

Technical Appendix E
Transport Assessment

Leapers Wood Quarry

Kellet Road, Carnforth, Lancashire

Transport Assessment



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1 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 Tetra Tech has been appointed by Tarmac to prepare a Transport Assessment (TA) in support of a planning application for an extension of time at Leapers Wood Quarry in Carnforth, Lancashire. The proposed development will include the deepening of the existing working and an extension of time. The proposals will not result in an increased rate of mineral output. A plan of the site location is included at **Figure 1** and the proposed site masterplan is contained in **Appendix A**.
- 1.1.2 The highway network near the site is maintained by Lancashire County Council (LCC) in their capacity as the local highway authority. Lancashire County Council are also the Mineral Planning Authority responsible for the determination of the planning application. The site lies within the Lancaster City Council district.

1.2 SCOPE OF TRANSPORT ASSESSMENT

- 1.2.1 An email was sent to LCC in June 2022 to agree the scope of this TA. A response was received in June 2022 and is presented in **Appendix B**. LCC also provided a scoping opinion in December 2021 (see **Appendix B**). This TA takes into consideration the scoping responses from LCC and has been prepared in general accordance with the National Planning Policy Framework (NPPF) and Planning Practice 'Travel Plans, Transport Assessments and Statements'.
- 1.2.2 The TA report demonstrates that the site can be accessed in a safe and suitable manner and that access can be achieved in accordance with appropriate design standards.

1.3 REPORT LAYOUT

- 1.3.1 This TA investigates the highways and transportation issues associated with the proposed development. The structure of the report is as follows:
- Chapter 2 describes relevant planning policy and design guidance.
 - Chapter 3 describes existing conditions.
 - Chapter 4 outlines the development proposals.
 - Chapter 5 outlines the future assessment year, background traffic growth and committed development traffic.
 - Chapter 6 summarises the development trip generation and distribution calculations.
 - Chapter 7 assesses junction capacity.

- Chapter 8 summarises the report.

2 PLANNING POLICY AND DESIGN GUIDANCE

2.1 PREAMBLE

2.1.1 Within this TS, consideration has been given to the following documents:

Policy

- National Planning Policy Framework [NPPF] (MHCLG, 2021)
- Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD (Lancashire County Council, Blackpool Council and Blackburn and Darwen Borough Council, 2009)
- Joint Lancashire Aggregate Assessment (Lancashire County Council, Blackpool Council and Blackburn and Darwen Borough Council, 2021)
- Infrastructure and Planning Annex 1 Highways (LCC, 2017)

Design Guidance

- Design Manual for Roads and Bridges [DMRB] (National Highways)
- Travel Plans, Transport Assessments and Statements (MHCLG, 2014)

2.2 POLICY

National Planning Policy

2.2.1 The NPPF sets out the Government's planning policies for England and how these should be applied. An updated version of the NPPF was published in July 2021. At the heart of the NPPF is a presumption in favour of sustainable development. In terms of transport, Paragraph 110 states that:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- b) safe and suitable access to the site can be achieved for all users;
- c) the design of streets, parking areas, other transport elements and the content of the associated standards reflects current national guidance, including the National Design Guide and the National Design Guide and the National Model Design Code; and

- d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

2.2.2 Paragraph 111 goes on to state that “Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.”

2.2.3 In order to address this, applications for development should give priority to pedestrian, cycle and public transport movements; address the needs of people with disabilities and reduced mobility; create places that are safe, secure and attractive; allow for the efficient delivery of goods, service and emergency vehicles; and be designed to enable charging of plug-in vehicles.

Joint Lancashire Minerals and Waste Development Core Strategy

2.2.4 The Joint Lancashire Minerals and Waste Development Framework Core Strategy DPD was adopted by LCC in 2009. The document sets out the future for minerals and waste development in Lancashire until 2021 and outlines the strategic policies required to deliver the vision. LCC is currently in the process of reviewing the adopted Minerals and Waste Core Strategy and a consultation is likely to take place in the autumn of 2022.

