runs through the town of Forres there are many sensitive receptors present, therefore this section of the road has been classified as medium sensitivity. The C12E is a single carriageway and does not commonly experience high levels of traffic. As such, this section has also been classified as medium sensitivity.
	Unclassified Roads	Medium	The U109E is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
14	B Road	Low for the majority, medium through Elgin	The B9010 runs through the town of Elgin on its northern section. While this is a wide carriageway with pedestrian facilities, there are many sensitive receptors through this urban area and therefore, this section of the road has been classified as medium sensitivity. The southern section of the road is through more rural areas and thus has been classified as low sensitivity.
	Classified Road	Medium	The C12E and C13E are single carriageways and do not commonly experience high levels of traffic. As such, both roads have been classified as medium sensitivity.
15	A Roads	Low for majority, medium through Elgin	The A941 runs through the town of Elgin on its northern section. While this is a wide carriageway with pedestrian facilities, there are many sensitive receptors through this urban area and therefore, this section of the road has been classified as medium sensitivity. The southern section of the road is through more rural areas and thus has been classified as low sensitivity.
16	B Road	Low	The B9103 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.

Section	Road	Sensitivity Classification	Sensitivity Rationale
	Unclassified Roads	Medium	The U20E and U129E are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
17	B Road	Low	The B9015 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.
	Unclassified Roads	Medium	The U22E and U19E are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
18	Classified Road	Medium	The C74H is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
	Unclassified Road	Medium	The U13E, U65H and U41H are single carriageways and do not commonly experience high levels of traffic. The U14E is in a similar condition and also runs through the urban section of Fochabers. As such, these sections have been classified as medium sensitivity.
19	A Roads	Medium	The A95 runs through the town of Keith. While this is a wide carriageway with pedestrian facilities, there are many sensitive receptors through this urban area and therefore, the link has been classified as medium sensitivity.
	B Road	Low	The B9017 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.
	Classified Road	Medium	The C74H is a single carriageway and does not commonly experience high levels of traffic. As such, this section has been classified as medium sensitivity.
	Unclassified Road	Medium	The U41H, U49H, U50H, U35H, and U44H are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.

13.3.51 Based on professional judgement it is considered that the following links are subject to Rule 2 as having 'medium' sensitivity overall:

- MC-A940-01: A940 within Forres;
- MC-C11E-01: C11E between the A940 and Dusach;

- MC-U88E-01: U88E between the A940 and Little Corshellach;
- MC-U88E-02: U88E between the A940 and Bridge of Newton;
- MC-B9011-01: B9011 between the A96 (T) and the C37E;
- MC-C37E-01: C37E between the B9011 and B9010;
- MC-B9010-01: B9010 between the C37E and C12E;
- MC-C12E-01: C12E between the B9010 and U109E;
- MC-U109E-01: U109E between the C12E and Rhinagoup;
- MC-C12E-01: C12E between the B9010 and C13E;
- MC-C13E-01: C13E between the C12E and Coldwells;
- MC-A941-01: A941 between the A96 (T) and Culzean Road;
- MC-U129E-01: U129E between the B9103 and Greenside;
- MC-U20E-01: U20E between the B9103 and Westerton;
- MC-U22E-01: U22E between the B9015 and U19E;
- MC-U19E-01: U19E between the U22E and Burnside of Dipple;
- MC-U14E-01: U14E between the Upper Ordquish and Aultdearg
- MC-U13E-01: U13E northeast of the A96 (T) at Forgie Hill;
- MC-U13E-02: U13E southwest of the A96 (T) at Forgie Hill;
- MC-U65H-01: U65H between the A96 (T) and Blackfold;
- MC-C74H-01: C74H between the B9016 and U41H;
- MC-U41H-01: U41H between the C74H and Auchairn;
- MC-C74H-02: C74H between the B9017 and Auchairn;
- MC-U41H-02: U41H between the C74H and Broomhill;
- MC-U50H-01: U50H between the B9017 and Foulford
- MC-U51H-01: U51H between the B9017 and Brunthall;
- MC-A95-01: A95 between the A96 (T) and B9017;
- MC-U35H-01: U35H between the A96 (T) and Meikle Ardrone; and
- MC-U44H-01: U44H between A96 (T) and Mains of Auchoynanie;

13.3.52 Based on professional judgement it is considered that the following links are subject to Rule 1 as having 'low' sensitivity overall:

- MC-A940-02: A940 between Forres and Tomdow;
- MC-B9010-02: B9010 between the A96 (T) and the C12E;
- MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry;
- MC-B9103-01: B9103 between the A96 (T) and the U129E;
- MC-B9103-02: B9103 between the U129E and Altonside;
- MC-B9015-01: B9015 between the A96 (T) and Cairnend;
- MC-B9016-01: B9016 between the A96 (T) and Auchinderran;
- MC-B9017-01: B9017 between the A96 (T) and C75H
- MC-B9017-02: B9017 between the A95 and U51H; and
- MC-A95-02: A95 between the B9017 and B9018.

13.3.53 The results of the classification of receptors on each link reflect the generally rural nature of the local road network, with the greatest amount of sensitivity located at villages along each link.

Baseline 3: Aberdeenshire Council

Extent of the Aberdeenshire Study Area

13.3.54 **Figure 13.7: Aberdeenshire Council - Traffic and Transport Study Area** shows the Study Area's location in relation to the local road network which is included within the Study Area and detailed in **Table 13.24**.

Table 13.24: Extent of Aberdeenshire Study Area

Road	Description
Trunk Road Network	
A96 (T)	The A96 (T) is a predominantly two-way single carriageway which forms part of the trunk road network and provides the main road connection between Aberdeen and Inverness. The A96 (T) is generally subject to the national speed limit, which reduces to 30 mph when passing through towns and villages.
Local Road Network	
A947	The A947 is a two-way single carriageway road which and provides a connection between Turriff and Oldmeldrum. The A947 is generally subject to the national speed limit, which reduces to 30 mph when passing through villages such as Turriff.
A948	The A948 is a two-way single carriageway road which and provides a connection between Ellon and the A981, near New Deer The A948 is generally subject to the national speed limit, which reduces when passing through villages.
A950	The A950 is a two-way single carriageway road which and provides a connection between Peterhead Bypass and the A98, north of New Pitsilgo. The A950 is generally subject to the national speed limit, which reduces when passing through villages.
A952	The A952 is a two-way single carriageway road which provides a connection between Mintlaw and the A90, at Toll of Birness. The A952 is generally subject to the national speed limit, which reduces when passing through villages.
A97	The A97 is a two-way single carriageway road which provides a connection between Banff and Huntly via Aberchirder. Within the Study Area, the A97 is of good standard and subject to the national speed limit.
A981	The A981 is a two-way single carriageway road which and provides a connection between the A950 northeast of Brucklay and New Deer. The A981 is generally subject to the national speed limit, which reduces to 30 mph when passing through villages.
B9001	The B9001 is a two-way single carriageway road which provides a connection between the A97 at Bogniebrae and Inverurie. Within the Study Area, the road is subject to the national speed limit and is of good condition between the A97 and Forgue.
B9022	The B9022 is a two-way single carriageway road which connects the A96 (T) at Huntly with the A95 (T) at Gordonstown to the north. Within the Study Area, the road is of good condition and is subject to the national speed limit.
B9024	The B9024 is a two-way single carriageway road which connects Turriff with the B9001 at Forgue to the west. Within the Study Area, the road is of reasonable standard and is subject to the national speed limit which reduces when passing through villages.
B9028	The B9028 is a two-way single carriageway road which connects the A948 at mains of Drum with the A981 at Artamford Crossroads. The road is subject to the national speed limit and is generally of good standard.

Road	Description
B9029	he B9029 is a two-way single carriageway road which provides a connection between Maud and Old Deer. The road is subject to the national speed limit and is generally of good standard.
B9030	The B9030 is a two-way single carriageway road which connects the A950 at Old Deer with the A948 at Auchnagatt. Within the Study Area, the road is of reasonable standard and is subject to the national speed limit which reduces when passing through villages such as Stuartfield.
B9106	The B9106 is a two-way single carriageway road which connects the A950 north of Maud with the A948 north of Nethermuir. Within the Study Area, the road is of reasonable standard and is subject to the national speed limit.
B9170	The B9170 is a single carriageway road which provides a connection between Turriff and New Deer, via Cuminestown. Within the Study Area, the B9170 is of a reasonable standard and is subject to the national speed limit which reduces when passing through villages.
C21S	The C21S two-way carriageway road which provides connections between Turriff and the B9170 via two sections: via Meikle Colp and Bridge of Delgaty. Within the Study Area, the C21S is of reasonable standard, approximately 5 m in width and subject to the national speed limit.
C22S	The C22S is a two-way single carriageway road which connects the B9024 at Turriff with the B9001 at Thorneybank. Within the Study Area, the road is approximately 6 m wide, of reasonable standard and is subject to the national speed limit.
C25S	The C25S is a single carriageway road which connects the C22S south of Turriff with the B992 at Dykeside. Within the Study Area, the road is approximately 3 m wide, subject to the national speed limit and not supported by passing places.
C26S	The C26S is a single carriageway road of 4-5 m width which connects Cuminestown with Fyvie to the south. The road is subject to the national speed limit, of reasonable standard and currently not supported by passing places.
C29S	The C29S is a single carriageway road of 5 m width which connects the C1S with the B9170 east of Greens. The road is subject to the national speed limit and of reasonable standard.
C38B	The C38B is a two-way carriageway road which connects the A952 west of Kinknockie with the A950 south of Longside Airfield. Within the Study Area, the road is approximately 5 m wide, subject to the national speed limit.
C39B	The C39B is a single carriageway road that provides a connection between the C38B at North Redbog to the A950. The C39B is approximately 3 - 4 m wide, subject to the national speed limit and is currently not supported by formal passing places.
C56B	The C56B is a single carriageway road which connects the A950 east of Flushing with the A90 east of Hatton. The road is subject to the national speed limit, is approximately 5 m wide, and of good standard.
C82S	The C82S is a rural single-track road approximately 5.5 m in width which connects the A97 and Drumblade. The C82S is subject to the national speed limit and is currently supported by passing places.
C87S	The C87S is a single carriageway road which connects the B9001 at Glen Dronach with the A96 (T) at Fordmouth to the south. The road is subject to the national speed limit and is approximately 3 - 4 m wide, supported by informal passing places.

Road	Description
C88S	The C88S is a single carriageway road which connects the A97 south of Bogniebrae with the U89S at Comisty to the south. The road is subject to the national speed limit and is approximately 4 m wide, currently not supported by formal passing places.
C97B	The C97B is a single carriageway road which connects the B9030 at Stuartfield with the A948 at Lammermuir to the south. The C97B is of approximately 4-5 m width, of good standard and subject to national speed limit.
C100B	The C100B is a single carriageway road which provides a connection between Cairnie and the B9022, via Ruthven. Within the Study Area, the C100B is of a reasonable standard, approximately 4 m wide, currently not supported by passing places, and is subject to the national speed limit.
C100S	The C100S is a single carriageway road which connects the A97 at Blackblair with Milltown of Rothiemay, via Millburn. The road is subject to the national speed limit and is approximately 4.5 m wide, which widens at bends, and is currently not supported by formal passing places.
C102B	The C102B is a single carriageway road that provides a connection between the C103B and Burntbrae. The C102B is approximately 3 - 4 m wide, subject to the national speed limit and is currently not supported by formal passing places.
C103B	The C103B is a single carriageway road which provides a connection between Maud and the B9030, via Bulwark. Within the Study Area, the C103B is of a reasonable standard, approximately 4 m wide, not currently supported by passing places, and is subject to the national speed limit which reduces to 30 mph when passing through villages.
C111S	The C11S is a single carriageway rural road of approximately 6 m width and connects the A96 (T) near Mains on Botary to Bridge of Dividson. The road is subject to the national speed limit and supported by passing places.
C106S	The C106S is a single carriageway road which provides a connection between Cairnie and the B9022, via Ruthven. Within the Study Area, the C106S is of a reasonable standard, approximately 4 - 5 m wide, and is subject to the national speed limit which reduces to 30 mph when passing through villages.
C123B	The C123B is a single carriageway road which connects the A981 north of New Deer with Mains of Culsh to the west. Within the Study area, the C123B is of good standard, approximately 5 m in width and subject to the national speed limit.
C125B	The C125B is a single carriageway road which connects the B9170 west of New Deer with New Byth to the northeast. Within the Study area, the C125B is of good standard, approximately 5-6 m in width, and subject to the national speed limit.
C127B	The C127B is a single carriageway road which connects the A981 north of New Deer with Loanhead of Fedderate to the west. Within the Study area, the C127B is of good standard, approximately 4 m in width, currently not supported by formal passing places and subject to the national speed limit.
U1S	The U1S is also a single-track road of which connects the B9170 at Mill of Colp with Northburnhill vias the C26S. The U1S is of approximately 3 m width of reasonable standard and subject to the national speed limit and is currently not supported by passing places.
U24S	The U24S is a single carriageway road that provides a connection between the C22S and the C25S south of Turriff. The U24S is approximately 3 m wide, subject to the national speed limit and is supported by informal passing places.

Road	Description
U25S	The U25S is a single carriageway road that provides a connection between the A947 at Darra and the C25S south of Turriff. The U25S is approximately 4 m wide, subject to the national speed limit and is supported by passing places along the eastern section close to Darra Centre.
U33S	The U33S is a single-track carriageway road approximately 3 m in width, providing a connection between B9024 at Mains of Tollo and the B992 at Kirktown of Auchterless. Within the Study Area, the U33S is subject to the national speed limit and is supported by informal passing places.
U52B	The U52B is a single carriageway road that provides a connection between the C38B east of Newton and Skelmuir Cottages to the west via the A952. The U52B is approximately 3 - 4 m wide, subject to the national speed limit and is currently not supported by formal passing places.
U55B	The U55B is a single carriageway road that provides a connection between the C38B at Toddlehills and Newmill to the west. The U55B is approximately 3 m wide, subject to the national speed limit and is currently not supported by formal passing places other than local carriageway widening at farming accesses.
U70B	The U70B is a single carriageway road that provides a connection between the A952 at Clola and the C38B to the south. The U70B is approximately 3 m wide, subject to the national speed limit and is currently not supported by formal passing places other than local carriageway widening two locations.
U89S	The U89S is a single-track carriageway road which provides a connection between the C89S at Conland and Comisty to the south. The U89S is of approximately 3 m width, subject to the national speed limit and currently not supported by passing places.
U90S	The U90S is a single-track carriageway road which provides a connection between the C87S just south of the B9001 and Bogcoup to the west. The U90S is of approximately 3 m width, subject to the national speed limit and currently not currently supported by passing places.
U91S	The U91S is a rural single-track road approximately 5 m in width which connects the B9001 and Corse. The U91S is subject to the national speed limit and is currently supported by passing places.
U92S	The U92S is a single-track carriageway road approximately 3 m in width, providing a connection between the U93bL at Haremoss and the B9001 at Denmoss to the south. Within the Study Area, the U92S is subject to the national speed limit and is currently not supported by passing places.
U93bL	The U93bL is a single-track carriageway road approximately 3 m in width, providing a connection between the B9024 the U94L at Haremoss to the south. The U93bL is subject to the national speed limit and is currently not supported by passing places.
U94L	The U94L is a single-track carriageway road approximately 3 m in width, providing a connection between the B9024 at Mains of Tollo and the U92S at Haremoss to the south. Within the Study Area, the U94L is subject to the national speed limit and is currently not supported by passing places.
U102S	The U102S is a rural single-track road approximately 3 m in width which connects the A97 and Boghead of Cobairdy. The U102S is subject to the national speed limit and is currently supported by passing places.
U103S	The U103S is a rural single-track road approximately 3 m in width which connects between the A97 and the C100S. The U103S is subject to the national speed limit and is currently supported by passing places.

Road	Description
U104S	The U104S is a rural single-track road approximately 3 m in width which connects between the the C100S and Corse of Kinnoir. The U104S is subject to the national speed limit and is currently supported by passing places.
U108S	The U108S is a single-track rural road of approximately 3 m width and connects the A96 (T) and the B9022 with Braehead via Hollowdyke and Riggens. The road is subject to the national speed limit and is currently not supported by passing places.
U111S	The U111S is a single carriageway rural road of approximately 6 m width and connects the A96 (T) at Auchairn to Coachford to the east. The road is subject to the national speed limit and built to a standard to accommodate larger vehicles.
U122B	The U122B is a single-track carriageway road of approximately 3 m width and connects the C127B at Loanhead of Fedderate with New Deer to the south. The road is subject to the national speed limit and is currently not supported by passing places.
U130S	The U130S is a single-track carriageway road chich connects the B9170 to the east with Northburn to the west. The U130S is of approximately 3 m width, subject to the national speed limit, and currently not supported by passing places however, local widenings are present at bends.

Existing Traffic Conditions

13.3.55 As previously outlined in **Paragraphs 13.2.15 - 13.2.18,** two sources of traffic data have been used to establish baseline flows, including ATC surveys and DfT count data.

13.3.56 The most recent 'manual and automatic count' data available on the DfT website has been used and extrapolated to 2024 where necessary to align with the ATC data. A summary of the 2024 two-way flows on the road links contained in the Study Area is provided in **Table 13.25**, with the locations of the traffic count sites shown in **Figure 13.8: Aberdeenshire Council - Traffic Count Site Locations**.

