Chapter 13
Traffic and Transport

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13 Traffic and Transport

Introduction

13.1 This chapter presents the findings of the assessment of the likely significant construction effects of the proposed Kendoon to Tongland 132 kilovolt (kV) Reinforcement Project ('the KTR Project') on traffic and transport, details of which are provided in Chapter 4: Development Description and Chapter 5: Felling, Construction, Operational Maintenance and Decommissioning. Cumulative effects associated with committed projects which are likely to generate traffic that will utilise local public roads within the KTR Project Study Area at the same time as traffic generated by the KTR Project have also been assessed.

13.2 This chapter details the traffic that is likely to be generated during the construction phase of the KTR Project (including the decommissioning of N and R routes) and assesses the effect upon the local and trunk road network and identifies measures to reduce network disruption.

13.3 A Transport Assessment (TA) has not been undertaken as a TA is not generally considered to be required for temporary construction works and the traffic movements associated with the operational phase of the KTR Project are not high enough to warrant a formal TA. In addition, the statutory consultees for the KTR Project did not request that a formal TA was undertaken.

13.4 It should be noted that Chapter 14: Noise, Chapter 15: Socioeconomics, Tourism and Recreation, and Chapter 16: Other Issues also consider other environmental effects related to traffic and transport.

13.5 Planning policies of relevance to this assessment are provided in Chapter 6: Planning Policy Context.

13.6 The following appendices accompany this Chapter:

- Appendix 13.1: Framework Construction Traffic Management Plan; and
- Appendix 13.2: Construction Access Routes & Temporary Access Locations Review.

Scope of the Assessment

13.7 This section outlines the effects which have been considered to be potentially significant under this assessment and the reasons for excluding from the assessment other effects. The scope of the assessment remained under review as the Environmental Impact Assessment (EIA) progressed, with account taken of the scoping responses and other additional consultation responses received as part of this process.

Effects Assessed in Full

13.8 The three categories of potential effects listed below have been considered for the individual connections comprising the KTR Project within the Study Area during the construction phase, for the KTR Project in isolation and cumulatively with committed schemes which are likely to utilise local roads at the same time as traffic generated by the development as detailed further in Table 13.1 below:

- driver delay;
- road safety; and
- community effects (severance, pedestrian amenity / fear and intimidation, and pedestrian delay).

Effects Scoped Out

13.9 The following effects have been scoped out of this assessment as detailed further in Table 13.1 below:

- Operational and maintenance phase effects. Traffic associated with the operation and maintenance of the new connections is limited and infrequent. Operational overhead lines (OHL) are subject to an annual maintenance inspection with any further visits generally being the result of unplanned outages on the lines. These visits are infrequent and are unlikely to generate significant volumes of traffic. On the basis of the professional judgement of the EIA team, the effects of traffic associated with the operational phase are not likely to be significant and have not been considered in detail.
- Construction traffic noise. This has not been assessed in detail as traffic movements will be distributed over the existing road network. In addition, the proposed new accesses to be formed during the construction phase are of temporary/short duration, therefore no significant noise effects are anticipated to arise. Further details are provided in Chapter 14.
- Potential effects on air quality resulting from construction traffic. These effects have not been assessed in detail on the basis that the KTR Project will be accessed via a number of geographically distinct roads and access points and therefore traffic related emissions will be diffused throughout the Study Area. Further details are provided in Chapter 16.

Table 13.1: Effects Assessed in Full and Scoped Out

Connection	Effects Assessed in Full	Effects Scoped out
Polquhanity to Glenlee (via Kendoon) (P-G via K) including: • the removal of the 'N' route towers between Polquhanity and Kendoon, and part of the' R (north) towers between Kendoon and Glenlee	• Effects of felling and construction traffic on existing traffic flows and the local and trunk road network (driver delay and road safety). • Effects of felling and construction traffic on communities (severance, pedestrian amenity / fear and intimidation, and pedestrian delay) and users of the Southern Upland Way and the 'core path' network and 'off-road tracks' which service associated worksites. • Cumulative effects with other developments, including on traffic flows.	• Effects of operational and maintenance vehicles on existing traffic flows and the local road network. • Noise and air quality/dust effects associated with construction traffic on the basis that the KTR Project will be accessed via a number of geographically distinct roads and access points.
Carsfad to Kendoon (C-K)	As for P-G via K	As for P-G via K
Earlstoun to Glenlee (E-G)	As for P-G via K	As for P-G via K
BG Route Deviation (BG Deviation)	As for P-G via K	As for P-G via K
Glenlee to Tongland (G-T) including the removal of the R (south) towers between Glenlee and Tongland	As for P-G via K	As for P-G via K
KTR Project as a Whole	As for P-G via K	As for P-G via K

Assessment Methodology

13.10 This assessment has been undertaken as a combination of desk-top study, field survey and consultation with statutory agencies in line with current good practice and policy advice. Predicted volumes of felling and construction vehicle movements (and decommissioning movements for N and R routes) have been compared with baseline traffic flows to identify if there are likely to be periods where the increase in general traffic (or HGV traffic) exceeds standard thresholds. Likely effects arising as a result of the additional traffic (i.e. on driver delay, road safety and community effects) have been identified and their significance assessed.

Guidance

13.11 This assessment is carried out in accordance with the principles contained within the following documents:

- Institution of Highways and Transportation (IHT) (1994), Guidelines for Traffic Impact Assessment.

- Institute of Environmental Assessment (now the Institute of Environmental Management and Assessment (IEMA) (1993), Guidelines for the Environmental Assessment of Road Traffic, Guidance Notes No. 1 (referred to as 'the IEMA Guidelines')).
- Transport Scotland (2012), Transport Assessment Guidance.
- Scottish Government (2005), NESA Manual, DMRB, Volume 15, Economic Assessment of Road Schemes in Scotland.
- ROSPA Road Safety Engineering Manual, 2007.

13.12 The IEMA Guidelines are intended for the assessment of the effect of road traffic associated with new developments. It is common and established practice that they are applied to energy related developments and as such these guidelines are defined as suitable to assess the construction phase of a high voltage overhead line.

Consultation

13.13 Consultation was undertaken with Transport Scotland (TS), Dumfries and Galloway Council (D&GC) Roads Department, Ayrshire Roads Alliance and the South of Scotland Timber Transport Officer to ascertain their views on the assessment methodology, environmental effects relating to access, traffic and transport, any particular concerns they may have and any proposed road works. A summary of the consultation is provided in Table 13.2.

Table 13.2: Summary of Consultee Responses

Consultee	Scoping Response / Additional Consultation	Response/Action Taken
Transport Scotland, Trunk Road and Bus Operations (TRBO)	1. Stated that any trunk road access requirements will need to be with the agreement of Transport Scotland and asked that details are supplied with the EIA Report. 2. Stated that the assumption that the KTR Project is unlikely to result in an intensification of use exceeding 10% of the existing Annual Average Daily Traffic (AADT) on any link section of the A75 (T) shall be verified through the EIA process. 3. Confirmed that effects associated with the operational and maintenance phase could be scoped out of the assessment. 4. Agreed that noise and air quality/dust effects associated with construction traffic could be scoped out of this assessment.	1. Requirements for agreements acknowledged. Two existing accesses off the A75 will require to be upgraded (Access No. 63 and 64) to facilitate construction of the KTR Project. Details of the two accesses are included in Appendix 13.2. 2. This chapter considers potential effects on the A75(T), A76 (T) and A77 (T). 3. Noted 4. Noted
Transport Scotland (TS), Area Manager (South West Trunk Road Network)	Date: 28th June 2019 Advised that TS are not aware of any future development proposals on the A75, A76 and A77 (within the Study Area) which will affect construction traffic.	Noted. No further action required.
D&GC Roads Department	1. Requested to provide details of all works compounds and site access points on public roads. 2. Indicated that it would be appropriate that all access routes be assessed in full and the extent of any accommodation works (such as widening, strengthening, provision of suitable passing places, etc. along any proposed access routes necessary to permit construction traffic and the passage of vehicles) to public roads and the potential impacts on utility services lying within the public road boundary are identified. 3. Proposals for all accommodation works should be supported by swept path tracks. 4. Indicated that all accesses and accommodation works on public roads must be designed and constructed to the satisfaction of the Planning Authority in consultation with the Roads Authority and will require appropriate permits and consents to have been issued and a Legal Agreement covering ongoing maintenance and restoration entered into. 5. Indicated that the developer will be held responsible for the immediate execution of any repairs and will be required to meet the cost of above average maintenance to the public road network arising from the concentration of heavy traffic associated with this development. This is to be secured by Legal Agreement. 6. Indicated that where public road boundaries are altered for accommodation works, these should be reinstated in their original position at the conclusion of construction works (unless prior agreements have been secured with the Planning and Road Authorities). 7. Indicated that where an access route crosses bridges and culverts, the applicant will require to get approvals (in respect of those structures) from the Council's Design Bridges and Structures Unit. 8. Indicated that it would be appropriate for all timber haulage traffic to follow agreed routes from the appropriate and approved forest plans. 9. Indicated that appropriate consultation with nearby forest managers and timber hauliers through the office of the South of Scotland Timber Transport Officer shall take place to co-ordinate timber haulage operations that may use the access routes during the construction period to minimise the cumulative impact on communities and road users.	1. Requirement acknowledged, all proposed construction worksite access locations have been identified and shown on Figures 5.5.1. and 5.5.2. Appendix 13.2 provides information on each location along with a typical construction access design plan and typical temporary signage arrangement. 2. All construction access routes have been assessed with the exception of the C50s, C31s, U137s, U133s, U107s, U103s and U62s which will solely be used to facilitate the removal of R route. It is assessed that the removal of the R route will generate less than ten vehicle movements per day on these specific road sections. Accordingly, the professional judgement of the assessment team is that effects arising from such low level of traffic will be none and therefore not significant. As such, no detailed assessment has been carried out for these public road sections. Appendix 13.2 provides a description of each construction access route and identify recommended mitigatory actions such as localised widening to ease access to the worksites. Further study, design and consultation with (D&GC) Roads Department will be undertaken during the pre-construction phase once the construction programmes and vehicle movements have been more accurately defined to identify and define extents of accommodation works. 3. Requirement acknowledged. Prior to commencement of works, SP Energy Networks (SPEN) will provide details of works necessary to road infrastructure to allow all temporary or permanent site access to the relevant Roads Authority for approval, these will be supported by swept path analysis. 4. Requirement acknowledged. Prior to commencement of works, SPEN will submit details of infrastructure works necessary to provide temporary or permanent site access to the relevant Roads Authority for approval. The contractor will implement works required to the specification of the Roads Authority prior to commencement of construction works on site. Location, general arrangement and standard of construction of access points will be agreed with the relevant Roads Authority. The Contractor will liaise with the Roads Authority to obtain appropriate permits and consents. 5. Requirement acknowledged. SPEN will enter into a legal agreement under Section 96 of the Roads (Scotland) Act 1984 to formalise an inspection and maintenance regime with D&GC for agreed sections of road. 6. Noted.

Consultee	Scoping Response / Additional Consultation	Response/Action Taken
	10. Indicated that a Traffic Management Plan (TMP) will be required and to be agreed in writing with the Police and the Roads Authorities prior to any works commencing on site. The TMP should include a programme of delivery types/numbers by month, details of all proposed mitigation measures, list of contacts, agreed access (and excluded) routes and details of measures that will be implemented to ensure that no stacking of delivery vehicles occur on any part of the public road network.	7. Noted, consultation has been undertaken and D&GC confirmed that none of the structures on the routes identified have a legal weight restriction and can therefore be assumed able to safely accommodate normal loads up to 40 tonnes. 8. None of the public roads proposed to be used for timber extraction for the KTR Project are designated as 'excluded route'[1]. 9. Further consultation with (D&GC) Roads Department and South of Scotland Timber Transport Officer (see below) will be undertaken during the pre-construction phase once the felling programmes have been more accurately defined to agree as necessary; limits of timing, allowable tonnage etc. before the routes are utilised by construction traffic. 10. Requirement acknowledged. A framework Construction Traffic Management Plan (CTMP) is provided as Appendix 13.1. The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded as appropriate by SPEN's appointed contractor(s), prior to commencement of construction activities and updated as necessary during the construction phase.
D&GC Roads Department	Date: 3rd August 2018 Consultation undertaken to assess the feasibility of using the A713 Old Polharrow Bridge for construction traffic to facilitate construction of Tower 20.	D&GC has advised that there is currently no weight restriction on the A713 Old Polharrow Bridge. However, as the bridge is closed to vehicles and is now in a deteriorating condition, the structure will require to be re-assessed. The structural integrity of the Old Polharrow Bridge and hence suitability as a route for construction traffic will be determined by further surveys and assessment undertaken by the appointed contractor during the pre-construction phase.
D&GC Roads Department	Date: 13th September 2018 and subsequently on the 20th November 2018 and 13th June 2019	D&GC confirmed that none of the structures on the routes identified have a weight restriction and can therefore all accommodate normal loads up to 40 tonnes.
D&GC Roads Department	Date:10th December 2018 Confirmed that appraisal of road traffic (personal injury) collision historical data sourced from the Crashmap website is acceptable.	Requirements acknowledged and road traffic (personal injury) collisions assessed in this Chapter.
D&GC Roads Department	Date: 11th July 2019 Confirmed that the Non-motorised user (NMU) surveys method, duration and timings as carried out (i.e. surveys were carried out for full 24-hour periods over seven days during the summer 2018; largely to coincide where peak holiday period. Counts were carried out via CCTV camera with subsequent manual classification) would provide a satisfactory basis for the assessment of impacts.	No further action required.
Ayrshire Roads Alliance (ARA)	Date: 15th March 2019 Consultation undertaken to confirm the suitability of using Gateside Road to bypass the central area of Dalmellington.	ARA subsequently confirmed that it would be acceptable to use Gateside Road to bypass the central area of Dalmellington.
South of Scotland Timber Transport Officer (SSTTO)	Date: 28th March 2019 Consultation undertaken by RTS to introduce the project and more specifically proposed timber felling requirements and obtain advice regarding transport routes.	SSTTO subsequently advised that further consultation will be required once timescales and specific areas are identified. Further liaison will be undertaken with SSTTO during the pre-construction phase once the felling programmes have been more accurately defined.

Study Area

13.14 The Study Area for traffic and transport is effectively the public road network in the vicinity of the KTR Project which will be used during construction of the new Connections and the decommissioning and removal of the existing N and R routes. The public road network considered in this assessment is shown on Figures 13.1.1 and 13.1.2. Whilst a Study Area has not been defined on a distance basis, the public roads in the vicinity of the KTR Project which are proposed to be used during construction and operation of the KTR Project, and therefore those which have been assessed as part of this study, include: A77(Trunk), A76 (Trunk), A75(Trunk), A713, A762, A712, A711, A702, B795, B741, C13s, C45s, C31s, C50s, U137s, U133s, U107s, U103s, U1s, U2s, U3s, U34s, U43s, U62s and Gateside Road as shown on Figures 13.1.1 and 13.1.2.

13.15 The primary route in the local area is the A75, a trunk road in south Scotland linking Stranraer with the A74 (M) at Gretna. Other roads include:

- the A77 trunk road linking Kilmarnock to Stranraer;
- the A76 trunk road linking Kilmarnock to Dumfries;
- the A713 is a local road which runs broadly north-south between Ayr and Castle Douglas linking with the A77 trunk road to the north and the A75 trunk road to the south;
- the A762 runs broadly north-south between St John's Town of Dalry and Ringford linking with the A713 to the north and the A75 to the south;
- the A712 local road runs broadly east to west between Crocketford and Newton Stewart linking with the A75 to the east and west;

[1] Agreed Route Map for Timber Transport currently undersized (https://timbertf.maps.arcgis.com/apps/webappviewer/index.html?id=4a23d4910e604b71872956441113c83c

- the A711 local road runs broadly north-south linking with the A75 to the north and the A762 to the south;
- the A702 local roads runs broadly north - east to south -west linking with the A76 to the north and the A713 to the south;
- the B741 local roads runs broadly north east- south west between New Cumnock and Dalmellington linking with the A76 to the north and the A713 to the south; and
- the B795 local roads runs broadly east-west linking with the A75 to the east and the A762 to the west.

13.16 The C31s, U137s, U133s, U107s, U103s and U62s will solely be used to facilitate the removal of R(south). It is assessed that the removal of the R(south) will generate less than 10 vehicle movements per day on these specific road sections. Accordingly, the professional judgement of the assessment team is that effects arising from such low level of traffic will be none and therefore not significant. On this basis, no detailed assessment has been carried out for these public road sections.

13.17 As vehicles travel to/ from the KTR Project in the wider area they shall split across the wider road network. Beyond the Study Area professional judgement therefore suggests that effects relating to access, traffic and transport are unlikely to be significant.

Desk Based Research and Data Sources

13.18 Preliminary desktop study was undertaken to review site access routes. Constraints and sensitive road sections were identified (i.e. locations which are likely to be more vulnerable to change in traffic flow or profile, e.g. crash cluster sites ('accident blackspot'), high footfall areas, or areas in close proximity to a school).

13.19 Recorded Personal Injury Collision (PIC) data was obtained from publicly available PIC information from the Crashmap website (https://www.crashmap.co.uk/) which utilises information sourced from the Department for Transport (DfT) database.

13.20 SPEN provided information in relation to construction traffic generation, based on their knowledge and experience of the construction and operational traffic requirements of similar projects. Information in relation to traffic movements required for forestry felling was provided by RTS as Project forestry advisors. In addition, the following data sources have been used in this assessment:

- Traffic flow information for roads within the defined Study Area were sourced from the DfT website (where available).
- Automatic traffic counts undertaken by Streetwise on behalf of Mott MacDonald to supplement traffic flow information obtained from the DfT, dated October and November 2018.
- Peak and off-peak sample traffic counts, undertaken by Mott MacDonald, on minor local routes to supplement traffic flow information obtained from the DfT, dated November 2018.
- Non-motorised user (NMU) surveys undertaken by Streetwise on behalf of Mott MacDonald to quantify pedestrian, equestrian and pedal cycle activity, dated August 2018.

Field Survey

13.21 In addition to the traffic surveys undertaken as listed above, field surveys were undertaken on 31st July 2018, 11th November 2018, 22nd November 2018 and 5th and 6th June 2019 by experienced Mott MacDonald staff. This involved a drive through of the public road sections within the Study Area to identify potential constraints and upgrades necessary to accommodate the safe movements of development generated construction traffic and review sensitive route sections as defined above.

Assessing Significance

13.22 As noted above, and as agreed with TS and D&GC[2], a TA has not been undertaken as a TA is not generally considered to be required for temporary construction works and the traffic movements associated with the operational phase of the KTR Project are not high enough to warrant a formal TA.

13.23 An assessment of traffic and transport effects has been undertaken as significant effects associated with felling and construction traffic were considered likely at the scoping stage. The following effect classifications are considered:

- Driver Delay;
- Road Safety; and
- Community Effects (Pedestrian and Cyclist Amenity, Fear and Intimidation, and Severance).

Sensitivity

13.24 Under IEMA Guidelines road links may be categorised as 'specifically sensitive', meaning that these sections are considered to be more vulnerable to changes to the volume or profile of traffic flows. Such locations could include 'accident blackspots', hospitals (e.g. Ayr hospital), and links with high pedestrian flows etc.

Magnitude

13.25 The magnitude of change has been calculated as the proportional change in traffic volume anticipated on each public road section within the Study Area. This calculation compares the forecast development traffic generation against the anticipated traffic baseline during the assumed construction years.

Significance

13.26 The IEMA Guidelines suggest that two broad rules can be used as a screening process to delimit the scale and extent of the assessment of road traffic. These are:

- Rule 1 – Include highway links where traffic flows would increase by more 30% (or the number of HGVs would increase by more than 30%).
- Rule 2 – Include any other specifically sensitive areas where traffic flows would increase by 10% or more.

13.27 Where the predicted increase in traffic volume (general traffic or HGV only) is lower than these thresholds, the significance of the effects can be stated to be not significant. This means that that further detailed assessments are not warranted. Consequently, where the predicted increase in traffic volume exceeds thresholds, the effects are considered to be potentially significant and accordingly, are assessed in greater detail.

13.28 The assessment has clearly identified transport routes which are to be used in connection with the KTR Project. Quantitative assessments have been undertaken alongside the application of professional judgement to determine whether or not the effects are considered to be of significance. Based on the Rule 1 and 2 of the IEMA Guidelines (IEMA, 1993), the predicted significance of the effect was determined considering both the sensitivity of the receiving environment and the magnitude of change against the baseline. As a guide to inform the assessment, but not as a substitute for professional judgement, criteria for determining the significance of traffic related effects are set out in Table 13.3[3]. It should be noted that the assessment considers the effects of the % increase in general traffic (Heavy Goods Vehicles (HGV)+ Light Goods Vehicles (LGV) and also % increase in HGV traffic only based on related baseline traffic flows e.g. % increase in HGVs from existing HGV baseline flow.

13.29 Given the rural nature and proximity of the Study Area to the Galloway Forest all routes have been treated as sensitive areas, and therefore the 10% significance threshold will apply as per Rule 2 of the IEMA Guidelines (IEMA, 1993) and thus ensuring a robust assessment.

Table 13.3: Significance Criteria

Significance of Effect	% Increase in general traffic (HGV + LGV) volume % Increase in HGV traffic volume
Major (Significant)	Greater than or equal to 60%
Moderate (Significant)	Greater than or equal to 10% and less than 60%
Minor (Not Significant)	Greater than or equal to 5% and less than 10%

[2] D&GC agreed with the proposed traffic and transport assessment methodology which proposed excluding a TA.

[3] It should be noted that the term 'significance' is used here both to identify where the % change in traffic should be assessed in greater detail, and also to establish the level of effect on driver delay, community impacts and road safety.

Significance of Effect	% Increase in general traffic (HGV + LGV) volume % Increase in HGV traffic volume
None (Not Significant)	Less than 5%

13.30 These thresholds have been developed based upon the Rule 2 criteria above and the consideration that **'Major'** and 'Moderate' effects are significant in the context of the Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2017 ('the 2017 2017 EIA Regulation (as amended)).

13.31 As such, where traffic is expected to increase by less than 10% the potential effects have not been considered as 'significant' under this assessment. Therefore, any effect described as 'Minor' or 'None' has not been assessed in further detail.

13.32 The significance of all effects under consideration is linked to the volume of traffic generated by the KTR Project, and so it is considered appropriate to link significance criteria to the magnitude of forecast traffic increase. However, the IEMA Guidelines (IEMA, 1993) also state that:

"For many effects there are no simple rules or formulae which define the thresholds of significance and there is, therefore, a need for interpretation and judgement on the part of the assessor, backed-up by data or quantified information wherever possible."

13.33 As such, professional judgement (led by good practice guidance) has also been applied in the assessment of effects so as to provide more meaningful conclusions, particularly in relation to the assessment of community (pedestrian delay, pedestrian amenity / fear and intimidation) and road safety effects which require local area knowledge. Information gathered during site visits, advice provided in the IEMA Guidelines (IEMA, 1993) and the DMRB Volume 15 (Scottish Government, 2005) have been used.

13.34 Furthermore, where baseline traffic flows are very low, it is possible to derive unrealistic determinations of significance when considered against purely numerical assessment criteria. For example, when traffic flow is very low, it is possible to show relatively large traffic increases and for the road to operate well below capacity. Under the numerical criteria defined above, a 60% increase in traffic volume would represent a major effect, but in reality, the effect is likely to be less significant, given the residual capacity of the road.

Assessment Limitations

13.35 It has been necessary to make a number of assumptions to enable the traffic and transport assessment to be undertaken. These assumptions relate to all components of the KTR Project, with further specific assumptions highlighted in the individual assessments for each Connection.

Assessment Assumptions

13.36 As indicated in Chapter 5, a seven-day working week has been assumed for assessment purposes. Construction activities will be undertaken during daytime periods only, between approximately 07.00 to 19.00 for felling and access installation activities and in summer (April to September) and 08.00 to 17.00 (or as daylight allows) for all other activities and in winter (October to March).

13.37 Felling and construction related activities for the KTR Project comprise all activities relating to tree felling, removal and undergrounding of 11kV OHLs (associated with the P-G via K connection only), construction/upgrading of access tracks, construction of overhead line or cabling installation, commissioning and associated activities as well as the decommissioning and removal of the existing N and R routes as set out in Chapter 5.

13.38 It has been assumed that all concrete deliveries would be sourced from concrete batching plants, located predominantly to the north, south and east of the development. Delivery vehicles would be routed via the trunk road network (A75 and A77) and access the construction areas from the A713 north (33%), the A713 south (33%) and the A712 west (33%).

13.39 All electrical equipment deliveries are assumed to originate from the north; delivery vehicles would be routed via the trunk road network (A75 and A77) and access the construction areas:

- from the A713 north (100%) for connections P-G via K, C-K and E-G.
- from the A713 north (25%) and A713 south (75%) for Connections G-T and the BG Deviation.

13.40 In relation to the stone required for construction, whilst SPEN anticipates that most of all stone requirements for the KTR Project can be met from the seven onsite quarries, in advance of ground investigation data, for the purposes of the EIA, it has been assumed that

- Stone will be sourced entirely from offsite locations for Connections P-G via K, C-K, E-G and for the removal of the N route towers between Polquhanity and Kendoon and the R(south) towers between Kendoon and Glenlee; this is primarily due to the presence of only one onsite quarry to the north. Stone will be sourced either from Sorn Quarry or Tongland Quarry. The traffic and transport assessment consider scenarios where stone will be sourced either 100% from Sorn Quarry or 100% from Tongland for these Connections.
- For Connection G-T (including removal of the R (south) towers between Glenlee and Tongland), the BG Deviation and it has been assumed that 50% of stone will be sourced from the onsite quarries as a robust realistic scenario for assessment due to the presence of a number of proposed quarries in the vicinity of these Connections. In this scenario it is assumed that the remaining 50% will be sourced from both Sorn Quarry (north of the Study Area, in East Ayrshire) and Tongland Quarry (in the south of the Study Area, in Dumfries & Galloway).

13.41 Similar to the above, in relation to the reinstatement of temporary access tracks, for the purpose of the EIA, it has been assumed that:

- Stone will be entirely be taken offsite for connections P-G via K, C-K, E-G and for the removal of the N route towers between Polquhanity and Kendoon and also R (north) towers between Kendoon and Glenlee. For assessment purposes it has been assumed that stone will be returned to either Sorn Quarry or Tongland Quarry. The traffic and transport assessment consider scenarios where stone will be returned either 100% to Sorn Quarry or 100% to Tongland for these Connections.
- 50% of stone will be reinstated within the onsite quarries as a 'robust' scenario for connection G-T, the BG Deviation and for the removal of the R route (south) towers between Glenlee and Tongland. In this scenario it is assumed that the remaining 50% will be returned to both Sorn Quarry and Tongland Quarry.

13.42 It is assumed that site personnel, during the felling/construction phase, will be transported to and from the site by car, mini-bus or van; all classed as LGVs. It is not intended that these vehicles will be restricted to specific site access routes; the only road section where no construction traffic will be allowed is the U3s road section between the U2s and Bucks Linn Bridge; this is to reduce the impact of construction traffic on the residential properties situated along the U3s. For the purpose of the assessment it has been assumed that site personnel will approach the construction areas from the A713 north (25%), A713 south (25%), A712 west (25%) and A712 east (25%).

13.43 Confirmation of the routes selected will be agreed with the appropriate roads authorities when a contractor has been appointed as an integral part of the Construction Traffic Management Plan (CTMP) to be approved by D&GC (in consultation with other relevant roads authorities) and adopted by the contractor.

13.44 Whilst a number of assumptions based on previous overhead line construction schemes have necessarily been required to have been made at this stage, it is considered that there is sufficient information to enable an informed decision to be taken in relation to the identification and assessment of likely significant environmental effects on traffic and transport.

Baseline Conditions

Existing Conditions

Tourist and Leisure Use

13.45 There are several local communities present in the Study Area; including Patna, Dalmellington, New Cumnock, Carsphairn, Moniaive, St. John's Town of Dalry, New Galloway, Glenlee, Mossdale, Laurieston, Ringford, Crossmichael, Parton and Tongland. There are also smaller residential clusters, hamlets and farm buildings in the locality.

13.46 The locality is popular for leisure and tourist trips, focusing on outdoors activities, with road cycling being a common pursuit. Key recreational routes which can potentially be affected by the increase traffic volume include:

- the National Byway Cycle Route is a national cycle route network which utilises predominantly rural lanes. The route approaches St. John's Town of Dalry from the north along the B7000, cuts west through the town via the A702, before joining the A713 heading north. After crossing west over the Water of Ken, the route then follows the A762 south and the U2s west, briefly, before continuing off to the south - west to join the A712 to Blackcraig.
- the National Cycle Route 7 links Sunderland and Inverness passing through the Galloway Forest Park. The route approaches Kirkcudbright from the east before heading west and north towards Gatehouse of Fleet. At Gatehouse Station, the route splits with one section heading north and crossing the A712 just south of Clatteringshaws Loch and another section heading west towards Newton Stewart and crossing the A712 at its junction with the A75.
- the Southern Upland Way (Core Path 504) is a long-distance coast-to-coast footpath in southern Scotland. The route links Portpatrick in the west and Cockburnspath in the east via the hills of the Southern Uplands. The route approaches St. John's Town of Dalry from the north, cuts west through the town via the A702, before crossing the A713 heading north. It then crosses the A762 just south of the Earlstoun Power Station, before continuing west.
- Raider's Road (Core Path 143) is a ten-mile-long forest road in Galloway Forest Park. The route links the A712 near Clatteringshaws to the A762 near Mossdale. Notable features on this forest drive include a variety of forest walks and cycle tracks, picnic sites at Stroan Loch and the Otter Pool.
- the Mossdale to Gatehouse Station Railway Walk (Core Path 485) is an 8-mile route running along the old railway through the heart of the Dark Sky Park.
- a number of core paths intersect with or overlap with proposed construction routes for the KTR Project, including:
  - the Bardennoch Trail linking Carsphairn to Dundeugh (Core Path 164);
  - the Glenlee path (Core Path 30);
  - the Mulloch Hill path (Core Path 224);
  - the Dalry to New Galloway path (Core Path 21);
  - Raiders Road to Kenmuir Link (Core Path 142);
  - Cairn Edward Hill path (Core Path 177);
  - Arie path, near Mossdale (Core Path 153);
  - Glengap and Laurieston Forest (Core Path 28);
  - Kenick Burn Walk (Core Path 200);
  - The Gunney, Parton (Core Path 29);
  - Livingston Hill (Core Path 208);
  - Mossdale Walk, Red Kite Trail (Core Path 205);
  - Retreat Wood, Laurieston (Core Path 144);
  - The New Galloway West path (Core Path 516); and
  - Raiders Road East (Core Path 141).

13.47 The recreational routes as described above are shown on Figures 13.2.1 and 13.2.2.

Non-Motorised User Surveys

13.48 To determine the level of pedestrian, equestrian and pedal cycle activity, NMU surveys were carried out at five distinct sites for full 24-hour periods over seven days, from Wednesday 1st August 2018 to Tuesday 7th 2018 (Sites 1 and 2) and from Saturday 25th August 2018 to Friday 31st August 2018 (Sites 3, 4 and 5):

- Site 1: Intersection of the Southern Upland Way and the A762;
- Site 2: Intersection of the Glenlee Path (Core Path 30) and the A762;
- Site 3: C13s (Laurieston Road) by the Kenick Burn car park;
- Site 4: A762 by the Mossdale to Gatehouse Station Railway Walk in Mossdale; and
- Site 5: B795 by its junction with Church Road, east of Laurieston.

13.49 Locations of Sites 1 to 5 are shown on Figures 13.2.1 and 13.2.2.

13.50 Counts were carried out via CCTV camera with subsequent manual classification and summarised in 15-minute intervals.

13.51 Table 13.4 Summarises NMU movements at Sites 1 and 2 and

13.52 Table 13.5 summarises NMU movements at Sites 3, 4 and 5.

Table 13.4: NMU Movements Summary (Sites 1 and 2)

Date / Location	Site 1			Site 2		
	Ped	PC	Equ	Ped	PC	Equ
Wed 1st August 2018	10	0	0	8	0	0
Thu 2nd August 2018	24	1	0	6	0	0
Fri 3rd August 2018	12	1	0	6	1	0
Sat 4th August 2018	17	1	0	7	0	0
Sun 5th August 2018	24	0	0	7	0	0
Mon 6th August 2018	13	1	0	10	0	0
Tue 7th August 2018	17	1	0	6	0	0
TOTAL	117	5	0	50	1	0

Table 13.5: NMU Movements Summary (Sites 3, 4 and 5)

Date / Users	Site 3			Site 4			Site 5		
	Ped	PC	Equ	Ped	PC	Equ	Ped	PC	Equ
Sat 25th August 2018	34	19	0	52	2	0	4	31	9
Sun 26th August 2018	20	3	0	28	0	0	1	4	2
Mon 27th August 2018	23	11	0	31	0	0	10	8	14
Tue 28th August 2018	16	11	0	38	3	0	7	9	10
Wed 29th August 2018	31	13	0	29	8	0	3	12	8
Thu 30th August 2018	27	7	0	29	0	0	10	7	6
Fri 31st August 2018	18	3	0	27	7	0	3	12	8
TOTAL	169	67	0	234	20	0	38	83	57

13.53 In addition, pedal cyclist counts were carried out at two sites situated on the National Byway Cycling Route, for full 24-hour periods over seven days, from Wednesday 1st August 2018 to Tuesday 7th 2018:

- Site 6: A762 south of Earlstoun Power Station Bridge; and
- Site 7: U2s at its intersection with the U3s.

13.54 Table 13.6 summarises pedal cycle counts at Sites 6 and 7. The locations of Sites 6 and 7 are shown on Figures 13.2.1 and 13.2.2.

Table 13.6: Pedal Cycle Counts Summary (Sites 6 and 7)

Date / Location	Site 6	Site 7
Wed 1st August 2018	10	2
Thu 2nd August 2018	6	2
Fri 3rd August 2018	6	3
Sat 4th August 2018	11	0
Sun 5th August 2018	2	0
Mon 6th August 2018	4	2
Tue 7th August 2018	10	2

Date / Location	Site 6	Site 7
TOTAL	49	11

Road Network and Route Profiles

13.55 The road network included in the Study Area was identified on the basis of likely felling and construction traffic routes provided by SPEN and consultation with the relevant transport authorities. Confirmation of the routes selected will be agreed with the appropriate road authorities when a contractor has been appointed as an integral part of the CTMP to be approved by D&GC (in consultation with other relevant roads authorities) and adopted by the contractor.

13.56 A concise profile setting out key characteristics of the local public road sections within the Study Area is provided as follows. These are shown graphically on Figures 13.1.1 and 13.1.2.

13.57 A713 (between A77 and Dalmellington): The A713 throughout this section is a single carriageway road. The route passes next to Ayr Hospital then through the hamlet of Hollybush and the village of Patna; where the speed limit reduces to 50mph and 30mph respectively. Elsewhere in this route section the national speed limit applies. Patna is a large village with residential and commercial properties fronting the A713. Patna Primary School is situated on Carnshalloch Avenue, situated approximately 500m from the A713. There are traffic management features implemented locally to encourage low speeds including 'slow' road markings, vehicle activated signs and speed humps. There is footway provision in Patna.

13.58 A713 (between Dalmellington and Carsphairn): The A713 throughout this section is a single carriageway road. The route passes through the town of Dalmellington and the hamlet of Waterside where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. Dalmellington is a small town with residential and commercial properties fronting the A713. Doon Academy Secondary School and Dalmellington Primary School are situated approximately 100m from the A713. There are traffic management features implemented locally to encourage low speeds including 'slow' road markings, illuminated 20mph signs (which operate at beginning and end of school day) and speed humps. There is footway provision in Dalmellington.

13.59 A713 (between Carsphairn and A762): The A713 throughout these sections is a single carriageway road. The route passes through the village of Carsphairn where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. In Carsphairn residential and commercial properties front the A713. Carsphairn Primary School is situated approximately 50m from the A713. There are a number of traffic management features implemented locally to encourage low speeds including 30mph speed roundels and 'slow' road markings and illuminated 20mph signs (which operate at beginning and end of school day). There is local footway provision in Carsphairn.

13.60 A713 (between A762 and A702) and A713 (between A702 and A712): The A713 throughout these sections is a single carriageway road. The route passes through the town of St John's Town of Dalry where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. St John's Town of Dalry is a small town with several residential and commercial properties including public amenities fronting the A713. Dalry Primary and Secondary Schools are situated approximately 100m from the A713. There are traffic management features implemented locally to encourage low speeds including 30mph speed roundels and 'slow' road markings. There is local footway provision in Dalry.

13.61 A713 (between A712 and B795) and A713 (between B795 and A75): The A713 throughout these sections is a single carriageway road. The route passes through the hamlet of Parton and the village of Crossmichael where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. In Crossmichael residential and commercial properties front the A713. Crossmichael Primary School is situated approximately 100m from the A713. There are traffic management features implemented locally to encourage low speeds including 30mph speed roundels and 'slow' road markings. There is local footway provision in Crossmichael.

13.62 A712 (between A75 and A762) and A712 (between A762 and A713): The A712 throughout these sections is a single carriageway road. The route features places of interest, such as the Wild Goat Park, the Red Deer Range and the Clatteringshaws Visitor Centre. The route passes through the town of New Galloway where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. New Galloway is a small town with residential properties fronting the A712. Kells Primary School is situated approximately 50m from the A712. There are traffic management features implemented locally to encourage low speeds including 30mph speed roundels and 'slow' road markings. There is local footway provision in the built-up areas.

13.63 A712 (between A713 and Corsock) and A712 (between Corsock and A75): The A712 throughout this section is a single carriageway road. The route passes through the villages of Corsock and Crocketford where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. With the exception of Corsock and Crocketford (where residential properties front the A712), there is minimal frontage development.

13.64 A711 (between A75 and A762): The A711 throughout this section is a single carriageway road. The route passes through the village of Tongland where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. In Tongland residential properties front the A711.

13.65 A702 (between A713 and Moniaive) and A702 (between Moniaive and A76): The A702 throughout this section is a single carriageway road. The route passes through Moniaive and Thornhill where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. In Moniaive residential and commercial properties front the A702. Moniaive Primary School is situated approximately 100m from the A713. The route through Moniaive features width restrictions including an alternate one-way traffic system. There is local footway provision in Moniaive and Thornhill.

13.66 A762 (between A713 and U2s): The A762 throughout this section is a single carriageway road. The route provides access to residential properties and the Earlston Power Station. The national speed limit applies throughout.