2.2.5 The adopted Joint Lancashire Minerals and Waste Development Core Strategy has the following objectives:

- To identify and safeguard mineral resources for specific purposes which meet a proven and sustainable need, recognising their environmental, cultural and landscape value and their potential for future working.
- To provide a sustainable supply of locally sourced minerals, sufficient to meet our local, regional, and national needs.
- To provide certainty for businesses, operators, and the public by identifying sites and areas for new mineral extraction, whilst seeking to conserve and enhance Lancashire’s environmental assets and ensure a high quality of life for all.
- To support high standards of working practices and environmental protection and take an integrated and innovative approach to enhancing the quality of land and our landscapes during extraction and in restoration for beneficial after-use, including potential benefits to biodiversity, amenity, and access to the countryside.

- To encourage and enable local communities, businesses, and local authorities to work together in coming to decisions and delivering solutions for sustainable resource management.

2.2.6 Section 8 of the Joint Lancashire Minerals and Waste Core Strategy sets out the approach to site identification and assessment.

2.2.7 Policy CS1 of the Joint Lancashire Minerals and Waste Core Strategy focuses on safeguarding Lancashire's mineral resources. It states that "minerals will be extracted only where they meet a proven need for materials with those particular specifications" It also states that "mineral resources with potential for extraction in the future will be identified and as Mineral Safeguarding Areas and protected from permanent sterilisation by other development".

2.2.8 Policy CS3 of the Joint Lancashire Minerals and Waste Core Strategy focuses on meeting the demand for new minerals. It states that "provision will be met using existing reserves with planning permission and no additional land will be made available for extraction before 2021".

Joint Lancashire Local Aggregate Assessment

2.2.9 The Joint Lancashire Local Aggregate Assessment contains information on the past 10 years data for aggregate sales (up to 2020). It also assesses the adequacy of mineral supply.

2.2.10 Section 5.2 of the document assesses the adequacy of limestone supply and states "it is estimated that Leapers Wood quarry is likely to be worked out before the end of its planning permission".

2.2.11 Section 5.4 of the Joint Lancashire Local Aggregate Assessment focuses on meeting forecast demand for limestone. It states that "There is a need to consider the permitted reserves ability to meet forecast demand and if Leapers Wood Quarry is exhausted sooner, this is likely to bring considerations forwards". It goes on to state that "should existing quarries be unable to increase production to compensate it will affect the availability of supplies to local markets".

Infrastructure and Planning Annex 1 Highways

2.2.12 The Infrastructure and Planning (Annex 1 Highways) sets out Lancashire County Council's approach to considering the potential impact of proposed developments upon the highways infrastructure within the local area of development.

2.2.13 The document states that developments should:

- Ensure safe access and egress;
- Minimise development-related impacts such as traffic congestion.

2.3 DESIGN GUIDANCE

Design Manual for Roads and Bridges

- 2.3.1 The DMRB is a suite of design guidance documents published by National Highways. They provide both statutory requirements and guidance for the design, maintenance and assessment of motorways and all-purpose trunk roads and in England, Wales, and Scotland.

Travel Plans, Transport Assessments and Statements Planning Practice Guidance

- 2.3.2 The Planning Practice Guidance provides information relating to the preparation of a TA, including when they are required, the scope of the report and what information to include. This TA has been prepared in accordance with the Planning Practice Guidance.

2.4 SUMMARY

- 2.4.1 The proposed development will be designed in accordance with policy objectives set out in national and local documentation.