Table 13.25: Aberdeenshire - 2024 Annual Average Daily Two-Way Traffic Flows (24-hour)

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year 24hr Two-Way Flows		HGV Proportion
				HGV	Total	
Section 20	AC-B9022-01: B9022 between the A96 (T) and Haddoch	2018	804969	31	1414	2.21%
Section 21	AC-A97-01: A97 between the A96 (T) and B9001	2011	40870	102	1981	5.14%
	AC-B9001-02: B9001 between the B9024 and Burnside	2024	ATC 19	34	835	4.07%
Section 22	AC-B9170-01: B9170 between the A947 and Cuminestown	2018	804729	70	2451	2.85%
Section 23	AC-B9170-02: B9170 between the A948 and Cairncake	2024	ATC 20	30	1013	2.96%
	AC-A948-01: A948 between B9170 and B9028	2009	1180	71	973	7.29%

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year 24hr Two-Way Flows		HGV Proportion
				HGV	Total	
	AC-A981-01: A981 between B9029 and A950	2019	41009	97	1442	6.73%
Section 24	AC-B9106-01: B9106 between Drymuir and the A950	2024	ATC 21	7	568	1.23%
	AC-B9030-01: B9030 between the A950 and Upper Crichie	2024	ATC 22	8	487	1.64%
	AC-A950-02: A950 between B9106 and Mintlaw	2012	20990	215	2344	9.16%
Section 25	AC-A950-03: A950 between Mintlaw and A90 (T)	2023	ATC 23	909	6682	13.60%

13.3.57 The links included below in **Table 13.26** are included within **Figure 13.7: Aberdeenshire Council - Traffic and Transport Study Area**. As traffic data is not available for these Study Links, they have not been quantitatively analysed at this stage. However, assuming that the addition of construction traffic results in a 100% impact throughout the assessment, these links have been qualitatively assessed.

Table 13.26: Aberdeenshire Study Area Links without Traffic Data

Section	Link	Description
Section 20	AC-U111S-01	U111S between A96 (T) and Coachford
	AC-C111S-01	C111S between the A96 (T) and Hollowdyke
	AC-C106S-01	C106S between A96 (T) and Ruthven
	AC-U108S-01	U108S between the C106S and West Riggins
Section 21	AC-C100S-01	C100S between A97 and Milburn
	AC-U103S-01	U103S between C1005 and Broomfold
	AC-U104S-01	U104S between C100s and Course of Kinnoir
	AC-C82S-01	C82S between the A97 and Meikleton
	AC-U102S	U102S between A97 and Boghead of Cobairdy
	AC-C88S-01	C88S between A97and U89S
	AC-U89S-01	U89S between the C88S and Gariochsburn
	AC-B9001-01	B9001 between the A97 and B9024
	AC-C87S-01	C87S between B9001 and U91S
	AC-U90S-01	U90S between the C87S and Bogcoup
	AC-U91S-01	U91S between C87S and Frendraught

Section	Link	Description
	AC-B9024-01	B9024 between B9001 and U33S
	AC-U94L-01	U94L between B9024 and Reidswell
	AC-U93bL-01	AC-U93bL-01: U83bL between U94L and Haremoss
	AC-U33S-01	U33S between B9024 and Carlincraig
	AC-B9024-02	B9024 between U33S and A947
Section 22	AC-C22S-01	C22S between B9024 and Brownhill
	AC-U24S-01	U24S between C22S and Denfield
	AC-C25S-01	C25S between C22S and C25S
	AC-C25S-02	U24S between C25S and Denfield
	AC-A947-01	A947 between B9024 and U25S
	AC-U25S-01	U25S between A947 and Hill of Darra
	AC-C21S-01	C21S between B9170 and Little Colp
	AC-C21S-02	C21S between B9170 and Hill of Ardin
	AC-C26S-01	C26S between B9170 and U1S
	AC-U1S-01	U1S between C26S and Greeness
	AC-U1S-02	U1S between C26S and Berryhill
	AC-C1S-01	C1S between U1S and C29S
	AC-C29S-01	C29S between C1S and B9170
	AC-U130S-01	AC-U130S-01 between B9170 and Newton
Section 23	AC-C125B-01	C125B between B9170 and North Commonty
	AC-B9028-01	B9028 between A981 and West Auchreddie
	AC-C123B-01	C123B between A981 and Milton of Culsh
	AC-U122B-01	U122B between C127B and Collageford
	AC-C127B-01	C127B between A981 and Stevensburn
Section 24	AC-B9029-01	B9029 between the B9106 and C103B
	AC-C103B-01	C103B between the B9029 and Meikle Kirkhill
	AC-C102B-01	C102B between the C103B and Bruntbrae
	AC-C97B-01	C97B between B9030 and C100B
	AC-C100B-01	C100B between C97B and Upper Crichie
Section 25	AC-C56B-01	C56B between A950 and C38B

Section	Link	Description
	AC-U55B-01	U55B between C56B and Invereddie
	AC-C38B-01	C38B between C56B and A952
	AC-C39B-01	C39B between C39B and Braeside of Luqguharn
	AC-U52B-02	U52B between the C38B and Newton of Ludquharn
	AC-A952-01	A952 between C38B and U52B
	AC-U52B-01	U52B between the A952 and West Newton
	AC-U70B-01	U70B between A952 and Easter Pettymarcus

13.3.58 To provide a robust assessment, and to align with the current information provided by the Principal Contractor, it is assumed that site deliveries would take place over an 11-hour day (between 07:00 and 18:00). Conversion factors have been derived from DfT Road Traffic Statistics – Table TRA0308: 'Traffic distribution on all roads by time of day and day of the week, for selected vehicle types in Great Britain'[23] for the latest data available, 2023, to convert the DfT and ATC AADT flows to 11-hour flows.

13.3.59 The following factors have been derived for cars, light vehicles and HGVs:

- HGVs – 0.7124; and
- all vehicles – 0.7435.

13.3.60 **Table 13.30** shows the resulting 11-hour flows following application of the derived factors.

Table 13.27: Aberdeenshire - 2024 Annual Average Daily Two-Way Traffic Flows (11-hour)

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year 24hr Two-Way Flows		HGV Proportion
				HGV	Total	
Section 20	AC-B9022-01: B9022 between the A96 (T) and Haddoch	2018	804969	22	1051	2.12%
Section 21	AC-A97-01: A97 between the A96 (T) and B9001	2011	40870	73	1473	4.92%
	AC-B9001-02: B9001 between the B9024 and Burnside	2024	ATC 19	24	621	3.90%
Section 22	AC-B9170-01: B9170 between the A947 and Cuminestown	2018	804729	50	1822	2.73%
Section 23	AC-B9170-02: B9170 between the A948 and Cairncake	2024	ATC 20	21	753	2.84%
	AC-A948-01: A948 between B9170 and B9028	2009	1180	51	724	6.99%
	AC-A981-01: A981 between B9029 and A950	2019	41009	69	1072	6.45%

[23] Department for Transport, (2024). Road Traffic Statistics – Annual Daily Traffic Flow and Distribution (TRA03). Available at: https://www.gov.uk/government/statistical-data-sets/road-traffic-statistics-tra#annual-daily-traffic-flow-and-distribution-tra03

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year 24hr Two-Way Flows		HGV Proportion
				HGV	Total	
Section 24	AC-B9106-01: B9106 between Drymuir and the A950	2024	ATC 21	5	422	1.18%
	AC-B9030-01: B9030 between the A950 and Upper Crichie	2024	ATC 22	6	362	1.57%
	AC-A950-02: A950 between B9106 and Mintlaw	2012	20990	153	1742	8.77%
Section 25	AC-A950-03: A950 between Mintlaw and A90 (T)	2023	ATC 23	647	4968	13.03%

13.3.61 The data in **Table 13.24** has been used to support the impact assessment.

Pedestrian, Cyclist, and Public Rights of Way Facilities

Pedestrian Facilities

13.3.62 The Proposed Development's alignment results in it passing through an area which is predominantly rural in nature, with limited pedestrian facilities provided out with towns and villages.

13.3.63 There are pedestrian facilities provided by way of footways adjacent to carriageway on several sections of the access routes, predominantly within the towns of Huntly and Turriff. These towns are served by comprehensive pedestrian networks supported by controlled pedestrian crossings.

13.3.64 Pedestrian facilities are also present in the villages of Cuminestown, New Deer, Maud, Old Deer, Stuartfield, Mintlaw and Longside, which support local pedestrian access.

Public Rights of Way

13.3.65 A review of the Public Rights of Way (PRoW) and Core Paths within Aberdeenshire indicates that a number of routes are located within the vicinity of the proposed access routes, and these are detailed in **Chapter 14: Recreation and Tourism**, within **Figure 14.2: Public Access Routes**.

Cycle Facilities

13.3.66 There are limited cycle facilities in the vicinity of the Proposed Development.

13.3.67 As previously mentioned, the Formartine and Buchan Way, which is shown in **Figure 13.7: Aberdeenshire Council – Traffic and Transport Study Area**, is a long-distance off-road trail that links Dyce with Peterhead and Fraserburgh. The route passes through Maud, Mintlaw and Longside within the Study Area.

13.3.68 A review of Sustrans' National Cycle Network (NCN) map indicates that NCN Route 1 passes through Maud, Cuminestown and Turriff, with the route supported by both on-road and traffic-free cycle facilities.

Accident Review

13.3.69 PIA data for the most recently available five-year period, covering 2018 to 2022, was obtained for the Study Area links. The locations and severity of the PIAs reported in the Study Area are shown in **Figure 13.9: Aberdeenshire Council – Personal Injury Accident Locations** and are summarised in **Table 13.28**. The table also identifies the accident rate associated with each link, comparing this with the national average as identified by the DfT for the road type.

Table 13.28: Aberdeenshire Personal Injury Accident Summary (2018-2022)

PIA Study Area	Road Type	Slight	Serious	Fatal	Total	PIA Rate (per Million Veh[12])	National Average (per Million Veh Km[13])	Above or Below National Average
A97 between A96 (T) and B9001	Rural A Roads	1	3	0	4	0.15	0.12	Above
B9001 between the A97 and B9024	Rural other road	1	0	0	1	0.11	0.20	Below
B9170 between the A947 and Cuminestown	Rural other road	1	1	0	2	0.13	0.20	Below
A981 between the A948 and the A950	Rural A Roads	2	0	0	2	0.12	0.12	Below
A950 between the A952 and the C38B	Urban A Roads	2	0	0	2	0.11	0.43	Below

13.3.70 As shown in **Table 13.28**, of the local roads that experienced the highest number of accidents, the majority of the road network is shown to have annual accident rates that are below the respective national average for each of the roads characteristics. This suggests that there are no existing safety concerns on the majority of the network.

13.3.71 However, as shown, the section of the A97 between the A96 (T) and the B9001 is slightly above the national average. Four accidents occurred on this link, with one of the accidents occurring at a junction. Further analysis of the data suggests all of the accidents are likely attributable to driver error or weather conditions.

13.3.72 The accident data review has therefore confirmed that there are no specific safety concerns within the Study Area.

Future Baseline

13.3.73 Construction of the Proposed Development within Aberdeenshire would commence during 2026 if planning consent is granted. In order to provide a robust assessment, the future baseline year has been adjusted to cover the peak period of construction movements. The Principal Contractor currently anticipates that the busiest construction period would take place during 2026, and the assessment has therefore been undertaken for a 2026 future baseline to coincide with the peak period.

13.3.74 To assess the likely effects during the construction phase, 2026 base year traffic flows were determined by applying National Road Traffic Forecast 1997 (NRTF97) low growth factors (1.011) to the individual traffic flows. The resulting 2026 Base traffic flows are presented in **Table 13.29.**

Table 13.29: 2026 Annual Average Daily Two-Way Traffic Flows (11-hour)

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year 24hr Two-Way Flows		HGV Proportion
				HGV	Total	
Section 20	AC-B9022-01: B9022 between the A96 (T) and Haddoch	2018	804969	22	1062	2.12%
Section 21	AC-A97-01: A97 between the A96 (T) and B9001	2011	40870	73	1488	4.92%
	AC-B9001-02: B9001 between the B9024 and Burnside	2024	ATC 19	24	627	3.90%

Section	Road Link (of Section) from the TRN	Manual / Automatic Survey Year	Survey Location	Survey Year 24hr Two-Way Flows		HGV Proportion
				HGV	Total	
Section 22	AC-B9170-01: B9170 between the A947 and Cuminestown	2018	804729	50	1842	2.73%
Section 23	AC-B9170-02: B9170 between the A948 and Cairncake	2024	ATC 20	22	761	2.84%
	AC-A948-01: A948 between B9170 and B9028	2009	1180	51	731	6.99%
	AC-A981-01: A981 between B9029 and A950	2019	41009	70	1084	6.45%
Section 24	AC-B9106-01: B9106 between Drymuir and the A950	2024	ATC 21	5	427	1.18%
	AC-B9030-01: B9030 between the A950 and Upper Crichie	2024	ATC 22	6	366	1.57%
	AC-A950-02: A950 between B9106 and Mintlaw	2012	20990	154	1761	8.77%
Section 25	AC-A950-03: A950 between Mintlaw and A90 (T)	2023	ATC 23	654	5021	13.03%

Sensitive Receptor Identification

13.3.75 **Table 13.27** provides a summary of the sensitive receptors identified on each link, with the locations of the links shown in **Figure 13.7: Aberdeenshire Council- Traffic and Transport Study Area**.

13.3.76 The IEMA Guidelines suggests how the sensitivity of receptors should be assessed. Professional judgement was subsequently used to develop a classification of sensitivity for users based on the characteristics of roads and locations. This is summarised in **Table 13.30**.

13.3.77 Where a road passes through a location, users are considered subject to the level of sensitivity defined by either the road or location characteristics.

Table 13.30: Aberdeenshire Sensitive Receptor Identification

Section	Road	Sensitivity Classification	Sensitivity Rationale
20	B Roads	Low	The B9022 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.
	Classified Roads	Medium	The C106S and C111S are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U111S and U108S are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
21	A Roads	Low	The A97 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.

Section	Road	Sensitivity Classification	Sensitivity Rationale
	B Roads	Low	The B9001 and B9024 are wide, high standard carriageways with properties set back from the carriageway. These sections are rural and have very few sensitive receptors. As such, these sections have been classified as low sensitivity.
	Classified Roads	Medium	The C100S, C82S, C88S, C89S, and C87S are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U102S, U104S, U103S, U89S, U90S, U94L, U93bL, U33S and U91S are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
22	A Roads	Low	The A947 is a wide, high standard carriageway with properties set back from the carriageway. This section is rural and has very few sensitive receptors. As such, this section has been classified as low sensitivity.
	B Roads	Low	The B9024 and B9170 are wide, high standard carriageways with properties set back from the carriageway. These sectiosn are rural and have very few sensitive receptors. As such, these sections hves been classified as low sensitivity.
	Classified Roads	Medium	The C22S, C25S, C21S, and C26S are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U24S, U25S and U1S are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
23	A Roads	Low	The A950, A981 and A948 are wide, high standard carriageways with properties set back from the carriageway. These sections are rural and have very few sensitive receptors. As such, these sections have been classified as low sensitivity.
	B Roads	Low	The B9170 is a wide, high standard carriageway with properties set back from the carriageway. This section is slightly urban but with very few sensitive receptors. As such, this section has been classified as low sensitivity. The B9029 and B9028 are wide, high-quality carriageways set in rural locations with limited sensitive receptors, as such, these sections have been classified as low sensitivity.
	Classified Roads	Medium	The C29S, C125B, C123B, and C127B are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U1S, U130S and U122B are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
24	A Roads	Low for majority, medium through Mintlaw	The A950 is a wide, high standard carriageway with properties set back from the carriageway and should be considered low sensitivity for majority of the section. However, with the introduction of sensitive receptors including pedestrian infrastructure in the urban section of Mintlaw, this section should be considered medium sensitivity.

Section	Road	Sensitivity Classification	Sensitivity Rationale
	B Roads	Low for majority, medium through Maud, Stuartfield, and Old Deer	The B9106 and B9029 are wide, high standard carriageways with properties set back from the carriageway and should be considered low sensitivity for majority of their sections. However, with the introduction of sensitive receptors including pedestrian infrastructure in the urban section of Maud, this section should be considered medium sensitivity. The B9030 is of similar condition and while the majority of the route runs through rural areas with minimal sensitive receptors, the section through Stuartfield and Old Deer should be considered medium sensitivity due to the introduction of sensitive receptors including pedestrian infrastructure, and sensitive locations.
	Classified Roads	Medium	The C103B, C102B, C97B, and C100B are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
25	A Roads	Low	The A950 and A952 are a wide, high standard carriageways with properties set back from the carriageway. These sections are predominantly rural and have very few sensitive receptors. As such they have been classified as low sensitivity.
	Classified Roads	Medium	The C38B, C39B and C56B are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.
	Unclassified Roads	Medium	The U52B, U70B, and U55B are single carriageways and do not commonly experience high levels of traffic. As such, these sections have been classified as medium sensitivity.