13.67 A762 (between A712 and B795): The A762 throughout this section is a single carriageway road. The route passes through the town of New Galloway, the village of Laurieston and the hamlet of Mossdale. The speed limit reduces to 30mph through New Galloway and Laurieston, elsewhere in this route section the national speed limit applies. New Galloway is a small town with residential and commercial properties fronting the A762. There is local footway provision in the built-up areas. The route features places of interest, such as the Bennan viewpoint and access to Raider's Road.

13.68 A762 (between B795 and A75): The A762 throughout this section is a single carriageway road. The route passes through the villages of Laurieston and Ringford where the speed limit reduces to 30mph, elsewhere in this route section the national speed limit applies. There is local footway provision in the built-up areas.

13.69 B741 (between A76 and Gateside Road): The B741 throughout this section is a single carriageway road. The route passes through New Cumnock and the northern fringe of Dalmellington where the speed limit reduces to 30mph; elsewhere in this route section the national speed limit applies. In Dalmellington and New Cumnock residential properties front the B741. Doon Academy Secondary School and Dalmellington Primary School are situated approximately 200m from the B741. There is local footway provision in Dalmellington and New Cumnock.

13.70 B795 (between the A713 and A762): The B795 throughout that section is a single carriageway road. The route passes through the hamlet of Glenlochar and the eastern part of Laurieston where the speed limit reduces to 30mph. Residential properties front the B795 and the Bellymack Hill Farm - Kite Feeding Station is situated immediately off the B795.

13.71 C13s (between A762 and Lochenbreck Cottage): The C13s is a single carriageway road within Laurieston and a single-track road intercepted with passing places for the remainder of the section. The road passes through the western part of Laurieston where residential properties front the C13s.

13.72 C45s (between the A75 and the B795): The C45s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.73 C50s (between the B795 and Livingstone): The C50s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.74 C31s (between the A713 and U107s): The C31s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.75 U137s (between the A713 and U112s): The U137s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.76 U133s (between the U103s and U107s): The U133s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.77 U107s: The U107s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.78 U103s: The U103s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.79 U62s: The U62s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.80 U43s: The U43s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.81 U34s: The U34s is a single-track road. The road is used for access to a small number of residential and agricultural properties. The national speed limit applies on this section of road.

13.82 U1s (to an extent of 200m west of the A713): The U1s is a single-track road interspersed with passing places. The road is used for access to a small number of residential and agricultural properties as well as the Forest Estate Shooting Ground and Natural Power offices. The national speed limit applies on this section of road.

13.83 U2s (between Glenlee Mains and the A762): The U2s is a single-track road. The road is used for access to a small number of residential and agricultural properties and the Glenlee Power Station. The route passes through the Hamlet of Glenlee. The national speed limit applies on this section of road.

13.84 Gateside Road (Dalmellington): Gateside Road is a single carriageway road with a 30mph speed limit. The road is fronted by residential properties.

Bridges and Other Structures

13.85 To access tower 20 it will be necessary to cross the A713 Old Polharrow Bridge. Consultation was undertaken with D&GC Roads Department in August 2018 to obtain details on the bridge and associated access road.

13.86 The A713 Old Polharrow Bridge is Category B listed structure, located in Dumfries and Galloway (NGR 260323, 584358), which spans in a north-south direction accommodating the disused single-track Ayr Road over Polharrow Burn. The structure, which is owned and maintained by D&GC, is now decommissioned and closed to vehicles. The structural integrity of the Old Polharrow Bridge and hence suitability as a route for construction traffic will be determined by further surveys and assessment undertaken by the appointed contractor during the pre-construction phase. Should an alternative access be required, then the location will be confirmed by the appointed contractor as an integral part of their adopted CTMP.

13.87 There are several bridges and culverts on the existing road network, however no evidence of signed weight restrictions were observed during field study nor identified during consultation.

Existing Traffic Flows

13.88 Typical capacities for a variety of road types are provided within the Design Manual for Roads and Bridges (DMRB), Volume 15, Table 5/3/1. These capacities, which are quoted as two way flows in vehicles per hour (vph), have been extracted for the road sections considered likely to be utilised by project related traffic and are summarised in Table 13.7.

13.89 To supplement and verify the traffic count data sourced from the DfT website, Mott MacDonald at strategic locations:

- Carried out peak and off-peak sample traffic counts, these were factored to provide Annual Average Daily Traffic (AADT) values, consistent with the process as set-out in The Design Manual for Roads and Bridges (DMRB), Volume 13, Chapter 9, Part 4.
- Commissioned automatic traffic counts on the A713, C13s and B795; as shown on Figures 13.1.1 and 13.1.2.

13.90 Due to the rural status of the U1s, traffic flow data has not been sourced. Instead a reasonable assumption has been applied using professional judgement based on local observation and knowledge of traffic volumes on adjacent roads. For the purpose of assessment, 65 AADT has been assumed for the U1s, being 5% of the feeder road (the A713).

13.91 Table 13.7 details the existing baseline traffic flows and capacities on the routes within the Study Area considered in the assessment.

Table 13.7: Route Capacities and Existing Baseline Traffic Count Data

Route Section	Description [Speed limit (mph)]	Width	AADT {% HGV} [Source]	Capacity (vph) (two-way hourly flow)	Typical peak flow (vph) (two-way peak hour flow) from the determination of baselines conditions
A77 (between A713 and A70)	Rural typical single carriageway [60 typical]	10m (typically)	20,094 {5.5%} [a]	3,000	<1,200
A76 (between B743 and A70)	Rural typical single carriageway [60 typical]	7.3m (typically)	11,024 {8.5%} [a]	2,400	<1,000
A76 (between A70 and New Cumnock)	Rural typical single carriageway [60 typical]	10m (typically)	6,056 {14.5%} [a]	3,000	<1,000
A76 (between New Cumnock and Thornhill)	Rural typical single carriageway [60 typical]	7.3m (typically)	3,634 {16%} [a]	2,400	<1,000
A76 (between Thornhill and A75)	Rural typical single carriageway [60 typical]	7.3m (typically)	5,757 {9.5%} [a]	2,400	<1,000
A75 (between A762(N) and A712)	Rural typical single carriageway [60 typical]	7.3m (typically)	7,450 {13%} [a]	2,400	<1,000
A75 (between A712 and A780)	Rural typical single carriageway [60 typical]	10m (typically)	10,433 {10.5%} [a]	3,000	<1,000
A75 (between A780 and A76)	Rural typical single carriageway [60 typical]	10m (typically)	13,888 {11%} [a]	3,000	<1,000
A77 (between A713 and A70)	Rural typical single carriageway [60 typical]	10m (typically)	20.094 {5.5%} [a]	3,000	<1,200
A713 (between A77 and Dalmellington)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	3,852 {6%} [a]	1,800	<200

Route Section	Description [Speed limit (mph)]	Width	AADT {% HGV} [Source]	Capacity (vph) (two-way hourly flow)	Typical peak flow (vph) (two-way peak hour flow) from the determination of baselines conditions
A713 (between Dalmellington and Carsphairn)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	1,469 {11.5%} [a]	1,800	<200
A713 (between Carsphairn and A762)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	1,243 {11.3%} [b]	1,800	<200
A713 (between A762 and A702)	Urban typical single carriageway [30 typical]	Varies; 6m (typically)	1,303 {8.5%} [a]	1,600	<200
A713 (between A702 and A712)	Urban typical single carriageway [30 typical]	Varies; 6m (typically)	2,152 {8.5%} [a]	1,600	<200
A713 (between A712 and B795)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	1,781 {10%} [a]	1,800	<200
A713 (between B795 and A75)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	3,647 {5%} [a]	1,800	<200
A712 (between A75 and A762)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	646 {10.5%} [a]	1,800	<200
A712 (between A762 and A713)	Urban typical single carriageway [30 typical]	Varies; 6m (typically)	1,456 {8%} [a]	1,600	<200
A712 (between A713 and Corsock)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	932 {7.5%} [a]	1,800	<200
A712 (between Corsock and A75)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	724 {10%} [a]	1,800	<200
A711 (between A75 and A762)	Rural typical single carriageway [60 typical]	Varies; 6.5m (typically)	3,675 {9%} [a]	1,800	<200
A702 (between A713 and Moniaive)	Rural poor single carriageway [60 typical]	Varies; 5.5m (typically)	230 {8%} [a]	1,600	<100
A702 (between Moniaive and A76)	Rural poor single carriageway [60 typical]	Varies; 5.5m (typically)	878 {9%} [a]	1,600	<100
A762 (between A713 and U2s)	Rural poor single carriageway [60 typical]	Varies; 4.5m to 5m (typically)	336 {7%} [c]	280	<50
A762 (between A712 and B795)	Rural poor single carriageway [60 typical]	Varies; 5.5m (typically)	375 {5.5%} [a]	1,600	<100
A762 (between B795 and A75)	Rural poor single carriageway [60 typical]	Varies; 5.5m (typically)	349 {9%} [a]	1,600	<100
B741 (between New Cumnock and Dalmellington)	Rural typical single carriageway [60 typical]	Varies; 6m (typically)	996 {3.5%} [c]	1,800	<200
B795 (between A762 and A713)	Rural typical single-track [60 typical]	Varies; 5.5m (typically)	482 {10%} [b]	1,600	<100
C13s	Rural typical single-track [60 typical]	Varies; 4m (typically)	143 {5%} [b]	n/a*	<50
C45s	Rural typical single-track [60 typical]	Varies; 3m (typically)	240 {<1%} [c]	n/a*	<50
U43s	Rural typical single-track [60 typical]	Varies; 3m (typically)	204 {<1%} [c]	n/a*	<50
U34s	Rural typical single-track [60 typical]	Varies; 3m (typically)	168 {<1%} [c]	n/a*	<50
U1s	Rural typical single-track [60 typical]	Varies; 4m (typically)	70 {9%} [d]	n/a*	<50

Route Section	Description [Speed limit (mph)]	Width	AADT {% HGV} [Source]	Capacity (vph) (two-way hourly flow)	Typical peak flow (vph) (two-way peak hour flow) from the determination of baselines conditions
U2s	Rural typical single-track [60 typical]	Varies; 4m to 4.3m	192 {6%} [c]	n/a*	<50
U3s	Rural typical single-track [60 typical]	Varies; 3m (typically)	60 {1.5%} [c]	n/a*	<50
Gateside Road (Dalmellington)	Urban typical single carriageway [30 typical]	Varies; 6m (typically)	1,187 {3.8%} [c]	1,600	<200

* DMRB does not define theoretical capacities for single track roads.

[a] Source: Department for Transport (DfT) database

[b] Source: Automatic Traffic Counts (October and November 2018)

[c] Source: Mott MacDonald Sample Traffic Counts (October 2017, November 2018 and June 2019) - factored flows derived from peak and inter-peak sample counts.

[d] Source: Estimated traffic volume

Personal Injury Collisions (PIC)

13.92 No concerns were raised during the consultations regarding road safety or crash 'blackspots' on the local or trunk road network.

13.93 Nevertheless, a road traffic collision analysis has been undertaken to appraise road safety in the Study Area. Personal Injury Collision (PIC) records have been obtained from Crashmap for a three-year period ending in June 2018.

13.94 The data has been examined with due reference to the ROSPA Road Safety Engineering Manual, 2007 (to identify any clusters and trends in the pattern and location of the collisions) and Road Casualties Great Britain, 2017 (RCGB) to evaluate against national statistics for roads of similar classification. Where collision rates exceed national average, these have been subject to more detailed consideration. Results of the road traffic collision analysis are summarised in Table 13.8.

Table 13.8: Summary of Collision Assessment for Public Roads within the Study Area

Route Section	No. of collisions in three-year period [Crash rate per billion vehicle miles]	RCGB Crash rate per billion vehicle miles (Comparison %)	Assessment
A713 (between A77 and Dalmellington [Road Length = 13 miles]	30 [569]	384 [148%]	• There were 30 recorded PICs during the three-year period ending in June 2018. • HGVs were involved in 3% of the 30 collisions. Of the total 86 vehicles which were in some way involved in the 30 collisions, one involved a HGV; comprising 1% of the total vehicles involved in collisions. • Of the 30 collisions recorded, eight resulted in serious injuries and none in fatal injuries. • The collision where HGV was involved resulted in serious injuries.
			No collisions involved pedestrians, cyclists or motorcyclists.
A713 (between Dalmellington and Carsphairn) [Road Length = 10 miles]	14 [870]	384 [227%]	• There were 14 recorded PICs during the three-year period ending in June 2018. • HGVs were involved in 14% of the 14 collisions. Of the total 17 vehicles which were in some way involved in the 14 collisions, two involved a HGV; comprising 12% of the total vehicles involved in collisions. HGVs comprise 11.5% of the overall traffic composition locally and thus they are not over-represented in the overall collision statistics. • Of the 14 collisions recorded, three resulted in serious injuries and one in fatal injuries. • Of the two collisions where HGVs were involved, one resulted in fatal injuries and the other one resulted in serious injuries. • No collisions involved pedestrians, cyclists or motorcyclists.
A713 (between Carsphairn and A762) [Road Length = 8.6 miles]	4 [342]	384 [89%]	• There were four recorded PICs during the three-year period ending in June 2018. • No HGV was involved in any collision. • Of the four collisions recorded, none resulted in serious or fatal severity injury. • No collisions involved pedestrians or cyclists and one collision involved motorcyclists.
A713 (between A762 and A702) [Route Length = 0.8 miles]	0 [0]	384 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
A713 (between A702 and A712) [Road Length = 2.5 miles]	1 [170]	384 [44%]	• There was one recorded PIC during the three-year period ending in June 2018. • No HGVs were involved in the recorded collision. • The recorded collision resulted in fatal injuries. • No pedestrians, cyclists or motorcyclists were involved in the collision.
A713 (between A712 and B795) [Road Length = 11 miles]	3 [139]	384 [36%]	• There were three recorded PICs during the three-year period ending in June 2018. • Of the total three vehicles which were in some way involved in the four collisions, there was one HGV involved. • No collisions involved pedestrians or cyclists. • Two collisions involved motorcyclists.
A713 (between B795 and A75) [Road Length = 1.5 miles]	4 [626]	384 [163%]	• There were four recorded PICs during the three-year period ending in June 2018. • Of the total six vehicles which were in some way involved in the four collisions, there was one HGV involved. • No collisions involved pedestrians, cyclists or motorcyclists.

Route Section	No. of collisions in three-year period [Crash rate per billion vehicle miles]	RCGB Crash rate per billion vehicle miles (Comparison %)	Assessment
A712 (between A75 and A762) [Road Length = 17.2 miles]	6 [278]	384 [72%]	• There were six recorded during the three-year period ending in June 2018. • No HGV was involved in any collision. • Of the six collisions recorded, three collisions resulted in serious injuries and one in fatal injuries. • No collisions involved pedestrians or cyclists. • Three collisions involved motorcyclists.
A712 (between A762 and A713) [Road Length = 0.7 miles]	1 [896]	384 [233%]	• There was one recorded PIC within the route section during the three-year period ending in June 2018. • No HGVs were involved in the recorded collision. • No collisions involved pedestrians or cyclists. • One collision involved motorcyclist.
A712 (between A713 and Corsock) [Road Length = 8.5 miles]	3 [320]	384 [83%]	• There were three recorded PICs within the route section during the three-year period ending in June 2018. • No HGVs was involved in any collision. • Of the three collisions recorded, one resulted in serious injuries. • No collisions involved pedestrians or cyclists. • One collision involved motorcyclist.
A712 (between Corsock and A75) [Road Length = 6 miles]	3 [1051]	384 [274%]	• There were three recorded PICs within the route section during the three-year period ending in June 2018. • Of the total eight vehicles which were in some way involved in the three collisions, there was one HGV involved. • No collisions involved pedestrians, cyclists or motorcyclists.
A711 (between A75 and A762) [Road Length = 3.9 miles]	4 [255]	384 [66%]	• There were four recorded PICs within the route section during the three-year period ending in June 2018. • Of the total seven vehicles which were in some way involved in the four collisions, there was one HGV involved. • No collisions involved pedestrians, cyclists or motorcyclists.
A702 (between A713 and Moniaive) [Route Length = 14 miles]	5 [1551]	384 [404%]	• There were five recorded PICs within the route section during the three-year period ending in June 2018. • No HGVs were involved in the recorded collision. • No collisions involved pedestrians or cyclists. • Three collisions involved motorcyclists.
A702 (between Moniaive and A76) [Route Length = 8.5 miles]	4 [505]	384 [131%]	• There were four recorded PICs within the route section during the three-year period ending in June 2018. • No HGVs were involved in the recorded collision. • No collisions involved pedestrians or cyclists. • One collision involved motorcyclists.
A762 (between A713 and U2s) [Route Length = 1.2 miles]	1 [2455]	384 [639%]	• There was one recorded PIC during the three-year period ending in June 2018. • No HGVs were involved in the recorded collision.
			• No pedestrians, cyclists or motorcyclists were involved in the collision.
A762 (between A712 and B795) {Road Length = 9.2 miles]	0 [0]	384 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
A762 (between B795 and A75) Road Length = 5.1 miles]	0 [0]	384 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
B741 (between New Cumnock and Dalmellington [Road Length = 10.3 miles]	5 [246]	599 [41%]	• There were five recorded PICs during the three-year period ending in June 2018. • Of the total five vehicles which were in some way involved in the five collisions, no HGVs were involved. • Of the five collisions recorded, one collision resulted in serious injuries and one in fatal injuries. • No collisions involved pedestrians or cyclists and one collision involved motorcyclists.
B795 (between A762 and A713) [Road Length = 4 miles]	1 [476]	599 [79%]	• There was one recorded PIC during the three-year period ending in June 2018. • No HGVs were involved in the recorded collision. • No pedestrians, cyclists or motorcyclists were involved in the collision.
C13s [Road Length = 2.5 miles]	0 [0]	599 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
C45s [Road Length = 3.9 miles]	0 [0]	599 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
U43s [Road Length = 0.5 miles]	0 [0]	599 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
U34s [Road Length = 0.5 miles]	0 [0]	599 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
U1s [Road Length = 0.2 miles]	0 [0]	599 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
U2s [Road Length = 0.6 miles]	0 [0]	599 [0%]	• No collisions were recorded during the three-year period ending in June 2018.
U3s [Road Length = 2.8 miles]	1 [5018]	599 [838%]	• There was one recorded PIC during the three-year period ending in June 2018. • No HGVs were involved in the recorded collision. • No pedestrians, cyclists or motorcyclists were involved in the collision.
Gateside Road (Dalmellington) [Road Length = 0.6 miles]	0 [0]	599 [0%]	• No collisions were recorded during the three-year period ending in June 2018.

13.95 From the descriptions provided it appears that for all four of the collisions resulting in a fatality that driver error played a notable part.

13.96 It can reasonably be concluded from review of the collision history that although some sections of some routes exceed national average collision rates for roads in their respective categories, there are no notable crash clusters (accident 'blackspots') and there is no apparent safety problem specifically relating to vulnerable road users.

Future Baseline in the Absence of the Development

13.97 This section outlines traffic conditions anticipated within the Study Area, in the absence of the KTR Project.

Planned Changes to the Road Network

13.98 Routine periodic route maintenance is likely to occur at a variety of locations however nothing notable is proposed in the Study Area at the time of writing.

13.99 No planned changes to the road network were identified during consultation.

Future Baseline Traffic Flow

13.100 This assessment will consider the effects of traffic generated during the KTR Project construction phase (including the decommissioning of N and R routes). Construction is scheduled to commence in March 2022 and be completed by December 2026.

13.101 In the absence of the KTR Project, it has been assumed that traffic flows on the local road network would increase broadly in line with National Road Traffic Forecasts (NRTF). The level of increase within the local road network is assessed to be 'Low'. This relates to a 1.06% increase in background traffic between 2017 and 2022, 1.000 between 2018 and 2022 and 1.035 between 2019 and 2022. Low growth was selected on the basis that the KTR Project is situated in a sparsely populated area. High or medium levels of traffic growth would only be likely if there is to be a significant increase in population and car ownership in the area, which is not foreseen. Beyond 2026 road traffic will continue to increase in line with NRTF low forecasts. Table 13.9 details forecast 2022 future baseline traffic flows.

Table 13.9: Future Baseline Traffic Count Data (2022)

Route Section	2022 AADT	
	Total Traffic Movements	HGV Traffic Movements
A77 (between A713 and A70)	21,311	1188
A76 (between B743 and A70)	11,691	978
A76 (between A70 and New Cumnock)	6,423	954
A76 (between New Cumnock and Thornhill)	3854	648
A76 (between Thornhill and A75)	6106	578
A75 (between A762(N) and A712)	7,901	1052
A75 (between A712 and A780)	11,065	1175
A75 (between A780 and A76)	14,729	1624
A77 (between A713 and A70)	21,311	1188
A713 (between A77 and Dalmellington)	4,085	239
A713 (between Dalmellington and Carsphairn)	1,557	182
A713 (between Carsphairn and A762)	1,398	160
A713 (between A762 and A702)	1,382	116
A713 (between A702 and A712)	2,282	196
A713 (between A712 and B795)	1,889	187
A713 (between B795 and A75)	3,868	201
A712 (between A75 and A762)	685	72
A712 (between A762 and A713)	1,544	120
A712 (between A713 and Corsock)	988	72
A712 (between Corsock and A75)	768	76
A711 (between A75 and A762)	3,898	340
A702 (between A713 and Moniaive)	243	20
A702 (between Moniaive and A76)	931	81
A762 (between A713 and U2s)	356	25
A762 (between A712 and B795)	398	23
A762 (between B795 and A75)	370	33
B741 (between New Cumnock and Dalmellington)	1031	37
B795 (between A762 and A713)	499	49
C13s	148	7
C45s	249	1
U43s	211	1
U34s	174	1
U1s	72	7
U2s	199	12
U3s	62	1
Gateside Road (Dalmellington)	1,280	49

Planned Local Developments

13.102 Committed developments[4] were identified through consultation with D&GC and for the purpose of the cumulative assessment, the following developments were considered:

- Knockman Hill Wind Farm;
- Mochrum Fell Wind Farm;
- Little Sypland Wind Turbine;
- Shepherds Rig Wind Farm;
- Troston Loch Wind Farm;
- Cornharrow Wind Farm;
- Glenshimmeroch Wind Farm; and
- Fell Wind Farm.

13.103 The EIA Report for the Glenlee Substation Extension notes that the construction programme for the works comprises August 2020 to June 2022, although the actual construction works will end in December 2021. Therefore, to ensure a robust EIA, the assessment has been undertaken on the basis of an overlap with the KTR construction enabling works between March 2022 and June 2022 in the cumulative assessment.

[4] Those developments which have permission/consent or are under construction or are the subject of an application for planning permission/consent.

Implications of Climate Change

13.104 Qualitatively, the UKCP18[5] projects the following for Dumfries and Galloway:

- an increase in summer and winter temperatures;
- an increase in dry spells, particularly in summer months;
- an increase in winter rainfall; and
- an increase in wind speeds, including an increase in the frequency of winter storms.

13.105 These changes suggest that there may be an increase in travel disruptions due to increased flood risk and an increase in travel discomfort due to higher summer temperatures.

13.106 The assessment of the potential traffic and transport effects associated with the proposed development has focused on the key construction period starting in March 2022 and finishing in December 2026. The implications of climate change on the baseline conditions during that period and over the lifetime of the proposed development are unlikely to alter the predicted effects set out in this assessment.

Embedded Mitigation Measures

Construction Traffic Management Plan (CTMP)

13.107 The temporary effects of felling and construction (whether assessed as significant or otherwise) will be mitigated through adoption of a regulated and approved CTMP. A framework CTMP is provided in Appendix 13.1 and the assessment has been undertaken on the assumption that this, and the embedded measures set out within it, will be in place.

13.108 SPEN will agree temporary traffic management measures then adopt and monitor an appropriate way of working in consultation with D&GC Roads Department, Ayrshire Roads Alliance, Transport Scotland and/or their Agent and the Police as appropriate. Felling and construction activity generated vehicles (with the exception of site personnel in cars and vans) will travel on pre-defined routes to and from the relevant sites to reduce effects on existing local traffic.

13.109 Timing and frequency of vehicle movements will be managed to ensure, where practical, that vehicle movements are spaced adequately to reduce disruption and coincide (if/where applicable) with existing/current local forestry operations.

13.110 The framework CTMP has been developed in consultation with relevant Roads Authorities and will be further developed as necessary in consultation with Roads Authorities and the Police prior to construction commencing. The CTMP will document outline measures to promote the efficient transportation of components and materials to site, whilst reducing congestion and disruption which might impact negatively on local communities or general traffic and in particular the emergency services. The CTMP should be considered a 'live' document that includes:

- a programme of delivery types/numbers by month;
- a statement of which public roads are to be used by felling and construction traffic;
- a statement of which public roads are not to be used by felling and construction traffic;
- a statement of which local towns and villages are to be avoided (completely or on stated days and times);
- details of all proposed mitigation measures, list of contacts, and details of measures that will be implemented to limit the potential of vehicle stacking on any part of the public road network;
- if appropriate, details of speed restrictions through sensitive areas and procedures to ensure pedestrian safety adjacent to worksites; and
- details of temporary signage to be installed at defined locations.

13.111 As far as reasonably practicable, deliveries will be scheduled outwith school opening and closing times.

13.112 In partnership with SPEN, the appointed contractors will be required to maintain close liaison with local community representatives, landowners and statutory consultees throughout the construction period. This is likely to include circulation of information about ongoing activities; particularly those that could potentially cause disturbance, including due to traffic. A telephone number will be provided and persons with appropriate authority to respond to calls and resolve or escalate any problems arising will be available.

13.113 It will be mandated through the CTMP that HGV traffic:

- must not travel through New Galloway via the A762; this is to reduce the impact of construction traffic on New Galloway;
- must not travel through Moniaive via the A702; this is to reduce the impact of construction traffic on Moniaive;
- must not travel through Gatehouse of Fleet via the C13s; this is to reduce the impact of construction traffic on Gathehouse of Fleet; and
- must not travel through central Dalmellington; this is to reduce impact of construction traffic on the Dalmellington historic centre.

13.114 Furthermore, it will be mandated through the CTMP that construction generated traffic (i.e. HGVs and LGVs):

- must not travel on the U3s road section between the U2s and Bucks Linn Bridge; this is to reduce the impact of construction traffic on the residential properties situated along the U3s.

Infrastructure Upgrades

13.115 As part of the Glenlee Substation Extension development, it is proposed to locally widen strategic sections of the A762 (between the A713 and U2s) and the U2s to provide passing places achieving a minimum of width of 6.75m. It is assumed that the newly constructed passing places will remain for the duration of the KTR Project construction phase.

13.116 Works to culverts and bridges over watercourses will be agreed with the Scottish Environment Protection Agency (SEPA) and the contractor would be required to adhere to SEPA's Special Requirements. All relevant mitigation measures presented in Chapter 9: Geology, Hydrology, Hydrogeology, Water Resources and Peat, for the protection of watercourses during felling and construction activities (particularly those relating to access tracks) will apply.

Polquhanity to Glenlee (via Kendoon)

13.117 The Polquhanity to Glenlee via Kendoon (P-G via K) Connection of the KTR Project is shown in Figure 4.2.

13.118 A new 132kV double circuit OHL is required between Polquhanity (situated approximately 3km north of the existing Kendoon substation) and the existing Glenlee substation, via the existing Kendoon substation. This proposed OHL, of approximately 10.1km in length, will connect to the recently constructed OHL which runs from Polquhanity to the existing New Cumnock substation; situated 3km north-east of Dalmellington.

13.119 Modifications will also be required within the Kendoon Substation to accommodate the new and repositioned terminal tower locations and 132kV trident wood pole entry from Carsfad. During the construction period it will be necessary to create a temporary crane pad to erect the proposed L7 Terminal tower. This will require a temporary diversion of the existing access road into Kendoon to ensure unrestricted access for residents during the works. It is proposed that the temporary road diversion will have a tarmac surface and be in place for up to nine months during the construction works. The existing pedestrian access leading to the footbridges and bus stop and A713 will remain open at all times. The proposed temporary construction works are shown in Figure 4.8b.

13.120 As outlined in Chapter 4, in addition to the new Connection above (and associated ancillary development), the assessment also considers the potential traffic and transport effects associated with:

[5] UK Climate Projections (2019) [online], available at: http://www.metoffice.gov.uk/research/collaboration/ukcp

- the removal of the N route towers between Polquhanity and Kendoon, and the R (north) towers between Kendoon and Glenlee;

Access Arrangements

13.121 Transportation, including deliveries to and from the construction areas will be taken from the existing trunk and local road network. The local area road network is shown on Figures 13.1.1 and 13.1.2.

13.122 Given the nature of construction of the overhead line Connection (i.e. a linear development), SPEN has identified 31 construction access points for Connection P-G via K of the KTR Project, identified in Table 13.10 and shown on Figure 5.5.1.

13.123 Further information relating to the proposed construction worksite access locations is included in Appendix 13.2.

Table 13.10: Access Points for the P-G via K Connection of the KTR Project

Worksite Access Reference	Public Road	Components
1	A713	Barlae Hill Quarry, towers 3, 4, 5 and 6
2	A713	Construction Compound
3	A713	Tower DE102R and removal of Towers 229 (N) and 230 (N)
4	A713	Tower 2
5	A713	Removal of Towers 231 (N) and 232 (N)
6	A713	Removal of Towers 233 (N) and 234 (N)
7	A713	Removal of Tower 235 (N)
8	A713	Towers 7, 8 and 9
9	A713	Removal of Tower 236 (N)
10	A713	Removal of Towers 237 (N) and 238 (N)
11	A713	Tower 36 and removal of Towers 239 (N) and 0 (R)
12	A713	Tower 10
13	A713	Tower 11 and 12 removal of Towers 001 (R) and 002 (R)
14	A713	Removal of Towers 003 (R)
15	A713	Tower 13
16	A713	Tower 14 and removal of Towers 004 (R) and 005 (R)
17	A713	Towers 15 and 16 and removal of Towers 001 (R) and 006 (R)
18	A713	Construction Compound
19	A713	Tower 17 and removal of Towers 007 A (R) and 007 (R)
20	A713	Towers 18 and 19 and removal of Towers 008 (R) and 009 (R)
21	A713	Removal of Tower 010 (R)
22	U1s	Tower 20
23	U1s	Tower 21
24	U1s	Towers 22 and 23 and removal of Towers 012 (R), 013 (R) and 014 (R)
25	A713	Removal of Tower 011 (R)
26	A713	Towers 24 to 29 and removal of Towers 015 (R) to 021 (R)
27	A713	Removal of Tower 023 (R)
28	A762	Towers 30 to 33 and removal Towers 022(R) to 026 (R)
29	A762	Tower 34 and removal of Tower 027 (R)
33	U2s	Tower 35
34	U2s	Removal of Tower 028 (R)

13.124 The proposed worksite accesses are preliminary based on SPEN's experience of constructing similar projects. The worksite access locations will be confirmed by the appointed contractor as an integral part of their adopted CTMP, the framework of which is provided as Appendix 13.1.

13.125 All construction vehicle drivers will be instructed to access a worksite via an approved route.

Assessment of Construction Effects (including tree felling)

13.126 As detailed in Chapter 5, the overall construction period duration for the P-G via K Connection is 51 months, allowing for the removal of the N route towers between Polquhanity and Kendoon, and the R (north) towers between Kendoon and Glenlee during that period.

13.127 Sections of the A77, A76, A75, A713, A712, A711, A702, A762, B741, U1s, U2s and Gateside Road public roads will be used by construction traffic. The assessed number of traffic movements (note: one trip = two movements; i.e. one delivery and one return journey) generated by construction activity are summarised in Table 13.11.

13.128 As outlined in Chapter 3: Approach to EIA, tree felling (or loss due to windthrow if not felled) of the areas outwith the 80m wayleave will result in indirect effects on the wider environment and therefore traffic generated by tree felling outside the wayleave has been included in the traffic assessment as part of the robust EIA[6]. This is based on the assumption that felling both within the wayleave and for windthrow will happen concurrently.

Table 13.11: Vehicle Movements Generated by Tree Felling and Construction Activity for the P-G via K Connection of the KTR Project

Activity / Item Being Transported	Type of Vehicle	Details / deliveries	Total Vehicle Movements
Timber Clearance (within wayleave)	Lorry (24 tonne capacity)	An estimated 29.81hectares (ha) of timber will be felled resulting in a total of 4,967.5 tonnes of timber being produced	416
Timber Clearance (windthrow areas)	Lorry (24 tonne capacity)	An estimated 20.9ha of timber will be felled resulting in a total of 6,237 tonnes of timber being produced	520
Site Access Tracks	Lorry (20 tonne capacity)	An estimated 154,421 tonnes of stone will be required	15,440
OHL Construction	Lorry (20 m^3 capacity) concrete ready-mix trucks with a 6 m^3 capacity	Concrete and steelwork	1,112
11kV Removal and Undergrounding	Lorry (20 tonne capacity)	Wiring, ducting and sand	360
Wiring and Commissioning	Lorry (20 m^3 capacity) and light vans	Wiring and commissioning	396
Decommissioning of N and R route towers	Lorry (20 m^3 capacity) and light vans	Steelwork and wiring	1,740
Reinstatement	Lorry (20 tonne capacity)	An estimated 143,100 tonnes of stone will require to be removed	14,310
Other	Private cars, light vans and mini-bus	Construction personnel and other site visitors	25,256
TOTAL HGV TRAFFIC MOVEMENTS for P-G via K			34,294
TOTAL LGV TRAFFIC MOVEMENTS for P-G via K			25,256

[6] On this basis assessment of traffic effects associated with the wayleave felling has not been presented separately as a secondary effect.

Activity / Item Being Transported	Type of Vehicle	Details / deliveries	Total Vehicle Movements
TOTAL ALL TRAFFIC MOVEMENTS for P-G via K			59,550

Predicted Construction Effects

13.129 As indicated in Table 13.11 the total of traffic generated by Connection P-G via K is estimated as 59,550 movements, of which 34,294 movements will be HGV movements over the 51 months construction period.

13.130 With reference to the indicative construction programme and the anticipated vehicle movements provided by SPEN for each activity, the number of vehicle movements that are anticipated for each month of the construction programme has been calculated. The vehicle movements calculated have then been distributed over each route section as per the assumptions indicated in the Assessment Assumptions section.

13.131 As indicated in the Assessment Assumptions section, two separate scenarios have been assessed:

- Scenario 1: 100% stone is sourced/returned from/to Sorn Quarry and delivered to site via the A76, B741 and A713.
- Scenario 2: 100% of stone is sourced/returned from/to Tongland Quarry and delivered to site via the A711, A75 and A713.

13.132 Estimated daily and monthly movements generated by Connection P-G via K against the programme along with predicted percentages increases on relevant trunk and local roads are shown in Table 13.12 and in Table 13.13 for Scenario 1 and Scenario 2 respectively.

13.133 Construction traffic is estimated at an average of 62 vehicle movements a day over the entire construction (and N and R decommissioning) period, with a maximum of 108 vehicle movements occurring per day between August 2022 and January 2023. The 'peak period' for the purpose of this assessment is therefore considered to be August 2022 to January 2023 inclusive. Table 13.14 presents a summary of this information by route section for both Scenario 1 and Scenario 2.

13.134 The A77, A76, A75, A712 and A702 currently operate comfortably within their respective capacities (see Table 13.7). The increase in traffic volume on these roads throughout the construction phase of P-G via K Connection is assessed to be less than 5% in terms of both general traffic (HGV+LGV) and specifically HGV traffic for both Scenario 1 and Scenario 2. On this basis, the significance of the effect is assessed to be none and accordingly not significant. Since the 10% traffic increase threshold has not been exceeded on these routes, no detailed assessment has been undertaken for these public roads.

13.135 As noted above, for the purpose of the detailed assessment, it has been assumed that embedded mitigation measures and operational procedures as proposed in the framework CTMP (Appendix 13.1) will be in place during construction of the KTR Project and therefore have been used to inform the judgement of significance of effects.