3 EXISTING CONDITIONS

3.1 EXISTING SITE

- 3.1.1 As shown in **Figure 1** the site is located on a parcel of land to the south of Kellet Road. To the north, the existing site is bound by woodland and agricultural land. To the west the site is bound by Back Lane Quarry (operated by Aggregate Industries), Back Lane and the M6. To the east is further agricultural land and Nether Kellet Road. Back Lane Quarry lies immediately adjacent to the south.
- 3.1.2 Kellet Road bounds the site to the north and is aligned in an approximate east-west direction. Kellet Road meets the Kellet Road / B6601 junction approximately 85m west of the existing site access and provides access to the M6 (J35) and the A601(M) via the B6601. There are two vehicular access points for a residential dwelling on the northern side of Kellet Road approximately 50m and 80m east of the site access.
- 3.1.3 The site access from Kellet Road is shown in **Photograph 1**.

Photograph 1: Existing Site Access



3.2 EXISTING SITE OPERATIONS

- 3.2.1 Leapers Wood Quarry is a limestone quarry that supplies high grade limestone aggregate for strategic projects throughout the region.

- 3.2.2 The average yearly output from the site is around 800,000 tpa. The existing permission for the site restricts working to a maximum depth of 38m AOD via planning condition. The existing permission also limits the timescales for extraction and restoration of the site to 19 September 2048 and 19 September 2049, respectively (Ref: 01/03/1185/1).

3.3 PEDESTRIAN ACCESSIBILITY

Pedestrian Infrastructure

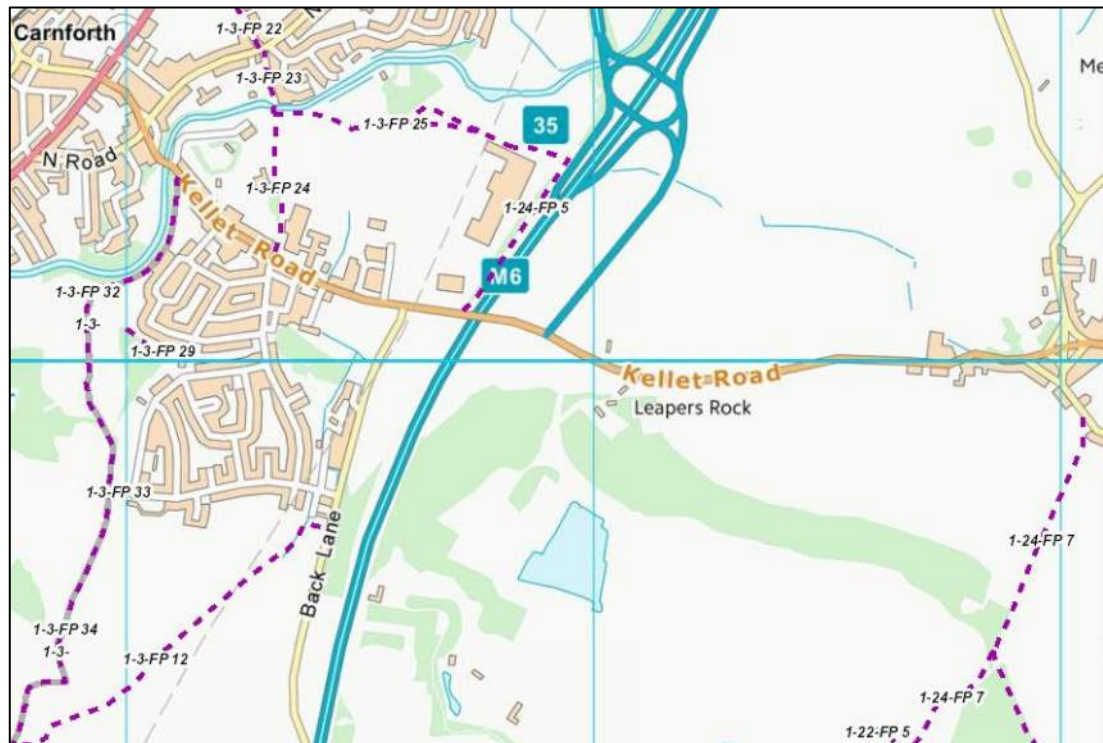
- 3.3.1 Continuous footway is provided alongside the northern side of Kellet Road (see **Photograph 2**). There are no footways provided on the southern side of Kellet Road. A dropped kerb crossing is provided at the Kellet Road / B6601 junction.