13.3.78 Based on professional judgement it is considered that the following links are subject to Rule 2 as having 'medium' sensitivity overall:

- AC-U111S-01: U1115 between A96 (T) and Coachford;
- AC-C111S-01: C111S between the A96 (T) and Hollowdyke;
- AC-U108S-01: U108S between the C106S and West Riggins;
- AC-C106S-01: C106S between A96 (T) and Ruthven;
- AC-C100S-01: C100S between A97 and Milburn;
- AC-U103S-01: U103S between C1005 and Broomfold;
- AC-U104S-01: U104S between C100s and Course of Kinnoir;
- AC-C82S-01: C82S between the A97 and Meikleton;
- AC-U102S: U102S between A97 and Boghead of Cobairdy;
- AC-C88S-01: C88S between A97and U89S;
- AC-U89S-01: U89S between the C88S and Gariochsburn;
- AC-C87S-01: C87S between B9001 and U91S;
- AC-U90S-01: U90S between the C87S and Bogcoup;
- AC-U91S-01: U91S between C87S and Frendraught
- AC-U94L-01: U94L between B9024 and Reidswell;
- AC-U93bL-01: U93bL between U94L and Haremoss

- AC-U33S-01: U33S between B9024 and Carlincraig;
- AC-C22S-01: C22S between B9024 and Brownhill;
- AC-U24S-01: U24S between C22S and Denfield;
- AC-C25S-01: C25S between C22S and U24S;
- AC-U24S-02: U24S between C25S and Denfield;
- AC-U25S-01: U25S between A947 and Hill of Darra;
- AC-C21S-01: C21S between B9170 and Little Colp;
- AC-C21S-02: C21S between B9170 and Hill of Ardin;
- AC-C26S-01: C26S between B9170 and U1S;
- AC-U1S-01: U1S between C26S and Greeness;
- AC-U1S-02: U1S between C29S and Berryhill;
- AC-C29S-01: C29S between C1S and B9170
- AC-U130S-01: AC-U130S-01 between B9170 and Newton;
- AC-C125B-01: C125B between B9170 and North Commonty;
- AC-C123B-01: C123B between A981 and Milton of Culsh;
- AC-U122B-01: U122B between C127B and Collageford;
- AC-C127B-01: C127B between A981 and Stevensburn;
- AC-A950-01: A950 between B9106 and Mintlaw;
- AC-B9029-01: B9029 between the B9106 and C103B;
- AC-C103B-01: C103B between the B9029 and Meikle Kirkhill;
- AC-C102B-01: C102B between the C103B and Bruntbrae;
- AC-B9030-01: B9030 between the A950 and Upper Crichie;
- AC-C97B-01: C97B between B9030 and C100B;
- AC-C100B-01: C100B between C97B and Upper Crichie;
- AC-A950-02: A950 between A981 and Mintlaw;
- AC-A950-03: A950 between Mintlaw and C56B;
- AC-C56B-01: C56B between A950 and C38B;
- AC-U55B-01: U55B between C56B and Invereddie;
- AC-C38B-01: C38B between C56B and A952;
- AC-C39B-01: C39B between C39B and Braeside of Luqguharn
- AC-U52B-02: U52B between the C38B and Newton of Ludquharn;
- AC-U52B-01: U52B between the A952 and West Newton; and
- AC-U70B-01: U70B between A952 and Easter Pettymarcus.

13.3.79 Based on professional judgement it is considered that the following links are subject to Rule 1 as having 'low' sensitivity overall:

- AC-B9022-01: B9022 between A96 (T) and Haddoch;
- AC-A97-01: A97 between the A96 (T) and B9001;
- AC-B9001-01: B9001 between the A97 and B9024;
- AC-B9001-02: B9001 between the B9024 and Burnside;
- AC-B9024-01: B9024 between B9001 and U33S;
- AC-B9024-02: B9024 between U33S and A947;

- AC-A947-01: A947 between B9024 and B9170;
- AC-B9170-01: B9170 between the A947 and Cuminestown;
- AC-B9170-02: B9170 between the A948 and Cairncake;
- AC-A948-01: A948 between B9170 and B9028;
- AC-A981-01: A981 between B9029 and A950;
- AC-B9028-01: B9028 between A981 and A948;
- AC-B9029-01: B9029 between the A981 and Craigmill;
- AC-B9106-01: B9106 between Drymuir and the A950; and
- AC-A952-01: A952 between C38B and U52B.

13.3.80 The results of the classification of receptors on each link reflect the generally rural nature of the local road network, with the greatest amount of sensitivity located at villages along each link.

13.4 Assessment of Likely Significance of Effects

Embedded Mitigation

13.4.1 There are a number of mitigation measures proposed to reduce the significance of effect of construction traffic on the surrounding road network. These measures are either physical (those that require specific works to be undertaken whether on the existing road network or as part of the Proposed Development) or management used to ensure correct contractor behaviours.

Good Construction Practices and General Construction Traffic Management

13.4.2 Prior to the commencement of any on-site activities, a detailed CTMP would be prepared and agreed with the Local Authorities. The CTMP would include a number of measures to reduce the effects of the construction of the Proposed Development on local receptors and communities. The Outline CTMP, which is included within **Appendix 3.4: Outline Construction Traffic Management Plan**, is to be treated as an outline document, fixed at the time of submission to inform the EIA and is intended to be expanded into a detailed CTMP. The indicative measures proposed will be developed as the project progresses up to the construction stage. The Outline CTMP will be further developed by the Principal Contractor, in conjunction with THC, MC and AC and Transport Scotland (TS) and other appropriate stakeholders.

Outline Outdoor Access Plan

13.4.3 Prior to the commencement of any on-site activities, a finalised Outdoor Access Management Plan (OAMP) would be preprepared and agreed with the Local Authorities. The OAMP would include a number of measures to reduce the effects of the construction of the listed PRoW and core paths, crossing points and management of access locations. An outline OAMP is included in **Appendix 14.2: Outdoor Access Management Plan**.

Physical Measures

13.4.4 As detailed within the TAs included within **Appendix 13.1, 13.2, and 13.3** a number of physical measures include Public Road Improvements (PRIs) are proposed within the Study Area to mitigate against the potential impacts of construction traffic associated with the Proposed Development, with these including the following:

- **Site Access** – formation of new bellmouth junctions at various locations throughout the Study Area and the upgrade of existing bellmouths, The formation of these junctions may be supported by the installation of temporary speed limits to support the provision of an appropriate level of visibility at each access location, using site-relevant instruments for the duration of the construction works, including Traffic Regulation Orders and Temporary Traffic Regulation Orders. The indicative layouts of these junctions are presented in **Figure 3.7: Typical Bellmouth Layout;**

- **Public Road Improvements** – throughout the Study Area, as identified by the TAs, there are 64 instances where indicative alterations to the carriageways have been identified for construction traffic and which are summarised in **Appendix 3.2: Indicative Public Road Improvement (PRI) Works**. For further details please refer to the TAs included within **Appendix 13.1, 13.2 and 13.3** and the ALRA within **Appendix 13.5: Abnormal Load Route Assessment.** The final list of PRIs are to be determined by the Principal Contractor;
- **Route signage** – temporary construction signage would be erected on the construction traffic access routes, in the vicinity of the proposed Site access, at Yard access locations, and at other locations as considered necessary, to warn drivers of construction activities and the potential to encounter construction vehicles. The exact nature and location of the signage would be agreed with Highland Council, Moray Council, and Aberdeenshire Council prior to the commencement of construction activities;
- **Plant and Vehicle Cleaning** Construction vehicles which are required to enter the public road will be required to only make use of the identified construction traffic access routes and tracks. This will help to reduce the potential for excess dirt / muck attaching to the wheels of the wagon / lorry. Any driver found to be driving off-track will be reported and removed from site by site management. In the event of bad weather or muck being displaced onto the trunk road, additional road sweeping measures may be employed as and when required; and
- **Parking and Rest Bays** - In the event that the proposed traffic management (TM) plans associated with the Proposed Development impact any parking / rest bays, the Local Authority and Transport Scotland will be consulted well in advance of works commencing. To maintain the safety of the workforce and TM team, the parking / rest bay would be temporarily closed during the duration of the TM system.

Predicted Construction Impacts

Estimated Delivery Volumes

13.4.5 The Outline CTMP provided within **Appendix 3.4: Outline Construction Traffic Management Plan** presents an estimate of the total level of construction traffic associated with the delivery of each element of the Proposed Development.

13.4.6 The Daily Peak Trip Generation method for the Proposed Development has been extracted from the TAs which are located within **Appendix 13.1, 13.2 and 13.3** where this is assessed fully.

Maximum Daily Trip Generation Per Access Point on Each Section

13.4.7 **Table 13.31** summarises the maximum level of daily trips (where one trip equates to an arrival and departure) by vehicle type anticipated to be generated by the construction of each section of the Proposed Development for the peak period of construction. This takes cognisance of the trips generated by tower installation and track formation activities but assumes that no materials can be won or disposed of via borrow pits to provide a robust estimate of the level of traffic generated by construction activities. The table also summarises the average number of vehicles generated on an hourly basis and for 10-minute intervals on the assumption that construction traffic would be accessing the site for an 11-hour period.

Table 13.31: Predicted Total Traffic Generation Associated with Each Construction Section

Local Authority	Links	Daily Cars / Vans	Daily HGVs	Hourly Cars / Vans	Hourly HGVs	Cars / Vans per 10 mins	HGVs per 10 mins
Highland	Section 1 (A862, A833, A831, C1108, U1604, C1106)	76	150	7	14	1	2
	Section 2 (A862, C1102, C1100, C1116, U1568, U2362, U1556, U2395)	76	150	7	14	1	2

Local Authority	Links	Daily Cars / Vans	Daily HGVs	Hourly Cars / Vans	Hourly HGVs	Cars / Vans per 10 mins	HGVs per 10 mins
	Section 3 (A862, C1114, C1097, C1118, U1560, U1797, U1160, U1255, U2370, U2374)	76	150	7	14	1	2
	Section 4 (C1060, U2268)	76	150	7	14	1	2
	Section 5 (A8082, B862, C1064, C1040, U1096)	76	150	7	14	1	2
	Section 6 (C1068, B851, B861)	76	150	7	14	1	2
	Section 7 (B851, C1056, B9154)	76	150	7	14	1	2
	Section 8 (B9090, C1056, U1169)	76	150	7	14	1	2
	Section 9 (B9090, U3151, U1169, U3138)	106	158	10	14	2	2
	Section 10 (U3114, C1161, C1154)	106	158	10	14	2	2
	Section 11 (B9090, B9091, A939, B9007, C1173)	106	158	10	14	2	2
Moray Council	Section 12 (A940, C11E, U88E)	76	150	7	14	1	2
	Section 13 (B9011, B9010, C37E, C12E, U109E)	75	149	7	14	1	2
	Section 14 (B9010, C12E, C13E)	76	150	7	14	1	2
	Section 15 (A941)	75	150	7	14	1	2
	Section 16 (B9103, U20E, U129E)	76	150	7	14	1	2
	Section 17 (B9015, U19E, U22E)	76	150	7	14	1	2
	Section 18 (U14E, U13E, U65H, C74H)	106	158	10	14	1	2
	Section 19 (B9016, B9017, A95, C74H, U41H, U50H, U51H, U35H, U44H)	76	150	7	14	1	2
Aberdeenshire Council	Section 20 (U108S, C111S, B9022, C106S, U111S)	83	152	8	14	1	2
	Section 21 (A97, B9001, B9024, U33S, U93bL, U94L, U90S, U91S, U89S, U102S, U103S, U104S, C100S, C82S, C88S, C87S)	88	153	8	14	1	2

Local Authority	Links	Daily Cars / Vans	Daily HGVs	Hourly Cars / Vans	Hourly HGVs	Cars / Vans per 10 mins	HGVs per 10 mins
	Section 22 (B9170, A947, B9024, U1S, U25S, U24S, C22S, C25S, C21S, C26S)	106	158	10	14	1	2
	Section 23 (A948, A950, A981, B9170, B9028, B9029, C125B, C123B, C127B, C29S, U130S, U1S, U122B)	106	158	10	14	2	2
	Section 24 (A950, B9030, B9106, B9029, C103B, C97B, C100B, C102B)	106	158	10	14	2	2
	Section 25 (A950, A952, C56B, C38B, C39B, U55B, U52B, U70B)	106	158	10	14	2	2

13.4.8 As identified within the TAs (located within **Appendix 13.1, 13.2 and 13.3**), it is assumed that the trip generation identified above is the maximum level of daily traffic that each section of the Study Areas would experience at any one time. And therefore 100% of each sections daily peak construction traffic is assigned to each link within each section respectively.

Design Solutions and Assumptions

13.4.9 Construction and commissioning of the Proposed Development within Highland would commence during 2026 if consent is granted, with estimated energisation in Quarter 4 of 2030. Dismantling of existing OHLs and reinstatement would follow and is anticipated to be completed by Quarter 2 of 2032. The assessment of the potential effects has been undertaken assuming a worst-case scenario of the main portion of the construction phase which is expected to take approximately four years to 2030, with construction traffic likely to peak in 2026. The construction phase includes all activities supporting installation of the towers and cabling from establishment of the temporary site compounds to foundation and cabling works. It is anticipated that the busiest time period would be during the access track construction and enabling works which would run concurrently for each section. The peak construction activities are currently anticipated to occur within 2026.

Study Area 1: The Highland Assessment

13.4.10 This section provides an assessment of the level of effects generated by vehicles on The Highland Council existing local road network traffic flows during the peak construction phase of the Proposed Development.

Predicted Construction Impacts

13.4.11 A detailed assessment has been undertaken to determine the potential level of effect the construction traffic would have on the road network. **Table 13.32** quantifies the impact which construction traffic is forecast to have on the operation of each of the links in the Highland Study Area.

Table 13.32: Highland Construction Traffic Impact Summary

Study Network Route Section	Threshold (HGV or Total)	Scenario	2026 Two-Way Flows			Threshold Triggered?*
			HGV	Non-HGV	Total	
	10%	Baseline	1	179	180	Yes

Study Network Route Section	Threshold (HGV or Total)	Scenario	2026 Two-Way Flows			Threshold Triggered?*
			HGV	Non-HGV	Total	
HC-C1106-01: C1106 between Fanellan and the U1604		Baseline + Construction Traffic	151	255	406	
		% Impact	20874.21%	42.49%	126.01%	
HC-U1604-01: U1604 between the C1106 and the C1108	10%	Baseline	6	219	225	Yes
		Baseline + Construction Traffic	156	295	451	
		% Impact	2609.28%	34.72%	100.72%	
HC-C1108-01: C1108 between the A833 and the U1604	10%	Baseline	5	326	331	Yes
		Baseline + Construction Traffic	155	402	558	
		% Impact	2982.03%	23.29%	68.29%	
HC-A833-01: A833 between the A862 and C1108	30%	Baseline	34	2271	2305	Yes
		Baseline + Construction Traffic	184	2347	2531	
		% Impact	444.13%	3.35%	9.82%	
HC-A862-01: A862 between the A831 and C1116	30%	Baseline	91	3212	3303	Yes
		Baseline + Construction Traffic	241	3288	3529	
		% Impact	165.70%	2.37%	6.85%	
HC-A862-02: A862 between the C1116 and Inchmore	30%	Baseline	58	3311	3369	Yes
		Baseline + Construction Traffic	208	3387	3595	
		% Impact	258.54%	2.30%	6.72%	
HC-C1102-01: C1102 between A862 and U1568	10%	Baseline	4	357	361	Yes
		Baseline + Construction Traffic	155	433	588	
		% Impact	3479.03%	21.28%	62.61%	
HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness	30%	Baseline	56	3916	3973	Yes
		Baseline + Construction Traffic	206	3992	4199	
		% Impact	267.62%	1.94%	5.70%	
HC-A862-04: A862 between Scorguie Rd, Inverness and the A82	30%	Baseline	11	13720	13731	Yes
		Baseline + Construction Traffic	161	13796	13957	
		% Impact	1391.61%	0.55%	1.65%	
	30%	Baseline	326	11839	12166	Yes

Study Network Route Section	Threshold (HGV or Total)	Scenario	2026 Two-Way Flows			Threshold Triggered?*
			HGV	Non-HGV	Total	
HC-A8082-01: A8082 between the A9 (T) and A82 (T)		Baseline + Construction Traffic	476	11915	12391	
		% Impact	46.08%	0.64%	1.86%	
HC-B862-01: B862 (southwest of Inverness) between Scaniport and Cullaird	30%	Baseline	11	1776	1787	Yes
		Baseline + Construction Traffic	161	1852	2013	
		% Impact	1391.61%	4.28%	12.66%	
HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	10%	Baseline	4	170	174	Yes
		Baseline + Construction Traffic	155	246	401	
		% Impact	3479.03%	44.71%	129.81%	
HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot	30%	Baseline	8	521	529	Yes
		Baseline + Construction Traffic	158	597	755	
		% Impact	1897.66%	14.59%	42.78%	
HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	10%	Baseline	2	96	98	Yes
		Baseline + Construction Traffic	152	172	324	
		% Impact	6958.07%	79.57%	231.66%	
HC-B9090-01: B9090 between the A96 (T) and C1056 (including B9006)	30%	Baseline	172	1039	1211	Yes
		Baseline + Construction Traffic	330	1145	1475	
		% Impact	91.82%	10.20%	21.80%	
HC-B9090-03: B9090 between Cawdor and the B9091	30%	Baseline	266	1762	2028	Yes
		Baseline + Construction Traffic	424	1868	2292	
		% Impact	59.16%	6.04%	13.02%	
HC-A939-01: A939 between the B9091 and Ferness	30%	Baseline	9	772	781	Yes
		Baseline + Construction Traffic	166	878	1045	
		% Impact	1824.18%	13.78%	33.82%	

* Where there is no available traffic information, as a worst-case assessment it is assumed that percentage increase in total flows and HGV flows equate to 100% and these locations have been assessed as such.

Road Capacity Assessment

13.4.12 Capacity assessments have been conducted under the worst-case construction traffic levels that occur, and the results of the assessment can be seen in **Table 13.33**.