Table 13.12: Outline Construction programme and Associated Traffic Assessment for P-G via K Connection Study Area – Scenario 1

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	TOTA
Activity																																																				
Timber Clearance (within wayleave)	28	26	26	26	26	26	26	26	26	26	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**284**
Timber Clearance (windthrow areas)	62	62	62	62	62	62	62	62	62	62	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**652**
Site Access Tracks	1926	1896	1896	1896	1896	1896	1896	1896	1896	1896	1111	0	0	0	0	0	0	0	132	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2194 3**
OHL Construction	0	0	0	0	0	222	450	450	450	450	450	450	470	656	656	656	656	656	656	656	561	206	206	206	206	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9488**
Wiring and Commissioning	0	0	0	0	0	0	0	0	0	0	0	0	0	86	372	372	372	372	372	372	372	372	372	372	372	372	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4620**
Decommissioning of 'N' and 'R' route towers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	72	0	0	0	0	0	0	0	0	0	0	0	0	**2206**
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	764	1554	1554	1554	1554	1554	1554	1554	1554	1554	1554	1554	1169	82	82	82	82	82	82	82	82	82	82	82	68	**1999 7**
11kV Undergrounding Works	46	44	44	44	44	44	44	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**360**
Total no. Vehicle Movements (HGV + LGV)	2062	2028	2028	2028	2028	2250	2478	2484	2434	2434	1615	450	470	742	1028	1028	1028	1028	1204	1234	1139	784	784	784	784	697	1040	1760	1760	1760	1760	1760	1760	1760	1760	1742	1664	1241	82	82	82	82	82	82	82	82	82	82	82	68	**5955 0**
Total no. Vehicle Movements / Day (HGV + LGV)	82	82	82	82	82	108	108	108	108	108	108	30	42	66	66	66	66	66	80	80	80	54	54	54	54	54	104	82	82	82	82	82	82	82	82	82	74	80	8	8	8	8	8	8	8	8	8	8	8	8	-
Total no. Vehicle Movements (HGV)	1616	1588	1588	1588	1588	1614	1640	1646	1596	1596	962	52	54	84	108	108	108	108	192	186	178	134	134	134	134	134	658	1250	1250	1250	1250	1250	1250	1250	1250	1250	1236	1196	878	18	18	18	18	18	18	18	18	18	18	18	8	**3429 4**
Total no. Vehicle Movements / Day (HGV)	66	66	66	66	66	80	80	80	80	80	80	16	22	34	34	34	34	34	44	44	44	30	30	30	30	30	74	62	62	62	62	62	62	62	62	62	56	60	4	4	4	4	4	4	4	4	4	4	4	4	-
Total no. Vehicle Movements (LGV)	446	440	440	440	440	636	838	838	838	838	653	398	416	658	920	920	920	920	1012	1048	961	650	650	650	650	563	382	510	510	510	510	510	510	510	510	510	506	468	363	64	64	64	64	64	64	64	64	64	64	60	**2525 6**
Total no. Vehicle Movements / Day (LGV)	16	16	16	16	16	28	28	28	28	28	28	14	20	32	32	32	32	32	36	36	36	24	24	24	24	24	30	20	20	20	20	20	20	20	20	20	18	20	4	4	4	4	4	4	4	4	4	4	4	4	-
A76 (between B743 and A70) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A76 (between B743 and A70) % Increase in HGV Traffic	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A76 (between A70 and New Cumnock) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A762 and A712) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A762 and A712) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A712 and A780) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A712 and A780) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A780 and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A780 and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A77 (between A713 and A70) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A77 (between A713 and A70) % Increase in HGV Traffic	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A77 and Dalmellington) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between Dalmellington and Carsphairn) % Increase in ALL TRAFFIC	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	1%	1%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	24%	23%	23%	23%	23%	23%	23%	23%	23%	23%	22%	22%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
A713 (between Carsphairn and A762) % Increase in ALL TRAFFIC	5%	5%	5%	5%	5%	6%	6%	6%	6%	6%	6%	1%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	TOTA
A713 (between Carsphairn and A762) % Increase in HGV Traffic	33%	33%	33%	33%	33%	34%	34%	34%	34%	34%	34%	1%	3%	3%	3%	3%	3%	3%	5%	5%	5%	4%	4%	4%	4%	4%	28%	26%	26%	26%	26%	26%	26%	26%	26%	26%	26%	25%	25%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
A713 North of Dalry (between A762 and A702) % Increase in ALL TRAFFIC	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	<1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 South of Dalry (between A702 and A712) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A712 and B795) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A712 and B795) % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between B795 and A75) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between B795 and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A75 and A762) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A762 and A713) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A713 and Corsock) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A713 and Corsock) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between Corsock and A75) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between Corsock and A75) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A711 (between A75 and A762) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A711 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between A713 and Moniaive) % Increase in ALL TRAFFIC	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	3%	3%	3%	3%	3%	4%	4%	4%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between Moniaive and A76) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A712 and B795) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A712 and B795) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between B795 and A75) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between B795 and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A713 and U2s) % Increase in ALL TRAFFIC	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A713 and U2s) % Increase in HGV Traffic	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
B795 (between A762 and A713) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
B795 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
B741 % Increase in ALL TRAFFIC	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	TOTA
B741 % Increase in HGV Traffic	130%	130%	130%	130%	130%	130%	130%	130%	130%	130%	130%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	11%	11%	11%	11%	11%	11%	11%	11%	114%	114%	114%	114%	114%	114%	114%	114%	114%	114%	108%	108%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	
C13s % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
C13s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
C45s % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
C45s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U43s % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U43s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U34s % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U34s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U1s % Increase in ALL TRAFFIC	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U1s % Increase in HGV Traffic	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U2s % Increase in ALL TRAFFIC	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U2s % Increase in HGV Traffic	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U3s % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U3s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
Gateside Road % Increase in ALL TRAFFIC	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
Gateside Road % Increase in HGV Traffic	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	98%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	8%	8%	8%	8%	8%	8%	8%	8%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	82%	82%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	

Table 13.13: Outline Construction programme and Associated Traffic Assessment for P-G via K Connection Study Area – Scenario 2

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	TOTA
Activity																																																				
Timber Clearance (within wayleave)	28	26	26	26	26	26	26	26	26	26	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**284**
Timber Clearance (windthrow areas)	62	62	62	62	62	62	62	62	62	62	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**652**
Site Access Tracks	1926	1896	1896	1896	1896	1896	1896	1896	1896	1896	1111	0	0	0	0	0	0	0	132	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2194 3**
OHL Construction	0	0	0	0	0	222	450	450	450	450	450	450	470	656	656	656	656	656	656	656	561	206	206	206	206	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**9488**
Wiring and Commissioning	0	0	0	0	0	0	0	0	0	0	0	0	0	86	372	372	372	372	372	372	372	372	372	372	372	372	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4620**
Decommissioning of 'N' and 'R' route towers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	72	0	0	0	0	0	0	0	0	0	0	0	0	**2206**
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	764	1554	1554	1554	1554	1554	1554	1554	1554	1554	1554	1554	1169	82	82	82	82	82	82	82	82	82	82	82	68	**1999 7**
11kV Undergrounding Works	46	44	44	44	44	44	44	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**360**
Total no. Vehicle Movements (HGV + LGV)	2062	2028	2028	2028	2028	2250	2478	2484	2434	2434	1615	450	470	742	1028	1028	1028	1028	1204	1234	1139	784	784	784	784	697	1040	1760	1760	1760	1760	1760	1760	1760	1760	1760	1742	1664	1241	82	82	82	82	82	82	82	82	82	82	68	**5955 0**
Total no. Vehicle Movements / Day (HGV + LGV)	82	82	82	82	82	108	108	108	108	108	108	30	42	66	66	66	66	66	80	80	80	54	54	54	54	54	104	82	82	82	82	82	82	82	82	82	82	74	80	8	8	8	8	8	8	8	8	8	8	8	-
Total no. Vehicle Movements (HGV)	1616	1588	1588	1588	1588	1614	1640	1646	1596	1596	962	52	54	84	108	108	108	108	192	186	178	134	134	134	134	134	658	1250	1250	1250	1250	1250	1250	1250	1250	1250	1236	1196	878	18	18	18	18	18	18	18	18	18	18	8	**3429 4**
Total no. Vehicle Movements / Day (HGV)	66	66	66	66	66	80	80	80	80	80	80	16	22	34	34	34	34	34	44	44	44	30	30	30	30	30	74	62	62	62	62	62	62	62	62	62	62	56	60	4	4	4	4	4	4	4	4	4	4	4	-
Total no. Vehicle Movements (LGV)	446	440	440	440	440	636	838	838	838	838	653	398	416	658	920	920	920	920	1012	1048	961	650	650	650	650	563	382	510	510	510	510	510	510	510	510	510	506	468	363	64	64	64	64	64	64	64	64	64	64	60	25256
Total no. Vehicle Movements / Day (LGV)	16	16	16	16	16	28	28	28	28	28	28	14	20	32	32	32	32	32	36	36	36	24	24	24	24	24	30	20	20	20	20	20	20	20	20	20	20	18	20	4	4	4	4	4	4	4	4	4	4	4	-
A76 (between B743 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A76 (between B743 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A76 (between A70 and New Cumnock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A762 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A762 and A712) % Increase in HGV Traffic	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A712 and A780) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A712 and A780) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A780 and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A75 (between A780 and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A77 (between A713 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A77 (between A713 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A77 and Dalmellington) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between Dalmellington and Carsphairn) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between Carsphairn and A762)	5%	5%	5%	5%	5%	6%	6%	6%	6%	6%	6%	1%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	TOTA
% Increase in ALL Traffic																																																			
A713 (between Carsphairn and A762) % Increase in HGV Traffic	33%	33%	33%	33%	33%	34%	34%	34%	34%	34%	34%	1%	3%	3%	3%	3%	3%	3%	5%	5%	5%	4%	4%	4%	4%	4%	28%	26%	26%	26%	26%	26%	26%	26%	26%	26%	26%	25%	25%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
A713 North of Dalry (between A762 and A702) % Increase in ALL Traffic	4%	4%	4%	4%	4%	5%	5%	5%	5%	5%	5%	<1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	43%	43%	43%	43%	43%	45%	45%	45%	45%	45%	45%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	
A713 South of Dalry (between A702 and A712) % Increase in ALL Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	26%	26%	26%	26%	26%	27%	27%	27%	27%	27%	27%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
A713 (between A712 and B795) % Increase in ALL Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A712 and B795) % Increase in HGV Traffic	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	21%	21%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	
A713 (between B795 and A75) % Increase in ALL Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between B795 and A75) % Increase in HGV Traffic	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	21%	21%	21%	21%	21%	21%	21%	21%	21%	21%	20%	20%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A762 and A713) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A713 and Corsock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between A713 and Corsock) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between Corsock and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A712 (between Corsock and A75) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A711 (between A75 and A762) % Increase in ALL Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A711 (between A75 and A762) % Increase in HGV Traffic	14%	14%	14%	14%	14%	15%	15%	15%	15%	15%	15%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between A713 and Moniaive) % Increase in ALL Traffic	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	3%	3%	3%	3%	3%	4%	4%	4%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between Moniaive and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A712 and B795) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A712 and B795) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between B795 and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between B795 and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A713 and U2s) % Increase in ALL Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A762 (between A713 and U2s) % Increase in HGV Traffic	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	40%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	32%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
B795 (between A762 and A713) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
B795 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
B741 % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
B741 % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
C13s % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
C13s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
C45s % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	TOTA
C45s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U43s % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U43s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U34s % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U34s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U1s % Increase in ALL Traffic	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U1s % Increase in HGV Traffic	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	57%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U2s % Increase in ALL Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U2s % Increase in HGV Traffic	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U3s % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U3s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
Gateside Road % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
Gateside Road % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	

Table 13.14: Summary of Construction Traffic Generated on Public Roads within P-G via K Connection Study Area

Route Section	Construction traffic generated over the 51 months construction programme, by route section							
	Scenario 1				Scenario 2			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}		Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV
A76 (between B743 and A70) [AADT = 11,691]	24 [<1%] {none, not significant}	24 [2%] {none, not significant}	48 [<1%] {none, not significant}	48 [5%] {minor, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A76 (between A70 and New Cumnock) [AADT = 6,423]	24 [<1%] {none, not significant}	24 [2%] {none, not significant}	48 [<1%] {none, not significant}	48 [5%] {minor, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A75 (between A762(N) and A712) [AADT= 7,901]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	24 [<1%] {none, not significant}	24 [2%] {none, not significant}	50 [<1%] {none, not significant}	50 [5%] {minor, not significant}
A75 (between A712 and A780) [AADT= 11,065]	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A75 (between A780 and A76) [AADT= 14,729]	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A77 (between A713 and A70) [AADT= 21,311]	28 [<1%] {none, not significant}	22 [2%] {none, not significant}	58 [<1%] {none, not significant}	50 [4%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between A77 and Dalmellington) [AADT= 4,085]	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	4 [1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [1%] {none, not significant}
A713 (between Dalmellington and Carsphairn) [AADT= 1,557]	28 [2%] {none, not significant}	24 [13%] {moderate, significant}	58 [4%] {none, not significant}	50 [27%] {moderate, significant}	8 [<1%] {none, not significant}	4 [1%] {none, not significant}	10 [<1%] {none, not significant}	2 [2%] {none, not significant}
A713 (between Carsphairn and A762) [AADT=1,398]	42 [3%] {none, not significant}	26 [15%] {moderate, significant}	82 [6%] {minor, not significant}	54 [34%] {moderate, significant}	42 [3%] {none, not significant}	28 [15%] {moderate, significant}	82 [6%] {minor, not significant}	54 [34%] {moderate, significant}
A713 (between A762 and A702) [AADT=1,382]	16 [1%] {none, not significant}	2 [<1%] {none, not significant}	24 [2%] {none, not significant}	4 [3%] {none, not significant}	28 [2%] {none, not significant}	14 [11%] {moderate, significant}	72 [5%] {minor, not significant}	52 [45%] {moderate, significant}
A713 (between A702 and A712) [AADT=2,282]	16 [<1%] {none, not significant}	2 [<1%] {none, not significant}	24 [1%] {none, not significant}	4 [2%] {none, not significant}	28 [1%] {none, not significant}	14 [7%] {minor, not significant}	72 [3%] {none, not significant}	52 [27%] {moderate, significant}
A713 (between A712 and B795) [AADT=1,889]	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [1%] {none, not significant}	28 [1%] {none, not significant}	24 [12%] {moderate, significant}	58 [3%] {none, not significant}	50 [27%] {moderate, significant}
A713 (between B795 and A75)	8 [<1%]	2 [<1%]	10 [<1%]	2 [<1%]	28 [<1%]	24 [11%]	58 [1%]	50 [25%]

Route Section	Construction traffic generated over the 51 months construction programme, by route section							
	Scenario 1				Scenario 2			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}		Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV
[AADT=3,868]	{none, not significant}	{none, not significant}	{none, not significant}	{none, not significant}	{none, not significant}	{moderate, significant}	{none, not significant}	{moderate, significant}
A712 (between A75 and A762) [AADT=685]	6 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [1%] {none, not significant}	0 [0%] {none, not significant}	6 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [1%] {none, not significant}	0 [0%] {none, not significant}
A712 (between A762 and A713) [AADT=1,544]	6 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [<1%] {none, not significant}	0 [0%] {none, not significant}	6 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [<1%] {none, not significant}	0 [0%] {none, not significant}
A712 (between A713 and Corsock) [AADT=988]	8 [<1%] {none, not significant}	2 [1%] {none, not significant}	10 [1%] {none, not significant}	2 [3%] {none, not significant}	8 [<1%] {none, not significant}	2 [1%] {none, not significant}	10 [1%] {none, not significant}	2 [3%] {none, not significant}
A712 (between Corsock and A75) [AADT=768]	8 [<1%] {none, not significant}	2 [1%] {none, not significant}	10 [1%] {none, not significant}	2 [3%] {none, not significant}	8 [<1%] {none, not significant}	2 [1%] {none, not significant}	10 [1%] {none, not significant}	2 [3%] {none, not significant}
A711 (between A75 and A762) [AADT=3,898]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	24 [<1%] {none, not significant}	24 [7%] {minor, not significant}	50 [1%] {none, not significant}	50 [15%] {moderate, significant}
A702 (between A713 and Moniaive) [AADT=243]	6 [2%] {none, not significant}	0 [0%] {none, not significant}	8 [3%] {none, not significant}	0 [0%] {none, not significant}	6 [2%] {none, not significant}	0 [0%] {none, not significant}	8 [3%] {none, not significant}	0 [0%] {none, not significant}
A702 (between Moniaive and A76) [AADT=931]	6 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [<1%] {none, not significant}	0 [0%] {none, not significant}	6 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [1%] {none, not significant}	0 [0%] {none, not significant}
A762 (between A713 and U2s) [AADT = 356]	6 [1%] {none, not significant}	6 [19%] {moderate, significant}	12 [3%] {none, not significant}	10 [40%] {moderate, significant}	6 [<1%] {none, not significant}	6 [19%] {moderate, significant}	12 [<1%] {none, not significant}	10 [40%] {moderate, significant}
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	24 [2%] {none, not significant}	24 [60%] {major, significant}	48 [5%] {minor, not significant}	48 [130%] {major, significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
U1s [AADT = 72]	4 [4%] {none, not significant}	4 [41%] {moderate, significant}	6 [8%] {minor, not significant}	6 [86%] {major, significant}	4 [4%] {none, not significant}	4 [41%] {moderate, significant}	6 [8%] {minor, not significant}	6 [86%] major, significant}
U2s [AADT = 199]	2 [<1%] {none, not significant}	2 [13%] {moderate, significant}	2 [1%] {none, not significant}	2 [17%] {moderate, significant}	2 [<1%] {none, not significant}	2 [13%] {moderate, significant}	2 [1%] {none, not significant}	2 [17%] {moderate, significant}
Gateside Road (Dalmellington) [AADT = 1,280]	24 [2%] {none, not significant}	24 [45%] {moderate, significant}	48 [4%] {none, not significant}	48 [98%] {major, significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}

Driver Delay

13.136 All public road route sections where the 10% significance threshold has been met or exceeded operate notably below their theoretical capacity. Table 13.15 provides a comparison of forecast traffic flows on roads during the 'Peak Period' and associated theoretical road capacities.

13.137 Furthermore, the CTMP, a framework of which is provided in Appendix 13.1, will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. CTMP measures include but are not limited to:

- the timing and frequency of vehicle movements being managed to minimise local disruption;
- details of designated access routes forming part of the site induction and training being held for all site operatives and delivery drivers through 'toolbox talks'; and
- where reasonable and practicable, project-related vehicles will avoid travelling in convoys on public roads.

Table 13.15: Baseline Traffic + Traffic Generated by Construction of the P-G via K Connection of the KTR Project

Route Section	Two-way peak hour movements (2022 Baseline Traffic + Traffic Generated by Construction of the P-G via K Connection)	Capacity (vph) (two-way hourly flow)
A713 (between Dalmellington and Carsphairn)	206	1800
A713 (between Carsphairn and A762)	208	1800
A713 (between A762 and A702)	206	1600
A713 (between A702 and A712)	206	1600
A713 (between A712 and B795)	206	1800
A713 (between B795 and A75)	202	1800
A711 (between A75 and A762)	202	1800
A762 (between A713 and U2s)	52	280
B741 (between New Cumnock and Dalmellington)	202	1600
U1s	52	Not Specified
U2s	52	Not Specified
Gateside Road (Dalmellington)	202	1600

13.138 From a review of Table 13.14, it is evident that threshold significance criteria have been exceeded on the A713 (between Dalmellington and the A75), A711, A762, B741, U2s , U1s and Gateside Road either, or both, throughout the duration of the entire construction period or during the 'peak period' of construction activity for either Scenario 1 or Scenario 2.

13.139 The A713 has the residual capacity (see Table 13.15) to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between Carsphairn and the A762) is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.140 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the A713 and the U2s) and the U2s to provide passing places will be implemented; achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (see Embedded Mitigation Measures Section). On this basis, the significance of effect of driver delay for users of the A762 and U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.141 The U1s currently has very low traffic flow and as such shows a relatively large traffic increase which would represent a major effect. However, only a small section of the U1s will be used (approx. 500m in length). Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the U1s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.142 Considering Scenario 1, Table 13.14 indicates that threshold significance criteria have been exceeded on the A713 (between Dalmellington and Carsphairn) the B741 and Gateside Road both throughout the duration of the entire construction period and during the 'peak period' of construction activity.

13.143 The A713 has the residual capacity (see Table 13.15) to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between Dalmellington and Carsphairn) is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.144 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such show a relatively large traffic increase which would represent a major effect, however it is important to note that these route sections have the residual capacity (see Table 13.15) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.145 Considering Scenario 2, Table 13.14 indicates that threshold significance criteria have been exceeded on the A713 (between Carsphairn and the A75) either, or both, throughout the duration of the entire construction period or during the 'peak period' of construction activity and during the 'peak period' of construction activity for the A711.

13.146 Both the A713 and A711 have the residual capacity (see Table 13.15) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delays for users of the A713 and A711 is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.147 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic, the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.16.

Table 13.16: Projected Collisions for the P-G via K Connection of the KTR Project

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the P-G via K Connection of the KTR Project)
A713 (between Dalmellington and Carsphairn)	4.7	4.8
A713 (between Carsphairn and A762)	1.3	1.4
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A711 (between A75 and A762)	1.3	1.4
A762 (between A713 and U2s)	0.3	0.4

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the P-G via K Connection of the KTR Project)
B741 (between New Cumnock and Dalmellington)	1.7	1.8
U1s	0	0
U2s	0	0
Gateside Road	0	0

13.148 Using this basis of assessment, there would be a negligible increase in PICs in the Study Area as a consequence of the increased traffic generated by the P-G via K Connection and the significance of the effect would be none and therefore not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.149 The IEMA Guidelines define severance as 'the perceived division that can occur within a community when it becomes separated by a major traffic artery'. Severance may result from a road carrying large traffic flows or a physical barrier created by the road itself, and the IEMA guidelines suggest that consideration is given to the severity of existing severance and how this might be exacerbated by proposed construction traffic generated by a development. As shown in Table 13.15, the roads within the P-G via K Connection Study Area will continue to operate below capacity, even with the addition of traffic generated by construction of the P-G via K Connection. Severance should not occur when there is such a notable level of residual road capacity and traffic generated by the P-G via K Connection will be relatively low.

13.150 For similar reasoning, pedestrian delay is not considered to be an existing problem on any of the route sections within the P-G via K Study Area, nor one that shall be created by the addition of proposed construction traffic to these routes.

13.151 Pedestrian amenity is broadly defined by the IEMA as the 'relative pleasantness of a journey', and this definition also takes into account 'fear and intimidation'. The IEMA Guidelines suggest that 'a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flows (or its lorry component) is halved or doubled. The construction of the P-G via K Connection is predicted to generate less than double HGV flows on all route sections within the P-G via K Study Area and therefore the effect on pedestrian amenity is not considered to be significant.

13.152 Several construction access routes overlap and/or intersect with existing recreational routes, these include the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route; and
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way).
- The section of private road leading to Polmaddy overlaps with Core Path 164.

13.153 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of the potential of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of the Southern Upland Way, Core Paths 21, 30, 164 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.154 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate any potential pedestrian effects as a result of construction traffic engaged in the P-G via K Connection.

13.155 Overall, based on professional judgement, the construction traffic generated by P-G via K Connection Study Area will have a minor effect upon community receptors and is therefore not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.156 No further mitigation is proposed in addition to the embedded mitigation measures and operational procedures as proposed in the framework CTMP.

13.157 The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded upon as appropriate by SPEN's appointed contractor(s) in consultation with Roads Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.

Residual Construction Effects

13.158 Overall, due to the implementation of both the infrastructure improvements to the A762 (between the A713 and the U2s) and the U2s (therefore, embedded mitigation for the P-G via K Connection),, in conjunction with the embedded mitigation measures and operational procedures as proposed in the framework CTMP, the significance of the residual effects associated with the levels of traffic anticipated during the construction of the P-G via K Connection is considered to be minor and accordingly not significant in the context of the 2017 EIA Regulations (as amended).

Assessment of Cumulative Effects

13.159 An assessment of the likely construction effects of the P-G via K Connection and other committed developments as well as other Connections and developments forming part of the KTR Project has been undertaken to take account of the likely interrelation of overlapping construction programmes and the resultant cumulative effect upon the local road network.

13.160 The overall approach for the cumulative assessments, including a list of developments considered, is outlined in Chapter 3.

13.161 The following developments have been included with P-G via K Connection for the cumulative traffic and transport assessment:

- Knockman Hill Wind Farm (Proposed Wind Turbine Project at Knockman Hill, Milnmark Farm Dumfries and Galloway Environmental Statement (ES) 2009);
- Mochrum Fell Wind Farm (Mochrum Fell Wind Farm ES, 2009);
- Shepherds Rig Wind Farm (Shepherds Rig Wind Farm ES, 2020);
- Troston Loch Wind Farm (Troston Loch Wind Farm EIA Report, 2019);
- Cornharrow Wind Farm (Cornharrow Wind Farm EIA Report, 2020);
- Glenshimmeroch Wind Farm (Glenshimmeroch Wind Farm EIA Report, 2018); and
- Fell Wind Farm (Fell Wind Farm EIA Report, 2019).

13.162 In addition to the above wind farms, traffic associated with the construction of the proposed Glenlee Substation Extension has been included in order to ensure a robust EIA; the assessment has been undertaken on the basis of an overlap with the KTR construction enabling works between March 2022 and June 2022.

13.163 Construction of the other KTR Project Connections (i.e. C-K, EG, BG Deviation and G-T (including decommissioning and removal of R route (south))) will overlap with the construction phase of the P-G via K of the KTR Project between March 2022 and May 2026 inclusive.

Glenlee Substation Extension Access Arrangements

13.164 For the purpose of the assessment, it has been assumed that:

- Construction traffic associated with the Glenlee Substation Extension will access from the south via the A713 (45%), the north via the A713 (45%) and a proportion will come from the east via the A712 (10%).

Wind Farm Access Arrangements

13.165 The following assumptions have been made to inform the assessment, as derived from review of relevant supporting ESs/EIA reports for the wind farm projects:

- Construction traffic accessing the proposed Knockman Hill Wind Farm will do so from the north via the A713.
- Construction traffic accessing the proposed Mochrum Fell Wind Farm site will predominantly do so from the south via the A712 (60%) although a proportion will come from the north via the A713 (25%).
- All construction traffic accessing the proposed Shepherds Rig Wind Farm site will do so from the north via the A713.
- All construction traffic accessing the proposed Troston Loch Wind Farm site will do so from the north via the A713.
- Construction traffic accessing the Cornharrow Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Glenshimmeroch Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Fell Wind Farm site will route from both the north (70%) and south (30%) via the A712.

Total Cumulative Construction Effects

13.166 This section assesses the maximum development case, assuming that all the developments being considered as part of the cumulative assessment will proceed to construction and that the cumulative effects are the total likely effects created by the construction of the P-G via K Connection of the KTR Project in combination with:

- Wind farm developments (Knockman Hill, Mochrum Fell, Shepherds Rig, Troston Loch, Cornharrow, Glenshimmeroch, Fell);
- Glenlee Substation Extension; and
- other KTR Project Connections, i.e. C-K, E-G, BG Deviation and G-T.

13.167 It is uncertain if and when the construction phases of the wind farms and the P-G via K Connection of the KTR Project might overlap. To robustly assess cumulative traffic generation, the cumulative assessment has been undertaken for route sections within the KTR Project Study Area that are utilised by other committed developments as well as other Connections forming part of the KTR Project. This is based on the sum of the average traffic generation of the developments listed above and the P-G via K Connection of the KTR Project peak traffic generation. This is considered to represent a maximum case scenario as, in reality, it is considered highly improbable that peak traffic generation for all developments will align.

13.168 For the purpose of the assessment it has been assumed that:

- 50% of stone will be sourced entirely from the onsite quarries with the remaining 50% being sourced from both Sorn Quarry and Tongland Quarry.

13.169 Similarly, to the above, in relation to the reinstatement of temporary access tracks, it has been assumed that:

- 50% of stone will be reinstated within the onsite quarries and the remaining 50% being returned to both Sorn Quarry and Tongland Quarry.

13.170 Table 13.17 presents a summary of predicted traffic volume increases over the entire construction period of the P-G via K Connection and during the 'peak period' of construction activity (August 2022 to January 2023 inclusive). The table below shows the proportional increase in traffic generated for route sections within the KTR Project Study Area that are utilised by other committed developments as well as the other Connections forming part of the KTR Project.

Table 13.17: Summary of Predicted Traffic Volume Increase – Total Likely Cumulative Impact for P-G via K Connection of the KTR Project

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
A713 (between A77 and Dalmellington) [AADT = 4,085]	116 3% None	37 15% Moderate	319 8% Minor	93 39% Moderate
A713 (between Dalmellington and Carsphairn) [AADT = 1,557]	158 10% Moderate	75 41% Moderate	387 25% Moderate	159 87% Major
A713 (between Carsphairn and A762) [AADT = 1,398]	144 10% Moderate	73 46% Moderate	304 22% Moderate	141 88% Major
A713 (between A762 and A702) [AADT = 1,382]	66 5% Minor	30 26% Moderate	62 4% None	30 26% Moderate
A713 (between A702 and A712) [AADT = 2,282]	66 3% None	30 15% Moderate	62 3% None	30 15% Moderate
A713 (between A712 and B795) [AADT = 1,889]	50 3% None	24 13% Moderate	98 5% Minor	36 19% Moderate
A713 (between B795 and A75) [AADT = 3,868]	56 1% None	24 12% Moderate	100 3% None	36 18% Moderate
A712 (between A713 and Corsock) [AADT = 988]	44 4% None	15 21% Moderate	125 13% Moderate	46 64% Major
A712 (between Corsock and A75) [AADT = 768]	36 5% Minor	13 17% Moderate	83 11% Moderate	31 41% Moderate
A711 (between A75 and A762) [AADT=3,893]	34 <1% None	30 9% Minor	32 <1% None	30 9% Minor
A762 (between A713 and U2s) [AADT = 356]	16 4% None	14 56% Moderate	18 5% Minor	14 56% Moderate
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	42 4% None	42 114% Major	70 7% Minor	70 189% Major
U2s	14	8	8	8

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
[AADT = 199]	7% Minor	67% Major	4% None	67% Major
Gateside Road (Dalmellington) [AADT = 1,280]	40 3% None	40 82% Major	66 5% Minor	66 135% Major

Predicted Cumulative Effects during Construction

Driver Delay

13.171 From a review of

13.172 Table 13.17, it is evident that threshold significance criteria have been exceeded on the A713 (between the A77 and the A75), A712, A711, A762, B741, U2s and Gateside Road throughout the duration of the entire construction period.

13.173 The A713 has the residual capacity to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between the A77 and the A75) is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.174 As an integral part of the Glenlee Substation Extension Project, localised widening of strategic sections of the A762 (between the A713 and the U2s) and the U2s to provide passing places will be implemented achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (see Embedded Mitigation Measures Section). On this basis, the significance of effect of driver delay for users of the A762 and U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.175 Both the B741 and Gateside Road have very low HGV traffic flow and as such, the assessment shows a relatively large traffic increase which would represent a major effect; however it is important to note that these route sections have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.176 The A711 and A712 have the residual capacity to readily accommodate the expected additional traffic flow. Again, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delays for users of the A711 and A712 is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.177 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Therefore, if the number of collisions were to increase proportionally with the increase in traffic volume, then the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.18.

Table 13.18: Projected Collisions – Total Likely Cumulative Impacts

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the P-G via K Connection + Committed WF Developments + Glenlee Substation Extension + other KTR Project Connections)
A713 (between A77 and Dalmellington)	10	10.3
A713 (between Dalmellington and Carsphairn)	4.7	5.2
A713 (between Carsphairn and A762)	1.3	1.5
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A712 (between A713 and Corsock)	1	1.1
A712 (between Corsock and A75)	1	1.1
A711 (between A75 and A762)	1.3	1.4
A762 (between A713 and U2s)	0.3	0.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
U2s	0	0
Gateside Road	0	0

13.178 Using the basis of assessment set out above, there would be a small increase (less than 1 collision) in PICs for the A713 (between the A77 and the A762) as a consequence of the increased traffic generated cumulatively. Professional judgment suggests that the peak cumulative traffic, which would be temporary (seven months duration), would result in a minor effect (not significant) upon road safety if unmitigated.

13.179 On the other route sections within the Study Area, there would be a negligible (and therefore not significant) increase in PICs as a consequence of the increased traffic generated cumulatively by the developments and the significance of the effect would be none and therefore not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.180 The roads within the P-G via K Connection Study Area will continue to operate below capacity, even with the addition of traffic generated cumulatively. Severance and pedestrian delay should not occur when there is such a notable level of residual road capacity

13.181 Cumulatively, the only road sections where HGV flows are expected to double, or more are the B741 and Gateside Road.

13.182 The CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will minimise the effect of construction traffic on local communities, measures include but are not limited to:

- temporary construction site signage will be erected on the local road network in advance of local communities to warn people of construction activities and associated construction vehicles;
- SPEN shall nominate a Community Liaison Officer (CLO); the CLO will be responsible for keeping the local community informed of progress on the site and warning them of upcoming activities which may give rise to increased construction vehicle movements; and

- all site staff will be informed about traffic management arrangements and procedures via the site induction.

13.183 There is local footway provision in Dalmellington (B741 and Gateside Road) and New Cumnock (B741). Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic generated cumulatively. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the B741 and Gateside Road.

13.184 Several construction access routes overlap and/or intersect with existing recreational routes, these include the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route; and
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route, and intersects both Core Path 224 and 504 (the Southern Upland Way).

13.185 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of the Southern Upland Way, Core Paths 21, 30 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.186 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic engaged in the P-G via K Connection.

13.187 Overall based on professional judgement the construction traffic generated cumulatively will have a minor effect upon community receptors which is therefore not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.188 As recorded in the CTMP, if another development, such as the wind farms considered in the cumulative assessment appears likely to undergo construction at the same time as the P-G via K Connection, SPEN will liaise with the other developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.

Residual Cumulative Effects during Construction

13.189 Overall, due to the implementation of infrastructure improvements to the A762 (between the A713 and the U2s) and the U2s as part of the Glenlee Substation Extension works (therefore, embedded mitigation for the P-G via K Connection), in conjunction with the embedded mitigation measures and operational procedures as proposed in the framework CTMP and the proposed additional requirement for SPEN to liaise with other developers regarding the scheduling of deliveries and potential means of reducing the effect of combined construction, the residual effects associated with the levels of traffic generated cumulatively are considered to be minor and accordingly not significant in the context of the 2017 EIA Regulations (as amended).

Monitoring

13.190 The requirement for construction monitoring will be agreed with SPEN, Roads Authority representatives and other relevant stakeholders prior to commencement of works.

13.191 If deemed necessary, SPEN will enter into a legal agreement under Section 96 of the Roads (Scotland) Act 1984 to formalise an inspection and maintenance regime with the Roads Authority to contribute to maintenance of those roads impacted by HGV movements associated with the P-G via K Connection.

Summary of Effects

13.192 A summary of effects before and after proposed mitigation measures for the P-G via K Connection is provided in Table 13.19.

Table 13.19: Summary of Effects for Public Roads Within the P-G via K Connection Study Area

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
Construction Effects			
Driver Delay	Minor	No additional mitigation is proposed beyond the embedded measures and operational procedures as proposed as good practice in the framework CTMP. The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded as appropriate by SPEN's appointed contractor(s) in consultation with Roads Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor
Cumulative Effects			
Driver Delay	Minor	If the construction of any notably sized development(s), e.g. wind farm development(s) (as considered in the cumulative assessment) appears likely to overlap with the KTR Project, SPEN will liaise with the appropriate developer organisation regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor

13.193 Based on the assessment summary in Table 13.19, the additional traffic predicted to be generated on public roads throughout the P-G via K Connection Study Area during the construction phase is anticipated to result in minor effects which are therefore considered to be not significant.

Carsfad to Kendoon

13.194 The Carsfad to Kendoon (C-K) Connection of the KTR Project is shown in Figure 4.3.

13.195 A new 132kV single circuit OHL, of approximately 2.6km in length, is required between the hydroelectric power station at Carsfad and the existing substation at Kendoon. The OHL will be supported on a 'trident' design wood pole.

13.196 In relation to the stone required for construction of the C-K Connection of the KTR Project, it has been assumed that:

- Stone will be sourced entirely from offsite locations.
- Stone will be sourced either from Sorn Quarry or Tongland Quarry. The traffic and transport assessment consider scenarios where stone will be sourced either 100% from Sorn Quarry or 100% from Tongland.

13.197 Similarly, to the above, in relation to the reinstatement of temporary access tracks (where required), it has been assumed that:

- stone will be entirely be taken offsite and returned to either Sorn Quarry or Tongland Quarry. The traffic and transport assessment consider scenarios where stone is returned either 100% to Sorn Quarry or 100% to Tongland.

Access Arrangements

13.198 Transportation, including deliveries to and from the construction areas will be taken from the existing trunk and local road network. The local area road network is shown on Figures 13.1.1 and 13.1.2.

13.199 Given the nature of construction of the overhead line Connection (i.e. a linear development), SPEN has identified 6 construction access points for the Connection C-K of the KTR Project, identified in Table 13.20 and shown on Figure 5.5.1.

13.200 Further information relating to the proposed construction worksite access locations is included in Appendix 13.2.

Table 13.20: Access Points for Connection C-K of the KTR Project

Worksite Access Reference	Public Road	Components
11	A713	Wood Pole R002R and R003R
13	A713	Wood Pole R004R, R005R, R006R, R007R, R008R and R009R
15	A713	Wood Pole R010R, R011R and R012R
16	A713	Wood Pole R013R, R014R, R015R and R016R
17	A713	Wood Pole R017R, R018R, R019R and R020R
18	A713	Construction Compound
19	A713	Wood Pole R021R, R022R and R023R

13.201 The proposed worksite accesses are preliminary based on SPEN's experience of constructing similar projects. The worksite access locations will be confirmed by the appointed contractor as an integral part of their adopted CTMP, a framework of which is provided in Appendix 13.1.

13.202 All construction vehicles drivers will be instructed to access a worksite via an approved route.

Assessment of Construction Effects (including tree felling)

13.203 As detailed in Chapter 5, the overall construction period duration for the Connection C-K is 24 months.

13.204 Sections of the A77, A76, A75, A713, A712, A711, A702, B741 and Gateside Road public roads will be used by construction traffic (see Figure 13.1.1 and 13.1.2). The assessed number of traffic movements (note: one trip = two movements; i.e. one delivery and one return journey) generated by construction activity are summarised in Table 13.21.

Table 13.21: Vehicle Movements Generated by Tree Felling and Construction Activity for Connection C-K of the KTR Project

Activity/Item Being Transported	Type of Vehicle	Details/deliveries	Total Vehicle Movements
Timber Clearance (within wayleave)	Lorry (24 tonne capacity)	An estimated 0.98ha of timber will be felled resulting in a total of 204 tonnes of timber to be produced.	22
Site Access Tracks	Lorry (20 tonne capacity)	An estimated 15,610 tonnes of stone will be required.	1,561
OHL Construction	Lorry (20 m^3 capacity)	Wooden poles	150
Wiring and Commissioning	Lorry (20 m^3 capacity) and light vans	Wiring and commissioning	156
Reinstatement	Lorry (20 tonne capacity)	An estimated 15,610 tonnes of stone will be required to be removed.	1,561
Other	Private cars, light vans and mini-bus	Construction personnel, other site visitors.	3,764
TOTAL HGV TRAFFIC MOVEMENTS FOR CONNECTION C-K			3,450
TOTAL LGV TRAFFIC MOVEMENTS FOR CONNECTION C-K			3,764
TOTAL ALL TRAFFIC MOVEMENTS FOR CONNECTION C-K			7,214

Predicted Construction Effects

13.205 As indicated in Table 13.21 the total of traffic generated by Connection C-K is estimated as 7,214 movements, of which 3,450 movements will be HGV movements over the 25 months construction period.

13.206 With reference to the indicative construction programme and the anticipated vehicle movements provided by SPEN for each activity, the number of vehicle movements that are anticipated for each month of the construction programme has been calculated. The vehicle movements calculated have then been distributed over each route section as per the assumptions indicated in the Assessment Assumptions section.

13.207 As indicated in the Assessment Assumption section, two separate scenarios have been assessed:

- Scenario 1: 100% stone is sourced/returned from/to Sorn Quarry and delivered to site via the A76, B741 and A713.
- Scenario 2: 100% of stone is sourced/returned from/to Tongland Quarry and delivered to site via the A711, A75 and A713.

13.208 Estimated daily and monthly movements generated by Connection C-K against the programme along with predicted percentages increases on relevant trunk and local roads are shown in Table 13.22 and in Table 13.23 for Scenario 1 and Scenario 2 respectively.

13.209 Construction traffic is estimated at an average of 14 vehicle movements a day over the entire construction period.

13.210 The highest levels of construction traffic are anticipated to occur over a period of 3 months from August 2023 to October 2023 with an average of 64 vehicle movements a day, with a maximum of 70 vehicle movements occurring per day in October 2023. The 'peak period' for the purpose of this assessment is therefore considered to be August 2023 to October 2023 inclusive. Table 13.24 presents a summary of this information by route section for both Scenario 1 and Scenario 2.