Photograph 2: Footways on Kellet Road



- 3.3.2 Public Rights of Way (PRoW) in the vicinity of the site are show in **Image 1**.
- 3.3.3 The PRoW labelled as 1-24-FP5 provides a pedestrian link between Kellet Road and North Road in Carnforth to the west of the site. As shown in **Image 1** there are further Public Rights of Way that run from Kellet Road to Carnforth as well as links towards Bolton-le-Sands to the south west of the site.

Image 1: PRow in the Vicinity of the Site



Source: Lancashire County Council Website

Pedestrian Catchment Area

- 3.3.4 In terms of what constitutes a reasonable walking distance it is necessary to consider what is realistic for a walking trip. The Institution of Highways and Transportation (IHT) document ‘Guidelines for Providing for Journeys on Foot’ (2000) states that “walking accounts for over a quarter of all journeys and four fifths of journeys less than one mile”. The document also provides guidance on acceptable walking distances and suggests that a preferred maximum walking distance of 2km is applicable for commuting.
- 3.3.5 It can therefore be concluded that distances up to 2km can be considered reasonable to be undertaken on foot, and that walking is a realistic mode to consider for trips within this distance. Whilst this does not preclude pedestrians from undertaking longer journeys, it is considered that a distance of 2km is reasonable. Based on an average walking speed of 1.4 m/s it can be concluded that a 2km walk would take approximately 24 minutes.
- 3.3.6 A 2km catchment centred on the site is shown in **Figure 2**. The catchment demonstrates that all of Carnforth and Over Kellet are within 2km of the site. As a result, some residential areas and amenities are located within a reasonable walking distance to the site. The level of pedestrian accessibility may help encourage a proportion of shorter trips to / from the area to be made on foot.

3.4 CYCLIST ACCESSIBILITY

Cycle Infrastructure

- 3.4.1 There are no formal cycle facilities on Kellet Road and therefore cyclists are required to travel within the carriageway. Approximately 400m west of the site access Kellet Road is marked as a 'on road' cycle route between the Kellet Road / Back Lane junction towards Carnforth.

Cycle Catchment Area

- 3.4.2 In a similar way to pedestrian trip lengths, the length of cycling trips will be governed by the routes that are available and trip length, although several factors often mitigate for or against making these trips.
- 3.4.3 Local Transport Note 2/08 'Cycle Infrastructure Design' (DfT, 2008) states that "many utility cycle journeys are under three miles... although, for commuter journeys, a trip distance of over five miles is not uncommon". It can therefore be concluded that 3 miles, which is equivalent to approximately 5km, represents a reasonable typical cycling distance.
- 3.4.4 **Figure 2** shows a 5km catchment centred on the site. The 5km catchment includes all of Nether Kellet and Warton. The 5km catchment also includes some of Bolton-le-Sands and Tewitfield. As with walking, cycling should also therefore be encouraged as an appropriate mode of travel for local trips.

3.5 PUBLIC TRANSPORT ACCESSIBILITY

- 3.5.1 The nearest bus stops to the site are shown in **Figure 1**. The nearest set of bus stops are located on Back Lane approximately 400m southwest of the site access. The bus stop on the western side of Back Lane comprises of a shelter with seating and timetable information (see **Photograph 3**). The bus stop on the eastern side of Back Lane comprises of a flag of pole with timetable information (see **Photograph 4**).
- 3.5.2 Additional bus stops, served by bus services with an increased frequency, are located on Kellet Road approximately 750m west of the site access. The bus stops on both sides of the carriageway comprise of a flag and pole with timetable information. Bus services stopping on Back Lane and Kellet Road are summarised in **Table 1**. The services detailed in **Table 1** are operated by Stagecoach and The Travellers Choice.