Table 13.33: Highland Road Capacity Assessment

Study Network Route Section	2026 Two-Way Flows			
	Total Base Traffic Flows	Theoretical Road Capacity (11-hour period)	Base + Construction Traffic Flows	Spare Capacity
HC-C1106-01: C1106 between Fanellan and the U1604	180	3080	406	86.83%
HC-U1604-01: U1604 between the C1106 and the C1108	225	3080	451	85.37%
HC-C1108-01: C1108 between the A833 and the U1604	331	3080	557	81.90%
HC-A833-01: A833 between the A862 and C1108	2305	19800	2531	87.22%
HC-A862-01: A862 between the A831 and C1116	3303	26400	3529	86.63%
HC-A862-02: A862 between the C1116 and Inchmore	3369	26400	3595	86.38%
HC-C1102-01: C1102 between A862 and U1568	361	3080	587	80.93%
HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness	3973	26400	4199	84.10%
HC-A862-04: A862 between Scorguie Rd, Inverness and the A82	13731	26400	13957	47.13%
HC-A8082-01: A8082 between the A9 (T) and A82 (T)	12166	26400	12392	53.06%
HC-B861-01: B861 (southwest of Inverness) between Scaniport and Cullaird	1787	26400	2013	92.38%
HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	174	3080	400	87.00%
HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot	529	24200	755	96.88%
HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	98	3080	324	89.49%
HC-B9090-01: B9090 between the B9006 and C1056	1211	17600	1475	91.62%
HC-B9090-03: B9090 between Cawdor and the B9091	2028	17600	2292	86.98%
HC-A939-01: A939 between the B9091 and Ferness	781	17600	1045	94.06%

13.4.13 The results in **Table 13.33** show that even with the addition of the worst-case construction traffic levels there would be substantial spare capacity on all of the links.

13.4.14 As such, it is considered that the temporary increase in traffic during the worst-case scenario would not result in a noticeable change in road capacity on the road network. Therefore, based on the results of the road capacity assessment, during the construction phase it is considered that the sensitivity of the capacity of the traffic network to changes in traffic flows is low and the magnitude of impact is predicted to be **negligible** compared to the link capacities. The impact of the Proposed Development on the capacity of the road network is expected to create **temporary**, **short to medium-term**, **negligible** and **not significant** transport effects.

13.4.15 It is considered that for the roads within the Study Area for which there are no baseline traffic flows these would have a minimum of 3,080 total vehicle capacity within an 11-hour window. With the addition of 264 total daily construction vehicles, this equates to 9% of the theoretical capacity of this link. It is considered that it is highly unlikely that there is above 91% of the link utilised and therefore it is considered that at-worst the Proposed Development would have a **temporary**, **short to medium-term**, **minor adverse** impact, which is **not significant**.

Severance Assessment

13.4.16 The predicted change in severance on the links has been evaluated based on the percentage increase in total traffic levels expected during the construction phase, in line with IEMA Guidelines. The significance of the predicted change in severance has been determined based on factors including the road conditions, traffic flows and level of pedestrian activity. **Table 13.34** sets out the quantitative severance assessment, where the sensitivity grading of receptors as per **Table 13.16**, and the magnitude of impact due to construction traffic (per historical thresholds) are shown. As per the IEMA Guidelines, **Table 13.35** sets out the qualitative severance assessment which assesses the various factors of influence, the results of which correspond with the results of the quantitative severance assessment.

Table 13.34: Highland Quantitative Severance Assessment

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
HC-C1106-01: C1106 between Fanellan and the U1604	180	406	126.01%	20874.21%	Medium	High
HC-C1106-02: C1106 between the U1604 and A831	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1604-01: U1604 between the C1106 and the C1108	225	451	100.72%	2609.28%	Medium	High
HC-C1108-01: C1108 between the A833 and the U1604	331	558	68.29%	2982.03%	Medium	High
HC-A831-01: A831 between the A862 and C1106	No Data	No Data	100.00%	100.00%	Low	High
HC-A833-01: A833 between the A862 and C1108	2305	2531	9.82%	444.13%	Low	High
HC-A862-01: A862 between the A831 and C1116	3303	3529	6.85%	165.70%	Low	High
HC-A862-02: A862 between the C1116 and Inchmore	3369	3595	6.72%	258.54%	Low	High
HC-C1116-01: C1116 between A862 and U2395	No Data	No Data	100.00%	100.00%	Medium	High
HC-U2395-01: U2395 between C1116 and Achnagairn	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1100-01: C1100 between A862 and Cairn	No Data	No Data	100.00%	100.00%	Medium	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
HC-C1102-01: C1102 between A862 and U1568	361	588	62.61%	3479.03%	Medium	High
HC-U1568-01: U1568 between C1102 and U2362	No Data	No Data	100.00%	100.00%	Medium	High
HC-U2362-01: U2362 between U1568 and Newtonhill	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1556-01: U1556 between A862 and Newtonhill	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1097-01: C1097 between A862 and Newtonhill	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1797-01: U1797 between A862 and C1097	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1118-01: C1118 between A862 and U1160	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1160-01: U1160 between C1118 and U125S	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1255-01: U1255 between U1160 and Leachkin	No Data	No Data	100.00%	100.00%	Medium	High
HC-U2370-01: U2370 between A862 and U2374	No Data	No Data	100.00%	100.00%	Medium	High
HC-U2374-01: U2374 between U2370 and Lentran House	No Data	No Data	100.00%	100.00%	Medium	High
HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness	3973	4199	5.70%	267.62%	Medium	High
HC-A862-04: A862 between Scorguie Rd, Inverness and the A82	13731	2013	12.66%	1391.61%	Medium	High
HC-C1114-01: C1114 between A862 and U1560	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1114-02: C1114 between U1560 and Kirkton Muir	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1560-01: U1560 between C1114 and Bunchrew Burn	No Data	No Data	100.00%	100.00%	Medium	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
HC-C1060-01: C1060 between A82 (T) and Kirkhill and Bunchrew	No Data	No Data	100.00%	100.00%	Medium	High
HC-U2268-01: U2268 between A82 (T) and Loch Ness Country House	No Data	No Data	100.00%	100.00%	Medium	High
HC-A8082-01: A8082 between the A9 (T) and A82 (T)	12166	12391	1.86%	46.08%	Medium	Medium
HC-B861-01: B861 (southwest of Inverness) between Scaniport and Cullaird	1787	2013	12.66%	1391.61%	Low	High
HC-C1040-01: C1040 between the C1064 and B862	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1064-01: C1064 between the A8082 and U1096	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1096-01: U1096 between C1064 and Holm Burn	No Data	No Data	100.00%	100.00%	Medium	High
HC-B851-01: B851 between Inverarnie and the A9	No Data	No Data	100.00%	100.00%	Low	High
HC-B861-01: B861 between Cairn and the B851	No Data	No Data	100.00%	100.00%	Low	High
HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	174	401	129.81%	3479.03%	Medium	High
HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot	529	755	42.78%	1897.66%	Low	High
HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	98	324	231.66%	6958.07%	Medium	High
HC-B9154-01: B9154 between the A9 (T) and C1056	No Data	No Data	100.00%	100.00%	Low	High
HC-B9090-01: B9090 between the A96 (T) and C1056 (including B9006)	1211	1475	21.80%	91.82%	Low	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
HC-C1056-02: C1056 between B9090 and Culloden Viaduct	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1169-01: U1169 east of the C1056	No Data	No Data	100.00%	100.00%	Medium	High
HC-B9090-02: B9090 between C1056 and Cawdor	No Data	No Data	100.00%	100.00%	Low	High
HC-U3151-01: U3151 between U1169 and B9090	No Data	No Data	100.00%	100.00%	Medium	High
HC-U1169-02: U1169 between the U3151 and Drummournie	No Data	No Data	100.00%	100.00%	Medium	Low
HC-U1169-03: U1169 between U3138 and Glengoullie	No Data	No Data	100.00%	100.00%	Medium	High
HC-U3138-01: U3138 between U1169 and Lochanshelloch	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1154-01: C1154 between B9090 and C1161	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1154-02: C1154 between C1161 and Bruachmary	No Data	No Data	100.00%	100.00%	Medium	High
HC-C1161-01: C1161 between the C1154 and U3114	No Data	No Data	100.00%	100.00%	Medium	High
HC-U3114-01: U3114 between C1161 and Clunas Wood	No Data	No Data	100.00%	100.00%	Medium	High
HC-B9091-01: B9091 between the B9090 and A939	No Data	No Data	100.00%	100.00%	Low	High
HC-B9090-03: B9090 between Cawdor and the B9091	2028	2292	13.02%	59.16%	Low	Medium
HC-A939-01: A939 between the B9091 and Ferness	781	1045	33.82%	1824.18%	Low	High
HC-C1173-01: C1173 south of A939 to Drussie Wood	No Data	No Data	100.00%	100.00%	Medium	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
HC-B9007-01: B9007 between A939 and Auchnabechan Wood	No Data	No Data	100.00%	100.00%	Low	High

Table 13.35: Highland Qualitative Severance Assessment

Section	Road Link	Severance Impact	Significance of the Effect
Section 1	HC-C1106-01	The link is rural in nature, with no pedestrian facilities or Core Paths, indicating a low desirability for pedestrians to cross the road. There are also less than 200 total movements per day on this road indicating low base line flows.	Minor Adverse, Not significant
	HC-C1106-02	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	HC-U1604-01	The link is rural in nature, with no pedestrian facilities. There is one Core Path crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road. There are also less than 300 total movements per day on this road indicating low base line flows.	Minor Adverse, Not significant
	HC-C1108-01	While the link includes Kiltarlity Village and Tomnacross Village School, there are limited pedestrian facilities and the provision of a zebra crossing to facilitate NMU movements. There are also less than 500 total movements per day indicating low baseline flows. Therefore, it is considered there is a low impact.	Minor Adverse, Not significant
	HC-A831-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	HC-A833-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	HC-A862-01	This link is rural in nature however it does contain some pedestrian infrastructure including a shared cycle-walking route. There are few services along the carriageway indicating low desirability to cross the carriageway.	Minor Adverse, Not significant
Section 2	HC-A862-02	This link is rural in nature and there are limited pedestrian facilities. However, there are a few Core Paths that run adjacent to the carriageway. Through Inchmore there is a signalised crossing facility, facilitating pedestrian movements.	Minor Adverse, Not significant
	HC-C1116-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. Overall, this	Minor Adverse, Not significant

Section	Road Link	Severance Impact	Significance of the Effect
		indicates a low desirability for pedestrians to cross the road.	
	HC-U2395-01	The link is rural in nature, with no pedestrian facilities. There is one Core Path crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	HC-C1100-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	HC-C1102-01	The link is rural in nature, with limited pedestrian facilities. There are Core Paths adjacent to the carriageway. There are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U1568-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U2362-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U1556-01	This is a high-speed trunk road link with high traffic flows. Whilst there is a cycle crossing and footways on either side of the carriageway, it is unlikely that there are many pedestrians crossing the carriageway.	Minor Adverse, Not Significant
Section 3	HC-C1097-01	The link is rural in nature, with limited pedestrian facilities. There are Core Paths adjacent to the carriageway. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U1797-01	The link is rural in nature, with limited pedestrian facilities. There are Core Paths adjacent to the carriageway. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-C1118-01	This link is predominantly residential in nature. There are pedestrian facilities on both sides of the carriageway and signalised crossings at the King Brude Road junction. Overall, there is a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U1160-01	This link is predominantly residential in nature. There are pedestrian facilities on both sides of the carriageway. Overall, there is a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U1255-01	This link is predominantly residential in nature. There are pedestrian facilities on both sides of the carriageway and core paths connect to the link.	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
		Overall, there is a low desirability for pedestrians to cross the road.	
	HC-U2370-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U2374-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-A862-03	This link is rural in nature with few pedestrian facilities through the majority of the route. Within Brunchrew footways can be found on either side of the carriageway indicating a low desirability to cross the road. The link also runs through Scorguie Road which has pedestrian facilities on both sides of the carriageway. Overall, there is a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-A862-04	This link is predominantly residential in nature. There are pedestrian facilities on one side of the carriageway and signalised crossings at the King Brude Road junction. Overall, there is a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-C1114-01	The link is rural in nature with few residential properties throughout. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-C1114-02	The link is rural in nature with few residential properties throughout. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U1560-01	The link is rural in nature with few residential properties throughout. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
Section 4	HC-C1060-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-U2268-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. It is anticipated that there are low existing flows on this	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
		link. Overall, this indicates a low desirability for pedestrians to cross the road.	
Section 5	HC-A8082-01	This is a 40 mph bypass with shared pedestrian cycleways on either side of the carriageway. There are signalised pedestrian crossings to facilitate any movements.	Minor Adverse, Not Significant
	HC-B862-01	This is a predominantly rural high-speed link with a segregated shared cycle / pedestrian route on one side of the carriageway. Indicating a low desirability for pedestrians to cross the carriageway.	Minor Adverse, Not Significant
	HC-C1040-01	The link is rural in nature, with no pedestrian facilities. There are Core Paths adjacent to the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-C1064-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are several Core Paths located adjacent to the carriageway. With limited pedestrian facilities overall indicating low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	HC-U1096-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no Core Paths and no pedestrian facilities, overall indicating low desirability for pedestrian crossings.	Minor Adverse, Not Significant
Section 6	HC-B851-01	This is a high-speed rural link with limited sensitive receptors on either side of the carriageway indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	HC-B861-01	This is a rural link with limited pedestrian facilities and no Core Paths throughout the majority of the link and throughout Inverarnie, indicating a low desirability for pedestrian crossings.	Negligible, Not Significant
	HC-C1068-01	This is a rural link that forms a haul road for Daviot Quarry. It is observed that Daviot Primary School is located north of the carriageway. However, there are no pedestrian facilities throughout this link and no services on the adjacent carriageway indicating a low likelihood of pedestrian crossings being made.	Minor Adverse, Not Significant
Section 7	HC-B851-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Negligible, Not Significant
	HC-C1056-01	While the NCN 7 shares the C1056 along the carriageway, this is a high-speed rural link with few rural-residential properties located throughout indicating a low desirability for crossings to be made.	Minor Adverse, Not Significant
	HC-B9154-01	The B9154 forms a junction with the A9. This is a high-speed rural road with no pedestrian facilities or Core Paths throughout indicating a low likelihood of pedestrian crossings being made.	Negligible, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
Section 8	HC-B9090-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Negligible, Not Significant
	HC-C1056-02	While the NCN 7 shares the C1056 along the carriageway, this is a high-speed rural link with few rural-residential properties located throughout indicating a low desirability for crossings to be made.	Minor Adverse, Not Significant
	HC-U1169-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
Section 9	HC-B9090-02	This link is predominantly rural in nature and there are limited pedestrian facilities. However, there are a few Core Paths that run adjacent to the carriageway. Through Cawdor there is a signalised crossing facility, facilitating pedestrian movements.	Minor Adverse, Not Significant
	HC-U3151-01	While the NCN1 shares the U1169 along the carriageway, this is a high-speed rural link with few rural-residential properties located throughout indicating a low desirability for crossings to be made.	Minor Adverse, Not Significant
	HC-U1169-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	HC-U1169-03	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	HC-U3138-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
Section 10	HC-C1154-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	HC-C1154-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	HC-C1161-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	HC-U3114-01	The link is rural in nature, with no pedestrian facilities. There are no core paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
Section 11	HC-B9091-01	The link is rural in nature, with no pedestrian facilities. There are no core paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	HC-B9090-03	The link is rural in nature, with no pedestrian facilities. There are no core paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	HC-A939-01	The link is rural in nature, with no pedestrian facilities. There are no core paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	HC-C1173-01	The link is predominantly rural in nature with a low number of rural residential properties located adjacent to the carriageway. There are no pedestrian facilities or core paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	HC-B9007-01	Whilst this link runs through Ferness, pedestrian facilities are present on one side of the carriageway only. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant

13.4.17 The assessment confirms that the potential for increased severance of communities on all links is at worst **moderate,** with most links classed as **negligible** or **minor** due to the forecast marginal temporary increase in construction traffic volumes. Therefore, the greatest significance that is anticipated throughout the Study Area is found where there are urban areas or those with services or receptors on either side of the carriageway, which all have a 'medium' sensitivity and where the impact of the construction traffic is considered **low.** As a result, the severance effect is to have (at worst) **temporary, short to medium-term, minor adverse,** and **not significant** effects.

Road Vehicle and Passenger Delay

13.4.18 The form of the proposed access junctions would result in minimal driver delay being generated when vehicles are accessing the site. The IEMA Guidelines states that driver delay is only likely to be significant when traffic on the network surrounding the Proposed Development is already at, or close to, the capacity of the system. As established in **Table 13.33**, there are no links that are forecast to operate close to capacity following the addition of traffic generated by construction activities, with substantial spare capacity available and therefore the impact in driver delay is considered to be **low**.

13.4.19 Therefore, as some of the links have **medium** sensitive receptors, the effect of road vehicle driver and passenger delay would have a **temporary**, **short to medium-term**, **minor adverse** effect on all links and therefore this effect is considered **not significant**.

Non-Motorised User Delay and Amenity

Non-Motorised User Delay

13.4.20 As detailed in the severance assessment in **Table 13.34**, a substantial portion of the study links are high-speed sections of road where crossings within or without of communities are unlikely to be made. While there are some footway facilities provided within the villages, and some cycle facilities, the Study Area is generally rural in nature, with limited NMU facilities provided on the majority of the proposed construction traffic access routes. Additionally, as there are few formal crossing facilities throughout the Study Area, it is impossible to determine pedestrian visibility where crossings would be made in the rural context.

13.4.21 Considering the increase in traffic flow against IEMA Guidelines, it is considered that whilst the sensitivity for all minor roads (C Roads and U Roads) is considered to be **medium** (primarily due to the width of the carriageway), the general number of NMUs in this rural Study Area is expected to be **low**. As indicated in **Table 13.31**, an increase of two HGV movements and one Car / LGV movement every 10 minutes is not expected to result in significant NMU delay or impact amenity substantially.

13.4.22 Therefore, it is anticipated that for sensitive receptors the effect of Non-Motorised User Delay would have a **temporary**, **short-term**, **negligible** effect on the majority of links with medium sensitivity and **negligible** effect on Links with **low** sensitivity (where there are fewer NMU's anticipated). Therefore, this effect is considered **not significant**.