13.211 The A77, A76, A75, A711, A712 and A702 currently operate comfortably within their respective capacities (see Table 13.7). The increase in traffic volume on these roads throughout the construction phase of Connection C-K is assessed to be less than 5% or 10% for the A711 in terms of both general traffic (HGV+LGV) and specifically HGV traffic. On this basis, the significance of the effect is assessed to be minor at worst and accordingly not significant. Since the 10% traffic increase threshold has not been exceeded on these routes, no detailed assessment has been undertaken for these public roads.

13.212 For the purpose of the detailed assessment, it has been assumed that embedded mitigation measures and operational procedures as proposed in the framework CTMP (Appendix 13.1) will be in place during construction of the KTR Project and therefore used to inform the judgement of significance of effects.

Table 13.22: Outline Construction Programme and Associated Traffic Assessment for Connection C-K of the KTR Project – Scenario 1

Programme	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	TOTAL
Activity																										
Timber Clearance (within wayleave)	4	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Site Access Tracks	466	1780	643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2889
OHL Construction	0	0	180	274	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	525
Wiring and Commissioning	0	0	0	0	80	118	118	118	118	118	118	101	0	0	0	0	0	0	0	0	0	0	0	0	0	889
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	228	240	240	240	240	240	240	240	240	240	240	240	21	2889
Total no. vehicle movements, all traffic (HGV + LGV)	470	1794	827	274	151	118	118	118	118	118	118	101	228	240	240	240	240	240	240	240	240	240	240	240	21	7214
Total no. vehicle movements, all traffic (HGV + LGV) / day	60	60	70	12	14	6	6	6	6	6	6	6	10	10	10	10	10	10	10	10	10	10	10	10	10	-
Total no. HGV vehicle movements	256	976	403	78	34	20	20	20	20	20	20	22	124	130	130	130	130	130	130	130	130	130	130	130	7	3450
Total no. HGV vehicle movements / day	32	32	36	4	4	2	2	2	2	2	2	2	6	6	6	6	6	6	6	6	6	6	6	6	6	-
Total no. LGV vehicle movements	214	818	424	196	117	98	98	98	98	98	98	79	104	110	110	110	110	110	110	110	110	110	110	110	14	3764
Total no. LGV vehicle movements / day	28	28	34	8	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-
A76 (between B743 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between B743 and A70) % Increase in HGV Traffic	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between Dalmellington and Carsphairn) % Increase in ALL Traffic	2%	2%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	17%	17%	19%	1%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A713 (between Carsphairn and A762) % Increase in ALL Traffic	4%	4%	5%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Carsphairn and A762) % Increase in HGV Traffic	20%	20%	22%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A713 North of Dalry (between A762 and A702) % Increase in ALL Traffic	1%	1%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in ALL Traffic	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in ALL Traffic	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A711 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	-

Programme	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	TOTAL
A711 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in ALL Traffic	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
B741 % Increase in ALL Traffic	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
B741 % Increase in HGV Traffic	85%	85%	85%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	-
Gateside Road % Increase in ALL Traffic	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
Gateside Road % Increase in HGV Traffic	64%	64%	64%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	-

Table 13.23: Outline Construction Programme and Associated Traffic Assessment for Connection C-K of the KTR Project – Scenario 2

Programme	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	TOTAL
Activity																										
Timber Clearance (within wayleave)	4	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
Site Access Tracks	466	1780	643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2889
OHL Construction	0	0	180	274	71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	525
Wiring and Commissioning	0	0	0	0	80	118	118	118	118	118	118	101	0	0	0	0	0	0	0	0	0	0	0	0	0	889
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	228	240	240	240	240	240	240	240	240	240	240	240	21	2889
Total no. vehicle movements, all traffic (HGV + LGV)	470	1794	827	274	151	118	118	118	118	118	118	101	228	240	240	240	240	240	240	240	240	240	240	240	21	7214
Total no. vehicle movements, all traffic (HGV + LGV) / day	60	60	70	12	14	6	6	6	6	6	6	6	10	10	10	10	10	10	10	10	10	10	10	10	10	-
Total no. HGV vehicle movements	256	976	403	78	34	20	20	20	20	20	20	22	124	130	130	130	130	130	130	130	130	130	130	130	7	3450
Total no. HGV vehicle movements / day	32	32	36	4	4	2	2	2	2	2	2	2	6	6	6	6	6	6	6	6	6	6	6	6	6	-
Total no. LGV vehicle movements	214	818	424	196	117	98	98	98	98	98	98	79	104	110	110	110	110	110	110	110	110	110	110	110	14	3764
Total no. LGV vehicle movements / day	28	28	34	8	10	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-
A76 (between B743 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between B743 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in HGV Traffic	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
A713 (between Dalmellington and Carsphairn) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	<1%	<1%	1%	1%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Carsphairn and A762) % Increase in ALL Traffic	4%	4%	5%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Carsphairn and A762) % Increase in HGV Traffic	20%	20%	22%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A713 North of Dalry (between A762 and A702) % Increase in ALL Traffic	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	27%	27%	27%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
A713 South of Dalry (between A702 and A712) % Increase in ALL Traffic	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	16%	16%	16%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A713 (between A712 and B795) % Increase in ALL Traffic	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in HGV Traffic	17%	17%	17%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A713 (between B795 and A75) % Increase in ALL Traffic	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in HGV Traffic	16%	16%	16%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A712 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in ALL Traffic	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-

Programme	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	TOTAL
A711 (between A75 and A762) % Increase in ALL Traffic	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	-
A711 (between A75 and A762) % Increase in HGV Traffic	9%	9%	9%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A702 (between A713 and Moniaive) % Increase in ALL Traffic	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
B741 % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
B741 % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
Gateside Road % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
Gateside Road % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-

Table 13.24: Summary of Construction Traffic Generated on Public Roads within Connection C-K Study Area

Route Section	Construction traffic generated over the 24 months construction programme, by route section							
	Scenario 1				Scenario 2			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}		Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV
A76 (between A77 and B743) [AADT = 11,691]	8 [<1%] {none, not significant}	6 [1%] {none, not significant}	32 [<1%] {none, not significant}	32 [3%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A76 (between A70 and New Cumnock) [AADT = 6,423]	6 [<1%] {none, not significant}	6 [1%] {none, not significant}	32 [<1%] {none, not significant}	32 [3%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A75 (between A762(N) and A712) [AADT= 7,901]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	8 [1%] {none, not significant}	32 [<1%] {none, not significant}	32 [3%] {none, not significant}
A75 (between A712 and A780) [AADT= 11,065]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A75 (between A780 and A76) [AADT= 14,729]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A77 (between A713 and A70) [AADT= 21,311]	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between A77 and Dalmellington) [AADT= 4,085]	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [<1%] {none, not significant}	2 [1%] {none, not significant}
A713 (between Dalmellington and Carsphairn) [AADT= 1,557]	10 [1%] {none, not significant}	8 [4%] {none, not significant}	40 [3%] {none, not significant}	34 [18%] {moderate, significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	10 [1%] {none, not significant}	2 [1%] {none, not significant}
A713 (between Carsphairn and A762) [AADT=1,398]	14 [1%] {none, not significant}	8 [4%] {none, not significant}	62 [4%] {none, not significant}	34 [21%] {moderate, significant}	14 [<1%] {none, not significant}	8 [4%] {none, not significant}	62 [1%] {none, not significant}	34 [21%] {moderate, significant}
A713 (between A762 and A702) [AADT=1,382]	6 [<1%] {none, not significant}	2 [<1%] {none, not significant}	24 [2%] {none, not significant}	2 [<1%] {none, not significant}	12 [1%] {none, not significant}	8 [5%] {minor, not significant}	54 [4%] {none, not significant}	32 [27%] {moderate, significant}
A713 (between A702 and A712) [AADT=2,282]	6 [<1%] {none, not significant}	2 [<1%] {none, not significant}	24 [1%] {none, not significant}	2 [<1%] {none, not significant}	12 [1%] {none, not significant}	8 [3%] {none, not significant}	54 [4%] {none, not significant}	32 [16%] {moderate, significant}

Route Section	Construction traffic generated over the 24 months construction programme, by route section							
	Scenario 1				Scenario 2			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}		Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV
A713 (between A712 and B795) [AADT=1,889]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	8 [3%] {none, not significant}	40 [2%] {none, not significant}	32 [17%] {moderate, significant}
A713 (between B795 and A75) [AADT=3,868]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	6 [3%] {none, not significant}	40 [2%] {none, not significant}	30 [16%] {moderate, significant}
A712 (between A75 and A762) [AADT=685]	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [<1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [1%] {none, not significant}	0 [0%] {none, not significant}
A712 (between A762 and A713) [AADT=1,544]	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [<1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [1%] {none, not significant}	0 [0%] {none, not significant}
A712 (between A713 and Corsock) [AADT=988]	2 [<1%] {none, not significant}	2 [1%] {none, not significant}	8 [1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A712 (between Corsock and A75) [AADT=768]	2 [<1%] {none, not significant}	2 [1%] {none, not significant}	8 [1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [1%] {none, not significant}	2 [<1%] {none, not significant}
A711 (between A75 and A762) [AADT=3,898]	30 [1%] {none, not significant}	0 [0%] {none, not significant}	18 [<1%] {none, not significant}	0 [0%] {none, not significant}	36 [1%] {none, not significant}	6 [2%] {none, not significant}	50 [1%] {none, not significant}	32 [9%] {minor, not significant}
A702 (between A713 and Moniaive) [AADT=243]	2 [1%] {none, not significant}	0 [0%] {none, not significant}	8 [3%] {none, not significant}	0 [0%] {none, not significant}	2 [1%] {none, not significant}	0 [0%] {none, not significant}	8 [3%] {none, not significant}	0 [0%] {none, not significant}
A702 (between Moniaive and A76) [AADT=931]	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	8 [1%] {none, not significant}	0 [0%] {none, not significant}
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	6 [1%] {none, not significant}	6 [16%] {moderate, significant}	32 [3%] {none, not significant}	32 [85%] {major, significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
Gateside Road (Dalmellington) [AADT = 1,280]	6 [<1%] {none, not significant}	6 [12%] {moderate, significant}	32 [2%] {none, not significant}	32 [64%] {major, significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}

Driver Delay

13.213 All public road route sections where the 10% threshold significance criteria has been exceeded operate notably below their theoretical capacity. Table 13.25 provides a comparison of forecast traffic flows on roads during the 'Peak Period' and associated theoretical road capacities.

13.214 Furthermore, the CTMP a framework of which is provided as Appendix 13.1 will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay, CTMP measures include but are not limited to:

- The timing and frequency of vehicle movements being managed to minimise local disruption;
- details of designated access routes will form part of the site induction and training being held for all site operatives and delivery drivers through 'toolbox talks'; and
- where reasonable and practicable, project-related vehicles will avoid travelling in convoys on public roads.

Table 13.25: Baseline Traffic + Traffic Generated by Construction of the C-K Connection of the KTR Project

Route Section	Two-way peak hour movements (2022 Baseline Traffic + Traffic Generated by Construction of the C- K Connection of the KTR Project)	Capacity (vph) (two-way hourly flow)
A713 (between Dalmellington and Carsphairn)	204	1800
A713 (between Carsphairn and A762)	206	1800
A713 (between A762 and A702)	206	1600
A713 (between A702 and A712)	206	1600
A713 (between A712 and B795)	204	1800
A713 (between B795 and A75)	204	1800
A711 (between A75 and A762)	204	1800
B741 (between New Cumnock and Dalmellington)	204	1600
Gateside Road (Dalmellington)	206	1600

13.215 From a review of Table 13.24 it is evident that threshold significance criteria have been exceeded on the A713 (between Carsphairn and the A762) during the 'peak period' of construction activity for both Scenario 1 or Scenario 2.

13.216 The A713 has the residual capacity to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between Carsphairn and the A762) is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.217 Considering Scenario 1, Table 13.24 indicates that threshold significance criteria have been exceeded on the A713 (between Dalmellington and Carsphairn) during the 'peak period' of construction activity. Furthermore, threshold significance criteria have been exceeded on the B741 and Gateside Road both throughout the whole of the entire construction period and during the 'peak period' of construction activity.

13.218 As indicated above, the A713 has the residual capacity (see Table 13.25) to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between Dalmellington and Carsphairn) is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.219 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such show a relatively large traffic increase would represent a major effect, however it is important to note that these route sections have the residual capacity (see Table 13.25) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered not significant in the context of the 2017 EIA Regulations (as amended).

13.220 Considering Scenario 2, Table 13.24 indicates that threshold significance criteria have been exceeded on the A713 (between the A762 and the A75) during the 'peak period' of construction activity. The A713 has the residual capacity (see Table 13.25) to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 is considered to be minor and accordingly considered not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.221 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic, the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.26.

Table 13.26: Projected Collisions

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the P-G via K Connection of the KTR Project)
A713 (between Dalmellington and Carsphairn)	4.7	4.8
A713 (between Carsphairn and A762)	1.3	1.4
A713 (between A762 and A702)	0.0	0.0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1.0	1.1
A713 (between B795 and A75)	1.3	1.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
Gateside Road (Dalmellington)	0	0

13.222 Using this basis of assessment set out above, there would be a negligible increase in PICs in the Study Area as a consequence of the increased traffic generated by Connection C-K of the KTR Project and the significance of the effect would be none and accordingly considered not significant in the context of the 2017 EIA Regulations (as amended).

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.223 The IEMA Guidelines define severance as 'the perceived division that can occur within a community when it becomes separated by a major traffic artery'. Severance may result from a road carrying large traffic flows or a physical barrier created by the road itself, and the IEMA guidelines suggest that consideration is given to the severity of existing severance and how this might be exacerbated by proposed construction traffic generated by a development. As shown in Table 13.25, the roads within the C-K Connection Study Area will continue to operate below capacity, even with the addition of traffic generated by construction of the C-K Connection. Severance should not occur when there is such a notable level of residual road capacity and traffic generated by the C-K Connections will be relatively low.

13.224 For similar reasoning, pedestrian delay is not considered to be an existing problem on any of the route sections within the C-K Study Area, nor one that shall be created by the addition of proposed construction traffic to these routes.

13.225 Pedestrian amenity is broadly defined by the IEMA as the 'relative pleasantness of a journey', and this definition also takes into account fear and intimidation. The IEMA Guidelines suggest that 'a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flows (or its lorry component) is halved or doubled. The construction of the Connection C-K is predicted to

generate less than double the current HGV flows on all route sections within the C-K Study Area and therefore the effect on pedestrian amenity is not considered to be significant.

13.226 The section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route, and intersects both Core Path 224 and Core Path 504 (the Southern Upland Way). As such, the CTMP will include a commitment to provide signage to warn drivers of the presence of public paths and cycling routes. Accordingly, appropriate signage advising of dates and hours of construction activity will be installed on the 'core path network' in advance of road crossing locations to warn users of the potential of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of the Southern Upland Way, Core Paths 21 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.227 Construction routes traverse St John's Town of Dalry where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of project generated construction traffic engaged in the C-K Connection.

13.228 Overall based on professional judgement, the construction traffic generated by Connection C-K will have a minor (and therefore not significant in the context of the 2017 EIA Regulations (as amended)) effect upon community receptors.

Proposed Additional Mitigation

13.229 No further mitigation is proposed in addition to the embedded mitigation measures and operational procedures as proposed in the framework CTMP.

13.230 The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded upon as appropriate by SPEN's appointed contractor(s) in consultation with Roads Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.

Residual Construction Effects

13.231 Overall, due to the implementation of the embedded mitigation measures and operational procedures as proposed in the framework CTMP, the significance of the residual effects associated with the levels of traffic anticipated during the construction of the C-K Connection is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

Assessment of Cumulative Effects

13.232 An assessment of the likely construction effects of the C-K Connection and other committed developments as well as other Connections forming part of the KTR Project has been undertaken to robustly take account of the likely interrelation of overlapping construction programmes and the resultant cumulative effect upon the local road network.

13.233 The overall approach for the cumulative assessments, including a list of developments considered, is outlined in Chapter 3

13.234 The following developments have been included with the C-K Connection of the KTR Project for the cumulative traffic and transport assessment:

- Knockman Hill Wind Farm (Proposed Wind Turbine Project at Knockman Hill, Milnmark Farm Dumfries and Galloway Environmental Statement (ES) 2009);
- Mochrum Fell Wind Farm (Mochrum Fell Wind Farm ES, 2009);
- Shepherds Rig Wind Farm (Shepherds Rig Wind Farm ES, 2020);
- Troston Loch Wind Farm (Troston Loch Wind Farm EIA Report, 2019);
- Cornharrow Wind Farm (Cornharrow Wind Farm EIA Report, 2020);
- Glenshimmeroch Wind Farm (Glenshimmeroch Wind Farm EIA Report, 2018); and
- Fell Wind Farm (Fell Wind Farm EIA Report, 2019).

13.235 In addition to the above developments, construction of the other KTR Project Connections (i.e. P-G via K (including decommissioning of N and R route (north), EG, BG Deviation and G-T (including decommissioning of R route (south)) will overlap with the construction phase of Connection C-K of the KTR Project between August 2023 and August 2025 inclusive.

Wind Farm Access Arrangements

- The following assumptions have been made to inform the assessment, as derived from review of relevant supporting ESs/EIA reports for the wind farm projects:
- Construction traffic accessing the proposed Knockman Hill Wind Farm will do so from the north via the A713.
- Construction traffic accessing the proposed Mochrum Fell Wind Farm site will predominantly do so from the south via the A713 (75%) although a proportion would come from the north via the A713 construction activity (25%).
- All construction traffic accessing the proposed Shepherds Rig Wind Farm site will do so from the north via the A713.
- All construction traffic accessing the proposed Troston Loch Wind Farm site will do so from the north via the A713.
- Construction traffic accessing the Cornharrow Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Glenshimmeroch Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Fell Wind Farm site will route from both the north (70%) and south (30%) via the A712.

Total Cumulative Construction Effects

13.236 This section assesses the maximum development case assuming that all the developments being considered as part of the cumulative assessment will proceed to construction and that the cumulative effects are the total likely effects created by the construction of the C-K Connection in combination with:

- Wind farm developments (Knockman Hill, Mochrum Fell, Shepherds Rig, Troston Loch, Cornharrow, Glenshimmeroch, Fell); and
- other KTR Project Connections; P-G via K, E-G, BG Deviation and G-T.

13.237 It is uncertain if and when the construction phases of the wind farms and C-K Connection might overlap. To robustly assess cumulative traffic generation, the cumulative assessment has been undertaken for route sections within the KTR Study Area that are utilised by other committed developments as well as other Connections and developments forming part of the KTR Project. This is based on the sum of the average traffic generation of the developments listed above combined with peak traffic generation associated with C-K Connection. This is considered to represent a maximum case scenario as, in reality, it is considered highly improbable that peak traffic generation for all developments will align.

13.238 For the purpose of the assessment it has been assumed that:

- 50% of stone will be sourced entirely from the onsite quarries with the remaining 50% being sourced from both Sorn Quarry and Tongland Quarry.

13.239 Similarly, to the above, in relation to the reinstatement of temporary access tracks, it has been assumed that:

- 50% of stone will be reinstated within the onsite quarries and the remaining 50% being returned to both Sorn Quarry and Tongland Quarry.

13.240 Table 13.27 presents a summary of predicted traffic volume increases over the entire construction period of C-K Connection and during the 'peak period' of construction activity (August 2023 to October 2023 inclusive). The table below shows the proportional increase in traffic generated for route sections within the KTR Project Study Area that are utilised by other committed developments as well as other Connections and developments forming part of the KTR Project.

Table 13.27: Summary of Predicted Traffic Volume Increase – Total Likely Cumulative Impact for C-K Connection

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
A713 (between A77 and Dalmellington) [AADT = 4,085]	217 5% Minor	61 26% Moderate	337 8% Minor	93 39% Moderate
A713 (between Dalmellington and Carsphairn) [AADT = 1,557]	255 16% Moderate	97 53% Moderate	375 24% Moderate	129 71% Major
A713 (between Carsphairn and A762) [AADT = 1,398]	201 14% Moderate	87 54% Moderate	338 24% Moderate	127 79% Major
A713 (between A762 and A702) [AADT = 1,382]	74 5% Minor	28 24% Moderate	118 9% Minor	48 41% Moderate
A713 (between A702 and A712) [AADT = 2,282]	74 3% None	28 14% Moderate	118 5% Minor	48 24% Moderate
A713 (between A712 and B795) [AADT = 1,889]	74 4% None	32 17% Moderate	128 7% Minor	54 29% Moderate
A713 (between B795 and A75) [AADT = 3,868]	82 2% None	30 15% Moderate	134 3% None	52 29% Moderate
A712 (between A713 and Corsock) [AADT = 988]	77 8% Minor	28 39% Moderate	139 14% Moderate	46 64% Major
A712 (between Corsock and A75) [AADT = 768]	55 7% Minor	19 25% Moderate	97 13% Moderate	31 41% Moderate
A711 (between A75 and A762) [AADT=3,898]	30 <1% None	24 7% Minor	54 1% None	50 15% Moderate
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	40 4% None	40 108% Major	40 4% None	40 108% Major
Gateside Road (Dalmellington) [AADT = 1,280]	36 3% None	36 73% Major	36 3% None	36 73% Major

Predicted Cumulative Effects during Construction

Driver Delay

13.241 From a review of Table 13.27, it is evident that threshold significance criteria have been exceeded on the A713 (between the A77 and the A75), A712, A711, B741 and Gateside Road throughout the duration of the entire construction period.

13.242 The A713 has the residual capacity to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between the A77 and the A75) is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.243 Both the B741 and Gateside Road generally experience low HGV traffic levels and this assessment has therefore shown a relatively large traffic increase which would represent a major effect. However, it is important to note that these route sections have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.244 The A711 and A712 have the residual capacity to readily accommodate the expected additional traffic flow. Again, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delays for users of the A711 and A712 is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic volume, then the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.28.

Table 13.28: Projected Collisions – Total Likely Cumulative Impacts

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the C-K Connection + Committed Developments + other KTR Project Connections)
A713 (between A77 and Dalmellington)	10	10.5
A713 (between Dalmellington and Carsphairn)	4.7	5.5
A713 (between Carsphairn and A762)	1.3	1.5
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A712 (between A713 and Corsock)	1	1.1
A712 (between Corsock and A75)	1	1.1
A711 (between A75 and A762)	1.3	1.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
Gateside Road	0	0

13.245 Using this basis of assessment, there would be a small increase (less than 1 collision) in PICs for the A713 (between the A77 and the A762) as a consequence of the increased traffic generated cumulatively. Professional judgment suggests that the peak cumulative traffic, which would be temporary (seven months duration), would result in a minor effect (not significant) upon road safety if unmitigated.

13.246 On the other route sections within the Study Area, there would be a negligible increase in PICs as a consequence of the increased traffic generated cumulatively by the developments and the significance of the effect would be none and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.247 The roads within the C-K Connection Study Area will continue to operate below capacity, even with the addition of traffic generated cumulatively. Severance and pedestrian delay should not occur when there is such a notable level of residual road capacity.

13.248 Cumulatively, the only road section where HGV flows are expected to double, or more is the B741.

13.249 The CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will minimise the effect of construction traffic on local communities, measures include but are not limited to:

- temporary construction site signage will be erected on the local road network in advance of local communities to warn people of construction activities and associated construction vehicles;
- SPEN shall nominate a Community Liaison Officer (CLO); the CLO will be responsible for keeping the local community informed of progress on the site and warning them of upcoming activities which may give rise to increased construction vehicle movements; and
- all site staff will be informed about traffic management arrangements and procedures via the site induction.

13.250 There is local footway provision in Dalmellington and New Cumnock (B741). Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic generated cumulatively. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the B741.

13.251 The section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersects both Core Path 224 and Core Path 504 (the Southern Upland Way). As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of construction activity will be installed on the 'core path network' in advance of road crossing locations to warn users of the potential of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of the Southern Upland Way, Core Paths 21 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.252 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of project generated construction traffic.

13.253 Overall based on professional judgement the construction traffic generated cumulatively will have a minor effect upon community receptors and is therefore not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.254 As recorded in the CTMP, if another development, such as the wind farms considered in the cumulative assessment appears likely to undergo construction at the same time as the C-K Connection, SPEN will liaise with the other developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.

Residual Cumulative Effects during Construction

13.255 Overall, due to the implementation of the embedded mitigation measures and operational procedures as proposed in the framework CTMP and the proposed requirement for SPEN to liaise with other developers regarding the scheduling of deliveries and potential means of reducing the effect of combined construction, the residual effects associated with the levels of traffic generated cumulatively are considered to be minor and accordingly not significant in the context of the 2017 EIA Regulations (as amended).

Monitoring

13.256 The requirement for construction monitoring will be agreed with SPEN, Roads Authority representatives and other relevant stakeholders prior to commencement of works.

13.257 If deemed necessary, SPEN will enter into a legal agreement under Section 96 of the Roads (Scotland) Act 1984 to formalise an inspection and maintenance regime with the Roads Authority to contribute to maintenance of those roads impacted by HGV movements associated with the C-K Connection.

Summary of Effects

13.258 A summary of effects before and after proposed additional mitigation measures for the C-K Connection is provided in Table 13.29.

Table 13.29: Summary of Effects for Public Roads Within the C-K Connection Study Area

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
Construction Effects			
Driver Delay	Minor	No additional mitigation is proposed beyond the embedded measures and operational procedures as proposed as good practice in the framework CTMP. The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded as appropriate by SPEN's appointed contractor(s) in consultation with Roads Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor
Cumulative Effects			
Driver Delay	Minor	If the construction of any notably sized development(s), e.g. wind farm development(s) (as considered in the cumulative assessment) appears likely to overlap with the KTR Project, SPEN will liaise with the appropriate developer organisation regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor

13.259 Based on the assessment summary in Table 13.29, the additional traffic predicted to be generated on public roads throughout the C-K Connection Study Area during the construction phase is anticipated to result in minor effects and therefore considered to be not significant.

Earlstoun to Glenlee

13.260 The Earlstoun to Glenlee (E-G) Connection of the KTR Project is shown in Figure 4.4.

13.261 A new 132kV single circuit OHL, of approximately 1.6km in length, is required between the hydroelectric power station at Earlstoun and the existing substation at Glenlee. The OHL will be supported on a

'trident' design wood pole. A short section of approximately 250m of underground cable will be required to connect into the Glenlee substation.

13.262 In relation to the stone required for construction of the E-G Connection of the KTR Project, it has been assumed that:

- Stone will be sourced entirely from offsite locations.
- Stone will be sourced either from Sorn Quarry or Tongland Quarry. The traffic and transport assessment consider scenarios where stone will be sourced either 100% from Sorn Quarry or 100% from Tongland.

13.263 Similarly, to the above, in relation to the reinstatement of temporary access tracks (where required), it has been assumed that:

- stone will be entirely be taken offsite and returned to either Sorn Quarry or Tongland Quarry. The traffic and transport assessment consider scenarios where stone is returned either 100% to Sorn Quarry or 100% to Tongland.

Access Arrangements

13.264 Transportation, including deliveries to and from the construction areas will be taken from the existing trunk and local road network. The local area road network is shown on Figures 13.1.1 and 13.1.2.

13.265 Given the nature of construction of the overhead line Connection (including cable section) (i.e. a linear development), SPEN has identified 4 construction access points for the Connection E-G of the KTR Project, identified in Table 13.30 and shown on Figure 5.5.1.

13.266 Further information relating to the proposed construction worksite access locations is included in Appendix 13.2.

Table 13.30: Access Points for Connection E-G of the KTR Project

Worksite Access Reference	Public Road	Components
27	A713	Wood Pole EG0016
28	A762	Wood Poles EG0015, EG0014, EG0013, EG0012, EG0011, EG0010, EG009, EG008 and EG007
29	A762	Wood Poles EG006, EG005, EG004, EG003 and EG002
33	U2s	Wood Pole EG001

13.267 The proposed worksite accesses are preliminary based on SPEN's experience of constructing similar projects. The worksite access locations will be confirmed by the appointed contractor as an integral of their adopted CTMP, a framework of which is provided in Appendix 13.1.

13.268 All construction vehicles drivers will be instructed to access a worksite via an approved route.

Assessment Construction Effects (including tree felling)

13.269 As detailed in Chapter 5, the overall construction period duration for E-G Connection is 41 months.

13.270 Sections of the A77, A76, A75, A713, A712, A711, A702, A762, B741, U2s and Gateside Road public roads will be used by construction vehicles (see Figure 13.1.1 and 13.1.2). The assessed number of traffic movements (note: one trip = two movements; i.e. one delivery and one return journey) generated by construction activity are summarised Table 13.31.

13.271 As outlined in Chapter 3, tree felling (or loss due to windthrow if not felled) of the areas outwith the 70m wayleave will result in indirect effects on the wider environment and therefore traffic generated by tree felling outside the wayleave have been included in the traffic assessment as part of a robust EIA[7]. This is based on the assumption that felling both within the wayleave and for windthrow will happen concurrently.

Table 13.31: Vehicle Movements Generated by Tree Felling and Construction Activity for Connection E-G of the KTR Project

Activity/Item Being Transported	Type of Vehicle	Details/deliveries	Total Vehicle Movements
Timber Clearance (within wayleave)	Lorry (24 tonne capacity)	An estimated 1.9ha of timber will be felled resulting in a total of 349 tonnes of timber to be produced.	30
Timber Clearance (windthrow areas)	Lorry (24 tonne capacity)	An estimated 0.68ha of timber will be felled resulting in a total of 227 tonnes of timber to be produced.	26
Site Access Tracks	Lorry (20 tonne capacity)	An estimated 24,027 tonnes of stone will be required.	2,402
OHL Construction	Lorry (20 m^3 capacity)	Wooden poles	96
Wiring and Commissioning[8]	Lorry (20 m^3 capacity) and light vans	Wiring and commissioning	92
Reinstatement	Lorry (20 tonne capacity)	An estimated 24,027 tonnes of stone will be required to be removed.	2,402
Other	Private cars, light vans and mini-bus	Construction personnel, other site visitors	3,163
TOTAL HGV TRAFFIC MOVEMENTS FOR CONNECTION E-G			5,048
TOTAL LGV TRAFFIC MOVEMENTS FOR CONNECTION E-G			3,163
TOTAL ALL TRAFFIC MOVEMENTS FOR CONNECTION E-G			8,211

Predicted Construction Effects

13.272 As indicated in Table 13.31 the total of traffic generated by E-G Connection is estimated as 8,211 movements, of which 5,048 movements will be HGV movements over the 41 months construction period.

13.273 With reference to the indicative construction programme and the anticipated vehicle movements provided by SPEN for each construction related activity, the number of vehicle movements that are anticipated for each month of the construction programme has been calculated. The vehicle movements calculated have then been distributed over each route section as per the assumptions indicated in the Assessment Assumptions section.

13.274 As indicated in the Assessment Assumption section, two separate scenarios have been assessed:

- Scenario 1: 100% stone is sourced/returned from/to Sorn Quarry and delivered to site via the A76, B741 and A713.
- Scenario 2: 100% of stone is sourced/returned from/to Tongland Quarry and delivered to site via the A711, A75 and A713.

13.275 Estimated daily and monthly movements generated by E-G Connection against the programme along with predicted percentages increases on relevant trunk and local roads are shown in Table 13.32 and in Table 13.33 for Scenario 1 and Scenario 2 respectively.

13.276 Construction traffic is estimated at an average of 8 vehicle movements a day over the entire construction period, with a maximum of 32 vehicle movements occurring per day between March 2022 and June 2022. The 'peak period' for the purpose of this assessment is therefore considered to be March 2022 to June 2022 inclusive. Table 13.34 presents a summary of this information by route section for both Scenario 1 and Scenario 2.

13.277 The A77, A76, A75, A711, A712, A702 currently operate comfortably within their respective capacities (see Table 13.7). The increase in traffic volume on these roads throughout the construction phase of E-G Connection is assessed to be less than 5% or 10% for the A711 in terms of both general traffic (HGV+LGV) and specifically HGV traffic. On this basis, the significance of the effect is assessed to be minor and accordingly insignificant. Since the 10% traffic increase threshold has not been exceeded on these routes, no detailed assessment has been undertaken for these public roads.

13.278 For the purpose of the detailed assessment, it has been assumed that embedded mitigation measures and operational procedures as proposed in the framework CTMP (Appendix 13.1) will be in place during

[7] On this basis assessment of traffic effects associated with the wayleave felling has not been presented separately as a secondary effects.

[8] This includes an allowance for HGV movements associated with the construction of the 250m section of underground cable to connect into the Glenlee substation

construction of the KTR Project and therefore have been used to inform the judgement of significance of effects.

Table 13.32: Outline Construction Programme and Associated Traffic Assessment for Connection E-G of the KTR Project – Scenario 1

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	TOTAL
Activity																																										
Timber Clearance (within wayleave)	8	8	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
Timber Clearance (windthrow areas)	6	6	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
Site Access Tracks	904	888	888	818	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3498**
OHL Construction	0	0	0	0	40	240	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**336**
Wiring and Commissioning	0	0	0	0	0	16	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	15	0	0	0	0	0	0	0	0	0	0	0	0	**823**
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	276	290	290	290	290	290	290	290	290	290	290	32	**3498**
Total no. vehicle movements, all traffic (HGV + LGV)	918	902	902	832	40	256	92	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	15	276	290	290	290	290	290	290	290	290	290	290	32	**8211**
Total no. vehicle movements, all traffic (HGV + LGV) / day	32	32	32	32	10	12	12	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	12	12	12	12	12	12	12	12	12	12	12	12	-
Total no. HGV vehicle movements	634	624	624	576	12	70	20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	190	200	200	200	200	200	200	200	200	200	200	12	**5048**
Total no. HGV vehicle movements / day	22	22	22	22	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	8	8	8	8	8	8	8	8	8	8	8	-
Total no. LGV vehicle movements	284	278	278	256	28	186	72	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	13	86	90	90	90	90	90	90	90	90	90	90	20	**3163**
Total no. LGV vehicle movements / day	10	10	10	10	6	8	8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	-
A76 (between B743 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between B743 and A70) % Increase in HGV Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in ALL Traffic	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	11%	11%	11%	11%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
A713 (between Carsphairn and A762) % Increase in ALL Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Carsphairn and A762) % Increase in HGV Traffic	13%	13%	13%	13%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
A713 North of Dalry (between A762 and A702) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A711 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	-
A711 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A762 (between A713 and U2s) % Increase in ALL Traffic	8%	8%	8%	8%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A762 (between A713 and U2s) % Increase in HGV Traffic	84%	84%	84%	84%	9%	9%	9%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	-
B741 % Increase in ALL Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	
B741 % Increase in HGV Traffic	54%	54%	54%	54%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	
U2s % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
U2s % Increase in HGV Traffic	4%	4%	4%	4%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
Gateside Road % Increase in ALL Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	-
Gateside Road % Increase in HGV Traffic	41%	41%	41%	41%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	13%	-

Table 13.33: Outline Construction Programme and Associated Traffic Assessment for Connection E-G of the KTR Project – Scenario 2

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	TOTAL
Activity																																										
Timber Clearance (within wayleave)	8	8	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**30**
Timber Clearance (windthrow areas)	6	6	6	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**26**
Site Access Tracks	904	888	888	818	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3498**
OHL Construction	0	0	0	0	40	240	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**336**
Wiring and Commissioning	0	0	0	0	0	16	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	15	0	0	0	0	0	0	0	0	0	0	0	0	**823**
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	276	290	290	290	290	290	290	290	290	290	290	32	**3498**
Total no. vehicle movements, all traffic (HGV + LGV)	918	902	902	832	40	256	92	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	15	276	290	290	290	290	290	290	290	290	290	290	32	**8211**
Total no. vehicle movements, all traffic (HGV + LGV) / day	32	32	32	32	10	12	12	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	12	12	12	12	12	12	12	12	12	12	12	12	**-**
Total no. HGV vehicle movements	634	624	624	576	12	70	20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	190	200	200	200	200	200	200	200	200	200	200	200	**5048**
Total no. HGV vehicle movements / day	22	22	22	22	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	8	8	8	8	8	8	8	8	8	8	8	8	**-**
Total no. LGV vehicle movements	284	278	278	256	28	186	72	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	13	86	90	90	90	90	90	90	90	90	90	90	20	**3163**
Total no. LGV vehicle movements / day	10	10	10	10	6	8	8	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	**-**
A76 (between B743 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between B743 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in HGV Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Carsphairn and A762) % Increase in ALL Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Carsphairn and A762) % Increase in HGV Traffic	13%	13%	13%	13%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
A713 North of Dalry (between A762 and A702) % Increase in ALL Traffic	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	18%	18%	18%	18%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	-
A713 South of Dalry (between A702 and A712) % Increase in ALL Traffic	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	10%	10%	10%	10%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A713 (between A712 and B795) % Increase in ALL Traffic	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in HGV Traffic	11%	11%	11%	11%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A713 (between B795 and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in HGV Traffic	10%	10%	10%	10%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A712 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A711 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A711 (between A75 and A762) % Increase in HGV Traffic	6%	6%	6%	6%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A702 (between A713 and Moniaive) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A762 (between A713 and U2s) % Increase in ALL Traffic	8%	8%	8%	8%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A762 (between A713 and U2s) % Increase in HGV Traffic	84%	84%	84%	84%	9%	9%	9%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	27%	-
B741 % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	
B741 % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	
U2s % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
U2s % Increase in HGV Traffic	4%	4%	4%	4%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
Gateside Road % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
Gateside Road % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-

Table 13.34: Summary of Construction Traffic Generated on Public Roads within Connection E-G Study Area

Route Section	Construction traffic generated over the 41 months construction programme, by route section							
	Scenario 1				Scenario 2			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}		Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV
A76 (between B743 and A70) [AADT = 11,691]	4 [<1%] {none, not significant}	4 [<1%] {none, not significant}	22 [<1%] {none, not significant}	22 [2%] {none, insignificant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A76 (between A70 and New Cumnock) [AADT = 6423]	4 [<1%] {none, not significant}	4 [<1%] {none, not significant}	22 [<1%] {none, not significant}	22 [2%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A75 (between A762(N) and A712) [AADT= 7,901]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	4 [<1%] {none, not significant}	22 [<1%] {none, not significant}	22 [2%] {none, not significant}
A75 (between A712 and A780) [AADT= 11,065]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A75 (between A780 and A76) [AADT= 14,729]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A77 (between A713 and A70) [AADT= 21,311]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between A77 and Dalmellington) [AADT= 4,085]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between Dalmellington and Carsphairn) [AADT= 1,557]	6 [<1%] {none, not significant}	6 [2%] {none, not significant}	24 [1%] {none, not significant}	22 [11%] {moderate, significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between Carsphairn and A762) [AADT=1,398]	8 [1%] {none, not significant}	6 [3%] {none, not significant}	30 [2%] {none, not significant}	22 [13%] {moderate, significant}	8 [1%] {none, not significant}	6 [3%] {none, not significant}	30 [2%] {none, not significant}	22 [13%] {moderate, significant}
A713 (between A762 and A702) [AADT=1,382]	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	4 [3%] {none, not significant}	28 [2%] {none, not significant}	22 [18%] {moderate, significant}
A713 (between A702 and A712) [AADT=2,282]	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	4 [2%] {none, not significant}	28 [1%] {none, not significant}	22 [10%] {moderate, significant}
A713 (between A712 and B795) [AADT=1,889]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {minor, not significant}	2 [<1%] {none, not significant}	6 [<1%] {none, not significant}	4 [2%] {none, not significant}	24 [1%] {none, not significant}	22 [11%] {moderate, significant}

Route Section	Construction traffic generated over the 41 months construction programme, by route section							
	Scenario 1				Scenario 2			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}		Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV	HGV + LGV	HGV
A713 (between B795 and A75) [AADT=3,868]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	6 [<1%] {none, not significant}	4 [2%] {none, not significant}	24 [1%] {none, not significant}	22 [10%] {moderate, significant}
A712 (between A75 and A762) [AADT=685]	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [<1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [<1%] {none, not significant}	0 [0%] {none, not significant}
A712 (between A762 and A713) [AADT=1,544]	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [<1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [<1%] {none, not significant}	0 [0%] {none, not significant}
A712 (between A713 and Corsock) [AADT=988]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A712 (between Corsock and A75) [AADT=768]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A711 (between A75 and A762) [AADT=3,898]	22 [1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	26 [1%] {none, not significant}	4 [1%] {none, not significant}	22 [1%] {none, not significant}	22 [6%] {minor, not significant}
A702 (between A713 and Moniaive) [AADT=243]	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [1%] {none, not significant}	0 [0%] {none, not significant}
A702 (between Moniaive and A76) [AADT=931]	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [<1%] {none, not significant}	0 [0%] {none, not significant}	2 [<1%] {none, not significant}	0 [0%] {none, not significant}	4 [<1%] {none, not significant}	0 [0%] {none, not significant}
A762 (between A713 and U2s) [AADT = 356]	8 [2%] {none, not significant}	6 [17%] {moderate, significant}	30 [8%] {minor, not significant}	22 [84%] {major, significant}	8 [2%] {none, not significant}	6 [17%] {moderate, significant}	30 [8%] {minor, not significant}	22 [84%] {major, significant}
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	26 [2%] {none, not significant}	4 [11%] {moderate, significant}	26 [2%] {none, not significant}	26 [54%] {moderate, significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
U2s [AADT = 199]	2 [<1%] {none, not significant}	2 [5%] {minor, not significant}	2 [1%] {none, not significant}	2 [4%] {none, not significant}	2 [<1%] {none, not significant}	2 [5%] {minor, not significant}	2 [1%] {none, not significant}	2 [4%] {none, not significant}
Gateside Road (Dalmellington) [AADT = 1,280]	26 [2%] {none, not significant}	4 [8%] {minor, not significant}	26 [2%] {none, not significant}	26 [41%] {moderate, significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}

Driver Delay

13.279 All public road route sections where the 10% threshold significance criteria has been exceeded operate notably below their theoretical capacity. Table 13.35 provides a comparison of forecast traffic flows on roads during the Peak Period and associated theoretical road capacities.

13.280 Furthermore, the CTMP a framework of which is provided as Appendix 13.1 will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay, CTMP measures include but are not limited to:

- The timing and frequency of vehicle movements being managed to minimise local disruption;
- details of designated access routes forming part of the site induction and training being held for all site operatives and delivery drivers through 'toolbox talks'; and
- where reasonable and practicable, project-related vehicles will avoid travelling in convoys on public roads.

Table 13.35: Baseline Traffic + Traffic Generated by Construction of the E-G Connection of the KTR Project

Route Section	Two-way peak hour movements (2022 Baseline Traffic + Traffic Generated by Construction of the E-G Connection of the KTR Project)	Capacity (vph) (two-way hourly flow)
A713 (between Dalmellington and Carsphairn)	202	1800
A713 (between Carsphairn and A762)	204	1800
A713 (between A762 and A702)	204	1600
A713 (between A702 and A712)	204	1600
A713 (between A712 and B795)	202	1800
A713 (between B795 and A75)	202	1800
A762 (between A713 and U2s)	54	280
B741 (between New Cumnock and Dalmellington)	204	1600
Gateside Road (Dalmellington)	204	1600

13.281 From review of Table 13.34 it is evident that threshold significance criteria have been exceeded on the A713 (between Carsphairn and the A762) during the 'peak period' of construction activity and on the A762 throughout the duration of the entire construction period for both Scenario 1 and Scenario 2.

13.282 The A713 (between Carsphairn and the A762) has the residual capacity (see Table 13.35) to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between Carsphairn and the A762) is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.283 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the A713 and the U2s) to provide passing places will be implemented; achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (see Embedded Mitigation Measures Section). On this basis, the significance of effect on driver delay for users of the A762 is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.284 Considering Scenario 1, Table 13.32 indicates that threshold significance criteria have been exceeded on the A713 (between Dalmellington and Carsphairn) and Gateside Road during the 'peak period' of construction activity and on the B741 both during the 'peak period' of construction activity and throughout the duration of the entire construction period.

13.285 The A713 (between Dalmellington and Carsphairn) has the residual capacity (see Table 13.35) to readily accommodate the expected additional traffic flow. On this basis, the significance of effect on driver delay for users of the A713 (between Dalmellington and Carsphairn) is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.286 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such show a relatively large traffic increase would represent a major effect, however it is important to note that these route sections have the residual capacity (see Table 13.35) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.287 Considering Scenario 2, Table 13.33 indicates that threshold significance criteria have been exceeded on the A713 (between the A762 and the A702) and the A713 (between the A712 and B795) during the 'peak period' of construction activity. The A713 has the residual capacity (see Table 13.35) to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.288 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic, the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis is summarised in Table 13.36Error! Reference source not found..

Table 13.36: Projected Collisions

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the E-G Connection of the KTR Project)
A713 (between Dalmellington and Carsphairn)	4.7	4.8
A713 (between Carsphairn and A762)	1.3	1.4
A713 (between A762 and A702)	0.0	0.0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1.0	1.1
A713 (between B795 and A75)	0.0	0.0
A762 (between A713 and U2s)	0.3	0.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
Gateside Road (Dalmellington)	0.0	0.0

13.289 Using this basis of assessment, there would be a negligible increase in PICs in the Study Area as a consequence of the increased traffic generated by Connection E-G of the KTR project and the significance of the effect would be none and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.290 The IEMA Guidelines define severance as 'the perceived division that can occur within a community when it becomes separated by a major traffic artery'. Severance may result from a road carrying large traffic flows or a physical barrier created by the road itself, and the IEMA guidelines suggest that consideration is given to the severity of existing severance and how this might be exacerbated by proposed construction traffic generated by a development. As shown in Table 13.35, the roads within the Connection E-G Study Area will continue to operate below capacity, even with the addition of traffic

generated by construction of the E-G Connection . Severance should not occur when there is such a notable level of residual road capacity and traffic generated by the E-G Connection will be relatively low.

13.291 For similar reasoning, pedestrian delay is not considered to be an existing problem on any of the route sections within the E-G Study Area, nor one that shall be created by the addition of proposed construction traffic to these routes.

13.292 Pedestrian amenity is broadly defined by the IEMA as the 'relative pleasantness of a journey', and this definition also takes into account fear and intimidation. The IEMA Guidelines suggest that 'a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flows (or its lorry component) is halved or doubled. The construction of Connection E-G is predicted to generate less than double the current HGV flows on all route sections within the E-G Study Area and therefore the effect on pedestrian amenity is not considered to be significant.

13.293 Several construction access routes overlap and/or intersect with existing recreational routes, including the following route sections (see Figure 13.2.1):

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route; and
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way).

13.294 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of the potential of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of the Southern Upland Way, Core Paths 21, 30 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.295 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic engaged in the E-G Connection.

13.296 Overall based on professional judgement the construction traffic generated by E-G Connection will have a minor effect upon community receptors and is therefore not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.297 No further mitigation is proposed in addition to the embedded mitigation measures and operational procedures as proposed in the framework CTMP.

13.298 The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded upon as appropriate by SPEN's appointed contractor(s) in consultation with Roads Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.

Residual Construction Effects

13.299 Overall, due to the implementation of both the infrastructure improvements to the A762 (between the A713 and the U2s) as part of the Glenlee substation extension works (therefore, embedded mitigation for the EG Connection), in conjunction with the embedded mitigation measures and operational procedures as proposed in the framework CTMP the significance of the residual effects associated with the levels of traffic anticipated during the construction of the E-G Connection is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Assessments of Cumulative Effects

13.300 An assessment of the likely construction effects of the E-G Connection and other committed developments as well as other Connections forming part of the KTR Project has been undertaken to robustly take account of the likely interrelation of overlapping construction programmes and the resultant cumulative effect upon the local road network.

13.301 The overall approach for the cumulative assessments, including a list of developments considered, is outlined in Chapter 3

13.302 The following developments have been included with Connection E-G of the KTR Project for the cumulative traffic and transport assessment:

- Knockman Hill Wind Farm (Proposed Wind Turbine Project at Knockman Hill, Milnmark Farm Dumfries and Galloway Environmental Statement (ES) 2009);
- Mochrum Fell Wind Farm (Mochrum Fell Wind Farm ES, 2009);
- Shepherds Rig Wind Farm (Shepherds Rig Wind Farm ES, 2020);
- Troston Loch Wind Farm (Troston Loch Wind Farm EIA Report, 2019);
- Cornharrow Wind Farm (Cornharrow Wind Farm EIA Report, 2020);
- Glenshimmeroch Wind Farm (Glenshimmeroch Wind Farm EIA Report, 2018); and
- Fell Wind Farm (Fell Wind Farm EIA Report, 2019).

13.303 In addition to the above wind farms, traffic associated with the construction of the proposed Glenlee Substation Extension has been included in order to ensure a robust EIA; the assessment has been undertaken on the basis of an overlap with the KTR construction enabling works between March 2022 and June 2022.

13.304 In addition to the above developments, construction of the other KTR Project Connections (i.e. Connections P-G via K (including decommissioning of N and R route (north)), C-K, BG Deviation and G-T(including the decommissioning of R route (south) will overlap with the construction phase of the Connection E-G of the KTR Project between March 2022 and August 2025 inclusive.

Glenlee Substation Extension Access Arrangements

13.305 For the purpose of the assessment, it has been assumed that:

- Construction traffic associated with the Glenlee Substation Extension will access from the south via the A713 (45%), the north via the A713 (45%) and a proportion would come from the east via the A712 (10%).

Wind Farm Access Arrangements

13.306 The following assumptions have been made to inform the assessment, as derived from review of relevant supporting ESs/EIA reports for the wind farm projects:

- Construction traffic accessing the proposed Knockman Hill Wind Farm will do so from the north via the A713.
- Construction traffic accessing the proposed Mochrum Fell Wind Farm site will predominantly do so from the south via the A713 (75%) although a proportion would come from the north via the A713 (25%).
- All construction traffic accessing the proposed Shepherds Rig Wind Farm site will do so from the north via the A713.
- All construction traffic accessing the proposed Troston Loch Wind Farm site will do so from the north via the A713.
- Construction traffic accessing the Cornharrow Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Glenshimmeroch Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Fell Wind Farm site will route from both the north (70%) and south (30%) via the A712.

Total Cumulative Construction Effects

13.307 This section assesses the maximum development case assuming that all the developments being considered as part of the cumulative assessment will proceed to construction and that the cumulative effects are the total likely effects created by the construction of the E-G Connection in combination with:

- Wind farm developments (Knockman Hill, Mochrum Fell, Shepherds Rig, Troston Loch, Cornharrow, Glenshimmeroch, Fell);
- Glenlee Substation Extension; and
- other KTR Project Connections; P-G via K, C-K, BG Deviation and G-T.

13.308 It is uncertain if and when the construction phases of the wind farms and E-G Connection might overlap. To robustly assess cumulative traffic generation, the cumulative assessment has been undertaken for route sections within the KTR Project Study Area that are utilised by other committed developments as well as other Connections and developments forming part of the KTR Project. This is based on the of sum of the average traffic generation of the developments listed above and E-G Connection peak traffic generation. This is considered to represent a maximum case scenario, as in reality, it is considered highly improbable that peak traffic generation for all developments will align.

13.309 Table 13.37 presents a summary of predicted traffic volume increases over the entire construction period of E-G Connection and during the 'peak period' of construction activity (March 2022 to June 2022 inclusive). The table below shows the proportional increase in traffic generated for route sections within the KTR Project Study Area that are utilised by other committed developments as well as other Connections and developments forming part of the KTR Project.

Table 13.37: Summary of Predicted Traffic Volume Increase – Total Likely Cumulative Impact for Connection E-G of the KTR Project

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
A713 (between A77 and Dalmellington) [AADT = 4,085]	139 3% None	45 19% Moderate	341 8% Minor	91 38% Moderate
A713 (between Dalmellington and Carsphairn) [AADT = 1,557]	185 12% Moderate	87 48% Moderate	419 27% Moderate	167 92% Major
A713 (between Carsphairn and A762) [AADT = 1,398]	165 12% Moderate	83 52% Moderate	334 24% Moderate	159 99% Major
A713 (between A762 and A702) [AADT = 1,382]	70 5% Minor	30 26% Moderate	90 7% Minor	42 21% Moderate
A713 (between A702 and A712) [AADT = 2,282]	70 3% None	28 15% Moderate	128 7% Minor	44 24% Moderate
A713 (between A712 and B795) [AADT = 1,889]	56 3% None	28 15% Moderate	128 7% Minor	44 24% Moderate
A713 (between B795 and A75) [AADT = 3,868]	62 2% None	26 13% Moderate	132 3% None	46 23% Moderate
A712 (between A713 and Corsock) [AADT = 988]	54 5% Minor	20 28% Moderate	123 12% Moderate	50 69% Major
A712 (between Corsock and A75) [AADT = 768]	41 5% Minor	15 20% Moderate	81 11% Moderate	35 46% Moderate
A711 (between A75 and A762) [AADT=3,898]	32 <1% None	28 8% Minor	38 <1% None	36 11% Moderate
A762 (between A713 and U2s) [AADT = 356]	24 7% Minor	14 56% Moderate	102 29% Moderate	44 176% Major
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	46 4% None	46 124% Major	76 7% Minor	76 205% Major
U2s [AADT = 199]	14 7% Minor	8 67% Major	68 34% Moderate	18 155% Major
Gateside Road (Dalmellington) [AADT = 1,280]	42 3% None	42 86% Major	76 6% Minor	76 155% Major

Predicted Cumulative Effects during Construction

Driver Delay

13.310 From a review of Table 13.37, it is evident that threshold significance criteria have been exceeded on the A713 (between the A77 and the A75), A762, A712, B741, U2s and Gateside Road throughout the duration of the entire construction period and the A711 during the 'peak period' of construction activity

13.311 The A713 has the residual capacity to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between the A77 and the A75) is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.312 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the A713 and the U2s) and the U2s to provide passing places will be implemented; achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (see Embedded Mitigation Measures Section). On this basis, the significance of effect of driver delay for users of the A762 and U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.313 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such shows a relatively large traffic increase which would represent a major effect, however it is important to note that these route sections have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.314 The A711 and A712 have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delays for users of the A711 and A712 is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.315 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic volume, then the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.38.

Table 13.38: Projected Collisions – Total Likely Cumulative Impacts

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the E-G Connection of the KTR Project + Committed Developments + Glenlee Substation Extension + other KTR Project Connections)
A713 (between A77 and Dalmellington)	10	10.3
A713 (between Dalmellington and Carsphairn)	4.7	5.3
A713 (between Carsphairn and A762)	1.3	1.5
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A712 (between A713 and Corsock)	1	1.1
A712 (between Corsock and A75)	1	1.1
A711 (between A75 and A762)	1.3	1.4
A762 (between A713 and U2s)	0.3	0.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
U2s	0	0
Gateside Road	0	0

13.316 Using this basis of assessment, there would be a small increase (less than 1 collision) in PICs for the A713 (between the A77 and the A762) as a consequence of the increased traffic generated cumulatively. Professional judgment suggests that the peak cumulative traffic, which would be temporary (five months duration), would result in a minor effect (not significant) upon road safety if unmitigated.

13.317 On the other route sections within the Study Area, there would be a negligible increase in PICs as a consequence of the increased traffic generated cumulatively by the developments and the significance of the effect would be none and not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.318 The roads within the E-G Connection Study Area will continue to operate below capacity, even with the addition of traffic generated cumulatively. Severance and pedestrian delay should not occur when there is such a notable level of residual road capacity.

13.319 Cumulatively, the only road sections where HGV flows are expected to double, or more are the A762 (between the A713 and U2s), the B741, the U2s and Gateside Road.

13.320 The CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will minimise the effect of construction traffic on local communities, measures include but are not limited to:

- temporary construction site signage will be erected on the local road network in advance of local communities to warn people of construction activities and associated construction vehicles;
- SPEN shall nominate a Community Liaison Officer (CLO); the CLO will be responsible for keeping the local community informed of progress on the site and warning them of upcoming activities which may give rise to increased construction vehicle movements; and
- all site staff will be informed about traffic management arrangements and procedures via the site induction.

13.321 There is local footway provision in Dalmellington (B741 and Gateside Road) and New Cumnock (B741). Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic generated cumulatively. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the B741 and Gateside Road.

13.322 Site observations indicate that pedestrian activity on the A762 (between the A713 and U2s) and the U2s road sections is low. Furthermore, the CTMP will promote interventions that will minimise the effect of construction traffic on pedestrian amenity. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the A762 (between the A713 and U2s) and the U2s

13.323 Several construction access routes overlap and/or intersect with existing recreational routes, including the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route; and
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way).

13.324 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of the Southern Upland Way, Core Paths 21, 30 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.325 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of project generated construction traffic.

13.326 Overall based on professional judgement the construction traffic generated cumulatively will have a minor effect upon community receptors and therefore not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.327 As recorded in the CTMP, if another development, such as the wind farms considered in the cumulative assessment appears likely to undergo construction at the same time as the E-G Connection, SPEN will

liaise with the other developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.

Residual Cumulative Effects during Construction

13.328 Overall, due to the implementation of the infrastructure improvements to the A762 (between the A713 and the U2s) and the U2s as part of the Glenlee Substation Extension works (therefore, embedded mitigation for the EG Connection), in conjunction with the embedded mitigation measures and operational procedures as proposed in the framework CTMP and the proposed additional requirement for SPEN to liaise with other developers regarding the scheduling of deliveries and potential means of reducing the effect of combined construction, the residual effects associated with the levels of traffic generated cumulatively are considered to be minor and accordingly not significant in the context of the 2017 EIA Regulations (as amended).

Monitoring

13.329 The requirement for construction monitoring will be agreed with SPEN, Roads Authority representatives and other relevant stakeholders prior to commencement of works.

13.330 If deemed necessary, SPEN will enter into a legal agreement under Section 96 of the Roads (Scotland) Act 1984 to formalise an inspection and maintenance regime with the Roads Authority to contribute to maintenance of those roads impacted by HGV movements associated with the E-G Connection.

Summary of Effects

13.331 A summary of effects before and after proposed additional mitigation measures for E-G Connection is provided in Table 13.39.

Table 13.39: Summary of Effects for Public Roads Within the Connection E-G Study Area

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
Construction Effects			
Driver Delay	Minor	No additional mitigation is proposed beyond the embedded measures and operational procedures as proposed as good practice in the framework CTMP. The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded as appropriate by SPEN's appointed contractor(s) in consultation with Roads Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor
Cumulative Effects			
Driver Delay	Minor	If the construction phase of any notably sized development(s), e.g. wind farm development(s) (as considered in the cumulative assessment) appears likely to overlap with the KTR Project, SPEN will liaise with the appropriate developer organisation regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor

13.332 Based on the assessment summary in Table 13.39, the additional traffic predicted to be generated on public roads throughout the E-G Connection Study Area during the construction phase is anticipated to result in minor effects and therefore considered to be not significant.

BG Route Deviation

13.333 The BG route comprises an existing 132kV OHL between the existing Glenlee substation and the existing substation at Newton Stewart. The OHL is currently supported on lattice steel towers. The 'BG' Connection of the KTR Project is shown in Figure 4.5.

13.334 To facilitate construction and operation of the proposed OHL for the Glenlee to Tongland connection (G-T), existing towers BG098-BG102 are proposed to be removed and replaced with five new L4m towers located approximately 40m north of those towers to be removed. Existing tower BG097 will remain in its existing location and strengthened to accommodate an increased angle onto new tower BG098. The relocation of these towers will result in an approximate 1.2km deviation of the existing BG OHL which will connect into the proposed extension to the Glenlee Substation. The existing BG route terminal tower will remain in situ within the existing substation compound and will form part of the proposed new Glenlee to Tongland circuit. The proposed configuration for both the B-G route deviation and proposed new Glenlee to Tongland route to the Glenlee substation are shown in Figures 4.7.4 and 4.7.5.

13.335 In relation to the stone required for construction of BG Deviation of the KTR Project, it has been assumed that:

- 50% of stone will be sourced entirely from the onsite quarries with the remaining 50% being sourced from both Sorn Quarry and Tongland Quarry.

13.336 Similarly, to the above, in relation to the reinstatement of temporary access tracks, it has been assumed that:

- 50% of stone will be reinstated within the onsite quarries and the remaining 50% being returned to both Sorn Quarry and Tongland Quarry.

Access Arrangements

13.337 Transportation, including deliveries to and from the construction areas will be taken from the existing trunk and local road network. The local area road network is shown on Figures 13.1.1 and 13.1.2.

13.338 Given the nature of construction of the overhead line Connection (i.e. a linear development), SPEN has identified 2 construction access points for the 'BG' route deviation, identified in Table 13.40 and shown on Figure 5.5.1.

13.339 Further information relating to the proposed construction worksite access locations is included in Appendix 13.2.

Table 13.40: Access Points for BG Route Deviation

Worksite Access Reference	Public Road	Components
35	U2s	Towers R-BG-101 and R-BG-102
37	U3s	Towers R-BG-097 to 100

13.340 The proposed worksite accesses are preliminary based on SPEN's experience of constructing similar projects. The worksite access locations will be confirmed by the appointed contractor as an integral of their adopted CTMP, a framework of which is provided as Appendix 13.1.

13.341 All construction vehicles drivers will be instructed to access a worksite via an approved route.

Assessment of Construction Effects (including tree felling)

13.342 As detailed in Chapter 5, the overall construction period duration for the 'BG' route deviation is 43 months.

13.343 Sections of the A77, A75, A713, A712, A711, A702, A762, U2s and U3s will be used by construction vehicles. The assessed number of traffic movements (note: one trip = two movements; i.e. one delivery and one return journey) generated by construction activity are summarised in Table 13.41.

Table 13.41: Vehicle Movements Generated by Tree Felling and Construction Activity for the BG Route Deviation

Activity / Item Being Transported	Type of Vehicle	Details / deliveries	Total Vehicle Movements
Timber Clearance (within wayleave)	Lorry (24 tonne capacity)	An estimated 2.12ha of timber will be felled resulting in a total of 209 tonnes of timber to be produced.	18
Site Access Tracks	Lorry (20 tonne capacity)	An estimated 13,630 tonnes of stone will be required.	1,364
OHL Construction	Lorry (20 m^3 capacity) concrete ready mix trucks with a 6 m^3 capacity	Concrete and steelwork	192
Wiring and Commissioning	Lorry (20 m^3 capacity) and light vans	Wiring and commissioning	92
Reinstatement	Lorry (20 tonne capacity)	An estimated 13,630 tonnes of stone will be required to be removed.	1,364
Other	Private cars, light vans and mini-bus	Construction personnel, other site visitors	3,212
TOTAL HGV TRAFFIC MOVEMENTS FOR 'BG' ROUTE DEVIATION			3,030
TOTAL LGV TRAFFIC MOVEMENTS FOR 'BG' ROUTE DEVIATION			3,212
TOTAL ALL TRAFFIC **MOVEMENTS FOR 'BG' ROUTE DEVIATION**			6,242

13.344 It should be noted that these accesses represent the likely access arrangements during construction, based on SPEN's experience of constructing similar projects. However, the final access points will be confirmed by the appointed contractor.

13.345 All construction vehicles will be instructed to access the site via the approved access routes.

Predicted Construction Effects

13.346 As indicated in Table 13.41 the total of traffic generated by the BG Deviation is estimated as 6,242 movements, of which 3,030 movements will HGV movements over the 42 months construction period.

13.347 With reference to the indicative construction programme and the anticipated vehicle movements provided by SPEN for each construction related activity, the number of vehicle movements that are anticipated for each month of the construction programme has been calculated. The vehicle movements calculated have then been distributed over each route section as per the assumptions indicated in the Assessment Assumptions section.

13.348 Estimated daily and monthly movements generated by the BG Deviation against the programme along with predicted percentages increases on relevant trunk and local roads are shown in Table 13.42.

13.349 As indicated in Table 13.42 felling and construction traffic is estimated at an average of 8 vehicle movements a day over the entire construction period, with a maximum of 36 vehicle movements occurring per day from September 2023 to November 2023 (the 'peak period'). The 'peak period' for the purpose of this assessment is therefore defined as September 2023 to November 2023 inclusive.

13.350 Table 13.43 presents a summary of this information by route section.

13.351 The A77, A76, A75, A713, A712, A711 and A702 currently operate comfortably within their respective capacities (see Table 13.7). The increase in traffic volume on these roads throughout the construction phase of the BG Deviation is assessed to be less than 5% in terms of both general traffic (HGV+LGV) and specifically HGV traffic. On this basis, the significance of the effect is assessed to be none and accordingly not significant. Since the 10% traffic increase threshold has not been exceeded on these routes, no detailed assessment has been undertaken.

13.352 As indicated in the Embedded Mitigation Measures Section, embedded mitigation measures and operational procedures as indicated in the framework CTMP (Appendix 13.1) have been assumed to be in place as part of the KTR Project and therefore used to inform the judgement of significance of effects.

Table 13.42: Outline Construction Programme and Associated Traffic Assessment for the BG Route Deviation

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	TOTAL
Activity																																											
Timber Clearance (within wayleave)	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**18**
Timber Clearance (windthrow areas)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Site Access Tracks	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1792**
OHL Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	464	568	465	339	106	136	136	136	136	136	18	0	0	0	0	0	0	0	0	0	0	0	0	0	**2640**
Wiring and Commissioning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	142	150	150	150	150	150	150	150	150	150	148	2	**1792**
Total no. vehicle movements, all traffic (HGV + LGV)	102	102	102	102	102	102	102	102	102	100	100	100	100	100	100	100	100	96	460	568	465	339	106	136	136	136	136	136	18	0	142	150	150	150	150	150	150	150	150	150	148	2	**6242**
Total no. vehicle movements, all traffic (HGV + LGV) / day	8	8	8	8	8	8	8	8	8	6	6	6	6	6	6	6	6	6	24	22	36	18	6	6	6	6	6	6	6	0	6	6	6	6	6	6	6	6	6	6	6	6	-
Total no. HGV vehicle movements	78	78	78	78	78	78	78	78	78	76	76	76	76	76	76	76	76	76	48	64	46	30	12	16	16	16	16	16	0	0	108	114	114	114	114	114	114	114	114	114	114	2	**3030**
Total no. HGV vehicle movements / day	6	6	6	6	6	6	6	6	6	4	4	4	4	4	4	4	4	4	6	4	4	2	2	2	2	2	2	2	2	0	4	4	4	4	4	4	4	4	4	4	4	4	-
Total no. LGV vehicle movements	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	20	412	504	419	309	94	120	120	120	120	120	18	0	34	36	36	36	36	36	36	36	36	36	34	0	**3212**
Total no. LGV vehicle movements / day	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	18	18	32	16	4	4	4	4	4	4	4	0	2	2	2	2	2	2	2	2	2	2	2	2	-
A76 (between B743 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between B743 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A780 and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A713 (between Carsphairn and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between Carsphairn and A762) % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A713 North of Dalry (between A762 and A702) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A713 South of Dalry (between A702 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between A712 and B795) % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	3%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A75 and A762) % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	1%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A712 (between A762 and A713) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A712 (between A713 and Corsock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A713 and Corsock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A711 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A711 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	3%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A762 (between A713 and U2s) % Increase in ALL Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	5%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A762 (between A713 and U2s) % Increase in HGV Traffic	13%	13%	13%	13%	13%	13%	13%	13%	13%	5%	5%	5%	5%	5%	5%	5%	5%	5%	10%	4%	6%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	-
B741 % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%	4%	4%	-
B741 % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	-
U2s % Increase in ALL Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	5%	5%	8%	4%	1%	1%	1%	1%	1%	1%	1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
U2s % Increase in HGV Traffic	27%	27%	27%	27%	27%	27%	27%	27%	27%	10%	10%	10%	10%	10%	10%	10%	10%	10%	19%	9%	13%	4%	1%	1%	1%	1%	1%	1%	1%	<1%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	-
U3s % Increase in ALL Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	18%	15%	27%	12%	3%	3%	3%	3%	3%	3%	3%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
U3s % Increase in HGV Traffic	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	123%	228%	105%	150%	45%	17%	17%	17%	17%	17%	17%	17%	<1%	186%	186%	186%	186%	186%	186%	186%	186%	186%	186%	186%	186%	-
Gateside Road % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	2%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
Gateside Road % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-

Table 13.43: Summary of Construction Traffic Generated on Public Roads within the BG Route Deviation Study Area

Route Section	Construction traffic generated over the 43 months construction programme, by route section			
	LGV+HGV		HGV Only	
	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}
A76 (between B743 and A70) [AADT = 11,691]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A76 (between A70 and New Cumnock) [AADT = 6423]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A75 (between A762(N) and A712) [AADT= 7,901]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A75 (between A712 and A780) [AADT= 11,065]	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A75 (between A780 and A76) [AADT= 14,729]	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A77 (between A713 and A70) [AADT= 21,311]	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between A77 and Dalmellington) [AADT= 4,085]	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between Dalmellington and Carsphairn) [AADT= 1,557]	4 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [1%] {none, not significant}	2 [1%] {none, not significant}
A713 (between Carsphairn and A762) [AADT=1,398]	6 [<1%] {none, not significant}	16 [1%] {none, not significant}	4 [3%] {none, not significant}	4 [3%] {none, not significant}
A713 (between A762 and A702)	4 [<1%]	14 [1%]	2 [2%]	2 [2%]
[AADT=1,382]	{none, not significant}	{none, not significant}	{none, not significant}	{none, not significant}
A713 (between A702 and A712) [AADT=2,282]	4 [<1%] {none, not significant}	14 [<1%] {none, not significant}	2 [1%] {none, not significant}	2 [1%] {none, not significant}
A713 (between A712 and B795) [AADT=1,889]	4 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [1%] {none, not significant}	2 [1%] {none, not significant}
A713 (between B795 and A75) [AADT=3,868]	4 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A712 (between A75 and A762) [AADT=685]	4 [<1%] {none, not significant}	16 [2%] {none, not significant}	2 [3%] {none, not significant}	2 [3%] {none, not significant}
A712 (between A762 and A713) [AADT=1,544]	4 [<1%] {none, not significant}	16 [1%] {none, not significant}	2 [2%] {none, not significant}	2 [2%] {none, not significant}
A712 (between A713 and Corsock) [AADT=988]	2 [<1%] {none, not significant}	8 [<1%] {none, not significant}	2 [3%] {none, not significant}	2 [3%] {none, not significant}
A712 (between Corsock and A75) [AADT=768]	2 [<1%] {none, not significant}	8 [1%] {none, not significant}	2 [3%] {none, not significant}	2 [3%] {none, not significant}
A711 (between A75 and A762) [AADT=3,898]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A702 (between A713 and Moniaive) [AADT=243]	2 [<1%] {none, not significant}	6 [2%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A702 (between Moniaive and A76) [AADT=931]	2 [<1%]	6 [<1%]	0 [0%]	0 [0%]

Route Section	Construction traffic generated over the 43 months construction programme, by route section			
	LGV+HGV		HGV Only	
	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}
	{none, not significant}	{none, not significant}	{none, not significant}	{none, not significant}
A762 (between A713 and U2s) [AADT = 356]	4 [1%] {none, not significant}	14 [4%] {none, not significant}	2 [8%] {minor, not significant}	2 [8%] {minor, not significant}
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [5%] {minor, not significant}	2 [5%] {minor, not significant}
U2s [AADT = 199]	4 [2%] {none, not significant}	14 [7%] {minor, not significant}	2 [17%] {moderate, significant}	2 [17%] {moderate, significant}
U3s [AADT = 62]	4 [6%] {none, not significant}	14 [23%] {moderate, significant}	2 [200%] {major, significant}	2 [200%] {major, significant}
Gateside Road (Dalmellington) [AADT = 1,280]	2 [2%] {none, not significant}	2 [<1%] {none, not significant}	2 [4%] {none, not significant}	2 [4%] {none, not significant}

Driver Delay

13.353 The CTMP a framework which is provided as Appendix 13.1 will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay, CTMP measures include but are not limited to:

- The timing and frequency of vehicle movements being managed to minimise local disruption;
- details of access route forming part of the site induction and training being held for all site operatives and delivery drivers through 'toolbox talks'; and
- where reasonable and practicable, project-related vehicles will avoid travelling in convoys on public roads.

13.354 From a review of Table 13.43 it is evident that threshold significance criteria have been exceeded on the U2s and U3s both throughout the duration of the entire construction period and during the 'peak period' of construction activity.

13.355 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the U2s to provide passing places will be implemented; achieving a minimum width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (see Embedded Mitigation Measures Section). On this basis, the significance of effect of driver delay for users of the U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.356 The U3s has very low traffic flow and as such shows a relatively large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of construction traffic anticipated. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the U3s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.357 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic, the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.44.

Table 13.44: Projected Collisions

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the B-G Route Deviation)
U2s	0.0	0.0
U3s	0.3	0.4

13.358 Using this basis of assessment, there would be a negligible (not significant) increase in PICs in the Study Area as a consequence of the increased traffic generated by B-G Route deviation and the significance of the effect would be none and not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.359 The IEMA Guidelines define severance as 'the perceived division that can occur within a community when it becomes separated by a major traffic artery'. Severance may result from a road carrying large traffic flows or a physical barrier created by the road itself, and the IEMA guidelines suggest that consideration is given to the severity of existing severance and how this might be exacerbated by proposed construction traffic generated by a development. The roads within the BG Deviation Study Area will continue to operate below capacity, even with the addition of traffic generated by construction of the B-G route deviation. Severance should not occur when there is such a notable level of residual road capacity and traffic generated by the BG Deviation will be low.

13.360 For similar reasoning, pedestrian delay is not considered to be an existing problem on any of the route sections within the BG Deviation Study Area, nor one that shall be created by the addition of proposed construction traffic to these routes.

13.361 The only road section where HGV flows are expected to double, or more is the U3s. The U3s has currently very low level of HGV traffic, and as such shows a large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of construction traffic anticipated. On this basis, it is considered that construction traffic generated by the BGdeviation will have a minor and therefore not significant effect to the amenity of users of the U3s.

13.362 Several construction access routes overlap and/or intersect with existing recreational routes, including the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route; and
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way).

13.363 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of the potential of construction traffic. On this basis, the effect on pedestrian amenity, specifically on the amenity of users

of the Southern Upland Way, Core Paths 21, 30 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.364 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic engaged in the B-G route deviation.

13.365 Overall based on professional judgement the, construction traffic generated by BGdeviation will have a minor effect upon community receptors.

Proposed Additional Mitigation

13.366 Localised widening of strategic sections of the U3s (between the junction of the A712 and worksite access reference 37) will be implemented to ease access to the worksites for HGV construction traffic and general traffic sharing this route section notably including upgraded passing places.

Residual Construction Effects

13.367 Overall, due to the implementation of the infrastructure improvements to the A762 (between the A713 and the U2s) and the U2s as part of the Glenlee Substation Extension works (therefore, embedded mitigation for the BG Deviation) and the U3s (between the junction of the A712 and worksite access reference 37) and the embedded mitigation measures and operational procedures as proposed in the framework CTMP the significance of the residual effects associated with the levels of traffic anticipated during the construction of the BG Deviation are considered to be minor and accordingly considered to be not significant.

Assessments of Cumulative Effects

13.368 An assessment of the likely construction effects of the BG Deviation and other committed developments as well as other Connections forming part of the KTR Project has been undertaken to robustly take account of the likely interrelation of overlapping construction programmes and the resultant cumulative effect upon the local road network.

13.369 The overall approach for the cumulative assessments, including a list of developments considered, is outlined in Chapter 3

13.370 The following developments have been included with the BG Deviation for the cumulative traffic and transport assessment:

- Knockman Hill Wind Farm (Proposed Wind Turbine Project at Knockman Hill, Milnmark Farm Dumfries and Galloway Environmental Statement (ES) 2009);
- Mochrum Fell Wind Farm (Mochrum Fell Wind Farm ES, 2009);
- Shepherds Rig Wind Farm (Shepherds Rig Wind Farm ES, 2020);
- Troston Loch Wind Farm (Troston Loch Wind Farm EIA Report, 2019);
- Cornharrow Wind Farm (Cornharrow Wind Farm EIA Report, 2020);
- Glenshimmeroch Wind Farm (Glenshimmeroch Wind Farm EIA Report, 2018); and
- Fell Wind Farm (Fell Wind Farm EIA Report, 2019).

13.371 In addition to the above wind farms, traffic associated with the construction of the proposed Glenlee Substation Extension has been included in order to ensure a robust EIA; the assessment has been undertaken on the basis of an overlap with the KTR construction enabling works between March 2022 and June 2022.

13.372 In addition to the above developments, construction of the other KTR Project Connections (i.e. Connection P-G via K, C-K, E-G and G-T) will overlap with the construction phase of the Connection E-G of the KTR Project between March 2022 and September 2025 inclusive.

Glenlee Substation Extension Access Arrangements

13.373 For the purpose of the assessment, it has been assumed that:

- Construction traffic associated with the Glenlee Substation Extension will access from the south via the A713 (45%), the north via the A713 (45%) and a proportion would come from the east via the A712 (10%).