Non-Motorised User Amenity

13.4.23 When considering the effect of pedestrian amenity, it is considered a starting point to compare whether traffic flows have halved or doubled. **Table 13.34** indicates that on the following links this threshold has been reached for total vehicles:

- HC-C1106-01: C1106 between Fanellan and the U1604;
- HC-U1604-01: U1604 between the C1106 and the C1108;
- HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie; and
- HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich.

13.4.24 It is considered however that, due to low existing HGV flows, that on all links HGV flows (including those with no traffic data) have exceed the 'doubled' threshold within the Study Area, except for the following links:

- HC-A8082-01: A8082 between the A9 (T) and the A82 (T);
- HC-B9090-01: B9090 between the B9006 and C1056 (including the B9006); and
- HC-B9090-03: B9090 between Cawdor and the B9091.

13.4.25 It is estimated that there would be a maximum of 226 two-way vehicle movements and 150 two-way HGV movements within an 11-hour working day on Sections 1-8 and 264 two-way vehicle movements and 158 two-way HGV movements on Sections 9 - 11. This equates to an average of one Car / LGV movement every 10 minutes and two HGV movements every 10 minutes.

13.4.26 Consequently, based on the expected low NMU movements, and the expected low increase on these moderately sensitive links, the impact of construction traffic on NMU amenity is predicted to be **low**. Therefore, the effect on Non-Motorised User Amenity is predicted to result in (at worst) **temporary, short to medium-term**, **minor Adverse**, and **not significant** effects.

Fear and Intimidation

13.4.27 **Table 13.36** summarises the comparison of the 18-hour baseline with a threshold for level of fear score assigned to each link and the magnitude of impact as a result of the forecast increase in vehicle movements on each link.

Table 13.36: Highland Fear and Intimidation Assessment

Link (#)	18 hr Base – Daily Trips		DoH Score	LoFI	18hr Base + Peak Phase Construction Daily Trips		DoH Score	LoFI	Magnitude of Impact
	Vehicles	HGVs			Vehicles	HGVs			
HC-C1106-01	229	1	30	Moderate	455	151	30	Moderate	Negligible
HC-U1604-01	286	7	30	Moderate	512	158	30	Moderate	Negligible
HC-C1108-01	422	7	10	Low	648	157	20	Low	Negligible
HC-A833-01	2935	44	60	Great	3161	194	60	Great	Negligible
HC-A862-01	4206	117	60	Great	4433	267	60	Great	Negligible
HC-A862-02	4290	75	50	Great	4517	225	50	Great	Negligible
HC-C1102-01	460	6	30	Moderate	687	156	40	Moderate	Negligible
HC-A862-03	5059	73	40	Moderate	5285	223	40	Moderate	Negligible
HC-A862-04	17486	445	40	Moderate	17712	596	40	Moderate	Negligible
HC-A8082-01	15492	421	40	Moderate	15719	572	40	Moderate	Negligible
HC-B861-01	2275	14	50	Great	2502	164	50	Great	Negligible
HC-C1068-01	222	6	20	Low	448	156	20	Low	Negligible
HC-B851-02	674	10	20	Low	900	161	20	Low	Negligible
HC-C1056-01	124	3	30	Moderate	351	153	30	Moderate	Negligible
HC-B9090-01	1542	222	50	Great	1769	373	50	Great	Negligible
HC-B9090-03	2583	344	60	Great	2847	502	60	Great	Negligible
HC-A939-01	994	11	40	Moderate	1258	169	50	Great	Minor Adverse

13.4.28 The results in **Table 13.36** show that with the addition of the worst case construction traffic levels, there would be one link with adverse step changes in level of fear. This change anticipated to occur on the A9390 on Section 11, where an increase of one car / LGV movement and two HGV movements every 10 minutes is expected to result in a **low** impact on this link according to the thresholds.

13.4.29 It is considered that the temporary increase in traffic during the worst-case scenario would result in low impact on road fear and intimidation, on the road links contained within the Study Area and that this would result in a negligible, not significant effect.

13.4.30 As identified within **Table 13.34**, the identified roads are without traffic data to base qualitative assessment on. With the addition of 264 total vehicles within the 18-hour assessment window, there is unlikely to be a significant impact, with the worst case scenario that those with a small level of Fear and intimidation generating a one-step level change to **moderate**. Therefore, at worst, the roads without traffic data may experience a **temporary**, **short to medium-term**, **minor adverse** impact, which is **not significant**.

Road User and Pedestrian Safety

13.4.31 As shown in **Table 13.14,** there is no requirement to introduce specific casualty reduction measures as a low number of PIAs have been reported on the local road network in the most recently available five year period. The majority of reported accidents have been attributed to driver / pedestrian / rider error, and further analysis of the accident data confirms that there are no specific safety concerns on the local road network which would support access to the Proposed Development from the trunk road network. The analysis concludes that there are not any inherent road safety or accident concerns.

13.4.32 While the analysis concludes that there are no inherent road safety or accident concerns, as the majority of the Study Area is forecast to experience an over 30% HGV increase of construction traffic, the temporary traffic flow increase during the construction period is expected to have an impact on road safety. Therefore, for the majority of the Study Area, the impact is considered to be **low** on all Links.

13.4.33 Consequently, as all Classified and Classified Unnumbered (C and U Roads) have a medium sensitivity, the effect of road user and pedestrian safety would have a **temporary**, **short to medium-term**, **minor adverse** effect on all of these links, which is considered to be **not significant**.

Summary of Likely Effects Generated by Construction Traffic

13.4.34 The greatest significance of the effect generated by construction traffic is considered to have **temporary**, **short to medium-term**, **minor adverse** and **not significant** transport effects when compared to the seven key criteria.

13.4.35 The overall significance of each effect is summarised in **Table** 13.37.

Table 13.37: Highland Summary of Significance of Effects

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
HC-C1106-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1106-02	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1604-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1108-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A831-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A833-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A862-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A862-02	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1116-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U2395-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
HC-C1100-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1102-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1568-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U2362-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1556-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1097-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1797-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1118-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1160-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1255-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U2370-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U2374-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A862-03	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A862-04	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
HC-C1114-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1114-02	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1560-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1060-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U2268-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A8082-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B862-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1040-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1064-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1096-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B851-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B861-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1068-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B851-02	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
HC-C1056-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B9154-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B9090-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Minor Adverse, Not Significant
HC-C1056-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1169-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B9090-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U3151-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1169-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U1169-03	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U3138-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1154-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1154-02	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-C1161-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-U3114-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
HC-B9091-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B9090-03	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-A939-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Minor Adverse, Not Significant
HC-C1173-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
HC-B9007-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Study Area 2: The Moray Assessment

13.4.36 This section provides an assessment of the level of effects generated by vehicles on the existing Moray road network traffic during the peak construction phase of the Proposed Development.

Predicted Construction Impacts

13.4.37 A detailed assessment has been undertaken to determine the potential level of effect the construction traffic would have on the road network. **Table 13.38** quantifies the impact which construction traffic is forecast to have on the operation of each of the links in the Study Area.

Table 13.38: Moray Construction Traffic Impact Summary

Study Network Route Section	Threshold (HGV or Total)	Scenario	2026 Two-Way Flows			Threshold Triggered?*
			HGV	Non-HGV	Total	
MC-A940-02: A940 Between Forres and Tomdow	30%	Baseline	33	861	893	Yes
		Baseline + Construction Traffic	183	937	1,120	
		% Impact	458.60%	8.83%	25.33%	
MC-B9011-01: B9011 between the A96 (T) and the C37E	30%	Baseline	301	3,679	3,980	Yes
		Baseline + Construction Traffic	450	3,754	4,205	
		% Impact	49.67%	2.04%	5.65%	
MC-B9010-02: B9010 between the A96 (T) and the C12E	30%	Baseline	4	224	228	Yes
		Baseline + Construction Traffic	154	300	454	
		% Impact	4174.84%	33.92%	99.39%	
	30%	Baseline	223	15,442	15,665	Yes

Study Network Route Section	Threshold (HGV or Total)	Scenario	2026 Two-Way Flows			Threshold Triggered?*
			HGV	Non-HGV	Total	
MC-A941-01: A941 between the A96 (T) and Culzean Road		Baseline + Construction Traffic	373	15,518	15,890	
		% Impact	67.05%	0.49%	1.44%	
MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry	30%	Baseline	169	4,640	4,810	Yes
		Baseline + Construction Traffic	319	4,716	5,035	
		% Impact	88.45%	1.62%	4.68%	
MC-B9103-02: B9103 between the U129E and Altonside	30%	Baseline	7	928	935	Yes
		Baseline + Construction Traffic	157	1,004	1,162	
		% Impact	2087.42%	8.19%	24.19%	
MC-B9015-01: B9015 between the A96 (T) and Cairnend	30%	Baseline	118	926	1,044	Yes
		Baseline + Construction Traffic	268	1,002	1,270	
		% Impact	127.28%	8.21%	21.68%	
MC-U22E-01: U22E between the B9015 and U19E	10%	Baseline	5	24	29	Yes
		Baseline + Construction Traffic	155	100	256	
		% Impact	2982.03%	313.22%	772.21%	
MC-B9016-01: B9016 between the A96 (T) and Auchinderran	30%	Baseline	61	1,895	1,957	Yes
		Baseline + Construction Traffic	211	1,971	2,183	
		% Impact	245.58%	4.01%	11.57%	

* Where there is no available traffic information, as a worst-case assessment it is assumed that percentage increase in total flows and HGV flows equate to 100% and these locations have been assessed as such.

Road Capacity Assessment

13.4.38 Capacity assessments have been conducted under the worst-case construction traffic levels that occur, and the results of the assessment can be seen in **Table 13.39**.

Table 13.39: Moray Road Capacity Assessment

Study Network Route Section	2026 Two-Way Flows			
	Total Base Traffic Flows	Theoretical Road Capacity (11-hour period)	Base + Construction Traffic Flows	Spare Capacity
MC-A940-02: A940 Between Forres and Tomdow	893	19800	1120	94.35%
MC-B9011-01: B9011 between the A96 (T) and the C37E	3980	19800	4205	78.76%
MC-B9010-02: B9010 between the A96 (T) and the C12E	228	19800	454	97.71%
MC-A941-01: A941 between the A96 (T) and Culzean Road	15665	26400	15890	39.81%

Study Network Route Section	2026 Two-Way Flows			
	Total Base Traffic Flows	Theoretical Road Capacity (11-hour period)	Base + Construction Traffic Flows	Spare Capacity
MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry	4810	26400	5035	80.93%
MC-B9103-02: B9103 between the U129E and Altonside	935	19800	1162	94.13%
MC-B9015-01: B9015 between the A96 (T) and Cairnend	1044	19800	1270	93.59%
MC-U22E-01: U22E between the B9015 and U19E	29	3080	256	91.70%
MC-B9016-01: B9016 between the A96 (T) and Auchinderran	1957	19800	2183	88.98%

13.4.39 The results in **Table 13.39** show that with the addition of the worst-case construction traffic levels, there would be substantial spare capacity on all of the links.

13.4.40 As such, it is considered that the temporary increase in traffic during the worst-case scenario would not result in a noticeable change in road capacity on the road network. Therefore, based on the results of the road capacity assessment, during the construction phase it is considered that the sensitivity of the capacity of the traffic network to changes in traffic flows is low and the magnitude of impact is predicted to be **negligible** compared to the link capacities. Therefore, the impact of the Proposed Development on the capacity of the road network is expected to create **temporary**, **short to medium-term**, **negligible** and **not significant** transport effects.

13.4.41 It is considered that for the roads within the Study Area that there are no baseline traffic flows for, that these would have a minimum of 3,080 total vehicle capacity within an 11-hour window. With the addition of 264 total daily construction vehicles, this equates to 9% of the theoretical capacity of this link. It is considered that it is highly unlikely that there is above 91% of the link utilised and therefore it is considered that at-worst the Proposed Development would have a **temporary**, **short to medium-term**, **minor adverse** impact, which is **not significant**.

Severance Assessment

13.4.42 The predicted change in severance on the links has been evaluated based on the percentage increase in total traffic levels expected during the construction phase, in line with IEMA Guidelines. The significance of the predicted change in severance has been determined based on factors including the road conditions, traffic flows and level of pedestrian activity. **Table 13.40** sets out quantitative severance assessment where the sensitivity grading of receptors as per **Table 13.23**, and the magnitude of impact due to construction traffic (per historical thresholds) are shown. As per the IEMA Guidelines, **Table 13.41** sets out the qualitative severance assessment which assesses the various factors of influence, the results of which correspond with the results of the quantitative severance assessment.

Table 13.40: Moray Quantitative Severance Assessment

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
MC-A940-01: A940 within Forres	No Data	No Data	100.00%	100.00%	Medium	High
MC-A940-02: A940 Between Forres and Tomdow	893	1120	25.33%	458.60%	Low	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
MC-C11E-01: C11E between the A940 and Dusach	No Data	No Data	100.00%	100.00%	Medium	High
MC-U88E-01: U88E between the A940 and Little Corshellach	No Data	No Data	100.00%	100.00%	Medium	High
MC-U88E-02: U88E between the A940 and Bridge of Newton	No Data	No Data	100.00%	100.00%	Medium	High
MC-B9011-01: B9011 between the A96 (T) and the C37E	3980	4205	5.65%	49.67%	Medium	Low
MC-C37E-01: C37E between the B9011 and B9010	No Data	No Data	100.00%	100.00%	Medium	High
MC-B9010-01: B9010 between the C37E and C12E	No Data	No Data	100.00%	100.00%	Medium	High
MC-C12E-01: C12E between the B9010 and U109E	No Data	No Data	100.00%	100.00%	Medium	High
MC-U109E-01: U109E between the C12E and Rhinagoup	No Data	No Data	100.00%	100.00%	Medium	High
MC-B9010-02: B9010 between the A96 (T) and the C12E	228	454	99.39%	4174.84%	Medium	High
MC-C12E-01: C12E between the B9010 and C13E	No Data	No Data	100.00%	100.00%	Medium	High
MC-C13E-01: C13E between the C12E and Coldwells	No Data	No Data	100.00%	100.00%	Medium	High
MC-A941-01: A941 between the A96 (T) and Culzean Road	15665	15890	1.44%	67.05%	Medium	Medium
MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry	4810	5035	4.68%	88.45%	Low	Medium
MC-B9103-01: B9103 between the A96 (T) and the U129E	No Data	No Data	100.00%	100.00%	Low	High
MC-B9103-02: B9103 between the U129E and Altonside	935	1162	24.19%	2087.42%	Low	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
MC-U129E-01: U129E between the B9103 and Greenside	No Data	No Data	100.00%	100.00%	Medium	High
MC-U20E-01: U20E between the B9103 and Westerton	No Data	No Data	100.00%	100.00%	Medium	High
MC-B9015-01: B9015 between the A96 (T) and Cairnend	1044	1270	21.68%	127.28%	Low	High
MC-U22E-01: U22E between the B9015 and U19E	29	256	772.21%	2982.03%	Medium	High
MC-U19E-01: U19E between the U22E and Burnside of Dipple	No Data	No Data	100.00%	100.00%	Medium	High
MC-U14E-01: U14E between the Upper Ordquish and Aultdearg	No Data	No Data	100.00%	100.00%	Medium	High
MC-U13E-01: U13E northeast of the A96 (T) at Forgie Hill	No Data	No Data	100.00%	100.00%	Medium	High
MC-U13E-02: U13E southwest of the A96 (T) at Forgie Hill	No Data	No Data	100.00%	100.00%	Medium	High
MC-U65H-01: U65H between the A96 (T) and Blackfold	No Data	No Data	100.00%	100.00%	Medium	High
MC-B9016-01: B9016 between the A96 (T) and Auchinderran	1957	2183	11.57%	245.58%	Low	High
MC-C74H-01: C74H between the B9016 and U41H	No Data	No Data	100.00%	100.00%	Medium	High
MC-U41H-01: U41H between the C74H and Auchairn	No Data	No Data	100.00%	100.00%	Medium	High
MC-B9017-01: B9017 between the A96 (T) and C75H	No Data	No Data	100.00%	100.00%	Low	High
MC-B9017-02: B9017 between the A95 and U51H	No Data	No Data	100.00%	100.00%	Low	High
MC-C74H-02: C74H between the B9017 and Auchairn	No Data	No Data	100.00%	100.00%	Medium	High
MC-U41H-02: U41H between the C74H and Broomhill	No Data	No Data	100.00%	100.00%	Medium	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
MC-U51H-01: U51H between the B9017 and Brunthall	No Data	No Data	100.00%	100.00%	Medium	High
MC-U50H-01: U50H between the B9017 and Foulford	No Data	No Data	100.00%	100.00%	Medium	High
MC-A95-01: A95 between the A96 (T) and B9017	No Data	No Data	100.00%	100.00%	Medium	High
MC-A95-02: A95 between the B9017 and B9018	No Data	No Data	100.00%	100.00%	Low	High
MC-U35H-01: U35H between the A96 (T) and Meikle Ardrone	No Data	No Data	100.00%	100.00%	Medium	High
MC-U44H-01: U44H between the A96 (T) and Mains of Auchoynanie	No Data	No Data	100.00%	100.00%	Medium	High

Table 13.41: Moray Qualitative Severance Assessment

Section	Road Link	Severance Impact	Significance of the Effect
Section 12	MC-A940-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are signalised pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-A940-02	This is a high-speed rural link and whilst there are Core Paths adjacent to the carriageway, there are limited sensitive receptors and no pedestrian facilities or Core Paths crossing the link indicating a low desirability for pedestrian crossings	Negligible, Not Significant
	MC-C11E-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link, indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant
	MC-U88E-01	The link is rural in nature with few rural residential properties throughout. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-U88E-02	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant
Section 13	MC-B9011-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-C37E-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-B9010-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-B9010-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not significant

Section	Road Link	Severance Impact	Significance of the Effect
	MC-C12E-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not significant
	MC-U109E-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
Section 14	MC-B9010-03	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-C12E-02	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-C13E-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not significant
Section 15	MC-A941-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are signalised pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-A941-02	This is a predominantly high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link, including through Longmorn and Fogwatt, indicating a low desirability for pedestrian crossings	Negligible, Not Significant
Section 16	MC-B9103-01	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	MC-B9103-02	The link is rural in nature, with no pedestrian facilities. There are no Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	MC-U129E-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-U20E-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant
Section 17	MC-B9015-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	MC-U22E-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant
	MC-U19E-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant
Section 18	MC-U14E-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-U13E-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant

Section	Road Link	Severance Impact	Significance of the Effect
	MC-U13E-02	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant
	MC-U65H-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not significant
Section 19	MC-B9016-01	This is a rural link with limited pedestrian facilities and no Core Paths throughout the majority of the link and throughout Aultmore, indicating a low desirability for pedestrian crossings.	Negligible, Not Significant
	MC-C74H-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-U41H-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-B9017-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Negligible, Not Significant
	MC-B9017-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Negligible, Not Significant
	MC-C74H-02	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-U41H-02	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-U50H-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-U51H-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant
	MC-A95-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not significant
	MC-A95-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Negligible, Not Significant
	MC-U35H-01	The link is rural in nature, with no pedestrian facilities. There is one Core Path crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not significant

Section	Road Link	Severance Impact	Significance of the Effect
	MC-U44H-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are several Core Paths located adjacent to the carriageway. With limited pedestrian facilities overall indicating low desirability for pedestrian crossings.	Minor Adverse, Not significant

13.4.43 The assessment confirms that the potential for increased severance of communities on all links is at worst **moderate** with most links classed as **negligible** or **minor** due to the forecast marginal temporary increase in construction traffic volumes. Therefore, the greatest significance that is anticipated throughout the Study Area is found where there are urban areas or those with services or receptors on either side of the carriageway, which all have a 'medium' sensitivity and where the impact of the construction traffic is considered **low**, therefore the severance effect is to have (at worst) **temporary, short to medium-term, minor adverse, and not significant effects**.

Road Vehicle and Passenger Delay

13.4.44 The proposed form of the site access junction would result in minimal driver delay being generated when vehicles are accessing the site. The IEMA Guidelines states that driver delay is only likely to be significant when traffic on the network surrounding the Proposed Development is already at, or close to, the capacity of the system. As established in **Table 13.39** there are no links that are forecast to operate close to capacity following the addition of traffic generated by construction activities, with substantial spare capacity available and therefore the impact in driver delay is considered to be **negligible** to **low**.

13.4.45 Therefore, as some of the links have medium sensitive receptors, the effect of road vehicle driver and passenger delay would have a **temporary**, **short to medium-term**, **negligible** effect on all links and therefore this effect is considered **not significant**.

Non-Motorised User Delay and Amenity

Non-Motorised User Delay

13.4.46 As detailed in the severance assessment in **Table 13.40**, a substantial portion of the study links are high-speed sections of road where crossings within or without of communities are unlikely to be made. While there are some footway facilities provided within the villages, and some cycle facilities, the Study Area is generally rural in nature, with limited NMU facilities provided on the majority of the proposed construction traffic access routes. Additionally, as there are few formal crossing facilities throughout the Study Area, it is impossible to determine pedestrian visibility where crossings would be made in the rural context.

13.4.47 As such, whilst the sensitivity for all minor roads (C Roads and U Roads) is considered to be **medium** (primarily due to the width of the carriageway), the general number of NMU's in this rural Study Area is expected to be **low**. As indicated in **Table 13.31**, it is expected that an increase of one car / LGV movement and two HGV movements every 10 minutes is not expected to result in significant NMU delay or impact amenity substantially.

13.4.48 Therefore, it is anticipated that for sensitive receptors the effect of Non-Motorised User Delay would have a **temporary**, **short to medium-term**, **negligible** effect on the majority of links with medium sensitivity and **negligible** effect on Links with **low** sensitivity (where there are fewer NMU's anticipated). Therefore, this effect is considered **not significant**.

Non-Motorised User Amenity

13.4.49 When considering the effect of pedestrian amenity, it is considered a starting point to compare whether traffic flows have halved or doubled. **Table 13.38** indicates that on all links HGV flows (including those with no traffic data) have exceed the 'doubled' threshold within the Study Area, except for the following links:

- MC-B9011-01: B9011 between the A96 (T) and the C37E;

- MC-A941-01: A941 between the A96 (T) and Culzean Road; and
- MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry.

13.4.50 It is estimated that there would be a maximum of 226 two-way vehicle movements and 150 two-way HGV movements within a 11-hour working day on all Sections. This equates to an average of one car / LGV movement and two HGV movements every 10 minutes.

13.4.51 Consequently, based on the expected low NMU movements, and the expected low increase on these moderately sensitive links, the impact of construction traffic on NMU amenity is predicted to be **low**. Therefore, the effect on Non-Motorised User Amenity is predicted to result in (at worst) **temporary, short to medium-term**, **minor adverse**, and **not significant** effects.

Fear and Intimidation

13.4.52 **Table 13.42** summarises the comparison of the 18-hour baseline with a threshold for level of fear score assigned to each link and the magnitude of impact as a result of the forecast increase in vehicle movements on each link.

Table 13.42: Moray Fear and Intimidation Assessment

Link (#)	18 hr Base – Daily Trips		DoH Score	LoFI	18hr Base + Peak Construction Daily Trips		DoH Score	LoFI	Magnitude of Impact
	Vehicles	HGVs			Vehicles	HGVs			
MC-A940-01	1138	43	40	Moderate	1364	193	50	Great	Minor Adverse
MC-B9011-01	5068	389	40	Moderate	5293	538	40	Moderate	Negligible
MC-B9010-02	290	5	10	Low	516	155	10	Low	Negligible
MC-A941-01	19950	288	40	Moderate	20176	439	40	Moderate	Negligible
MC-A941-02	6125	219	60	Great	6351	369	60	Great	Negligible
MC-B9103-02	1191	9	40	Moderate	1418	160	50	Great	Minor Adverse
MC-B9015-01	1329	153	50	Great	1555	303	50	Great	Negligible
MC-U22E-01	37	7	30	Moderate	264	157	30	Moderate	Negligible
MC-B9016-01	2492	79	40	Moderate	2756	237	40	Moderate	Negligible

13.4.53 The results in **Table 13.42** show that with the addition of the worst-case construction traffic levels, there would be one link with an adverse step change in level of fear. This change is anticipated to occur on the B9015 on Section 17 where an increase of 1 car / LGV delivery and 2 HGV delivery every 10 minutes is expected to result in a **low** impact on this link according to the thresholds.

13.4.54 It is considered that the **temporary** increase in traffic during the worst-case scenario would result in **low** impact on road fear and intimidation, on the road links contained within the Study Area and that this would result in a **negligible, not significant** effect.

13.4.55 As identified within **Table 13.40**, the identified roads are without traffic data to base qualitative assessment on. With the addition of a maximum of 264 total vehicles within the 18-hour assessment window, there is unlikely to be a significant impact, with the worst-case scenario that those with a small level of fear and intimidation generating a one-step level change to **moderate**. Therefore, at worst, the roads without traffic data may experience a **temporary**, **short to medium-term**, **minor adverse** impact, which is **not significant**.

Road User and Pedestrian Safety

13.4.56 As shown in **Table 13.21**, there is no requirement to introduce specific casualty reduction measures as a low number of PIAs have been reported on the local road network in the most recently available five year period. All reported accidents have been attributed to driver / pedestrian / rider error, and further analysis of the accident data confirms that there are no specific safety concerns on the local road network which would support access to the tower installation sites from the trunk road network. The analysis concludes that there are not any inherent road safety or accident concerns.

13.4.57 While the analysis concludes that there are no inherent road safety or accident concerns, as the majority of the Study Area is forecast to experience an over 30% HGV increase of construction traffic, the temporary traffic flow increase during the construction period is expected to have an impact on road safety. Therefore, for the majority of the Study Area, the impact is considered to be **low** on all Links, which are forecast to experience an increase of HGV construction traffic of less than 30% and are considered to have a **negligible** impact.

13.4.58 Consequently, as all Classified and Classified Unnumbered (C and U Roads) have a medium sensitivity, the effect of road user and pedestrian safety would have a **temporary**, **short to medium-term**, **minor adverse** effect on which all of these links, which are considered to be **not significant**.

Summary of Likely Effects Generated by Construction Traffic

13.4.59 The greatest significance of the effect generated by construction traffic is considered to have **temporary**, **short to medium-term**, **minor adverse** and **not significant** transport effects when compared to the seven key criteria.

13.4.60 The overall significance of each effect is summarised in **Table 13.43**.

Table 13.43: Moray Summary of Significance of Effects

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
MC-A940-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Minor Adverse, Not Significant
MC-A940-02	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-C11E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U88E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U88E-02	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9011-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-C37E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
MC-B9010-01	Minor Adverse, Not significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-C12E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U109E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9010-02	Minor Adverse, Not significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-C12E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-C13E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-A941-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-A941-02	Minor Adverse, Not significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9103-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9103-02	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Minor Adverse, Not Significant
MC-U129E-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U20E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9015-01	Minor Adverse, Not significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U22E-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
MC-U19E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U14E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U13E-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U13E-02	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U65H-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9016-01	Minor Adverse, Not significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-C74H-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U41H-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9017-01	Minor Adverse, Not significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-B9017-02	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-C74H-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U41H-02	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U51H-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U50H-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
MC-A95-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-A95-02	Minor Adverse, Not significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U35H-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U44H-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
MC-U44H-01	Minor Adverse, Not significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Kellas Alternative Alignment

13.4.61 Kellas is located within Moray Council local authority and as previously mentioned, for this assessment it is assumed that the Kellas Drum Windfarm is consented, meaning that the Proposed Development will route around the location where the proposed windfarm development would be. Should the Kellas Alternative Alignment be taken forward, there would be no change to the proposed access points and therefore no change to this assessment. Therefore, the effects of predicted construction traffic impact within **Section 13.4** regarding the Kellas Alternative Alignment remain the same.

Study Area 3: The Aberdeenshire Assessment

13.4.62 This section provides an assessment of the level of effects generated by vehicles on the existing Aberdeenshire road network traffic during the peak construction phase of the Proposed Development.

Predicted Construction Impacts

13.4.63 A detailed assessment has been undertaken to determine the potential level of effect the construction traffic would have on the road network. **Table 13.44** quantifies the impact which construction traffic is forecast to have on the operation of each of the links in the Study Area.

Table 13.44: Aberdeenshire Construction Traffic Impact Summary

Study Network Route Section	Threshold (HGV or Total)	Scenario	2026 Two-Way Flows			Threshold Triggered?*
			HGV	Non-HGV	Total	
AC-B9022-01: B9022 between the A96 (T) and Haddoch	30%	Baseline	22	1040	1062	Yes
		Baseline + Construction Traffic	174	1123	1297	
		% Impact	674.24%	8.02%	22.12%	
AC-A97-01: A97 between the A96 (T) and B9001	30%	Baseline	73	1415	1488	Yes
		Baseline + Construction Traffic	226	1503	1729	

Study Network Route Section	Threshold (HGV or Total)	Scenario	2026 Two-Way Flows			Threshold Triggered?*
			HGV	Non-HGV	Total	
		% Impact	208.58%	6.23%	16.19%	
AC-B9001-02: B9001 between the B9024 and Burnside	30%	Baseline	24	603	627	Yes
		Baseline + Construction Traffic	177	691	868	
		% Impact	624.35%	14.62%	38.41%	
AC-B9001-01: B9001 between the A97 and Glen Dronach	30%	Baseline	24	604	628	Yes
		Baseline + Construction Traffic	182	710	892	
		% Impact	658.33%	17.55%	42.04%	
AC-B9170-02: B9170 between the A948 and Cairncake	30%	Baseline	22	740	761	Yes
		Baseline + Construction Traffic	179	846	1025	
		% Impact	729.67%	14.39%	34.68%	
AC-A948-01: A948 between B9170 and B9028	30%	Baseline	51	680	731	Yes
		Baseline + Construction Traffic	209	787	995	
		% Impact	308.37%	15.64%	36.10%	
AC-A981-01: A981 between B9029 and A950	30	Baseline	70	1014	1084	Yes
		Baseline + Construction Traffic	227	1120	1348	
		% Impact	225.54%	10.49%	24.36%	
AC-B9106-01: B9106 between Drymuir and the A950	30%	Baseline	5	422	427	Yes
		Baseline + Construction Traffic	163	528	691	
		% Impact	3127.16%	25.23%	61.86%	
AC-B9030-01: B9030 between the A950 and Upper Crichie	30%	Baseline	6	360	366	Yes
		Baseline + Construction Traffic	163	467	630	
		% Impact	2736.27%	29.54%	72.15%	
AC-A950-02: A950 between B9106 and Mintlaw	30%	Baseline	154	1606	1761	Yes
		Baseline + Construction Traffic	312	1713	2025	
		% Impact	102.02%	6.62%	14.99%	
AC-A950-03: A950 between Mintlaw and A90 (T)	30%	Baseline	654	4367	5021	Yes
		Baseline + Construction Traffic	812	4473	5285	
		% Impact	24.09%	2.44%	5.26%	

* Where there is no available traffic information, as a worst-case assessment it is assumed that percentage increase in total flows and HGV flows equate to 100% and these locations have been assessed as such.

Road Capacity Assessment

13.4.64 Capacity assessments have been conducted under the worst-case construction traffic levels that occur, and the results of the assessment can be seen in **Table 13.45.**

Table 13.45: Aberdeenshire Road Capacity Assessment

Study Network Route Section	2026 Two-Way Flows			
	Total Base Traffic Flows	Theoretical Road Capacity (11-hour period)	Base + Construction Traffic Flows	Spare Capacity
AC-B9022-01: B9022 between the A96 (T) and Haddoch	1062	19800	1297	93.45%
AC-A97-01: A97 between the A96 (T) and B9001	1488	26400	1729	93.45%
AC-B9001-02: B9001 between the B9024 and Burnside	627	19800	868	95.61%
AC-B9170-01: B9170 between the A947 and Cuminestown	1842	19800	2106	89.36%
AC-B9170-02: B9170 between the A948 and Cairncake	761	19800	1025	94.82%
AC-A948-01: A948 between B9170 and B9028	731	26400	995	96.23%
AC-A981-01: A981 between B9029 and A950	1084	26400	1348	94.89%
AC-B9106-01: B9106 between Drymuir and the A950	427	19800	691	96.51%
AC-B9030-01: B9030 between the A950 and Upper Crichie	366	19800	630	96.82%
AC-A950-02: A950 between B9106 and Mintlaw	1761	26400	2025	92.33%
AC-A950-03: A950 between Mintlaw and A90 (T)	5021	26400	5285	79.98%

13.4.65 The results in **Table 13.45** show that with the addition of the worst-case construction traffic levels, there would be significant spare capacity on all of the links.

13.4.66 As such, it is considered that the temporary increase in traffic during the worst-case scenario would not result in a noticeable change in road capacity on the road network. Therefore, based on the results of the road capacity assessment, during the construction phase it is considered that the sensitivity of the capacity of the traffic network to changes in traffic flows is low and the magnitude of impact is predicted to be negligible compared to the link capacities. Therefore, the impact of the Proposed Development on the capacity of the road network is expected to create **temporary**, **short to medium-term**, **negligible** and **not significant** transport effects.

13.4.67 It is considered that for the roads within the Study Area that there are no baseline traffic flows for, that these would have a minimum of 3,080 total vehicle capacity within an 11-hour window. With the addition of 264 total daily construction vehicles, this equates to 9% of the theoretical capacity of this link. It is considered that it is highly unlikely that there is above 91% of the link utilised and therefore it is considered that at-worst the Proposed Development would have a **temporary**, **short to medium-term**, **minor adverse** impact, which is **not significant**.

Severance Assessment

13.4.68 The predicted change in severance on the links has been evaluated based on the percentage increase in total traffic levels expected during the construction phase, in line with IEMA Guidelines. The significance of the predicted change in severance has been determined based on factors including the road conditions, traffic flows and level of pedestrian activity. **Table 13.46** sets out quantitative severance assessment where the sensitivity grading of receptors as per **Table 13.30** , and the magnitude of impact due to construction traffic (per historical thresholds) are shown. As per the IEMA Guidelines, **Table 13.47** sets out the qualitative severance assessment which assesses the various factors of influence, the results of which correspond with the results of the quantitative severance assessment.