Wind Farm Access Arrangements

13.374 The following assumptions have been made to inform the assessment, derived from review of relevant supporting ESs/EIA reports for the schemes:

- Construction traffic accessing the proposed Knockman Hill Wind Farm will do so from the north via the A713.
- Construction traffic accessing the proposed Mochrum Fell Wind Farm site will predominantly do so from the south via the A713 (75%) although a proportion would come from the north via the A713 (25%).
- All construction traffic accessing the proposed Shepherds Rig Wind Farm site will do so from the north via the A713.
- All construction traffic accessing the proposed Troston Loch Wind Farm site will do so from the north via the A713.
- Construction traffic accessing the Cornharrow Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Glenshimmeroch Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Fell Wind Farm site will route from both the north (70%) and south (30%) via the A712.

Total Cumulative Construction Effects

13.375 This section assesses the maximum development case assuming that all the developments being considered as part of the cumulative assessment will proceed to construction and that the cumulative effects are the total likely effects created by the construction of the BG Deviation in combination with:

- Wind farm developments (Knockman Hill, Mochrum Fell, Shepherds Rig, Troston Loch, Cornharrow, Glenshimmeroch, Fell);
- Glenlee Substation Extension; and
- other KTR Project Connections; P-G via K, C-K, E-G and G-T.

13.376 It is uncertain if and when the construction phases of the wind farms and the BG Deviation might overlap. To robustly assess cumulative traffic generation, cumulative assessment has been undertaken for route sections within the KTR Project Study Area that are utilised by other committed developments as well as other Connections and developments forming part of the KTR Project. This is based on the sum of the average traffic generation of the developments listed above and the BG Deviation peak traffic generation. This is considered to represent a maximum case scenario as, in reality, it is considered highly improbable that peak traffic generation for all developments will align.

13.377 Table 13.45 presents a summary of predicted traffic volume increases over the entire construction period of the BG Deviation and during the 'peak period' of construction activity (September 2023 to November 2023 inclusive). The table shows the proportional increase in traffic generated for route sections within the KTR Project Study Area that are utilised by other committed developments as well as other Connections and developments forming part of the KTR Project

Table 13.45: Summary of Predicted Traffic Volume Increase – Total Likely Cumulative Impact for the BG Route deviation

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
A713 (between A77 and Dalmellington) AADT = [4,085]	136 3% None	42 18% Moderate	339 8% Minor	95 40% Moderate
A713 (between Dalmellington and Carsphairn) [AADT = 1,557]	180 12% Moderate	84 46% Moderate	371 24% Moderate	125 69% Major
A713 (between Carsphairn and A762) [AADT = 1,398]	162 12% Moderate	80 50% Moderate	330 24% Moderate	119 74% Major
A713 (between A762 and A702) [AADT = 1,382]	68 5% None	30 26% Moderate	114 8% Minor	42 21% Moderate
A713 (between A702 and A712) [AADT = 2,282]	68 3% None	30 15% Moderate	114 5% None	42 27% Moderate
A713 (between A712 and B795) [AADT = 1,889]	53 3% None	27 14% Moderate	124 7% Minor	50 27% Moderate
A713 (between B795 and A75) [AADT = 3,868]	59 2% None	25 12% Moderate	130 3% None	48 24% Moderate
A712 (between A713 and Corsock) [AADT = 988]	38 6% Minor	16 22% Moderate	66 10% Minor	22 31% Moderate
A712 (between Corsock and A75) [AADT = 768]	50 3% None	20 17% Moderate	80 5% Minor	28 23% Moderate
A711 (between A75 and A762) [AADT=3,898]	32 <1% None	28 8% Minor	50 1% None	44 13% Moderate
A762 (between A713 and U2s) [AADT = 356]	24 7% Minor	14 56% Moderate	16 4% None	4 16% Moderate
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	44 4% None	44 119% Major	34 3% None	34 92% Major
U2s	14	8	16	4
[AADT = 199]	7% Minor	67% Major	8% Minor	33% Moderate
U3s [AADT = 62]	10 16% Moderate	4 400% Major	20 32% Moderate	6 600% Major
Gateside Road (Dalmellington) [AADT = 1,280]	42 3% None	42 86% Major	30 2% None	30 61% Major

Predicted Cumulative Effects during Construction

Driver Delay

13.378 From a review of Table 13.45, it is evident that threshold significance criteria have been exceeded on the A713 (between the A77 and the A75), A762, A712, B741, U2s, U3s and Gateside Road throughout the duration of the entire construction period and the A711 during the 'peak period' of construction activity

13.379 The A713 has the residual capacity to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713 (between the A77 and the A75) is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.380 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the A713 and the U2s) and the U2s to provide passing places will be implemented; achieving. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (and therefore form embedded mitigation). On this basis, the significance of effect of driver delay for users of the A762 and U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.381 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the A713 and the U2s) to provide passing places will be implemented; achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (see Embedded Mitigation Measures Section). On this basis, the significance of effect on driver delay for users of the A762 is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.382 The U3s has very low traffic flow and as such shows a relatively large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of construction traffic anticipated. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the U3s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.383 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such show that a relatively large traffic increase would represent a major effect, however it is important to note that these route sections have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.384 The A711 and A712 have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delays for users of the A711 and A712 is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.385 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic volume, then the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.46.

Table 13.46: Projected Collisions – Total Likely Cumulative Impacts

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the BG Route deviation + Committed Developments + Glenlee Substation Extension + other KTR Connections)
A713 (between A77 and Dalmellington)	10	10.3
A713 (between Dalmellington and Carsphairn)	4.7	5.3
A713 (between Carsphairn and A762)	1.3	1.5
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A712 (between A713 and Corsock)	1	1.1
A712 (between Corsock and A75)	1	1.1
A711 (between A75 and A762)	1.3	1.4
A762 (between A713 and U2s)	0.3	0.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
U2s	0	0
U3s	0.3	0.4
Gateside Road	0	0

13.386 Using this basis of assessment, there would be a small increase (less than 1 collision) in PICs for the A713 (between the A77 and the A762) as a consequence of the increased traffic generated cumulatively. Professional judgment suggests that the peak cumulative traffic, which would be temporary (five months duration), would result in a minor effect (not significant) upon road safety if unmitigated.

13.387 On the other route sections within the Study Area, there would be a negligible increase in PICs as a consequence of the increased traffic generated cumulatively by the developments and the significance of the effect would be none and not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.388 The roads within the BG Deviation Study Area will continue to operate below capacity, even with the addition of traffic generated cumulatively. Severance and pedestrian delay should not occur when there is such a notable level of residual road capacity.

13.389 Cumulatively, the only road section where HGV flows are expected to double, or more is the U3s. The U3s has currently very low level of HGV traffic, and as such shows a large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of construction traffic anticipated. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the U3s.

13.390 Several construction access routes overlap and/or intersect with existing recreational routes, including the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route; and
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way).

13.391 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of the potential of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of the Southern Upland Way, Core Paths 21, 30 and 224 and the National Byway cycling route is considered to be minor and accordingly considered to be not significant.

13.392 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of project generated construction traffic.

13.393 Overall based on professional judgement the construction traffic generated cumulatively will have a minor effect upon community receptors and will not be significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.394 As recorded in the CTMP, if another development, such as the wind farms considered in the cumulative assessment appears likely to undergo construction at the same time as the BG Deviation, SPEN will liaise with the other developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.

Residual Cumulative Effects during Construction

13.395 Overall, due to the implementation of the infrastructure improvements to the A762 (between the A713 and the U2s) and the U2s as part of the Glenlee Substation Extension works (therefore, embedded mitigation for the BG Deviation) and the U3s (between the junction of the A712 and worksite access reference 37), in conjunction with the embedded mitigation measures and operational procedures as proposed in the framework CTMP and the additional proposed requirement for SPEN to liaise with other developers regarding the scheduling of deliveries and potential means of reducing the effect of combined construction, the residual effects associated with the levels of traffic generated cumulatively are considered to be minor and accordingly not significant in the context of the 2017 EIA Regulations (as amended).

Monitoring

13.396 The requirement for construction monitoring will be agreed with SPEN, Roads Authority representatives and other relevant stakeholders prior to commencement of works.

13.397 If deemed necessary, SPEN will enter into a legal agreement under Section 96 of the Roads (Scotland) Act 1984 to formalise an inspection and maintenance regime with the Roads Authority to contribute to maintenance of those roads impacted by HGV movements associated with the BG Deviation.

Summary of Effects

13.398 A summary of effects before and after proposed mitigation measures for the BG Deviation is provided in Table 13.47.

Table 13.47: Summary of Effects for Public Roads within the BG Route Deviation Study Area

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
Construction Effects			
Driver Delay	Minor	Localised widening of strategic sections of the U3s (between the junction of the A712 and worksite access reference 37) will be implemented to ease access to the worksites for HGV construction traffic and general traffic sharing this route section notably including upgraded passing places. Beyond the measures listed above, no additional mitigation is proposed beyond the embedded measures and operational procedures as proposed as good practice in the framework CTMP. The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded as appropriate by SPEN's appointed contractor(s) in consultation with Roads Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor
Cumulative Effects			
Driver Delay	Minor	If the construction phase of any notably sized development(s), e.g. wind farm development(s) (as considered in the cumulative assessment) appears likely to overlap with the KTR Project, SPEN will liaise with the appropriate developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor

13.399 Based on the assessment summary in Table 13.47, the additional traffic predicted to be generated on public roads throughout the BG Deviation Study Area during the construction phase is anticipated to result in minor effects which are therefore considered to be not significant.

Glenlee to Tongland

13.400 The Glenlee to Tongland (G-T) Connection of the KTR Project is shown in Figure 4.6

13.401 A new 132kV double circuit OHL, of approximately 32.3km in length, is required between the existing/extended Glenlee substation and the existing Tongland substation. The OHL will be supported on L4 lattice steel towers, which have six cross-arms (three on each side).

13.402 As outlined in Chapter 1: Introduction, in addition to the new Connection above, the assessment also considers the potential traffic and transport effects associated with the removal of the R route (south) towers between Glenlee and Tongland.

13.403 In relation to the stone required for construction of the Glenlee to Tongland Connection of the KTR Project, it has been assumed that:

- 50% of stone will be sourced entirely from the onsite quarries with the remaining 50% being sourced from both Sorn Quarry and Tongland Quarry.

13.404 Similarly, to the above, in relation to the reinstatement of temporary access tracks, it has been assumed that:

- 50% of stone will be reinstated within the onsite quarries and the remaining 50% being returned to both Sorn Quarry and Tongland Quarry.

Access Arrangements

13.405 Transportation, including deliveries to and from the construction areas will be taken from the existing trunk and local road network. The local area road network is shown on Figures 13.1.1 and 13.1.2.

13.406 Given the nature of construction of the overhead line Connection (i.e. a linear development), SPEN has identified 88 construction access points for the Connection G-T of the KTR Project, identified below in

13.407 Table 13.48 and shown on Figures 5.5.1 and 5.5.2.

13.408 Further information relating to the proposed construction worksite access locations is included in Appendix 13.2.

Table 13.48: Access Points for Connection G-T of the KTR Project

Worksite Access Reference	Public Road	Components
30	A762	Removal of Tower 032 I
31	U2s	Removal of Tower 031 (R)
36	U3s	Towers 5 to 12
37	U3s	Towers 2, 3 and 4
38	U3s	Gallows Knowe Quarry
39	U3s	Will's Hill Quarry
40	A712	Towers 13 to 20 and Hind Craig Quarry
41	A712	Towers 9, 10, 11 and 12 and Gallows Knowe Quarry
42	A712	Tower 9 and installation of road crossing
43	A762	Towers 21 to 42 (including 41A) and Hind Craig Quarry
44	A762	Construction Compound
45	A762	Construction Compound
46	A762	Towers 43 to 49
47	C13s	Towers 63 and 64
48	C13s	Towers 71 to 73, Craigelwhan Quarry and Craigelwhan West Quarry
49	C13s	Towers 69 to 73, Craigelwhan Quarry and Craigelwhan West Quarry
50	C13s	Craigelwhan Quarry and Craigelwhan West Quarry
51	C13s	Towers 50 to 68 Lochenbreck Quarry
52	A762	Towers 74 to 79
53	A762	Towers 74 to 79
54	A762	Tower 80
55	A762	Towers 81 to 89
56	U34s	Towers 90 and 91
57	C45s	Towers 92 to 95 and removal of Towers 127 (R) and 128 (R)

Worksite Access Reference	Public Road	Components
58	C45s	Removal of Tower 129 (R)
59	C45s	Towers 97 and 98
60	C45s	Removal of Tower 130 (R)
61	C45s	Tower 100
62	C45s	Removal of Towers 133 (R)
63	A75	Towers 103 and 104
64	A75	Towers 101 and 102 and removal of Towers 134 (R) to Tower 137 (R)
65	U43s	Towers 105 and 106 and removal of Towers 138 (R) to Towers 140 (R)
66	U43s	Towers 107 and 108 and removal of Towers 141 (R) and 142 (R)
67	U43s	Towers 109, 110 and 111 and removal of Towers 143 (R) to Tower 145 (R)
68	A711	Towers 112, 113 and 114 and removal of Towers 146 (R) to Tower 149 (R)
69	A711	Towers 115, 116, 117 and 118 and removal of Towers 150 (R) to Tower 153 (R)
70	A713	Removal of Tower 033 (R)
71	A713	Removal of Tower 034 (R) and 35(R)
72	A713	Removal of Tower 036 (R)
73	A713	Removal of Tower 037 (R)
74	A713	Removal of Tower 038 (R)
75	A713	Removal of Tower 039 (R) to Tower 042 (R)
76	A713	Removal of Tower 043 (R)
77	A713	Removal of Tower 044 (R) and Tower 045 (R)
78	A712	Removal of Tower 046 (R) and Tower 047 (R)
79	A713	Removal of Tower 048 (R) to Tower 051 (R)
80	A713	Removal of Tower 052 (R) to Tower 054 (R)
81	A713	Removal of Tower 055 (R) and Tower 056 (R)
82	A713	Removal of Tower 057 (R)
83	U137S	Removal of Tower 059 (R) and Tower 60 (R)
84	U137S	Removal of Tower 061 (R)
85	U137S	Removal of Tower 058 (R)
86	A713	Removal of Tower 062 (R)
87	A713	Removal of Tower 063 (R) and Tower 064
88	A713	Removal of Tower 065 (R) to Tower 067 (R)
89	A713	Removal of Tower 068 (R) to Tower 071 (R)
90	A713	Removal of Tower 072 (R) to Tower 076 (R)
91	U103s	Removal of Tower 077 (R) to Tower 079 (R)
92	U103S	Removal of Tower 077 (R) to Tower 079 (R)
93	U103S	Removal of Tower 080 (R) and Tower 081 (R)
94	U133S	Removal of Tower 082 (R)
95	U133S	Removal of Tower 083 (R)
96	U107S	Removal of Tower 084 (R) to Tower 87 (R)
97	U107S	Removal of Tower 090 (R) and Tower 091 (R)
98	C31S	Removal of Tower 092 (R) and Tower 093 (R)
99	C31S	Removal of Tower 094 (R)
100	A713	Removal of Tower 095 (R)
101	A713	Removal of Tower 096 (R) and Tower 097 (R)
102	A713	Removal of Tower 098 (R) and Tower 099 (R)
103	A713	Removal of Tower 100 (R) and Tower 100I(R)
104	C50S	Removal of Tower 101 (R)
105	C50S	Removal of Tower 102 (R)
106	C50S	Removal of Tower 103 (R)
107	C50S	Removal of Tower 104 I and Tower 105 (R)
108	U62S	Removal of Tower 106 (R)
109	U62s	Removal of Tower 107 (R) to Tower 109 (R)
110	B795	Removal of Tower 110 (R) to Tower 112 (R)
111	B795	Removal of Tower 113 (R)
112	B795	Removal of Tower 113 (R)
113	C45s	Removal of Tower 114 (R)
114	C45s	Removal of Tower 115 (R)
115	C45s	Removal of Tower 116 (R)
116	C45s	Removal of Tower 117 (R)
117	C45s	Removal of Tower 118 (R) and Tower 119I)
118	C45s	Removal of Tower 120 (R) and 121 (R)
119	C45s	Removal of Tower 122 (R) to Tower 126 (R)
120	C45s	Tower 96
121	C45s	Tower 99 and removal of Towers 131 (R) and 132 (R)

13.409 The proposed worksite accesses are preliminary based on SPEN's experience of constructing similar projects. The worksite access locations will be confirmed by the appointed contractor as an integral of their adopted CTMP, an outline of which is provided in Appendix 13.1.

13.410 All construction vehicles drivers will be instructed to access a worksite via an approved route.

Assessment of Construction Effects (including tree felling)

13.411 As detailed in Chapter 5, the overall construction period duration for the G-T Connection is 58 months, allowing for the removal of the R route (south) towers between Glenlee and Tongland.

13.412 Sections of the A77, A76, A75, A713, A712, A711, A702, A762, B795, C50s, C31s, C13s, C45s, U137s, U133s, U107s, U103s, U62s, U43s, U34s, U3s and U2s will be used by construction vehicles. The number of movements (note: one trip = two movements; i.e. one delivery and one return journey) for each construction task are outlined below in Table 13.49.

13.413 As outlined in Chapter 3, tree felling (or loss due to windthrow if not felled) of the areas outwith the 80m wayleave will result in indirect effects on the wider environment and therefore traffic generated by tree felling outside the wayleave has been included in the traffic assessment as part of a robust EIA. This is based on the assumption that felling both within the wayleave and for windthrow will happen concurrently.

Table 13.49: Vehicle Movements Generated by Tree Felling and Construction Activity for Connection G-T of the KTR Project

Activity/Item Being Transported	Type of Vehicle	Details/deliveries	Total Vehicle Movements
Timber Clearance (within wayleave)	Lorry (24 tonne capacity)	An estimated 208Ha of timber will be felled resulting in a total of 18,293 tonnes of timber to be produced.	1,522
Timber Clearance (windthrow areas)	Lorry (24 tonne capacity)	An estimated 91.9Ha of timber will be felled resulting in a total of 22,920 tonnes of timber to be produced.	1,908
Site Access Tracks	Lorry (20 tonne capacity)	An estimated 341,500 tonnes of stone will be required.	34,150
OHL Construction	Lorry (20 m^3 capacity) concrete ready mix trucks with a 6 m^3 capacity	Concrete and steelwork	3,704
Wiring and Commissioning	Lorry (20 m^3 capacity) and light vans	Wiring and commissioning	1,196
Decommissioning	Lorry (20 m^3 capacity) and light vans	Steelwork and wiring	6,600
Reinstatement	Lorry (20 tonne capacity)	An estimated 293,540 tonnes of stone will be required to be removed.	29,354
Other	Private cars, light vans and mini-bus	Construction personnel and other site visitors	92,863
TOTAL HGV TRAFFIC MOVEMENTS FOR CONNECTION G-T			78,434
TOTAL LGV TRAFFIC MOVEMENTS FOR CONNECTION G-T			92,863
TOTAL ALL TRAFFIC MOVEMENTS FOR CONNECTION G-T			171,297

Predicted Construction Effects

13.414 As indicated in Table 13.49 the total of traffic generated by Connection G-T is estimated as 171,297 movements, of which 78,434 movements will be HGV movements over the 58 months construction period.

13.415 With reference to the indicative construction programme and the anticipated vehicle movements provided by SPEN for each construction related activity, the number of vehicle movements that are anticipated for each month of the construction programme has been calculated. The vehicle movements calculated have then been distributed over each route section as per the assumptions indicated in the Assessment Assumptions section.

13.416 Estimated daily and monthly movements generated by G-T Connection against the programme along with predicted percentages increases on relevant trunk and local roads are shown in Table 13.50.

13.417 Construction traffic is estimated at an average of 164 vehicle movements a day over the entire construction period.

13.418 The highest levels of construction traffic are anticipated to occur over a period of 13 months from December 2025 to December 2026 with an average of 234 vehicle movements a day, with a maximum of 250 vehicle movements occurring per day in April 2026. The 'peak period' for the purpose of this assessment is therefore considered to be December 2025 to December 2026 inclusive. Table 13.51 presents a summary of this information by routes sections.

13.419 The A77, A76, A75, A702 and B795 currently operate comfortably within their respective capacities (see Table 13.7). The increase in traffic volume on these roads throughout the construction phase of G-T Connection of the KTR Project is assessed to be less than 5% in terms of both general traffic (HGV+LGV) and specifically HGV traffic. On this basis, the significance of the effect is assessed to be none and accordingly not significant. Since the 10% traffic increase threshold has not been exceeded on these routes, no detailed assessment has been undertaken for these public roads.

13.420 The C50s, C31s, U137s, U133s, U107s, U103s and U62s will solely be used to facilitate the removal of R route (south). It is assessed that the removal of the R route (south) will generate less than 10 vehicle movements per day on these specific road sections. Accordingly, the professional judgement of the assessment team is that effects arising from such low level of traffic will be none and therefore not significant. On this basis, no detailed assessment has been carried out for these public road sections.

13.421 For the purpose of the detailed assessment, it has been assumed that embedded mitigation measures and operational procedures as proposed in the framework CTMP (Appendix 13.1) will be in place during the construction of the KTR Project and therefore have been used to inform the judgement of significance of effects.

Table 13.50: Outline Construction Programme and Associated Traffic Assessment for Connection G-T of the KTR Project

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	TOTAL
Activity																																																										
Timber Clearance (within wayleave)	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1032**
Timber Clearance (windthrow areas)	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**2398**
Site Access Tracks	2070	2034	2034	2034	2034	2034	2250	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	2196	1131	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	162	254	0	0	0	0	0	0	0	0	0	**62873**
OHL Construction	0	0	0	0	0	0	0	0	0	0	0	0	0	602	874	874	874	874	874	874	874	874	874	874	874	1234	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1210	353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30413
Wiring and Commissioning	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	650	650	650	650	650	650	650	650	650	650	650	650	426	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11498
Decommissioning of 'R' route towers	0	0	0	0	0	0	0	0	168	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	196	**8242**
Reinstatement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3616	4244	4244	4244	4360	4670	4670	4670	4670	4670	4670	4670	1443	**54841**
Total no. vehicle movements, all traffic (HGV + LGV)	2196	2160	2160	2160	2160	2160	2376	2322	2490	2518	2518	2518	2518	3120	3392	3392	3392	3392	3392	3392	3392	3392	3392	3392	3392	3752	3990	3455	2458	2458	2458	2458	2458	2458	2458	2458	2458	2458	2218	1361	1008	1008	1008	1008	784	3974	4602	4694	4440	4594	4670	4670	4670	4670	4670	4670	1443	**171297**
Total no. vehicle movements, all traffic (HGV + LGV) / day	98	98	98	98	98	98	110	110	126	126	126	126	126	178	178	178	178	178	178	178	178	178	178	178	178	214	256	256	158	158	158	158	158	158	158	158	158	158	158	104	68	68	68	68	68	226	226	226	218	250	236	236	236	236	236	236	236	236	**-**
Total no. HGV vehicle movements	1390	1368	1368	1368	1368	1368	1494	1462	1498	1504	1504	1504	1504	1576	1608	1608	1608	1608	1608	1608	1608	1608	1608	1608	1608	1654	1684	1004	382	382	382	382	382	382	382	382	382	382	360	250	204	204	204	204	174	2212	2572	2616	2478	2530	2526	2526	2526	2526	2526	2526	618	**78434**
Total no. HGV vehicle movements / day	72	72	72	72	72	72	80	80	88	88	88	88	88	116	116	116	116	116	116	116	116	116	116	116	116	136	158	158	86	86	86	86	86	86	86	86	86	86	86	58	38	38	38	38	38	156	156	156	150	168	160	160	160	160	160	160	160	**-**
Total no. LGV vehicle movements	806	792	792	792	792	792	882	860	992	1014	1014	1014	1014	1544	1784	1784	1784	1784	1784	1784	1784	1784	1784	1784	1784	2098	2306	2451	2076	2076	2076	2076	2076	2076	2076	2076	2076	2076	2076	1858	1111	804	804	804	804	610	1762	2030	2078	1962	2064	2144	2144	2144	2144	2144	2144	825	**92863**
Total no. LGV vehicle movements / day	26	26	26	26	26	26	30	30	38	38	38	38	38	62	62	62	62	62	62	62	62	62	62	62	62	78	98	98	72	72	72	72	72	72	72	72	72	72	72	46	30	30	30	30	30	70	70	70	68	82	76	76	76	76	76	76	76	**-**
A76 (between B743 and A70) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between B743 and A70) % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	3%	4%	4%	4%	4%	4%	4%	4%	4%	-
A76 (between A70 and New Cumnock) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
A76 (between New Cumnock and Thornhill) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between New Cumnock and Thornhill) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	-
A76 (between Thornhill and A75) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between Thornhill and A75) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	-
A75 (between A762 and A712) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	4%	4%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	-
A75 (between A712 and A780) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A712 and A780) % Increase in HGV Traffic	13%	13%	13%	13%	13%	13%	15%	15%	16%	16%	16%	16%	16%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	19%	19%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	6%	6%	6%	6%	6%	6%	25%	25%	25%	23%	25%	24%	24%	24%	24%	24%	24%	24%	-
A713 North of Dalry (between A762 and A702) % Increase in ALL TRAFFIC	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	4%	4%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	-
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	17%	17%	17%	17%	17%	17%	21%	21%	22%	22%	22%	22%	22%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	24%	26%	26%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	9%	9%	9%	9%	9%	9%	34%	34%	34%	31%	34%	33%	33%	33%	33%	33%	33%	33%	-
A713 South of Dalry (between A702 and A712) % Increase in ALL TRAFFIC	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	-
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	10%	10%	10%	10%	10%	10%	12%	12%	13%	13%	13%	13%	13%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	15%	15%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	5%	5%	5%	5%	5%	5%	20%	20%	20%	18%	20%	19%	19%	19%	19%	19%	19%	19%	-
A713 (between A712 and B795) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A713 (between A712 and B795) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	5%	5%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	9%	9%	9%	9%	9%	6%	6%	6%	6%	6%	6%	6%	-
A713 (between B795 and A75) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 (between B795 and A75) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	4%	4%	5%	5%	5%	5%	5%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	6%	6%	6%	5%	6%	5%	5%	5%	5%	5%	5%	5%	-
A712 (between A75 and A762) % Increase in ALL TRAFFIC	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	7%	7%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	1%	1%	1%	1%	1%	7%	7%	7%	7%	8%	7%	7%	7%	7%	7%	7%	7%	-
A712 (between A75 and A762) % Increase in HGV Traffic	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	25%	28%	28%	28%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	3%	3%	3%	3%	3%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	44%	-
A712 (between A762 and A713) % Increase in ALL TRAFFIC	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	5%	5%	5%	5%	5%	5%	5%	-
A712 (between A762 and A713) % Increase in HGV Traffic	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%	23%	23%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	2%	2%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	-
A732 (between A713 and Corsock) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A712 (between A713 and Corsock) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A712 (between Corsock and A75) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A711 (between A75 and A762) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	N/A
A711 (between A75 and A762) % Increase in HGV Traffic	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	-
A702 (between A713 and Moniaive) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	4%	3%	3%	3%	3%	3%	3%	3%	3%	-
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	TOTAL
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A762 (between A712 and B795) % Increase in ALL TRAFFIC	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	14%	16%	16%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	5%	3%	3%	3%	3%	3%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	-
A762 (between A712 and B795) % Increase in HGV Traffic	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	104%	113%	113%	113%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	9%	9%	9%	9%	9%	9%	174%	174%	174%	174%	174%	174%	174%	174%	174%	174%	174%	-
A762 (between B795 and A75) % Increase in ALL TRAFFIC	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	14%	16%	16%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	4%	3%	3%	3%	3%	3%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	-
A762 (between B795 and A75) % Increase in HGV Traffic	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	67%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	6%	6%	6%	6%	6%	6%	121%	121%	121%	121%	121%	121%	121%	121%	121%	121%	121%	-
A762 (between A713 and U2s) % Increase in ALL TRAFFIC	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A762 (between A713 and U2s) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
B795 (between A762 and A713) % Increase in ALL TRAFFIC	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
B795 (between A762 and A713) % Increase in HGV Traffic	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	8%	8%	8%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
B741 % Increase in ALL TRAFFIC	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
B741 % Increase in HGV Traffic	49%	49%	49%	49%	49%	49%	54%	54%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	59%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	97%	97%	97%	92%	97%	97%	97%	97%	97%	97%	97%	97%	-
C13s % Increase in ALL TRAFFIC	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	15%	16%	16%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	3%	3%	3%	3%	3%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	-
C13s % Increase in HGV Traffic	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	229%	229%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	29%	286%	286%	286%	286%	286%	286%	286%	286%	286%	286%	286%	286%	-
C45s % Increase in ALL TRAFFIC	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	6%	5%	5%	5%	5%	5%	5%	-
C45s % Increase in HGV Traffic	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	800%	800%	800%	800%	800%	800%	800%	800%	800%	800%	800%	800%	-
U43s % Increase in ALL TRAFFIC	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
U43s % Increase in HGV Traffic	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	400%	400%	400%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	-
U34s % Increase in ALL TRAFFIC	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
U34s % Increase in HGV Traffic	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	-
U2s % Increase in ALL TRAFFIC	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
U2s % Increase in HGV Traffic	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	33%	-
U3s % Increase in ALL TRAFFIC	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	13%	16%	16%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	6%	3%	3%	3%	3%	3%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	-
U3s % Increase in HGV Traffic	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	400%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	200%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	600%	-
Gateside Road % Increase in ALL TRAFFIC	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
Gateside Road % Increase in HGV Traffic	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	37%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	-

Table 13.51: Summary of Construction Traffic Generated on Public Roads within the Connection G-T Study Area

Road	Construction traffic generated over the 58 months construction programme, by route section			
	LGV+HGV		HGV Only	
	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}
A76 (between B743 and A70) [AADT = 11,691]	20 [<1%] {none, not significant}	36 [<1%] {none, not significant}	20 [2%] {none, not significant}	36 [4%] {none, not significant}
A76 (between A70 and New Cumnock) [AADT = 6,423]	20 [<1%] {none, not significant}	36 [<1%] {none, not significant}	20 [2%] {none, not significant}	36 [4%] {none, not significant}
A76 (between New Cumnock and Thornhill) [AADT = 3,854]	18 [<1%] {none, not significant}	34 [<1%] {none, not significant}	18 [3%] {none, not significant}	34 [5%] {minor, not significant}
A76 (between Thornhill and A75) [AADT = 6,106]	18 [<1%] {none, not significant}	34 [<1%] {none, not significant}	18 [3%] {none, not significant}	34 [6%] {minor, not significant}
A75 (between A762(N) and A712) [AADT= 7,901]	48 [<1%] {none, not significant}	70 [<1%] {none, not significant}	28 [3%] {none, not significant}	46 [4%] {none, not significant}
A75 (between A712 and A780) [AADT= 11,065]	16 [<1%] {none, not significant}	18 [<1%] {none, not significant}	4 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A75 (between A780 and A76) [AADT= 14,729]	28 [<1%] {none, not significant}	40 [<1%] {none, not significant}	16 [1%] {none, not significant}	26 [2%] {none, not significant}
A77 (between A713 and A70) [AADT= 21,311]	16 [<1%] {none, not significant}	14 [<1%] {none, not significant}	6 [<1%] {none, not significant}	2 [<1%] {none, not significant}
A713 (between A77 and Dalmellington) [AADT= 4,085]	14 [<1%] {none, not significant}	12 [<1%] {none, not significant}	6 [2%] {none, not significant}	4 [1%] {none, not significant}
A713 (between Dalmellington and Carsphairn)	32 [2%]	48 [3%]	22 [12%]	36 [20%]
[AADT= 1,557]	{none, not significant}	{none, not significant}	{moderate, significant}	{moderate, significant}
A713 (between Carsphairn and A762) [AADT=1,398]	42 [3%] {none, not significant}	62 [4%] {none, not significant}	26 [15%] {moderate, significant}	40 [24%] {moderate, significant}
A713 (between A762 and A702) [AADT=1,382]	40 [3%] {none, not significant}	58 [4%] {none, not significant}	26 [21%] {moderate, significant}	40 [33%] {moderate, significant}
A713 (between A702 and A712) [AADT=2,282]	40 [2%] {none, not significant}	58 [3%] {none, not significant}	26 [12%] {moderate, significant}	40 [20%] {moderate, significant}
A713 (between A712 and B795) [AADT=1,889]	16 [<1%] {none, not significant}	22 [1%] {none, not significant}	12 [6%] {minor, not significant}	14 [7%] {minor, not significant}
A713 (between B795 and A75) [AADT=3,868]	22 [<1%] {none, not significant}	28 [<1%] {none, not significant}	10 [5%] {minor, not significant}	12 [5%] {minor, not significant}
A712 (between A75 and A762) [AADT=685]	32 [5%] {minor, not significant}	52 [7%] {minor, not significant}	18 [24%] {moderate, significant}	32 [44%] {moderate, significant}
A712 (between A762 and A713) [AADT=1,544]	46 [3%] {none, not significant}	70 [5%] {minor, not significant}	24 [18%] {moderate, significant}	40 [33%] {moderate, significant}
A712 (between A713 and Corsock) [AADT=988]	12 [1%] {none, not significant}	14 [1%] {none, not significant}	2 [2%] {none, not significant}	2 [1%] {none, not significant}
A712 (between Corsock and A75) [AADT=768]	12 [1%] {none, not significant}	14 [2%] {none, not significant}	2 [2%] {none, not significant}	2 [1%] {none, not significant}
A711 (between A75 and A762) [AADT=3,898]	34 [<1%]	58 [1%]	28 [8%]	52 [15%]

Road	Construction traffic generated over the 58 months construction programme, by route section			
	LGV+HGV		HGV Only	
	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	Average vehicle movements per day over entire construction period [% Increase] {Significance}	Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}
	{none, not significant}	{none, not significant}	{minor, not significant}	{moderate, significant}
A702 (between A713 and Moniaive) [AADT=243]	6 [2%] {none, not significant}	8 [3%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A702 (between Moniaive and A76) [AADT=931]	6 [<1%] {none, not significant}	8 [<1%] {none, not significant}	0 [0%] {none, not significant}	0 [0%] {none, not significant}
A762 (between A712 and B795) [AADT=398]	44 [11%] {moderate, significant}	66 [17%] {moderate, significant}	22 [92%] {major, significant}	40 [174%] {major, significant}
A762 (between B795 and A75) [AADT=370]	40 [11%] {moderate, significant}	64 [17%] {moderate, significant}	22 [64%] {major, significant}	40 [121%] {major, significant}
A762 (between A713 and U2s) [AADT=356]	2 [<1%] {none, not significant}	2 [<1%] {none, not significant}	2 [6%] {minor, not significant}	2 [3%] {none, not significant}
B795 (between A762 and A713) [AADT= 499]	10 [2%] {none, not significant}	10 [2%] {none, not significant}	2 [3%] {none, not significant}	0 [0%] {none, not significant}
B741 (between New Cumnock and Dalmellington) [AADT= 1,031]	20 [2%] {none, not significant}	36 [4%] {none, not significant}	20 [52%] {moderate, significant}	36 [97%] {major, significant}
C13s [AADT= 148]	18 [12%] {moderate, significant}	26 [18%] (moderate, significant}	12 [170%] {major, significant}	20 [286%] {major, significant}
C45s [AADT= 249]	8 [3%] {none, not significant}	14 [5%] {minor, not significant}	6 [483%] {major, significant}	8 [800%] {major, significant}
U43s [AADT= 211]	6 [3%]	8 [4%]	4 [255%]	4 [400%]
U34s [AADT= 174]	4 [2%] {none, not significant}	4 [2%] {none, insignificant}	4 [245%] {major, significant}	4 [400%] {major, significant}
U2s [AADT= 199]	4 [2%] {none, not significant}	4 [2%] {none, not significant}	4 [20%] {moderate, significant}	4 [33%] {moderate, significant}
U3s [AADT= 62]	8 [10%] {moderate, significant}	10 [16%] {moderate, significant}	4 [386%] {major, significant}	6 [600%] {major, significant}
Gateside Road (Dalmellington) [AADT= 1,280]	18 [1%] {none, not significant}	34 [3%] {none, not significant}	18 [33%] {moderate, significant}	34 [69%] {major, significant}

Driver Delay

13.422 All public road route sections where the 10% threshold significance criteria has been exceeded operate notably below their theoretical capacity. Table 13.52 provides a comparison of forecast traffic flows on roads during the Peak Period and associated theoretical road capacities.

13.423 Furthermore, the CTMP (a framework of which is provided as Appendix 13.1) will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. CTMP measures include but are not limited to:

- The timing and frequency of vehicle movements will be managed to minimise local disruption;
- details of access route will form part of the site induction and training will be held for all site operatives and delivery drivers through 'toolbox talks'; and
- where reasonable and practicable, project-related vehicles will avoid travelling in convoys on public roads

Table 13.52: Baseline Traffic + Traffic Generated by Construction of the G-T Connection of the KTR Project

Route Section	Two-way peak hour movements (2022 Baseline Traffic + Traffic Generated by Construction of the G-T Connection of the KTR Project)	Capacity (vph) (two-way hourly flow)
A713 (between Dalmellington and Carsphairn)	206	1800
A713 (between Carsphairn and A762)	206	1800
A713 (between A762 and A702)	206	1600

Route Section	Two-way peak hour movements (2022 Baseline Traffic + Traffic Generated by Construction of the G-T Connection of the KTR Project)	Capacity (vph) (two-way hourly flow)
A713 (between A702 and A712)	206	1600
A712 (between A75 and A762)	206	1800
A712 (between A762 and A713)	206	1800
A711 (between A75 and A762)	206	1800
A762 (between A712 and B795)	206	1600
A762 (between B795 and A75)	206	1600
B741 (between New Cumnock and Dalmellington)	204	1800
C13s	54	Not Specified
C45s	52	Not Specified
U43s	52	Not Specified
U34s	52	Not Specified
U2s	52	Not Specified
U3s	52	Not Specified
Gateside Road (Dalmellington)	204	1600

13.424 From a review of Table 13.51 it is evident that threshold significance criteria have been exceeded on the A713 (between Dalmellington and the A712), A712 (between A75 and A713), A711, A762 (between A712 and A75), B741, C45s, C13s, U43s, U34s, U2s, and U3s and Gateside Road either, or both, throughout the whole project duration or during the 'peak period' of construction activity.