Table 13.46: Aberdeenshire Quantitative Severance Assessment

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
AC-U111S-01: U111S between the A96 (T) and Coachford	No Data	No Data	100.00%	100.00%	Medium	High
AC-C111S-01: C111S between the A96 (T) and Hollowdyke	No Data	No Data	100.00%	100.00%	Medium	High
AC-U108S-01: U108S between the C106S and West Riggins	No Data	No Data	100.00%	100.00%	Medium	High
AC-C106S-01: C106S between the A96 (T) and Ruthven	No Data	No Data	100.00%	100.00%	Medium	High
AC-B9022-01: B9022 between the A96 (T) and Haddoch	1062	1297	22.12%	674.24%	Low	High
AC-C100S-01: C100S between A97 and Milburn	No Data	No Data	100.00%	100.00%	Medium	High
AC-U103S-01: U103S between C100S and Broomfold	No Data	No Data	100.00%	100.00%	Medium	High
AC-U104S-01: U104S between C100s and Course of Kinnoir	No Data	No Data	100.00%	100.00%	Medium	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
AC-A97-01: A97 between the A96 (T) and B9001	1488	1729	16.19%	208.58%	Low	High
AC-C82S-01: C82S between the A97 and Meikleton	No Data	No Data	100.00%	100.00%	Medium	High
AC-U102S: U102S between A97 and Boghead of Cobairdy	No Data	No Data	100.00%	100.00%	Medium	High
AC-C88S-01: C88S between A97and U89S	No Data	No Data	100.00%	100.00%	Medium	High
AC-U89S-01: U89S between the C88S and Gariochsburn	No Data	No Data	100.00%	100.00%	Medium	High
AC-B9001-01: B9001 between the A97 and B9024	No Data	No Data	100.00%	100.00%	Low	High
AC-B9001-02: B9001 between the B9024 and Burnside	No Data	No Data	100.00%	100.00%	Low	High
AC-C87S-01: C87S between B9001 and U91S	No Data	No Data	100.00%	100.00%	Medium	High
AC-U90S-01: U90S between the C87S and Bogcoup	No Data	No Data	100.00%	100.00%	Medium	High
AC-U91S-01: U91S between the C87S and Frendraught	No Data	No Data	100.00%	100.00%	Medium	High
AC-B9024-01: B9024 between B9001 and U33S	No Data	No Data	100.00%	100.00%	Low	High
AC-U94L-01: U94L between B9024 and Reidswell	No Data	No Data	100.00%	100.00%	Medium	High
AC-U93bL-01: U93bL between U94L and Haremoss	No Data	No Data	100.00%	100.00%	Medium	High
AC-U33S-01: U33S between B9024 and Carlincraig	No Data	No Data	100.00%	100.00%	Medium	High
AC-B9024-02: B9024 between U33S and A947	No Data	No Data	100.00%	100.00%	Low	High
AC-C22S-01: C22S between B9024 and Brownhill	No Data	No Data	100.00%	100.00%	Medium	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
AC-U24S-01: U24S between C22S and Denfield	No Data	No Data	100.00%	100.00%	Medium	High
AC-C25S-01: C25S between C22S and U24S	No Data	No Data	100.00%	100.00%	Low	High
AC-U24S-02: U24S between C25S and Denfield	No Data	No Data	100.00%	100.00%	Medium	High
AC-A947-01: A947 between B9024 and B9170	No Data	No Data	100.00%	100.00%	Low	High
AC-U25S-01: U25S between A947 and Hill of Darra	No Data	No Data	100.00%	100.00%	Medium	High
AC-C21S-01: C21S between B9170 and Little Colp	No Data	No Data	100.00%	100.00%	Low	High
AC-C21S-02: C21S between B9170 and Hill of Ardin	No Data	No Data	100.00%	100.00%	Medium	High
AC-B9170-01: B9170 between the A947 and Cuminestown	1842	2106	14.33%	313.89%	Low	High
AC-C26S-01: C26S between B9170 and U1S	No Data	No Data	100.00%	100.00%	Medium	High
AC-U1S-01: U1S between C26S and Greeness	No Data	No Data	100.00%	100.00%	Medium	High
AC-U1S-02: U1S between C29S and Berryhill	No Data	No Data	100.00%	100.00%	Medium	High
AC-C29S-01: C29S between C1S and B9170	No Data	No Data	100.00%	100.00%	Medium	High
AC-U130S-01: AC-U130S-01 between B9170 and Newton	No Data	No Data	100.00%	100.00%	Medium	High
AC-C125B-01: C125B between B9170 and North Commonty	No Data	No Data	100.00%	100.00%	Medium	High
AC-B9170-02: B9170 between the A948 and Cairncake	761	1025	34.68%	729.67%	Low	High
AC-A948-01: A948 between B9170 and B9028	731	995	36.10%	308.37%	Low	High

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
AC-A981-01: A981 between B9029 and A950	1084	1348	24.36%	225.54%	Low	High
AC-B9028-01: B9028 between A981 and A948	No Data	No Data	100.00%	100.00%	Low	High
AC-B9029-01: B9029 between the A981 and Craigmill	No Data	No Data	100.00%	100.00%	Low	High
AC-C123B-01: C123B between A981 and Milton of Culsh	No Data	No Data	100.00%	100.00%	Medium	High
AC-U122B-01: U122B between C127B and Collageford	No Data	No Data	100.00%	100.00%	Medium	High
AC-C127B-01: C127B between A981 and Stevensburn	No Data	No Data	100.00%	100.00%	Medium	High
AC-A950-01: A950 between A981 and B9106	No Data	No Data	100.00%	100.00%	Low	High
AC-A950-02: A950 between B9106 and Mintlaw	1761	2025	14.99%	102.02%	Medium	High
AC-B9106-01: B9106 between Drymuir and the A950	427	691	61.86%	3127.16%	Medium	High
AC-B9029-01: B9029 between the B9106 and C103B	No Data	No Data	100.00%	100.00%	Medium	High
AC-C103B-01: C103B between the B9029 and Meikle Kirkhill	No Data	No Data	100.00%	100.00%	Medium	High
AC-C102B-01: C102B between the C103B and Bruntbrae	No Data	No Data	100.00%	100.00%	Medium	High
AC-B9030-01: B9030 between the A950 and Upper Crichie	366	630	72.15%	2736.27%	Medium	High
AC-C97B-01: C97B between B9030 and C100B	No Data	No Data	100.00%	100.00%	Medium	High
AC-C100B-01: C100B between C97B and Upper Crichie	No Data	No Data	100.00%	100.00%	Medium	High
AC-A950-03: A950 between Mintlaw and A90 (T)	5021	5285	5.26%	24.09%	Low	Low

Link	Total Base Traffic Flow	Base + Construction Traffic Flows	Total Impact	HGV Impact	Sensitivity of Receptor to Change	Magnitude of Impact
AC-C56B-01: C56B between A950 and C38B	No Data	No Data	100.00%	100.00%	Medium	High
AC-U55B-01: U55B between C56B and Invereddie	No Data	No Data	100.00%	100.00%	Medium	High
AC-C38B-01: C38B between C56B and A952	No Data	No Data	100.00%	100.00%	Low	High
AC-C39B-01: C39B between C39B and Braeside of Luqguharn	No Data	No Data	100.00%	100.00%	Medium	High
AC-U52B-02: U52B between the C38B and Newton of Ludquharn	No Data	No Data	100.00%	100.00%	Medium	High
AC-A952-01: A952 between C38B and U52B	No Data	No Data	100.00%	100.00%	Low	High
AC-U52B-01: U52B between the A952 and West Newton	No Data	No Data	100.00%	100.00%	Medium	High
AC-U70B-01: U70B between A952 and Easter Pettymarcus	No Data	No Data	100.00%	100.00%	Medium	High

Table 13.47: Aberdeenshire Qualitative Severance Assessment

Section	Road Link	Severance Impact	Significance of the Effect
Section 20	AC-U111S-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-C111S-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-U108S-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-C106S-01	This is a rural link that that is anticipated to have low baseline flows. It is observed that Cairney Primary School is located east of the carriageway. However, there are no pedestrian facilities throughout this link and	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
		no services on the adjacent carriageway indicating a low likelihood of pedestrian crossings being made.	
	AC-B9022-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
Section 21	AC-C100S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U103S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U104S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-A97-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	AC-C82S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U102S	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-C88S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
		Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	
	AC-U89S-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-B9001-01	This link is predominantly rural in nature with few pedestrian facilities through the majority of the route. Within Forgue footways can be found on one side of the carriageway indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-B9001-02	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	AC-C87S-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-U90S-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-U91S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-B9024-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	AC-U94L-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
	AC-U93bL-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U33S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
Section 22	AC-B9024-02	This link is predominantly rural in nature with few pedestrian facilities through the majority of the route. Within Bridgend footways can be found on either side of the carriageway with formal crossing points facilitating movements.	Minor Adverse, Not Significant
	AC-C22S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U24S-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not Significant
	AC-C25S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U24S-02	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not Significant
	AC-A947-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not Significant
	AC-U25S-01	This is a rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
		there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	
	AC-C21S-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-C21S-02	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not Significant
	AC-B9170-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not Significant
	AC-C26S-01	This link is predominantly residential in nature. There are pedestrian facilities on one side of the carriageway within Cuminestown. Overall, there is a low desirability for pedestrian to cross the road.	Minor Adverse, Not Significant
	AC-U1S-01	This is a high-speed rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
Section 23	AC-U1S-02	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-C29S-01	The link is rural in nature with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link indicating a low desirability for pedestrian crossings	Minor Adverse, Not Significant
	AC-B9170-02	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
	AC-U130S-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-C125B-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-A948-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	AC-A981-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	AC-B9028-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Negligible, Not Significant
	AC-B9029-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Negligible, Not Significant
	AC-C123B-01	This is a high-speed rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U122B-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-C127B-01	While the NCN 1 shares the C127B along the carriageway, this is a high-speed rural link with few rural-residential properties located throughout indicating a low desirability for crossings to be made.	Minor Adverse, Not Significant
	AC-A950-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout	Negligible, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
		indicating a low desirability for pedestrian crossings.	
Section 24	AC-B9106-01	This link is predominantly rural in nature with few pedestrian facilities through the majority of the route. Within Maud footways can be found on either side of the carriageway with formal crossings facilitating movements.	Minor Adverse, Not Significant
	AC-B9029-01	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not Significant
	AC-C102B-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-C103B-01	This link is predominantly rural in nature with few pedestrian facilities through the majority of the route. Within Maud footways can be found on either side of the carriageway indicating a low desirability to cross the road.	Minor Adverse, Not Significant
	AC-B9030-01	This link is predominantly rural in nature with few pedestrian facilities through the majority of the route. Within Stuartfield and Old Deer, footways can be found on either side of the carriageway with formal crossings facilitating movements.	Minor Adverse, Not Significant
	AC-C97B-01	This is a high-speed rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-C100B-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-A950-02	The link is urban in nature, with pedestrian facilities found on either side of the carriageway. There are formal pedestrian crossings to facilitate any movements.	Minor Adverse, Not Significant
Section 25	AC-A950-03	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout this link, including through Flushing, indicating a low desirability for pedestrian crossings	Minor Adverse, Not Significant

Section	Road Link	Severance Impact	Significance of the Effect
	AC-C56B-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U55B-01	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-C38B-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-C39B-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U52B-02	This is a high-speed rural link with limited sensitive receptors and no pedestrian facilities or Core Paths located throughout indicating a low desirability for pedestrian crossings.	Minor Adverse, Not Significant
	AC-A952-01	This is a high-speed rural link with few rural-residential houses set back from the carriageway. There are no pedestrian facilities or Core Paths crossing the link. Overall, this indicates a low desirability for pedestrians to cross the road.	Negligible, Not Significant
	AC-U52B-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant
	AC-U70B-01	This is a rural link with few rural-residential houses located adjacent to the carriageway. There are no pedestrian facilities or Core Paths crossing the link. It is anticipated that there are low existing flows on this link. Overall, this indicates a low desirability for pedestrians to cross the road.	Minor Adverse, Not Significant

13.4.69 The assessment confirms that the potential for increased severance of communities on all links is at worst **moderate** with most links classed as **negligible** or **minor** due to the forecast marginal temporary increase in construction traffic volumes. Therefore, the greatest significance that is anticipated throughout the Study Area is found where there are urban areas or those with services or receptors on either side of the carriageway, which all have a 'medium' sensitivity and where the impact of the construction traffic is considered **low**, therefore the severance effect is to have (at worst) **temporary, short to medium-term, minor adverse, and not significant effects**.

Road Vehicle and Passenger Delay

13.4.70 The proposed form of the site access junction would result in minimal driver delay being generated when vehicles are accessing the site. The IEMA Guidelines states that driver delay is only likely to be significant when traffic on the network surrounding the Proposed Development is already at, or close to, the capacity of the system. As established in **Table** 13.45 there are no links that are forecast to operate close to capacity following the addition of traffic generated by construction activities, with substantial spare capacity available and therefore the impact in driver delay is considered to be **negligible** to **low**.

13.4.71 Therefore, as some of the links have medium sensitive receptors the effect of road vehicle driver and passenger delay would have a **temporary**, **short to medium-term**, **negligible** effect on all links and therefore this effect is considered **not significant**.

Non-Motorised User Delay and Amenity

Non-Motorised User Delay

13.4.72 As detailed in the severance assessment in **Table 13.47**, a substantial portion of the study links are high-speed sections of road where crossings within or without of communities are unlikely to be made. While there are some footway facilities provided within the villages, and some cycle facilities, the Study Area is generally rural in nature, with limited NMU facilities provided on the majority of the proposed construction traffic access routes. Additionally, as there are few formal crossing facilities throughout the Study Area, it is impossible to determine pedestrian visibility where crossings would be made in the rural context.

13.4.73 As such, whilst the sensitivity for all minor roads (C Roads and U Roads) is considered to be **medium** (primarily due to the width of the carriageway), the general number of NMUs in this rural Study Area is expected to be **low**. As indicated in **Table** 13.31, it is expected that a maximum increase of 2 HGV movements and 2 Car / LGV movements every 10 minutes is not expected to result in significant NMU delay or impact amenity substantially.

13.4.74 Therefore, it is anticipated that for sensitive receptors the effect of Non-Motorised User Delay would have a temporary, **short to medium-term, negligible effect** on the majority of links with medium sensitivity and **negligible** effect on Links with **low** sensitivity (where there are fewer NMU's anticipated). Therefore, this effect is considered **not significant.**

Non-Motorised User Amenity

13.4.75 When considering the effect of pedestrian amenity, it is considered a starting point to compare whether traffic flows have halved or doubled. **Table 13.38** indicates that on all links HGV flows (including those with no traffic data) have exceed the 'doubled' threshold within the Study Area, except for the following link:

- AC-A950-03: A950 between Mintlaw and A90 (T)

13.4.76 It is estimated that there would be a maximum of 235 two-way vehicle movements and 152 two-way HGV movements within a 11-hour working day on Section 20, 241 two-way vehicle movements and 152 two-way HGV movements on Sections 21, and 264 two-way movements and 158 two-way HGV movements on Sections 22 to 25. This equates to an average of two car / LGV movements and two HGV movements every 10 minutes.

13.4.77 Consequently, based on the expected low NMU movements, and the expected low increase on these **medium** sensitive links, in the impact of construction traffic on NMU amenity is predicted to be **low**. Therefore, the effect on Non-Motorised User Amenity is to have (at worst) **temporary, short to medium-term**, **minor adverse**, and **not significant** effects.

Fear and Intimidation

13.4.78 The peak construction phase is expected to generate a maximum of 235 two-way vehicle movements and 152 two-way HGV movements within a 11-hour working day on Section 20, 241 two-way vehicle movements and 152 two-way HGV movements on Sections 21, and 264 two-way movements and 158 two-way HGV movements on sections 22 to 25.

13.4.79 **Table 13.48** summarises the comparison of the 18-hour baseline with a threshold for level of fear score assigned to each link and the magnitude of impact as a result of the forecast increase in vehicle movements on each link.

Table 13.48: Aberdeenshire Fear and Intimidation Assessment

Link (#)	18 hr Base – Daily Trips		DoH Score	LoFI	18hr Base + Peak Construction Daily Trips		DoH Score	LoFI	Magnitude of Impact
	Vehicles	HGVs			Vehicles	HGVs			
AC-B9022-01	1353	29	50	Great	1587	181	50	Great	Negligible
AC-A97-01	1895	95	60	Great	2130	246	60	Great	Negligible
AC-B9001-02	799	32	40	Moderate	1040	184	40	Moderate	Negligible
AC-B9170-01	2346	65	50	Great	2587	218	50	Great	Negligible
AC-B9170-02	969	28	40	Moderate	1233	186	50	Great	Minor Adverse
AC-A948-01	931	66	40	Moderate	1195	224	40	Moderate	Negligible
AC-A981-01	1380	90	50	Great	1644	248	50	Great	Negligible
AC-B9106-01	543	7	20	Low	807	164	30	Moderate	Minor Adverse
AC-B9030-01	466	7	20	Low	730	165	30	Moderate	Minor Adverse
AC-A950-02	2242	200	60	Great	2506	357	60	Great	Negligible
AC-A950-03	6394	845	60	Great	6658	1003	60	Great	Negligible

13.4.80 The results in **Table** 13.48 show that with the addition of the worst-case construction traffic levels, there would be three links with adverse step changes in level of fear. This change is anticipated to occur on the B9170 in Section 23 and on the B9106 and B9030 on Section 24. The increases are expected to result in a **low** impact on these links according to the thresholds.

13.4.81 As such, it is considered that the **temporary** increase in traffic during the worst-case scenario would result in **low** impact on road fear and intimidation, on the road links contained within the Study Area and that this would result in a **negligible, not significant** effect.

13.4.82 As identified within **Table 13.46**, the identified roads are without traffic data to base qualitative assessment on. With the addition of a maximum of 264 total vehicles within the 18-hour assessment window, there is unlikely to be a significant impact, with the worst-case scenario that those with a small level of Fear and Intimidation generating a one-step level change. Therefore, at worst, the roads without traffic data may experience a **temporary**, **short to medium-term**, **minor adverse** impact, which is **not significant**.

Road User and Pedestrian Safety

13.4.83 As shown in **Table 13.28**, there is no requirement to introduce specific casualty reduction measures as a low number of PIAs have been reported on the local road network in the most recently available five year period. All reported accidents have been attributed to driver / pedestrian / rider error, and further analysis of the accident data confirms that there are no specific safety concerns on the local road network which would support access to the tower installation sites from the trunk road network. The analysis concludes that there are not any inherent road safety or accident concerns.