13.425 The A713, A712, A711 and A762 have the residual capacity (see Table 13.52) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the A713, A712, A711 and A762 is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.426 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such shows a relatively large traffic increase which would represent a major effect, however it is important to note that these route sections have the residual capacity (see Table 13.52) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.427 The C45s, C13s, U43s, U34s and U3s have very low traffic flow and as such show a relatively large traffic increase which would represent a major effect. However, professional judgement suggests that effects on these roads are likely to be less significant based on the low level of construction traffic anticipated. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the C45s, C13s, U43s, U34s and U3s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.428 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the U2s to provide passing places will be implemented; achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (See Embedded Mitigation Measures Section). On this basis, the significance of effect of driver delay for users of the U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.429 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic, the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.53.

Table 13.53: Projected Collision

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the G-T Connection of the KTR Project)
A713 (between Dalmellington and Carsphairn)	4.7	4.8
A713 (between Carsphairn and A762)	1.3	1.4
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A712 (between A75 and A762)	2	2.1
A712 (between A762 and A713)	0.3	0.4
A711 (between A75 and A762)	1.3	1.4
A762 (between A712 and B795)	0	0
A762 (between B795 and A75)	0	0
B741 (between New Cumnock and Dalmellington)	1.7	1.8
C13s	0	0
C45s	0	0
U43s	0	0
U34s	0	0
U2s	0	0
U3s	0.3	0.4
Gateside Road (Dalmellington)	0	0

13.430 Using this basis of assessment, there would be a negligible increase in PICs in the Study Area as a consequence of the increased traffic generated by G-T Connection and the significance of the effect would be none and not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.431 The IEMA Guidelines define severance as 'the perceived division that can occur within a community when it becomes separated by a major traffic artery'. Severance may result from a road carrying large traffic flows or a physical barrier created by the road itself, and the IEMA guidelines suggest that consideration is given to the severity of existing severance and how this might be exacerbated by proposed construction traffic generated by a development. The roads within the G-T Connection Study Area will continue to operate below capacity, even with the addition of traffic generated by construction of the G-T Connection. Severance should not occur when there is such a notable level of residual road capacity and traffic generated by the G-T Connection will be relatively low.

13.432 For similar reasoning, pedestrian delay is not considered to be an existing problem on any of the route sections within the G-T Study Area, nor one that shall be created by the addition of proposed construction traffic to these routes.

13.433 Pedestrian amenity is broadly defined in the IEMA Guidelines as the 'relative pleasantness of a journey', and this definition also takes into account fear and intimidation. The IEMA Guidelines suggest that 'a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flows (or its lorry component) is halved or doubled'. The only road sections where HGV flows are expected to double, or more are the A762 (between the A712 and the A75), the A C45s, C13s, U43s, U34s and U3s.

13.434 The CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will minimise the effect of construction traffic on local communities, measures include but are not limited to:

- temporary construction site signage will be erected on the local road network in advance of local communities to warn people of construction activities and associated construction vehicles;
- SPEN shall nominate a Community Liaison Officer (CLO); the CLO will be responsible for keeping the local community informed of progress on the site and warning them of upcoming activities which may give rise to increased construction vehicle movements; and
- all site staff will be informed about traffic management arrangements and procedures via the site induction.

13.435 Site observations indicate that pedestrian activity on the C45s, U43s, U34s and U3s road sections is low. Furthermore, the CTMP will promote interventions that will minimise the effect of construction traffic on pedestrian amenity. On this basis, it is considered that construction traffic generated by Connection G-T will have a minor and therefore not significant effect to the amenity of users of the C45s, U43, U34 and U3s.

13.436 HGV traffic is predicted to increase considerably on the C13s and A762 through Laurieston. However, with the interventions promoted through the CTMP, and most specifically through local community consultation, it is considered that construction traffic generated by Connection G-T will have a minor and therefore not significant effect to the amenity of users of the C13s and A762.

13.437 Several core paths overlap with proposed construction access tracks, this include the following Core Paths (see Figure 13.2):

- The New Galloway West path (Core Path 516) overlaps with a proposed access track to towers 5 to 12;
- Raiders Road to Kenmuir Link (Core Path 142) overlaps with a proposed access track to Hind Craig Quarry;
- Raiders Road East (Core Path 141) and Cairn Edward Hill path (Core Path 177) overlaps with a proposed access track to towers 43 to 49;
- Arie path, near Mossdale (Core Path 153) overlaps with a proposed access track to towers 50 and 51;
- Glengap and Laurieston Forest (Core Path 28) and Retreat Wood, Laurieston (Core Path 144) overlap with a proposed access track to Craigelwhan Quarry;
- The Gunney, Parton (Core Path 29) overlaps with a proposed access track to existing R route (south) towers 84(R) to 87(R);
- Livingston Hill (Core Path 208) overlaps with a proposed access track to towers 104(R) and 105(R);

13.438 Furthermore, several construction access routes overlap and/or intersect with existing recreational routes, this include the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route;
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way);
- the section of the C13s intersects the Kenick Burn Walk (Core Path 200); and
- the section of the A712 between the A75 and the A762 intersects the National Cycle Route 7.

13.439 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, it is considered that construction traffic generated by Connection G-T will have a minor and therefore not significant effect to the amenity of users of the recreational routes identified above.

13.440 New construction access tracks will intersect with Raiders Road (Core Path 143), the Mossdale to Gatehouse Station Railway walk (Core Path 485) and Core Path 205. Based on site observations and results of NMU surveys it is considered that construction traffic generated by Connection G-T will have a minor effect on pedestrian amenity, specifically to the amenity of users of these three recreational routes.

13.441 NMU surveys indicated a relatively high level of equestrian activity on the B795. There is existing signage in place warning road users of the presence of equestrians and delivery drivers will be informed about the potential presence of equestrians at that location through 'toolbox talks'. On this basis, it is considered that construction traffic generated by Connection G-T will have a minor effect on equestrian activity along the B795.

13.442 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic engaged in the G-T Connection.

13.443 Overall based on professional judgment, the construction traffic generated by Connection G-T will have a minor effect upon community receptors and is therefore not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.444 Localised widening of strategic sections of C45s, C13s, U3s (between the junction of the A712 and worksite access reference 37) and U43s will be implemented to ease access to the worksites for HGV construction traffic and general traffic sharing these route sections notably including upgraded passing places.

Residual Construction Effects

13.445 Overall, due to the implementation of the infrastructure improvements to the U2s as part of the Glenlee Substation Extension works (therefore, embedded mitigation for the G-T Connection), the C45s, C13s, U3s (between the junction of the A712 and worksite access reference 37) and U43s and the embedded mitigation measures and operational procedures as proposed in the framework CTMP the significance of the residual effects associated with the levels of traffic anticipated during the construction of the G-T Connection is considered to be minor and accordingly considered to be not significant.

Assessments of Cumulative Effects

13.446 An assessment of the likely construction effects of the G-T Connection and other committed developments as well as other Connections and developments forming part of the KTR Project has been undertaken to robustly take account of the likely interrelation of overlapping construction programmes and the resultant cumulative effect upon the local road network.

13.447 The overall approach for the cumulative assessments, including a list of developments considered, is outlined in Chapter 3

13.448 The following developments have been included together with G-T Connection for the cumulative traffic and transport assessment:

- Knockman Hill Wind Farm (Proposed Wind Turbine Project at Knockman Hill, Milnmark Farm Dumfries and Galloway Environmental Statement (ES) 2009);
- Mochrum Fell Wind Farm (Mochrum Fell Wind Farm ES, 2009);
- Shepherds Rig Wind Farm (Shepherds Rig Wind Farm ES, 2020);
- Troston Loch Wind Farm (Troston Loch Wind Farm EIA Report, 2019);
- Cornharrow Wind Farm (Cornharrow Wind Farm EIA Report, 2020);
- Glenshimmeroch Wind Farm (Glenshimmeroch Wind Farm EIA Report, 2018); and
- Fell Wind Farm (Fell Wind Farm EIA Report, 2019).

13.449 In addition to the above wind farms, traffic associated with the construction of the proposed Glenlee Substation Extension has been included in order to ensure a robust EIA; the assessment has been undertaken on the basis of an overlap with the KTR construction enabling works between March 2022 and June 2022.

13.450 In addition to the above developments, construction of the other KTR Project Connections (i.e. Connections P-G via K, C-K, E-G and BG Deviation) will overlap with the construction phase of the Connection G-T of the KTR Project between March 2022 and December 2026 inclusive.

Glenlee Substation Extension Access Arrangements

13.451 For the purpose of the assessment, it has been assumed that:

- Construction traffic associated with the Glenlee Substation Extension will access from the south via the A713 (45%), the north via the A713 (45%) and a proportion would come from the east via the A712 (10%).

Wind Farm Access Arrangements

13.452 The following assumptions have been made to inform the assessment, as derived from review of relevant supporting ESs/EIA Reports for the wind farms projects:

- Construction traffic accessing the proposed Knockman Hill Wind Farm will do so from the north via the A713.
- Construction traffic accessing the proposed Mochrum Fell Wind Farm site will predominantly do so from the south via the A713 (75%) although a proportion would come from the north via the A713 (25%).
- All construction traffic accessing the proposed Shepherds Rig Wind Farm site will do so from the north via the A713.
- All construction traffic accessing the proposed Troston Loch Wind Farm site will do so from the north via the A713.
- Construction traffic accessing the Cornharrow Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Glenshimmeroch Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Fell Wind Farm site will route from both the north (70%) and south (30%) via the A712.

Total Cumulative Construction Effects

13.453 This section assesses the maximum development case assuming that all the developments being considered as part of the cumulative assessment will proceed to construction and that the cumulative effects are the total likely effects created by the construction of the G-T Connection in combination with:

- Wind farm developments (Knockman Hill, Mochrum Fell, Shepherds Rig, Troston Loch, Cornharrow, Glenshimmeroch, Fell);
- Glenlee Substation Extension; and
- other KTR Project Connections; P-G via K, C-K, E-G and BG Deviation.

13.454 It is uncertain if and when the construction phases of the wind farms and the Connection G-T of the KTR Project might overlap. To robustly assess cumulative traffic generation, cumulative assessment has been undertaken for route sections within the KTR Project Study Area that are utilised by other committed developments as well as other Connections and developments forming part of the KTR Project. This is based on the of sum of the average traffic generation of the developments listed above and the Connection G-T of the KTR Project peak traffic generation. This is considered to represent a maximum case scenario as, in reality, it is considered highly improbable that peak traffic generation for all developments will align.

13.455 Table 13.54 presents a summary of predicted traffic volume increases over the entire construction period of Connection G-T of the KTR Project and during the 'peak period' of construction activity for G-T (December 2025 to December 2026 inclusive). The table shows the proportional increase in traffic generated for route sections within the G-T Connection Study Area that are also utilised by other committed developments as well as other Connections and developments forming part of the KTR Project.

Table 13.54: Summary of Predicted Traffic Volume Increase – Total Likely Cumulative Impact for Connection G-T of the KTR Project

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
A713 (between A77 and Dalmellington) [AADT = 4,085]	107 3% None	36 15% Moderate	309 8% Minor	87 36% Moderate
A713 (between Dalmellington and Carsphairn) [AADT = 1,557]	147 9% Minor	74 41% Moderate	345 22% Moderate	121 66% Major
A713 (between Carsphairn and A762) [AADT = 1,398]	135 10% Moderate	70 44% Moderate	244 17% Moderate	99 62% Major
A713 (between A762 and A702) [AADT = 1,382]	66 5% Minor	32 28% Moderate	60 3% None	40 34% Moderate
A713 (between A702 and A712) [AADT = 2,282]	66 3% None	32 16% Moderate	60 5% Minor	40 20% Moderate
A713 (between A712 and B795) [AADT = 1,889]	44 2% None	24 13% Moderate	94 5% Minor	36 29% Moderate
A713 (between B795 and A75) [AADT = 3,868]	50 1% None	22 11% Moderate	102 3% None	34 17% Moderate
A712 (between A75 and A762) [AADT=685]	40 6% Minor	20 28% Moderate	52 8% Minor	32 44% Moderate
A712 (between A762 and A713) [AADT=1,544]	52 3% None	24 20% Moderate	70 5% Minor	40 33% Moderate
A712 (between A713 and Corsock) [AADT = 988]	44 4% None	16 22% Moderate	121 10% Moderate	44 61% Major
A712 (between Corsock and A75) [AADT = 768]	33 4% None	12 16% Moderate	79 10% Moderate	29 38% Moderate
A711 (between A75 and A762)	38	32	58	52

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
[AADT=3,898]	<1% None	9% Minor	1% None	15% Moderate
A762 (between A712 and B795) [AADT=398]	44 11% Moderate	22 96% Major	66 17% Moderate	40 174% Major
A762 (between B795 and A75) [AADT=370]	40 11% Moderate	22 67% Major	64 17% Moderate	40 121% Major
A762 (between A713 and U2s) [AADT = 356]	20 6% Minor	12 48% Moderate	2 <1% None	2 8% Minor
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	42 4% None	42 114% Major	38 4% None	38 103% Major
U2s [AADT = 199]	14 7% Minor	8 67% Major	4 2% None	4 33% Moderate
U3s [AADT = 62]	10 16% Moderate	6 600% Major	10 16% Moderate	6 600% Major
Gateside Road (Dalmellington) [AADT = 1,280]	38 3% None	38 78% Major	34 3% None	34 69% Major

Predicted Cumulative Effects during Construction

Driver Delay

13.456 From a review of Table 13.54, it is evident that threshold significance criteria have been exceeded on the A713 (between the A77 and the A75), A762, A711, A712, B741, U2s, U3s and Gateside Road throughout the duration of the entire construction period.

13.457 The A713, A712, A711 and A762 (between the A712 and the A75) have the residual capacity to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713, A712, A711 and A762 (between the A712 and the A75) is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.458 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the A713 and the U2s) and the U2s to provide passing places will be implemented; achieving a minimum width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase (see Embedded Mitigation Measures Section). On this basis, the significance of effect of driver delay for users of the A762 and U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.459 The U3s has very low traffic flow and as such shows a relatively large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of construction traffic anticipated. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the U3s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.460 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such show a relatively large traffic increase which would represent a major effect; however, it is important to note that these route sections have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.461 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic volume, then the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.55.

Table 13.55: Projected Collisions – Total Likely Cumulative Impacts

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the G-T Connection of the KTR Project + Committed Developments + Glenlee Substation Extension + other KTR Connections)
A713 (between A77 and Dalmellington)	10	10.3
A713 (between Dalmellington and Carsphairn)	4.7	5.2
A713 (between Carsphairn and A762)	1.3	1.5
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A712 (between A75 and A762)	2	2.2
A712 (between A762 and A713)	0.3	0.4
A712 (between A713 and Corsock)	1	1.1
A712 (between Corsock and A75)	1	1.1
A711 (between A75 and A762)	1.3	1.4
A762 (between A712 and B795)	0	0
A762 (between B795 and A75)	0	0
A762 (between A713 and U2s)	0.3	0.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
U2s	0	0
U3s	0.3	0.4
Gateside Road	0	0

13.462 Using this basis of assessment, there would be a small increase in PICs (less than 1 collision) for the A713 (between the A77 and the A762) as a consequence of the increased traffic generated cumulatively. Professional judgement suggests that the peak cumulative traffic, which would be temporary (13 months duration), would result in a minor effect (not significant) upon road safety if unmitigated.

13.463 On the other route sections within the Study Area, there would be a negligible increase in PICs as a consequence of the increased traffic generated cumulatively by the developments and the significance of the effect would be none and therefore not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.464 The roads within the Connection G-T of the KTR Project Study Area will continue to operate below capacity, even with the addition of traffic generated cumulatively. Severance and pedestrian delay should not occur when there is such a notable level of residual road capacity.

13.465 The only road sections where HGV flows are expected to double or more are the A762 (between the A712 and the A75), the B741 and the U3s.

13.466 The CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will minimise the effect of construction traffic on local communities, measures include but are not limited to:

- temporary construction site signage will be erected on the local road network in advance of local communities to warn people of construction activities and associated construction vehicles;
- SPEN shall nominate a Community Liaison Officer (CLO); the CLO will be responsible for keeping the local community informed of progress on the site and warning them of upcoming activities which may give rise to increased construction vehicle movements; and
- all site staff will be informed about traffic management arrangements and procedures via the site induction.

13.467 There is local footway provision in Dalmellington and New Cumnock (B741). Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of construction traffic generated cumulatively. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the B741.

The U3s has currently very low level of HGV traffic, and as such shows a large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of construction traffic anticipated. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the U3s.

13.468 HGV traffic is predicted to increase considerably on the A762 through Laurieston. However, with the interventions promoted through the CTMP, and most specifically through local community consultation, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the C13s and A762.

13.469 Furthermore, several construction access routes overlap and/or intersect with existing recreational routes, this include the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route;
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way); and

13.470 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, it is considered that construction traffic generated by Connection G-T will have a minor effect to the amenity of users of the recreational routes identified above.

13.471 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of project generated construction traffic.

13.472 Overall based on professional judgement the construction traffic generated cumulatively will have a minor effect upon community receptors and is not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.473 As recorded in the CTMP, if another development, such as the wind farms considered in the cumulative assessment appears likely to undergo construction at the same time as the G-T Connection, SPEN will liaise with the other developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.

Residual Cumulative Effects during Construction

13.474 Overall, due to the implementation of the infrastructure improvements to the U2s as part of the Glenlee substation extension works (therefore, embedded mitigation for the G-T Connection), the C45s, C13s, U3s (between the junction of the A712 and worksite access reference 37) and U43s in conjunction with the embedded mitigation measures and operational procedures as proposed in the framework CTMP and the additional proposed requirement for SPEN to liaise with other developers regarding the scheduling of deliveries and potential means of reducing the effect of combined construction, the residual effects associated with the levels of traffic generated cumulatively are considered to be minor and accordingly not significant in the context of the 2017 EIA Regulations (as amended).

Monitoring

13.475 The requirement for construction monitoring will be agreed with SPEN, local roads authority representatives and other stakeholders prior to commencement of works.

13.476 If deemed necessary, SPEN will enter into a legal agreement under Section 96 of the Roads (Scotland) Act 1984 to formalise an inspection and maintenance regime with the Roads Authority to contribute to maintenance of those roads impacted by HGV movements associated with the G-T Connection.

Summary of Effects

13.477 A summary of effects before and after proposed mitigation measures for Connection G-T of the KTR Project is provided in

13.478 Table 13.56.

Table 13.56: Summary of Effects for Connection G-T of the KTR Project

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
Construction Effects			
Driver Delay	Minor	Localised widening of strategic sections of C45s, C13s, U3s (between the A712 and worksite access reference 37) and U43s will be implemented to ease access to the worksites for HGV construction traffic and general traffic sharing these route sections notably including upgraded passing places. Beyond the measures listed above, no additional mitigation is proposed beyond the embedded measures and operational procedures as proposed as good practice in the framework CTMP. The framework CTMP provides preliminary details of proposed traffic management measures and associated interventions to be implemented during the construction phase of the KTR Project to minimise disruption and improve safety. The CTMP will be enhanced and expanded as appropriate by SPEN's appointed contractor(s) in consultation with Roads	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor

Predicted Effect	Significance	Mitigation	Significance of Residual Effect
		Authorities and the Police prior to commencement of construction activities and as necessary during the construction phase; the CTMP is considered a 'live' document.	
Cumulative Effects			
Driver Delay	Minor	If the construction phase of any notably sized development(s), e.g. wind farm development(s) (as considered in the cumulative assessment) appears likely to overlap with the KTR Project, SPEN will liaise with the appropriate developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction effects.	Minor
Road Safety	Minor		Minor
Community Impacts	Minor		Minor

13.479 Based on the assessment summary in

13.480 Table 13.56, the additional traffic predicted to be generated on public roads throughout the Connection G-T Study Area during the construction phase is anticipated to result in a minor effect and therefore not significant.

KTR Project as a Whole: Assessment of Effects

13.481 This section identifies the likely significant traffic and transport effects of the KTR Project as a Whole as if it was the subject of a single application for consent. These comprise the following:

- any likely significant effects identified as a consequence of the combined construction of the KTR Project as a whole; and
- any likely significant effects identified as a consequence of the combined construction of the KTR Project as a whole cumulatively with other committed developments.

Access Arrangements

13.482 Transportation, including deliveries to and from the site will be taken from the existing trunk and local road network. The local area road network is shown on Figures 13.1.1 and 13.1.2.

13.483 Given the nature of construction of the Connections forming the KTR Project (i.e. a number of linear developments), SPEN has identified 121 construction access points as shown on Figures 5.5.1 and 5.5.2.

Assessment of Construction Effects (including tree felling)

13.484 As detailed in Chapter 5, the overall construction period duration for the KTR Project as a Whole, including decommissioning of N and R routes and reinstatement, is 58 months.

13.485 Sections of the A77, A76, A75 trunk roads in addition to the A713, A762, A712, A711, A702, B795, B741, C50s, C45s, C31s, C13s, U137s, U133s, U107s, U103s, U62s, U43s, U34s, U3s, U2s, U1s and Gateside Road will be used by construction vehicles. The number of movements assumed for the purpose of this assessment are shown by individual Connection; see Table 13.11 for Connection P-G via K, Table 13.21 for Connection C-K, Table 13.31 for Connection E-G, Table 13.41 for BG Deviation, and Table 13.49 for Connection G-T.

13.486 The assessed number of traffic movements (note: one trip = two movements; i.e. delivery and return journeys) generated by construction activity for KTR Project as Whole are summarised in Table 13.57.

Table 13.57: Vehicle Movements Generated by Tree Felling and Construction Activity for the KTR Project as a Whole

Activity/Item Being Transported	Type of Vehicle	Details/deliveries	Total Vehicle Movements
Timber Clearance (within wayleave)	Lorry (24 tonne capacity)	An estimated 242.97Ha of timber will be felled resulting in a total of 24,022.8 tonnes of timber to be produced.	2,008
Timber Clearance (outside wayleave)	Lorry (24 tonne capacity)	An estimated 113.5ha of timber will be felled resulting in a total of 29,384.2 tonnes of timber to be produced.	2,454
Site Access Tracks	Lorry (20 tonne capacity)	An estimated 549,188 tonnes of stone will be required.	54,917
OHL Construction	Lorry (20 m^3 capacity) concrete ready-mix trucks with a 6 m^3 capacity	Concrete and steelwork	5,254
11kV Removal and Undergrounding	Lorry (20 tonne capacity)	Cabling, ducting and sand	360
Wiring and Commissioning[9]	Lorry (20 m^3 capacity) and light vans	Wiring and commissioning	1,932
Decommissioning	Lorry (20 m^3 capacity) and light vans	Steelwork and wiring	8,340
Reinstatement	Lorry (20 tonne capacity)	An estimated 489,907 tonnes of stone will be required to be removed.	48,991
Other	Private cars, light vans and minibus	Construction personnel and other site visitors	128,258
TOTAL HGV TRAFFIC MOVEMENTS FOR KTR PROJECT AS A WHOLE			124,256
TOTAL LGV TRAFFIC MOVEMENTS FOR KTR PROJECT AS A WHOLE			128,258
TOTAL ALL TRAFFIC MOVEMENTS FOR KTR PROJECT AS A WHOLE			252,514

Predicted Construction Effects

13.487 No significant residual effects that have been identified for the individual Connections.

13.488 As indicated in Table 13.57 the total of traffic generated by the KTR Project as a Whole is estimated as 252,514 movements, of which 124,256 movements will be HGV movements over the 58 month construction period.

13.489 For the purpose of the assessment of the potential traffic and transport effects associated with the construction of the KTR Project as a Whole, it has been assumed that:

- Stone will be sourced entirely from offsite locations for Connections P-G via K, C-K, E-G and for the removal of the N route towers between Polquhanity and Kendoon and also the R route (north) towers between Kendoon and Glenlee. In this scenario it is assumed that 50% will be sourced from Sorn Quarry (north of the Study Area, in East Ayrshire) and 50% sourced from Tongland Quarry (in the south of the Study Area, in Dumfries & Galloway).
- For Connection G-T, the BG Deviation and removal of the R (south) towers between Glenlee and Tongland it has been assumed that 50% of stone will be sourced from the onsite quarries as a robust realistic scenario for assessment due to the presence of a number of proposed quarries in the vicinity of these Connections. In this scenario it is assumed that the remaining 50% will be sourced from both Sorn Quarry and Tongland Quarry.

13.490 Similar to the above, in relation to the reinstatement of temporary access tracks, for the purpose of the EIA, it has been assumed that:

- Stone will be entirely be taken offsite for Connection P-G via K, C-K, E-G and for the removal of the N route towers between Polquhanity and Kendoon and also the R route (north) towers between

[9] This includes an allowance for HGV movements associated with the construction of the 250m section of underground cable to connect into the Glenlee substation

Kendoon and Glenlee. In this scenario it is assumed that stone will be returned to both Sorn Quarry or Tongland Quarry.

- 50% of stone will be reinstated within the onsite quarries as a robust scenario for Connection G-T, the BG Deviation and for the removal of the R route (south) towers between Glenlee and Tongland. In this scenario it is assumed that the remaining 50% will be returned to both Sorn Quarry and Tongland Quarry.

13.491 Estimated daily and monthly movements generated by the KTR Project as a Whole against the programme along with predicted percentages increases on relevant trunk and local roads are shown in Table 13.58.

13.492 Construction traffic is estimated at an average of 168 vehicle movements a day over the entire construction period.

13.493 The highest levels of construction traffic are anticipated to occur over a period of 11 months from August 2023 to June 2024 with an average of 212 vehicle movements a day, with a maximum of 264 vehicle movements occurring per day in October 2023. The 'peak period' for the purpose of this assessment is therefore considered to be August 2023 to June 2024 inclusive. Table 13.59 presents a summary of this information by route section.

13.494 The A77, A76, A75, A702 and the B795 currently operate comfortably within their respective capacities. The increase in traffic volume on these roads throughout the construction phase of the KTR Project as a Whole is assessed to be less than 10% in terms of both general traffic (HGV+LGV) and specifically HGV traffic. On this basis, the significance of the effect is considered to be minor and accordingly not significant. Since the 10% traffic increase threshold has not been exceeded on these routes, no detailed assessment has been undertaken for these public roads.

13.495 The C50s, C31s, U137s, U133s, U107s, U103s and U62s will solely be used to facilitate the removal of R route (south). It is assessed that the removal of the R route (south) will generate less than 10 vehicle movements per day on these specific road sections. Accordingly, the professional judgement of the assessment team is that effects arising from such low level of traffic will be none and therefore not significant. On this basis, no detailed assessment has been carried out for these public road sections.

13.496 For the purpose of the detailed assessment, it has been assumed that mitigation measures and operational procedures as proposed in the framework CTMP (Appendix 13.1) will be in place during construction of the KTR Project and therefore used to inform the judgement of significance of effects.

Table 13.58: Outline Construction programme and Associated Traffic Assessment for the KTR Project as a Whole

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	TOTAL
Activity																																																										
Polquhanity - Kendoon, Kendoon - Glenlee	2062	2028	2028	2028	2028	2250	2478	2484	2434	2434	1615	450	470	742	1028	1028	1028	1028	1204	1234	1139	784	784	784	784	697	1040	1760	1760	1760	1760	1760	1760	1760	1760	1760	1742	1664	1241	82	82	82	82	82	82	82	82	82	82	82	68	0	0	0	0	0	0	**59550**
Carsfad - Kendoon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	470	1794	827	274	151	118	118	118	118	118	118	101	228	240	240	240	240	240	240	240	240	240	240	240	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**7214**
Earlston - Glenlee	918	902	902	832	40	256	92	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	15	276	290	290	290	290	290	290	290	290	290	290	290	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**8211**
BG Route Realignment	102	102	102	102	102	102	102	102	102	100	100	100	100	100	100	100	100	92	464	568	465	339	106	136	136	136	136	136	18	0	142	150	150	150	150	150	150	150	150	150	150	148	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**6242**
Glenlee - Tongland	2196	2160	2160	2160	2160	2160	2376	2322	2490	2518	2518	2518	2518	3120	3392	3392	3392	3392	3392	3392	3392	3392	3392	3392	3392	3752	3990	3455	2458	2458	2458	2458	2458	2458	2458	2458	2458	2458	2218	1361	1008	1008	1008	1008	784	3974	4602	4694	4440	4594	4670	4670	4670	4670	4670	4670	4670	1443	**171297**
Total no. Vehicle Movements (HGV + LGV)	5278	5192	5192	5122	4330	4768	5048	4944	5062	5088	4269	3104	3124	3998	4556	4556	4556	5018	6890	6057	5306	4702	4436	4466	4466	4739	5320	5505	4352	4722	4890	4898	4898	4898	4898	4898	4880	4802	4139	2123	1770	1291	1092	1090	866	4056	4684	4776	4522	4676	4738	4670	4670	4670	4670	4670	4670	1443	**252514**
Total no. Vehicle Movements / Day (HGV + LGV)	182	182	182	182	160	174	184	176	186	184	184	118	126	168	168	168	168	228	256	264	220	188	168	168	168	186	252	242	172	178	184	184	184	184	184	184	184	180	184	96	78	78	56	50	50	166	166	166	156	178	168	162	162	162	162	162	162	162	**-**
Total no. Vehicle Movements (HGV)	3718	3658	3658	3610	3046	3130	3232	3190	3176	3180	2546	1636	1638	1740	1796	1796	1796	2048	2832	2265	1914	1810	1778	1782	1782	1828	2382	2294	1656	1946	2070	2076	2076	2076	2076	2076	2062	2022	1682	712	666	355	224	222	192	2230	2590	2634	2496	2548	2534	2526	2526	2526	2526	2526	2526	618	**124256**
Total no. Vehicle Movements / Day (HGV)	128	128	128	128	110	110	116	114	116	114	114	62	64	68	68	68	68	100	106	108	76	72	70	70	70	72	112	112	68	76	80	80	80	80	80	80	80	78	78	34	32	32	18	14	14	90	90	90	84	90	88	86	86	86	86	86	86	86	**-**
Total no. Vehicle Movements (LGV)	1560	1534	1534	1512	1284	1638	1816	1754	1886	1908	1723	1468	1486	2258	2760	2760	2760	2970	4058	3792	3392	2892	2658	2684	2684	2911	2938	3211	2696	2776	2820	2822	2822	2822	2822	2822	2818	2780	2457	1411	1104	936	868	868	674	1826	2094	2142	2026	2128	2204	2144	2144	2144	2144	2144	2144	825	**128258**
Total no. Vehicle Movements / Day (LGV)	54	54	54	54	50	64	68	62	70	70	70	56	62	100	100	100	100	128	150	156	144	116	98	98	98	114	140	130	104	102	104	104	104	104	104	104	104	102	106	62	46	46	38	36	36	76	76	76	72	88	80	76	76	76	76	76	76	76	**-**
A76 (between B743 and A70) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between B743 and A70) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between A70 and New Cumnock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between New Cumnock and Thornhill) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between New Cumnock and Thornhill) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between Thornhill and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A76 (between Thornhill and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A75 (between A762 and A712) % Increase in HGV Traffic	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	2%	2%	3%	3%	3%	3%	3%	4%	5%	5%	4%	4%	3%	3%	3%	3%	5%	5%	3%	3%	4%	4%	4%	4%	4%	4%	4%	3%	4%	2%	1%	1%	1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A75 (between A712 and A780) % Increase in ALL Traffic	9%	9%	9%	9%	7%	9%	9%	8%	9%	9%	9%	4%	5%	6%	6%	6%	6%	10%	12%	12%	8%	7%	6%	6%	6%	6%	10%	9%	7%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	4%	3%	3%	2%	2%	2%	5%	5%	5%	4%	5%	5%	4%	4%	4%	4%	4%	-
A75 (between A712 and A780) % Increase in HGV Traffic	6%	6%	6%	6%	5%	6%	6%	6%	7%	6%	6%	4%	4%	5%	5%	5%	5%	8%	9%	9%	7%	6%	5%	5%	5%	5%	6%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	2%	2%	2%	2%	2%	4%	4%	4%	4%	5%	4%	4%	4%	4%	4%	4%	-
A75 (between A780 and A76) % Increase in ALL Traffic	4%	4%	4%	4%	3%	4%	4%	4%	4%	4%	4%	2%	2%	3%	3%	3%	3%	5%	5%	5%	4%	3%	3%	3%	3%	3%	4%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	3%	3%	3%	2%	3%	3%	3%	3%	3%	3%	3%	-
A75 (between A780 and A76) % Increase in HGV Traffic	3%	3%	3%	3%	2%	2%	3%	2%	3%	3%	3%	1%	1%	1%	1%	1%	1%	3%	3%	3%	2%	2%	1%	1%	1%	1%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	2%	3%	1%	1%	1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A77 (between A713 and A70) % Increase in ALL Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	2%	2%	1%	<1%	<1%	<1%	<1%	<1%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A77 (between A713 and A70) % Increase in HGV Traffic	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	6%	6%	8%	9%	9%	10%	8%	6%	6%	6%	7%	8%	8%	4%	4%	5%	5%	5%	5%	5%	5%	5%	4%	5%	3%	2%	2%	2%	1%	1%	7%	7%	7%	7%	8%	8%	7%	7%	7%	7%	7%	-
A713 (between A77 and Dalmellington) % Increase in ALL Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	5%	5%	5%	4%	4%	4%	4%	4%	5%	5%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	1%	1%	1%	<1%	<1%	5%	5%	5%	4%	5%	5%	5%	5%	5%	5%	5%	-
A713 (between A77 and Dalmellington) % Increase in HGV Traffic	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%	3%	3%	3%	3%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A713 (between Dalmellington and Carsphairn) % Increase in ALL Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	2%	3%	3%	3%	3%	3%	3%	3%	2%	3%	2%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A713 (between Dalmellington and Carsphairn) % Increase in HGV Traffic	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A713 (between Carsphairn and A762) % Increase in ALL Traffic	3%	3%	3%	3%	3%	5%	5%	4%	5%	5%	5%	3%	4%	6%	6%	6%	6%	8%	11%	12%	10%	7%	6%	6%	6%	6%	7%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	3%	2%	2%	2%	2%	2%	3%	3%	3%	2%	4%	3%	3%	3%	3%	3%	3%	-
A713 (between Carsphairn and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	1%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 North of Dalry (between A762 and A702) % Increase in ALL Traffic	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	14%	16%	16%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	5%	3%	3%	3%	3%	3%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	-
A713 North of Dalry (between A762 and A702) % Increase in HGV Traffic	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	14%	16%	16%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	4%	3%	3%	3%	3%	3%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	-
A713 South of Dalry (between A702 and A712) % Increase in ALL Traffic	12%	12%	12%	12%	6%	7%	7%	4%	4%	4%	4%	1%	2%	2%	2%	2%	2%	2%	2%	4%	4%	6%	3%	2%	2%	2%	3%	3%	3%	5%	6%	6%	6%	6%	6%	6%	6%	6%	6%	3%	3%	3%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A713 South of Dalry (between A702 and A712) % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A713 (between A712 and B795) % Increase in ALL Traffic	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	1%	1%	1%	<1%	<1%	<1%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	-
A713 (between A712 and B795) % Increase in HGV Traffic	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	15%	16%	16%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	3%	3%	3%	3%	3%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	-
A713 (between B795 and A75) % Increase in ALL Traffic	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	5%	6%	5%	5%	5%	5%	5%	-
A713 (between B795 and A75) % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
A712 (between A75 and A762) % Increase in ALL Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A712 (between A75 and A762) % Increase in HGV Traffic	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between A762 and A713) % Increase in ALL Traffic	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	2%	2%	3%	3%	3%	3%	7%	6%	10%	5%	3%	3%	3%	3%	3%	4%	4%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
A712 (between A762 and A713) % Increase in HGV Traffic	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	13%	13%	13%	13%	13%	13%	29%	26%	39%	23%	13%	13%	13%	16%	19%	19%	13%	10%	13%	13%	13%	13%	13%	13%	13%	13%	10%	10%	10%	10%	3%	3%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	-
A712 (between A713 and Corsock) % Increase in ALL Traffic	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	1%	1%	1%	1%	1%	1%	3%	3%	3%	1%	1%	1%	1%	1%	1%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A712 (between A713 and Corsock) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A712 (between Corsock and A75) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A711 (between A75 and A762) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A711 (between A75 and A762) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between A713 and Moniaive) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
A702 (between Moniaive and A76) % Increase in HGV Traffic	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-