13.4.84 While the analysis concludes that there are no inherent road safety or accident concerns, as the majority of the Study Area is forecast to experience an over 30% HGV increase of construction traffic, the temporary traffic flow increase during the construction period is expected to have an impact on road safety. Therefore, for the majority of the Study Area, the impact is considered to be **low** on all Links, which are forecast to experience an increase of HGV construction traffic of less than 30% and are considered to have a **negligible** impact.

13.4.85 Consequently, as all minor (C and U Roads) have a medium sensitivity, the effect of road user and pedestrian safety would have a **temporary**, **short to medium-term**, **minor adverse** effect on which all of these links, which are considered to be **not significant**.

Summary of Likely Effects Generated by Construction Traffic

13.4.86 The greatest significance of the effect generated by construction traffic is considered to have **temporary**, **short to medium-term**, **minor adverse** and **not significant** transport effects when compared to the seven key criteria.

13.4.87 The overall significance of each effect is summarised in **Table 13.49**.

Table 13.49: Aberdeenshire Summary of Significance of Effects

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
AC-U111S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C111S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U108S-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C106S-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9022-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C100S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U103S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U104S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A97-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C82S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
AC-U102S	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C88S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U89S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9001-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9001-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C87S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U90S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U91S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9024-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U94L-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U93bL-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U33S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9024-02	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C22S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U24S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C25S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U24S-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A947-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U25S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C21S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
AC-C21S-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9170-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C26S-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U1S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U1S-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C29S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U130S-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C125B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9170-02	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A948-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A981-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9028-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9029-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C123B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U122B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C127B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A950-01	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A950-02	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9106-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9029-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

Road Link	Severance	Road Driver Delay	NMU Delay	NMU Amenity	Fear and Intimidation	Road Safety
AC-C103B-01	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C102B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-B9030-01	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Minor Adverse, Not Significant	Minor Adverse, Not Significant
AC-C97B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C100B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A950-03	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C56B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U55B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C38B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-C39B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U52B-02	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-A952-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U52B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant
AC-U70B-01	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant	Negligible, Not Significant	Minor Adverse, Not Significant

13.5 Additional Mitigation

13.5.1 As previously mentioned, at present there are no additional mitigation measures anticipated over and above the embedded CTMP and public road improvements.

13.6 Residual Effects

13.6.1 As there are no expected additional mitigation measures, it is anticipated that the residual effects will be the same as the results of the assessment of likely significant effects.

13.7 Assessment of Cumulative Effects

13.7.1 As per the IEMA Guidelines, the EIA Regulations requires consideration of the likely significant effects of the Proposed Development on the environment resulting from the cumulation of effects with other existing and / or approved (consented) projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources.

13.7.2 Any other existing and / or approved projects not included in the traffic model should be highlighted to the competent traffic and movement expert and agreement sought as to why they have not been included. For the avoidance of doubt, and in line with IEMA Guidelines and common industry practice, only developments which have consent (committed developments) have been considered within this assessment.

13.7.3 The following assessment has taken cognisance of the methodology set out in **Chapter 5: EIA Process and Methodology** and the following approach has been taken:

- Stage 1: the assessment of Stage 1 developments has been undertaken in alignment with the methodology set out in **Chapter 5: EIA Process and Methodology**. The Proposed Development has been assessed cumulatively with the developments listed in **Table 13.50** to understand the likely significant effects of the wider network transmission upgrade as a whole on that topic.
- Stage 2: the assessment of Stage 1 developments within this Traffic and Transport Chapter differs from the methodology set out in **Chapter 5: EIA Process and Methodology**. An in combination cumulative assessment has been undertaken with selected cumulative developments listed within **Appendix 5.1: Cumulative Developments** to determine the overall potential for in-combination cumulative effects. This is explained further below.

13.7.4 **Appendix 5.1: Cumulative Developments** lists all developments that have been analysed for this assessment, and where possible, data has been collated on each in respect to traffic and transport. While there are a number of developments which are currently being progressed in the area, a large proportion are currently still in planning and therefore there is no certainty that they will progress in the next 3 years. Those in earlier planning stages and those which are smaller in scale often do not provide information relating to vehicle trips which can be used in this study. For the avoidance of doubt, it is considered that the developments included within the cumulative assessment should be consented and within near distance to the Proposed Development that any common routes used by construction vehicles could be impacted. It was determined and developments should also have suitable data to assess and that have the potential to progress in the same time frame as the Proposed Development.

In-combination Effects: Stage 1 – Associated SSEN Transmission Developments

13.7.5 The developments that are part of the wider network transmission update that have been considered are listed within **Chapter 5: EIA Process and Methodology** in **Table 5.2** and again below in **Table 13.50**.

Table 13.50: Stage 1 Cumulative Schemes[24]

ID	Name	Description	Application Status	Scoped into Assessment?	Notes
01	Fanellan Substation	A new 400 kV substation and converter station located in the Beauly area.	Awaiting Decision	Yes	These projects are Associated SSEN Transmission

[24] The status of these schemes is accurate as of June 2025.

ID	Name	Description	Application Status	Scoped into Assessment?	Notes
02	Greens 400 kV Substation	A new 400 kV substation located 2.5 km southeast of Cuminestown.	Awaiting Decision	Yes	Developments (SSEN Transmission Development required to connect to the Proposed Development). Although it is considered that the projects overlap spatially and temporally, it would not be realistic to assess the peak trip generation of each of these projects, as these is not likely to occur simultaneously. These developments are being delivered by the Applicant, and it is considered that, where possible, this would provide opportunity for construction activities to be coordinated to minimise the effects generated by construction traffic.
03	Netherton Hub	A new strategic development near Flushing and Longside that consists of a 400 kV substation, 132 kV substation, a HVDC switching station, two HVDC converter stations and a spares warehouse and operations base.	Approved	Yes	

In-combination Effects: Stage 2 – Other Developments

13.7.6 A review of the local authority council planning portals and the Energy Consent Unit's website has been undertaken to determine what cumulative developments should be considered with regards to the Proposed Development.

13.7.7 While there are a number of proposed developments which are currently being progressed in the area, a large proportion are currently at the scoping stage and therefore do not provide information relating to vehicle trips which can be used in this study. Some of these developments are being delivered by the Applicant and where possible, this would provide opportunity for construction activities to be coordinated to minimise the effects generated by construction traffic.

13.7.8 On review of the developments, it is considered that the developments included within the cumulative assessment should be consented and within near distance to the Proposed Development that any common routes used by construction vehicles could be impacted.

13.7.9 It is considered that where developments are currently going through planning, that these are not consented and are therefore not included within the cumulative assessment. It may also be considered that they are of sufficient distance from the Proposed Development that any common routes used by construction vehicles combined construction traffic effect would be diluted across the network. Furthermore, it is considered that if the construction phase of the Proposed Development coincides with any other developments in the locale, construction traffic movements associated with the Proposed Development would be appropriately managed with suitable measures included with the detailed CTMP, which would be prepared by the Principal Contractor, to ensure that the cumulative effect would result in no significant (moderate or greater) detriment to existing conditions.

13.7.10 Other cumulative developments are listed below in **Table** 13.51.

Table 13.51: Third Party Cumulative Developments

Application Reference	Development Name	Notes
21/01521/S36 and ECU00003225	Cairn Duhie Wind Farm Redesign	The estimated trip generation for the future peak year of construction is an average of 40 daily HGV movements and 66 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A939. Therefore, this has been included in the cumulative assessment.
22/05289/S36 and ECU00001999	Ourack Wind Farm	The estimated trip generation for the future peak year of construction is an average of 146 daily HGV movements and 32 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A939. Therefore, this has been included in the cumulative assessment.
24/00486/S36 and ECU00004733	Kellas Drum Wind Farm	The estimated trip generation for the future peak year of construction is an average of 113 daily HGV movements and 59 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A941 and B9010. Therefore, this has been included in the cumulative assessment.
ECU00000718	Berry Burn Wind Farm	The estimated trip generation for the future peak year of construction is an average of 44 daily HGV movements and 17 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A940. Therefore, this has been included in the cumulative assessment.
23/00519/S37 and ECU00004733	Elchies (Rothes III) Wind Farm Grid Connection works	The estimated trip generation for the future peak year of construction is an average of 10 daily HGV movements and 20 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A941. Therefore, this has been included in the cumulative assessment.
24/01548/FUL	Balblair Quarry	The estimated trip generation for the future peak year of construction is an average of 20 daily HGV movements and 40 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A862. Therefore, this has been included in the cumulative assessment.
APP/2023/1454	Greenvolt Onshore Works	The estimated trip generation for the future peak year of construction is an average of 344 daily HGV movements and 103 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A950, A948, B9030 and B9170. Therefore, this has been included in the cumulative assessment.
APP/2025/0338	Whitestones Solar Project	The estimated trip generation for the future peak year of construction is an average of 3 daily HGV movements and 26 Car / LGV movements.

Application Reference	Development Name	Notes
		There is the possibility that this project programme would overlap with the Proposed Development and affect the A948, B9170 and C125B. Therefore, this has been included in the cumulative assessment.
APP/2025/0444	Salamander Offshore Wind Farm	The estimated trip generation for the future peak year of construction is an average of 38 daily HGV movements and 64 Car / LGV movements. There is the possibility that this project programme would overlap with the Proposed Development and affect the A950. Therefore, this has been included in the cumulative assessment.

Construction Impact – 2026 Baseline plus Cumulative Development Flows

13.7.11 The peak month traffic data was combined with the future year (2026) traffic data plus the consented, committed developments (CD) flows to show the theoretical road capacity accounting for traffic from cumulative developments within the Study Area. This assessment was undertaken separately for each council area and the results are shown in **Table 13.52** to **Table 13.54.**

Table 13.52: Highland - 2026 Committed Development Flows Daily Traffic (11 hr)

Study Network Route Section	2026 Two-Way Flows			
	Base + Construction Traffic Flows	Base + Construction Flows + CD*	Theoretical Road Capacity	Spare Road Capacity
HC-C1106-01: C1106 between Fanellan and the U1604	180	3080	406	86.83%
HC-U1604-01: U1604 between the C1106 and the C1108	225	3080	451	85.37%
HC-C1108-01: C1108 between the A833 and the U1604	331	3080	557	81.90%
HC-A833-01: A833 between the A862 and C1108	2305	19800	2531	87.22%
HC-A862-01: A862 between the A831 and C1116	3303	26400	3574	86.46%
HC-A862-02: A862 between the C1116 and Inchmore	3369	26400	3640	86.21%
HC-C1102-01: C1102 between A862 and U1568	361	3080	587	80.93%
HC-A862-03: A862 between Inchmore and Scorguie Rd, Inverness	3973	26400	4243	83.93%
HC-A862-04: A862 between Scorguie Rd, Inverness and the A82	13731	26400	14001	46.97%
HC-A8082-01: A8082 between the A9 (T) and A82 (T)	12166	26400	12392	53.06%
HC-B861-01: B861 (southwest of Inverness) between Scaniport and Cullaird	1787	26400	2013	92.38%
HC-C1068-01: C1068 (south of Inverness) southwest of the A9 (T) junction at Daviot / Dundavie	174	3080	400	87.00%

Study Network Route Section	2026 Two-Way Flows			
	Base + Construction Traffic Flows	Base + Construction Flows + CD*	Theoretical Road Capacity	Spare Road Capacity
HC-B851-02: B851 (southeast of Inverness) north of the junction with the A9 (T) at Mains of Daviot	529	19800	755	96.19%
HC-C1056-01: C1056 (from B9154 at Craggie to U1233 at Dalroy), at Mains of Daltulich	98	3080	324	89.49%
HC-B9090-01: B9090 between the B9006 and C1056	1211	19800	1476	92.54%
HC-B9090-03: B9090 between Cawdor and the B9091	2028	19800	2293	88.42%
HC-A939-01: A939 between the B9091 and Ferness	781	19800	1257	93.65%

*CD: Committed development

Table 13.53: Moray - 2026 Committed Development Flows Daily Traffic (11 hr)

Study Network Route Section	2026 Two-Way Flows			
	Base + Construction Traffic Flows	Base + Construction Flows + CD	Theoretical Road Capacity	Spare Road Capacity
MC-A940-02: A940 Between Forres and Tomdow	893	19800	1165	94.12%
MC-B9011-01: B9011 between the A96 (T) and the C37E	3980	19800	4205	78.76%
MC-B9010-02: B9010 between the A96 (T) and the C12E	228	19800	582	97.06%
MC-A941-01: A941 between the A96 (T) and Culzean Road	15665	26400	16002	39.39%
MC-A941-02: A941 between Culzean Road and the access to Breedon Netherglen Quarry	4810	26400	5146	80.51%
MC-B9103-02: B9103 between the U129E and Altonside	935	19800	1162	94.13%
MC-B9015-01: B9015 between the A96 (T) and Cairnend	1044	19800	1270	93.59%
MC-U22E-01: U22E between the B9015 and U19E	29	3080	256	91.70%
MC-B9016-01: B9016 between the A96 (T) and Auchinderran	1957	19800	2183	88.98%

*CD: Committed development

Table 13.54: Aberdeenshire - 2026 Committed Development Flows Daily Traffic (11 hr)

Study Network Route Section	2026 Two-Way Flows			
	Base + Construction Traffic Flows	Base + Construction Flows + CD	Theoretical Road Capacity	Spare Road Capacity
AC-B9022-01: B9022 between the A96 (T) and Haddoch	1062	19800	1297	93.45%
AC-A97-01: A97 between the A96 (T) and B9001	1488	26400	1729	93.45%

Study Network Route Section	2026 Two-Way Flows			
	Base + Construction Traffic Flows	Base + Construction Flows + CD	Theoretical Road Capacity	Spare Road Capacity
AC-B9001-02: B9001 between the B9024 and Burnside	627	19800	868	95.61%
AC-B9170-01: B9170 between the A947 and Cuminestown	1842	19800	2106	89.36%
AC-B9170-02: B9170 between the A948 and Cairncake	761	19800	1050	94.70%
AC-A948-01: A948 between B9170 and B9028	731	26400	1267	95.20%
AC-A981-01: A981 between B9029 and A950	1084	26400	1608	93.91%
AC-B9106-01: B9106 between Drymuir and the A950	427	19800	691	96.51%
AC-B9030-01: B9030 between the A950 and Upper Crichie	366	19800	877	95.57%
AC-A950-02: A950 between B9106 and Mintlaw	1761	26400	2285	91.34%
AC-A950-03: A950 between Mintlaw and A90 (T)	5021	26400	5617	78.72%

*CD: Committed development

13.7.12 The results in **Table 13.52** to **Table 13.54** show that with the addition of the worst-case construction traffic levels from cumulative developments, there would be substantial spare capacity on all of the links.

13.7.13 Where data is available it is considered that the temporary increase in traffic during these scenarios would not result in a noticeable change in road capacity on the road network. Therefore, based on the results of the road capacity assessment with additional cumulative development traffic, during the construction crossover periods, it is considered that the sensitivity of the capacity of the traffic network to changes in traffic flows is low and the magnitude of impact is predicted to be **negligible** compared to the link capacities. Therefore, the impact of the Proposed Development on the capacity of the road network is expected to create **temporary, short to medium-term, negligible and not significant** transport effects.

Kellas Alternative Alignment

13.7.14 As previously mentioned, for this assessment it is assumed that the Kellas Drum Windfarm is consented, meaning that the Proposed Development will route around the location where the development would be. Regardless of the outcome of this planning application process, as there are no proposed changes in access points for the Proposed Development with either scenario, there is consequently no change to this assessment. Therefore, the effects of predicted construction traffic impact within **Section 13.4** regarding the alternative alignment remain current.

13.8 Summary and Conclusions

13.8.1 **Table 13.55** provides a summary of the impacts and significance of effects on sensitive receptors from the Proposed Development.

Table 13.55: Summary of Predicted Impacts and Residual Effects

Description of Effect	Significance of Potential Effect	Additional Mitigation	Significance of Potential Effect (post-mitigation)
Road Capacity	Minor Adverse	None required	Minor Adverse
Severance	Minor Adverse		Minor Adverse
Driver Delay	Minor Adverse		Minor Adverse
Pedestrian Delay	Negligible		Negligible
Pedestrian Amenity	Negligible		Negligible
Fear and Intimidation	Minor Adverse		Minor Adverse
Accidents and Safety	Minor Adverse		Minor Adverse

13.8.2 This Transport Chapter has set out the methods used to assess the likely significant effects, the baseline conditions currently existing at the site, the potential direct and indirect effects of the Proposed Development arising from traffic generated by its construction the mitigation measures required to prevent, reduce, or offset the identified significant effects and the residual effects.

13.8.3 Operational traffic is considered to be so low that its effect would be **negligible** and has therefore been scoped out of further assessment.

13.8.4 Baseline traffic flows were gathered and sensitive receptors identified for the construction traffic route to the site and an assessment undertaken. The overall increase in vehicle trips compared to the existing capacity of the road has been assessed to be low. It is therefore considered that the existing road network can accommodate the anticipated temporary increase in traffic generated by construction activities and that the effects are **not significant**. Seven key IEMA criteria were assessed against thresholds identified by Guidelines and using professional judgement, with the greatest significance found to have **temporary, short to medium-term, minor adverse and not significant** transport effects.

13.8.5 In relation to the cumulative impact of the Proposed Development with local developments, it is considered that the coincidence of the construction phases is not predicted to result in significant cumulative traffic effects on the road network. Where data is available the study has demonstrated that there is spare capacity on the local road network to accommodate the predicted level and type of vehicles associated with the various schemes. It is considered that the cumulative effect would be **temporary, short to medium-term, minor adverse and not significant**.

13.8.6 Construction traffic would be managed through the implementation of a detailed CTMP, and the residual effect has been determined to be **minor adverse** when assessed in relation to the seven key IEMA indicators as identified in **Paragraph 13.2.28.**