Programme	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	TOTAL
A762 (between A712 and B795) % Increase in ALL Traffic	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	2%	2%	3%	3%	3%	3%	4%	5%	5%	4%	4%	3%	3%	3%	3%	5%	5%	3%	3%	4%	4%	4%	4%	4%	4%	4%	3%	4%	2%	1%	1%	1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-
A762 (between A712 and B795) % Increase in HGV Traffic	9%	9%	9%	9%	7%	9%	9%	8%	9%	9%	9%	4%	5%	6%	6%	6%	6%	10%	12%	12%	8%	7%	6%	6%	6%	6%	10%	9%	7%	8%	8%	8%	8%	8%	8%	8%	8%	8%	4%	3%	3%	2%	2%	2%	5%	5%	5%	4%	5%	5%	4%	4%	4%	4%	4%	4%	-
A762 (between A712 and B795) % Increase in ALL Traffic	6%	6%	6%	6%	5%	6%	6%	6%	7%	6%	6%	4%	4%	5%	5%	5%	5%	8%	9%	9%	7%	6%	5%	5%	5%	5%	6%	5%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	2%	2%	2%	2%	2%	4%	4%	4%	4%	5%	4%	4%	4%	4%	4%	4%	4%	-
A762 (between A712 and B795) % Increase in HGV Traffic	4%	4%	4%	4%	3%	4%	4%	4%	4%	4%	4%	2%	2%	3%	3%	3%	3%	5%	5%	5%	4%	3%	3%	3%	3%	3%	4%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	<1%	<1%	3%	3%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	-
A762 (between A713 and U2s) % Increase in ALL Traffic	3%	3%	3%	3%	2%	2%	3%	2%	3%	3%	3%	1%	1%	1%	1%	1%	1%	3%	3%	3%	2%	2%	1%	1%	1%	1%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	2%	3%	1%	1%	1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
A762 (between A713 and U2s) % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	2%	2%	1%	<1%	<1%	<1%	<1%	<1%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
B795 (between A762 and A713) % Increase in ALL Traffic	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	6%	6%	6%	6%	8%	9%	9%	10%	8%	6%	6%	6%	7%	8%	8%	4%	4%	5%	5%	5%	5%	5%	5%	5%	4%	5%	3%	2%	2%	2%	1%	1%	7%	7%	7%	7%	8%	8%	7%	7%	7%	7%	7%	-
B795 (between A762 and A713) % Increase in HGV Traffic	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	5%	5%	5%	4%	4%	4%	4%	4%	5%	5%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	1%	1%	1%	<1%	<1%	5%	5%	5%	4%	5%	5%	5%	5%	5%	5%	5%	-
B741 % Increase in ALL Traffic	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%	3%	3%	3%	3%	2%	2%	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
B741 % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	2%	3%	2%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
C13s % Increase in ALL Traffic	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	2%	2%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	-
C13s % Increase in HGV Traffic	3%	3%	3%	3%	3%	5%	5%	4%	5%	5%	5%	3%	4%	6%	6%	6%	6%	8%	11%	12%	10%	7%	6%	6%	6%	6%	7%	6%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	3%	2%	2%	2%	2%	2%	3%	3%	3%	2%	4%	3%	3%	3%	3%	3%	3%	3%	-
C45s % Increase in ALL Traffic	<1%	<1%	<1%	<1%	<1%	1%	1%	1%	1%	1%	1%	<1%	1%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
C45s % Increase in HGV Traffic	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	14%	16%	16%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	5%	3%	3%	3%	3%	3%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	-
U43s % Increase in ALL Traffic	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	9%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	11%	14%	16%	16%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	4%	3%	3%	3%	3%	3%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	17%	-
U43s % Increase in HGV Traffic	12%	12%	12%	12%	6%	7%	7%	4%	4%	4%	4%	1%	2%	2%	2%	2%	2%	2%	4%	4%	6%	3%	2%	2%	2%	2%	3%	3%	3%	5%	6%	6%	6%	6%	6%	6%	6%	6%	3%	3%	3%	1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
U34s % Increase in ALL Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
U34s % Increase in HGV Traffic	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%	4%	2%	2%	2%	2%	2%	4%	4%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	1%	1%	1%	<1%	<1%	<1%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	-
U1s % Increase in ALL Traffic	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	12%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	14%	15%	16%	16%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	4%	3%	3%	3%	3%	3%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%	-
U1s % Increase in HGV Traffic	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	5%	5%	5%	5%	6%	5%	5%	5%	5%	5%	5%	5%	-
U2s % Increase in ALL Traffic	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	-
U2s % Increase in HGV Traffic	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
U3s % Increase in ALL Traffic	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	-
U3s % Increase in HGV Traffic	4%	4%	4%	4%	4%	4%	4%	4%	4%	3%	3%	2%	2%	3%	3%	3%	3%	3%	7%	6%	10%	5%	3%	3%	3%	3%	4%	4%	3%	2%	3%	3%	3%	3%	3%	3%	3%	3%	2%	2%	2%	2%	1%	1%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	-
Gateside Road % Increase in ALL Traffic	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	13%	13%	13%	13%	13%	29%	26%	39%	23%	13%	13%	13%	16%	19%	19%	13%	10%	13%	13%	13%	13%	13%	13%	13%	13%	10%	10%	10%	10%	3%	3%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	16%	-
Gateside Road % Increase in HGV Traffic	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%	3%	1%	1%	1%	1%	1%	1%	3%	3%	3%	1%	1%	1%	1%	1%	1%	3%	3%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	<1%	<1%	<1%	<1%	<1%	<1%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	-

Table 13.59: Summary of Construction Traffic Generated on Public Roads within the KTR Project As a Whole Study Area

Route Section	Construction traffic generated over the 58 months construction programme, by route section			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV
A76 (between B743 and A70) [AADT = 11,691]	32 [<1%] {none, not significant}	32 [3%] {none, not significant}	30 [<1%] {none, not significant}	30 [3%] {none, not significant}
A76 (between A70 and New Cumnock) [AADT = 6,423]	32 [<1%] {none, not significant}	32 [3%] {none, not significant}	30 [<1%] {none, not significant}	30 [3%] {none, not significant}
A76 (between New Cumnock and Thornhill) [AADT = 3,854]	18 [<1%] {none, not significant}	18 [3%] {none, not significant}	20 [<1%] {none, not significant}	20 [3%] {none, not significant}
A76 (between Thornhill and A75) [AADT = 6,106]	18 [<1%] {none, not significant}	18 [3%] {none, not significant}	20 [<1%] {none, not significant}	20 [3%] {none, not significant}
A75 (between A762(N) and A712) [AADT = 7,901]	60 [1%] {none, not significant}	40 [4%] {none, not significant}	66 [1%] {none, not significant}	42 [4%] {none, not significant}
A75 (between A712 and A780) [AADT = 11,065]	22 [<1%] {none, not significant}	4 [<1%] {none, not significant}	32 [<1%] {none, not significant}	6 [<1%] {none, not significant}
A75 (between A780 and A76) [AADT = 14,729]	34 [<1%] {none, not significant}	16 [<1%] {none, not significant}	46 [<1%] {none, not significant}	18 [1%] {none, not significant}
A77 (between A713 and A70) [AADT = 21,311]	32 [<1%] {none, not significant}	16 [<1%] {none, not significant}	40 [<1%] {none, not significant}	14 [1%] {none, not significant}
A713 (between A77 and Dalmellington) [AADT = 4,085]	22 [1%] {none, not significant}	8 [3%] {none, not significant}	34 [1%] {none, not significant}	10 [4%] {none, not significant}
A713 (between Dalmellington and Carsphairn)	54 [3%]	36 [20%]	64 [4%]	38 [21%]
[AADT = 1,557]	{none, not significant}	{moderate, significant}	{none, not significant}	{moderate, significant}
A713 (between Carsphairn and A762) [AADT =1,398]	92 [7%] {minor, not significant}	52 [33%] {moderate, significant}	116 [8%] {minor, not significant}	52 [32%] {moderate, significant}
A713 (between A762 and A702) [AADT =1,382]	66 [5%] {minor, not significant}	34 [29%] {moderate, significant}	88 [6%] {minor, not significant}	34 [29%] {moderate, significant}
A713 (between A702 and A712) [AADT=2,282]	66 [3%] {none, not significant}	34 [17%] {moderate, significant}	88 [4%] {none, not significant}	34 [17%] {moderate, significant}
A713 (between A712 and B795) [AADT = 1,889]	36 [2%] {none, not significant}	24 [13%] {moderate, not significant}	40 [2%] {none, not significant}	24 [12%] {moderate, significant}
A713 (between B795 and A75) [AADT = 3,868]	42 [1%] {none, not significant}	24 [11%] {moderate, significant}	50 [1%] {none, not significant}	22 [10%] {moderate, significant}
A712 (between A75 and A762) [AADT = 685]	40 [6%] {minor, not significant}	20 [25%] {moderate, significant}	54 [8%] {minor, not significant}	22 [29%] {moderate, significant}
A712 (between A762 and A713) [AADT = 1,544]	52 [3%] {none, not significant}	24 [19%] {moderate, significant}	70 [4%] {none, not significant}	28 [22%] {moderate, significant}
A712 (between A713 and Corsock) [AADT = 988]	18 [2%] {none, not significant}	4 [3%] {none, not significant}	26 [3%] {none, not significant}	4 [4%] {none, not significant}
A712 (between Corsock and A75) [AADT = 768]	18 [2%] {none, not significant}	4 [3%] {none, not significant}	26 [3%] {none, not significant}	4 [3%] {none, not significant}

Route Section	Construction traffic generated over the 58 months construction programme, by route section			
	Average vehicle movements per day over entire construction period [% Increase] {Significance}		Average vehicle movements per day during the period of peak construction activity [% Increase] {Significance}	
	HGV + LGV	HGV	HGV + LGV	HGV
A711 (between A75 and A762) [AADT = 3,898]	46 [1%] {none, not significant}	40 [12%] {moderate, significant}	46 [1%] {none, not significant}	40 [12%] {moderate, significant}
A702 (between A713 and Moniaive) [AADT = 243]	12 [5%] {minor, not significant}	0 [0] {none, not significant}	20 [8%] {minor, not significant}	0 [0%] {none, not significant}
A702 (between Moniaive and A76) [AADT = 931]	12 [1%] {none, not significant}	0 [0%] {none, not significant}	20 [2%] {none, not significant}	0 [0%] {none, not significant}
A762 (between A712 and B795) [AADT = 398]	44 [11%] {moderate, significant}	22 [92%] {major, significant}	52 [13%] {moderate, significant}	26 [107%] {major, significant}
A762 (between B795 and A75) [AADT = 370]	40 [11%] {moderate, significant}	22 [64%] {major, significant}	46 [12%] {moderate, significant}	24 [73%] {major, significant}
A762 (between A713 and U2s) [AADT = 356]	14 [3%] {none, not significant}	10 [35%] {moderate, significant}	12 [3%] {none, not significant}	4 [15%] {moderate, significant}
B795 (between A762 and A713) [AADT = 499]	10 [2%] {none, not significant}	2 [3%] {none, not significant}	12 [2%] {none, not significant}	4 [5%] {minor, not significant}
B741 (between New Cumnock and Dalmellington) [AADT= 1,031]	32 [3%] {none, not significant}	32 [86%] {major, significant}	32 [3%] {none, not significant}	32 [82%] {major, significant}
C13s [AADT = 148]	18 [12%] {moderate, significant}	12 [170%] {major, significant}	22 [14%] {moderate, significant}	16 [205%] {major, significant}
C45s [AADT = 249]	8 [3%] {none, not significant}	6 [483%] {major, significant}	10 [3%] {none, not significant}	6 [600%] {major, significant}
U43s [AADT = 211]	6 [3%]	4 [255%]	8 [3%]	4 [255%]
	{none, not significant}	{major, significant}	{none, not significant}	{major, significant}
U34s [AADT = 174]	4 [1%] {none, not significant}	4 [245%] {major, significant}	4 [1%] {none, not significant}	2 [200%] {major, significant}
U1s [AADT = 72]	4 [4%] {none, not significant}	4 [36%] {moderate, significant}	4 [3%] {none, not significant}	4 [34%] {moderate, significant}
U2s [AADT = 199]	8 [3%] {none, not significant}	6 [36%] {moderate, significant}	10 [5%] {minor, not significant}	4 [26%] {moderate, significant}
U3s [AADT = 62]	10 [14%] {moderate, significant}	6 [438%] {major, significant}	14 [20%] {moderate, significant}	6 [436%] {major, significant}
Gateside Road (Dalmellington) [AADT = 1,280]	30 [2%] {none, not significant}	30 [59%] {moderate, significant}	28 [2%] {none, not significant}	28 [53%] {moderate, significant}

Driver Delay

13.497 All public road route sections where the 10% threshold significance criteria has been exceeded operate notably below their theoretical capacity. Table 13.60 below provides a comparison of forecast traffic flows on roads during the 'Peak Period' and associated theoretical road capacities.

13.498 Furthermore, the CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay, CTMP measures include but are not limited to:

- The timing and frequency of vehicle movements will be managed to minimise local disruption;
- details of access route will form part of the site induction and training will be held for all site operatives and delivery drivers through 'toolbox talks'; and
- where reasonable and practicable, project-related vehicles will avoid travelling in convoys on public roads.

Table 13.60: Baseline Traffic + Traffic Generated by Construction of KTR As a Whole

Route Section	Two-way peak hour movements (2022 Baseline Traffic + Traffic Generated by Construction of KTR As a Whole)	Capacity (vph) (two-way movements per hour)
A713 (between Dalmellington and Carsphairn)	206	1800
A713 (between Carsphairn and A762)	210	1800
A713 (between A762 and A702)	208	1600
A713 (between A702 and A712)	208	1600
A713 (between A712 and B795)	204	1800
A713 (between B795 and A75)	206	1800
A712 (between A75 and A762)	206	1800
A712 (between A762 and A713)	206	1600
A712 (between A713 and Corsock)	204	1800
A712 (between Corsock and A75)	204	1800
A711 (between A75 and A762)	204	1800
A762 (between A712 and B795)	206	1600
A762 (between B795 and A75)	204	1600
A762 (between A713 and U2s)	52	280
B741 (between New Cumnock and Dalmellington)	204	1800
C13s	52	Not Specified
C45s	52	Not Specified
U43s	52	Not Specified
U34s	52	Not Specified
U1s	52	Not Specified
U2s	52	Not Specified
U3s	52	Not Specified
Gateside Road (Dalmellington)	204	1600

13.499 From a review of Table 13.59 it is evident that threshold significance criteria have been exceeded on the A713 (between Dalmellington and the A75), A712 (between A75 and A713), A711, A762 (between A712 and A75), A762 (between A713 and U2s), B741, C45s, C13s, U43s, U34s, U1s, U2s, and U3s and Gateside Road either, throughout the duration of the entire construction period or during the 'peak period' of construction activity, or both.

13.500 The A713, A712, A711 and A762 (between A712 and A75), have the residual capacity (see Table 13.60) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the A713, A712, A711 and A762 (between A712 and A75) is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.501 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such show a relatively large traffic increase which would represent a major effect, however it is important to note that these route sections have the residual capacity (see Table 13.60) to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.502 The C45s, C13s, U43s, U34s and U3s have very low traffic flow and as such shows a relatively large traffic increase which would represent a major effect. However, professional judgement suggests that effects on these roads are likely to be less significant based on the low level of construction traffic anticipated. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the C45s, C13s, U43s, U34s and U3s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.503 The U1s currently has very low traffic flow and as such shows a relatively large traffic increase which would represent a major effect. However, only a small section of the U1s will be used (approx. 500m in length). On this basis, the significance of effect of driver delay for users of the U1s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

13.504 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the A713 and the U2s) and U2s to provide passing places will be implemented; achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase, therefore comprising embedded mitigation for the KTR Project. On this basis, the significance of effect of driver delay for users of the A762 (between the A713 and the U2s) and U2s is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.505 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic, the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis is summarised in Table 13.61.

Table 13.61: Projected Collisions

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the KTR As a Whole)
A713 (between Dalmellington and Carsphairn)	4.7	4.9
A713 (between Carsphairn and A762)	1.3	1.4
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A712 (between A75 and A762)	2	2.2
A712 (between A762 and A713)	0.3	0.4
A712 (between A713 and Corsock)	1	1.1
A712 (between Corsock and A75)	1	1.1
A711 (between A75 and A762)	1.3	1.4
A762 (between A712 and B795)	0	0
A762 (between B795 and A75)	0	0
A762 (between A713 and U2s)	0.3	0.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
C13s	0	0
C45s	0	0
U43s	0	0

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the KTR As a Whole)
U34s	0	0
U1s	0	0
U2s	0	0
U3s	0.3	0.4
Gateside Road (Dalmellington)	0	0

13.506 Using this basis of assessment, there would be a negligible (not significant) increase in PICs in the KTR Project Study Area as a consequence of the increased traffic generated by KTR As a Whole and the significance of the effect would be none.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.507 The IEMA Guidelines define severance as 'the perceived division that can occur within a community when it becomes separated by a major traffic artery'. Severance may result from a road carrying large traffic flows or a physical barrier created by the road itself, and the IEMA guidelines suggest that consideration is given to the severity of existing severance and how this might be exacerbated by proposed construction traffic generated by a development. The roads within the KTR as a Whole Project Study Area will continue to operate below capacity, even with the addition of traffic generated by construction of the KTR Project as a Whole. Severance and pedestrian delay should not occur when there is such a notable level of residual road capacity.

13.508 Pedestrian amenity is broadly defined by the IEMA as the 'relative pleasantness of a journey', and this definition also takes into account fear and intimidation. The IEMA Guidelines suggest that 'a tentative threshold for judging the significance of changes in pedestrian amenity would be where traffic flows (or its lorry component) is halved or doubled. The only road sections where HGV flows are expected to double, or more are the A762 (between A712 and B795), C45s, C13s, U43s, U34s and U3s.

13.509 The CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will minimise the effect of construction traffic on local communities, measures include but are not limited to:

- Temporary construction site signage will be erected on the local road network in advance of local communities to warn people of construction activities and associated construction vehicle;
- SPEN shall nominate a Community Liaison Officer (CLO); the CLO will be responsible for keeping the local community informed of progress on the site and warning them of upcoming activities which may give rise to increased construction vehicle movements; and
- All site staff will be informed about traffic management arrangements and procedures via the site induction.

13.510 Site observations indicate that pedestrian activity on the C45s, U43s and U34s road sections is low. Furthermore, the CTMP will promote interventions that will minimise the effect of construction traffic on pedestrian amenity. On this basis, it is considered that construction traffic generated by KTR As a Whole will have a minor effect to the amenity of users of the C45s, U43s and U34s.

13.511 HGV traffic is predicted to increase considerably on the C13s and A762 through Laurieston. However, with the interventions promoted through the CTMP and most specifically through local community consultation, it is considered that construction traffic generated by KTR As a Whole will have a minor effect to the amenity of users of the C13s and A762.

13.512 Several core paths overlap with proposed construction access tracks, this includes the following Core Paths:

- The New Galloway West path (Core Path 516) overlaps with a proposed access track to towers 5 to 12;
- Raiders Road to Kenmuir Link (Core Path 142) overlaps with a proposed access track to Hind Craig Quarry;
- Raiders Road East (Core Path 141) and Cairn Edward Hill path (Core Path 177) overlap with a proposed access track to towers 43 to 49;
- Arie path, near Mossdale (Core Path 153) overlaps with a proposed access track to towers 50 and 51;
- Glengap and Laurieston Forest (Core Path 28) and Retreat Wood, Laurieston (Core Path 144) overlap with a proposed access track to Craigelwhan Quarry;
- The Gunney, Parton (Core Path 29) overlaps with a proposed access track to towers 84(R) to 87(R);
- Livingston Hill (Core Path 208) overlaps with a proposed access track to towers 104(R) and 105(R);

13.513 Furthermore, several construction access routes overlap and/or intersect with existing recreational routes, this include the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route;
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way); and
- the section of the A712 between the A75 and the A762 intersects the National Cycle Route 7.

13.514 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of construction activity will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, it is considered that construction traffic generated by KTR As a Whole will have a minor effect to the amenity of users of the recreational routes identified above.

13.515 HGV traffic will significantly increase on the private road leading to Polmaddy which overlaps with Core Path 164. As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of Core Path 164 is considered to be minor and accordingly considered to be not significant.

13.516 NMU survey findings indicated a relatively high level of equestrian activity on the B795. There is existing signage in place warning road users of the presence of equestrians and delivery drivers will be informed about the potential presence of equestrians at that location through 'toolbox talks'. On this basis, it is considered that construction traffic generated by KTR As a Whole will have a minor effect on equestrian activity along the B795.

13.517 New construction access tracks will intersect with Raiders Road (Core Path 143), the Mossdale to Gatehouse Station Railway walk (Core Path 485) and Core Path 205. Based on site observations and results of NMU surveys it is considered that construction traffic generated by KTR As a Whole will have a minor effect on pedestrian amenity, specifically to the amenity of users of these three recreational routes.

13.518 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of project generated construction traffic.

13.519 Overall based on professional judgment, the construction traffic generated by KTR Project as a whole will have a minor effect upon community receptors which is not significant in the context of the 2017 EIA Regulations (as amended).

Proposed Additional Mitigation

13.520 No further mitigation is proposed in addition to the embedded mitigation measures and operational procedures as proposed in the framework CTMP and the KTR Connection specific mitigation measures.

Residual Effects

13.521 Overall, due to the implementation of the infrastructure improvements to the A762 (between the A713 and the U2s) and the U2s as part of the Glenlee Substation Extension works (therefore, embedded mitigation for the KTR Project) theC45s, C13s, U3s (between the junction of the A712 and worksite

access reference 37) and U43s and the embedded mitigation measures and operational procedures as proposed in the framework CTMP the significance of the residual effect associated with the levels of traffic anticipated during the construction of the KTR Project As a Whole is considered to be minor and accordingly not considered to be significant.

Assessment of Cumulative Effects

13.522 An assessment of the likely construction effects of the KTR Project As a Whole and other committed developments has been undertaken to robustly take account of the likely interrelation of overlapping construction programmes and the resultant cumulative effect upon the local road network.

13.523 The overall approach for the cumulative assessments, including a list of developments considered, is outlined in Chapter 3

13.524 The following developments have been included with the KTR Project As a Whole for the cumulative traffic and transport assessment:

- Knockman Hill Wind Farm (Proposed Wind Turbine Project at Knockman Hill, Milnmark Farm Dumfries and Galloway Environmental Statement (ES) 2009);
- Mochrum Fell Wind Farm (Mochrum Fell Wind Farm ES, 2009);
- Shepherds Rig Wind Farm (Shepherds Rig Wind Farm ES, 2020);
- Troston Loch Wind Farm (Troston Loch Wind Farm EIA Report, 2019);
- Cornharrow Wind Farm (Cornharrow Wind Farm EIA Report, 2020);
- Glenshimmeroch Wind Farm (Glenshimmeroch Wind Farm EIA Report, 2018); and
- Fell Wind Farm (Fell Wind Farm EIA Report, 2019).

13.525 In addition to the above wind farms, traffic associated with the construction of the proposed Glenlee Substation Extension has been included in order to ensure a robust EIA; the assessment has been undertaken on the basis of an overlap with the KTR construction enabling works between March 2022 and June 2022.

Wind Farm Access Arrangements

13.526 The following assumptions have been made to inform the assessment, as derived from review of relevant supporting ESs/EIA reports for the schemes:

- Construction traffic accessing the proposed Knockman Hill Wind Farm will do so from the north via the A713.
- Construction traffic accessing the proposed Mochrum Fell Wind Farm site will predominantly do so from the south via the A713 (75%) although a proportion would come from the north via the A713 (25%).
- All construction traffic accessing the proposed Shepherds Rig Wind Farm site will do so from the north via the A713.
- All construction traffic accessing the proposed Troston Loch Wind Farm site will do so from the north via the A713.
- Construction traffic accessing the Cornharrow Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Glenshimmeroch Wind Farm site will route from both the north (50%) and south (50%) via the A713.
- Construction traffic accessing the Fell Wind Farm site will route from both the north (70%) and south (30%) via the A712.

Glenlee Substation Extension Access Arrangements

13.527 For the purpose of the assessment, it has been assumed that:

- Construction traffic associated with the Glenlee Substation Extension will access from the south via the A713 (45%), the north via the A713 (45%) and a proportion would come from the east via the A712 (10%).

Total Cumulative Construction Effects

13.528 This section assesses the maximum development case assuming that all the developments being considered as part of the cumulative assessment will proceed to construction and that the cumulative effects are the total likely effects created by the construction of the KTR Project As a Whole in combination with:

- Wind farm developments (Knockman Hill, Mochrum Fell, Shepherds Rig, Troston Loch, Cornharrow, Glenshimmeroch, Fell); and
- Glenlee Substation Extension.

13.529 It is uncertain if and when the construction phases of the wind farms and the KTR Project As a Whole might overlap. To robustly assess cumulative traffic generation, cumulative assessment has been undertaken on the basis of summing the average traffic generation of the respective wind farms and the KTR Project As a Whole peak traffic generation, assuming that it is improbable that peak traffic generation at all developments will align.

13.530 Table 13.62 presents a summary of predicted traffic volume increases over the entire construction period of KTR Project As a Whole and during the 'peak period' of construction activity (August 2023 to June 2024 inclusive) and the proportional increase in traffic generated.

Table 13.62: Summary of Predicted Traffic Volume Increase – Total Likely Cumulative Impact for the KTR Project As a Whole

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
A713 (between A77 and Dalmellington) [AADT = 4,085]	107 [3%] {None}	36 [15%] {Moderate}	331 [8%] {Minor}	93 [39%] {Moderate}
A713 (between Dalmellington and Carsphairn) [AADT = 1,557]	147 [9%] {Minor}	74 [41%] {Moderate}	365 [23%] {Moderate}	125 [69%] {Major}
A713 (between Carsphairn and A762) [AADT = 1,382]	135 [10%] {Moderate}	70 [44%] {Moderate}	296 [21%] {Moderate}	111 [69%] {Major}
A713 (between A762 and A702) [AADT = 1,350]	66 [5%] {Minor}	32 [28%] {Moderate}	88 [6%] {Minor}	34 [29%] {Moderate}
A713 (between A702 and A712) [AADT = 2,282]	66 [3%] {None}	32 [16%] {Moderate}	88 [4%] {None}	34 [17%] {Moderate}
A713 (between A712 and B795) [AADT = 1,889]	44 [2%] {None}	24 [13%] {Moderate}	110 [6%] {Minor}	42 [22%] {Moderate}
A713 (between B795 and A75) [AADT = 3,868]	50 [1%] {None}	22 [11%] {Moderate}	118 [3%] {None}	40 [20%] {Moderate}

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements
A712 (between A75 and A762) [AADT = 685]	52 [8%] {Minor}	24 [33%] {Moderate}	70 [10%] {Moderate}	28 [39%] {Moderate}
A712 (between A762 and A713) [AADT=1,544]	52 [3%] {None}	24 [20%] {Moderate}	70 [5%] {Minor}	28 [23%] {Moderate}
A712 (between A713 and Corsock) [AADT=988]	44 [4%] {None}	16 [22%] {Moderate}	133 [13%] {Moderate}	46 [64%] {Major}
A712 (between Corsock and A75) [AADT = 768]	33 [4%] {None}	12 [16%] {Moderate}	91 [12%] {Moderate}	31 [41%] {Moderate}
A711 (between A75 and A762) [AADT = 3,898]	38 [<1%] {None}	32 [9%] {Minor}	44 [1%] {None}	38 [11%] {Moderate}
A762 (between A712 and B795) [AADT=398]	44 11% {Moderate}	22 96% {Major}	52 13% {Moderate}	26 113% {Major}
A762 (between B795 and A75) [AADT=370]	40 [11%] {Moderate}	22 [67%] {Major}	46 [12%] {Moderate}	24 [73%] {Major}
A762 (between A713 and U2s) [AADT = 356]	20 [6%] {Minor}	12 [48%] {Moderate}	12 [3%] {None}	4 [16%] {Moderate}
B741 (between New Cumnock and Dalmellington) [AADT = 1,031]	42 [4%] {None}	42 [114%] {Major}	34 [3%] {None}	34 [92%] {Major}
U2s [AADT = 199]	14 [7%] {Minor}	8 [67%] {Major}	10 [5%] {Minor}	4 [33%] {Moderate}
U3s [AADT = 62]	10 [16%] {Moderate}	6 [600%] {Major}	14 [23%] {Moderate}	6 [600%] {Major}
Gateside Road (Dalmellington) [AADT = 1,280]	38 [3%] {None}	38 [78%] {Major}	30 [2%] {None}	30 [61%] {Major}

Route Section	Average Vehicle Movements per day over the entire construction period [% Increase] {Significance}		Average Vehicle Movements per day during the period of peak construction activity [% Increase] {Significance}	
	Total Traffic Movements	HGV Traffic Movements	Total Traffic Movements	HGV Traffic Movements

Predicted Cumulative Effects during Construction

Driver Delay

13.531 From a review of Table 13.54, it is evident that threshold significance criteria have been exceeded on the A713 (between A77 and the A75), A762, A711, A712, A702 (between A713 and Moniaive) B741, U2s, U3s and Gateside Road throughout the duration of the entire construction period.

13.532 The A713, A712, A711 and A762 (between the A712 and the A75) have the residual capacity to readily accommodate the expected additional traffic flow. On this basis, the significance of effect of driver delay for users of the A713, A712, A711 and A762 (between the A712 and the A75) is considered to be minor and accordingly not considered to be significant in the context of the 2017 EIA Regulations (as amended).

13.533 As an integral part of the Glenlee Substation Extension, localised widening of strategic sections of the A762 (between the junction of the A713 and the U2s) and the U2s to provide passing places will be implemented; achieving a minimum of width of 6.75m. It is assumed that these newly constructed passing places will remain for the duration of the KTR Project construction phase and therefore comprise embedded mitigation. On this basis, the significance of effect of driver delay for users of the A762 and U2s is considered to be minor and accordingly considered not significant in the context of the 2017 EIA Regulations (as amended).

13.534 The U3s has very low traffic flow and as such shows a relatively large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of traffic anticipated. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the U3s is considered to be minor and accordingly considered not significant in the context of the 2017 EIA Regulations (as amended).

13.535 Both the B741 and Gateside Road generally experience low HGV traffic levels and as such show a relatively large traffic increase which would represent a major effect; however, it is important to note that these route sections have the residual capacity to readily accommodate the expected additional traffic flow. Furthermore, the CTMP will promote interventions that will ensure the safe and efficient transportation of materials to site to reduce the likelihood of driver delay. On this basis, the significance of effect of driver delay for users of the B741 and Gateside Road is considered to be minor and accordingly considered to be not significant in the context of the 2017 EIA Regulations (as amended).

Road Safety

13.536 The NESA Manual suggests that where traffic flow doubles, it can be expected that road traffic collisions will double (i.e. the increase in collisions is likely to be approximately proportional to the increase in traffic). Accordingly, if the number of collisions were to increase proportionally with the increase in traffic volume, then the impact of the construction traffic on road safety per route section can be forecast. The results of this analysis are summarised in Table 13.63.

Table 13.63: Projected Collisions – Total Likely Cumulative Impacts

Route Section	Average No. of collisions (2022 Average Baseline)	Average No. of collisions (2022 Average Baseline + Traffic Generated by Construction of the KTR Project As A Whole+ Committed Developments + Glenlee Substation Extension
A713 (between A77 and Dalmellington)	10	10.3
A713 (between Dalmellington and Carsphairn)	4.7	5.2
A713 (between Carsphairn and A762)	1.3	1.5
A713 (between A762 and A702)	0	0
A713 (between A702 and A712)	0.3	0.4
A713 (between A712 and B795)	1	1.1
A713 (between B795 and A75)	1.3	1.4
A712 (between A75 and A762)	2	2.2
A712 (between A762 and A713)	0.3	0.4
A712 (between A713 and Corsock)	1	1.1
A712 (between Corsock and A75)	1	1.1
A711 (between A75 and A762)	1.3	1.4
A762 (between A712 and B795)	0	0
A762 (between B795 and A75)	0	0
A762 (between A713 and U2s)	0.3	0.4
B741 (between New Cumnock and Dalmellington)	1.7	1.8
U2s	0	0
U3s	0.3	0.4
Gateside Road (Dalmellington)	0	0

13.537 Using this basis of assessment, there would be a small increase (less than 1 collision) in PICs for the A713 (between the A77 and the A762) as a consequence of the increased traffic generated cumulatively. Professional judgment suggests that the peak cumulative traffic, which would be temporary (11 months duration), would result in a minor effect (not significant) upon road safety if unmitigated.

13.538 On the other route sections within the Study Area, there would be a negligible increase in PICs as a consequence of the increased traffic generated cumulatively by the developments and the significance of the effect would be none and therefore not significant.

Community Impacts (severance, pedestrian amenity / fear and intimidation, and pedestrian delay)

13.539 The roads within the KTR Project Study Area will continue to operate below capacity, even with the addition of traffic the increased traffic generated cumulatively. Severance and pedestrian delay should not occur when there is such a notable level of residual road capacity.

13.540 The only road sections where HGV flows are expected to double, or more are the A762 (between A712 and B795) and the U3s.

13.541 The CTMP an outline of which is provided as Appendix 13.1 will promote interventions that will minimise the effect of construction traffic on local communities, measures include but are not limited to:

- temporary construction site signage will be erected on the local road network in advance of local communities to warn people of construction activities and associated construction vehicles;
- SPEN shall nominate a Community Liaison Officer (CLO); the CLO will be responsible for keeping the local community informed of progress on the site and warning them of upcoming activities which may give rise to increased construction vehicle movements; and
- all site staff will be informed about traffic management arrangements and procedures via the site induction.

13.542 The U3s has currently very low level of HGV traffic, and as such shows a large traffic increase which would represent a major effect. However, professional judgement suggests that effects on the U3s are likely to be less significant based on the low level of construction traffic anticipated. On this basis, it is considered that construction traffic generated cumulatively will have a minor and therefore not significant effect to the amenity of users of the U3s.

13.543 HGV traffic is predicted to increase considerably on the A762 through Laurieston. However, with the interventions promoted through the CTMP and most specifically through local community consultation, it is considered that construction traffic generated by KTR As a Whole will have a minor effect to the amenity of users of the A762.

13.544 Several core paths overlap with proposed construction access tracks, this include the following Core Paths:

- The New Galloway West path (Core Path 516) overlaps with a proposed access track to towers 5 to 12;
- Raiders Road to Kenmuir Link (Core Path 142) overlaps with a proposed access track to Hind Craig Quarry;
- Raiders Road East (Core Path 141) and Cairn Edward Hill path (Core Path 177) overlap with a proposed access track to towers 43 to 49;
- Arie path, near Mossdale (Core Path 153) overlaps with a proposed access track to towers 50 and 51;
- Glengap and Laurieston Forest (Core Path 28) and Retreat Wood, Laurieston (Core Path 144) overlap with a proposed access track to Craigelwhan Quarry;
- The Gunney, Parton (Core Path 29) overlaps with a proposed access track to towers 84(R) to 87(R);
- Livingston Hill (Core Path 208) overlaps with a proposed access track to towers 104(R) and 105(R);

13.545 Furthermore, several construction access routes overlap and/or intersect with existing recreational routes, this include the following route sections:

- the section of the A762 between the A713 and U2s overlaps with Core Path 504 (the Southern Upland Way), Core Path 30 and the National Byway cycling route;
- the section of the A713 between the A762 and A712 overlaps with Core Path 21, the National Byway cycling route and intersect both Core Path 224 and 504 (the Southern Upland Way); and
- the section of the A712 between the A75 and the A762 intersects the National Cycle Route 7.

13.546 As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and cycling routes and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, it is considered that construction traffic generated by KTR As a Whole will have a minor effect to the amenity of users of the recreational routes identified above.

13.547 HGV traffic will significantly increase on the private road leading to Polmaddy which overlaps with Core Path 164. As such, the CTMP will include a commitment to provide signage to warn drivers to the presence of public paths and appropriate signage advising of dates and hours of working will be installed on the 'core path network' in advance of road crossing points to warn users of construction traffic. On this basis, the significance of the effect on pedestrian amenity, specifically on the amenity of users of Core Path 164 is considered to be minor and accordingly considered to be not significant.

13.548 NMU survey findings indicated a relatively high level of equestrian activity on the B795. There is existing signage in place warning road users of the presence of equestrians and delivery drivers will be informed about the potential presence of equestrians at that location through 'toolbox talks'. On this basis, it is considered that construction traffic generated by KTR As a Whole will have a minor effect on equestrian activity along the B795.

13.549 New construction access tracks will intersect with Raiders Road (Core Path 143), the Mossdale to Gatehouse Station Railway walk (Core Path 485) and Core Path 205. Based on site observations and results of NMU surveys it is considered that construction traffic generated by KTR As a Whole will have a

minor effect on pedestrian amenity, specifically to the amenity of users of these three recreational routes.

13.550 Construction routes traverse St John's Town of Dalry, where pedestrian activity can be notable, especially at the beginning and end of the school day. There is existing pedestrian infrastructure provision in place, including footways and traffic management features. Based on professional judgement the existing provision is considered adequate to accommodate potential pedestrian effects as a result of project generated construction traffic.

13.551 Overall based on professional judgement the construction traffic generated cumulatively will have a minor and therefore not significant effect upon community receptors.

Proposed Mitigation

13.552 As recorded in the CTMP, if another development, such as the wind farms considered in the cumulative assessment, appears likely to undergo construction at the same time as the KTR Project, SPEN will liaise with the other developer regarding the scheduling of deliveries and potential means of reducing the impact of combined construction.

Residual Cumulative Effects during Construction

13.553 Overall, due to the implementation of the infrastructure improvements to the A762 (between the A713 and the U2s) and the U2s as part of the Glenlee Substation Extension works (therefore, embedded mitigation for the G-T Connection), the C45s, C13s, U3s (between the junction of the A712 and worksite access reference 37) and U43s in conjunction with the embedded mitigation measures and operational procedures as proposed in the framework CTMP and the additional proposed requirement for SPEN to liaise with other developers regarding the scheduling of deliveries and potential means of reducing the effect of combined construction, the residual effects associated with the levels of traffic generated cumulatively are considered to be minor and accordingly not significant in the context of the 2017 EIA Regulations (as amended).

Monitoring

13.554 The requirement for construction monitoring will be agreed with SPEN, local roads authority representatives and other stakeholders prior to commencement of works.

13.555 If deemed necessary, SPEN will enter into a legal agreement under Section 96 of the Roads (Scotland) Act 1984 to formalise an inspection and maintenance regime with the Roads Authority to contribute to maintenance of those roads impacted by HGV movements associated with KTR as a Whole.

Interrelationship between Effects

13.556 The additional traffic assessed to be generated on public roads throughout the KTR Project as whole Study Area during the construction phase may trigger environmental effects associated with related study disciplines.

13.557 These include, but are not limited to, the following:

- effects associated with socio-economic, tourism and recreation; and
- effects associated with noise and dust.

13.558 Where relevant, environmental effects related to traffic and transport associated with the KTR Project are referred to in Chapter 17: Assessment of Intra-Connection and Intra-KTR Effects.

Summary of Significant Effects

13.559 Assuming, the implementation of the embedded mitigation measures and operational procedures as proposed in the framework CTMP during the construction of the KTR Project alongside the identified Connection specific additional mitigation measures (i.e. public road infrastructure improvements), the residual effects associated with the levels of traffic anticipated during the construction of the KTR Project are considered to be minor and of temporary duration, hence the mitigated effects are not considered to be significant.

References

1 Institution of Highways and Transportation (IHT) (1994), Guidelines for Traffic Impact Assessment.

2 Institute of Environmental Assessment (now the Institute of Environmental Management and Assessment (IEMA) (1993), Guidelines for the Environmental Assessment of Road Traffic, Guidance Notes No. 1 (referred to as 'the IEMA Guidelines')).

3 Transport Scotland (2012), Transport Assessment Guidance.

4 Scottish Government (2005), NESA Manual, DMRB, Volume 15, Economic Assessment of Road Schemes in Scotland.

5 ROSPA Road Safety Engineering Manual, 2007.

6 Knockman Hill Wind Farm (Proposed Wind Turbine Project at Knockman Hill, Milnmark Farm Dumfries and Galloway Environmental Statement (ES) 2009);

7 Mochrum Fell Wind Farm (Mochrum Fell Wind Farm ES, 2009);

8 Shepherds Rig Wind Farm (Shepherds Rig Wind Farm ES, 2020);

9 Troston Loch Wind Farm (Troston Loch Wind Farm EIA Report, 2019);

10 Cornharrow Wind Farm (Cornharrow Wind Farm EIA Report, 2020);

11 Glenshimmeroch Wind Farm (Glenshimmeroch Wind Farm EIA Report, 2018); and

12 Fell Wind Farm (Fell Wind Farm EIA Report, 2019).