Photograph 3: Northbound Bus Stop on Back Lane



Photograph 4: Southbound Bus Stop on Back Lane



Table 1: Summary of Bus Services Stopping at Back Lane and Kellet Road

Service	Bus Stop	Mon - Fri Frequency			Sat Frequency	Sun Frequency
		7am – 9am	9am – 4pm	4pm - 6pm	9am – 6pm	9am – 6pm
49 (Lancaster – Warton)	Back Lane, Kellet Road	1 Bus	60 minutes	2 Buses	60 Minutes	0
49 (Warton- Lancaster)	Back Lane, Kellet Road	1 Bus	60 Minutes	2 Buses	60 Minutes	0
5 (Overton – Carnforth)	Kellet Road	1 Bus	60 Minutes	60 Minutes	60 Minutes	60 Minutes
5 (Carnforth- Overton)	Kellet Road	60 Minutes	60 Minutes	60 Minutes	60 Minutes	60 Minutes
55 (Lancaster City Centre – Carnforth)	Kellet Road	2 Buses	1 Bus	0	0	0
55 (Carnforth- Lancaster City Centre)	Kellet Road	1 Bus	2 buses	0	0	0

- 3.5.3 As shown in **Table 1** there are three bus routes that stop close to the site. The most frequent bus route is route 5; this route operates between Carnforth, Bolton-le-Sands, Morecambe, Heysham and Overton. Bus route 5 operates Monday to Sunday with a frequency of one bus every 60 minutes between 09:00 and 18:00.
- 3.5.4 Bus route 49 is also a regular service which operates throughout the week and provides a good frequency of services during the peak and interpeak hours when employees are likely to travel to / from the site.
- 3.5.5 Bus routes X1 and X20 are regular services which operate throughout the week and provide a good frequency of services during the peak and interpeak hours when employees are likely to travel to / from the site. Travel by bus is therefore a genuine alternative to the private car and should assist in encouraging a modal shift away from the private car.

3.6 RAIL SERVICES

- 3.6.1 The nearest train station is Carnforth which is located approximately 1.40km northwest of the site. Trains operate throughout the day to destinations including Lancaster, Barrow in Furness, and Morecambe catering for peak commuter travel as well as shift work and other associated journeys. **Table 2** shows the first and last weekday trains at Carnforth station.

Table 2: Summary of Train Services Operating from Carnforth Train Station

Train	Arrivals from Lancaster	Departures to Lancaster	Arrivals from Barrow-in-Furness	Departures to Barrow-in-Furness	Arrivals from Morecambe	Departures to Morecambe
First Train	23:42	05:32	06:39	05:49	06:58	05:32
Last Train	05:17	23:38	22:37	22:30	22:29	21:37

- 3.6.2 On weekdays, there are trains to Lancaster every 30-45 minutes, trains to Barrow-in-Furness every 60-120 minutes and trains to Morecambe every 45-60 minutes. Trains to Lancaster have an approximate 10-minute duration, trains to Barrow-in-Furness an approximate 50-minute duration and trains to Morecambe an approximate 40-minute duration. At the weekend there are trains to Barrow-in-Furness and Morecambe every 60 to 120 minutes. On Saturdays there are trains to Lancaster every 40-60 minutes and on Sundays there are trains to Lancaster every 60 minutes.
- 3.6.3 Travel by train provides a genuine alternative to the private car and should assist in encouraging a modal shift away from the private car.

3.7 HIGHWAY NETWORK

- 3.7.1 Kellet Road is a single carriageway road subject to the National Speed Limit (see **Photographs 5 and 6**). Approximately 340m west of the site the speed limit on Kellet Road changes to 30mph (towards Carnforth town centre).
- 3.7.2 Kellet Road, which bounds the site to the north, extends between the Market Street / North Road / Kellet Road junction in Carnforth to the west of the site to the village of Over Kellet to the east of the site. At this point Kellet Road becomes Kirkby Lonsdale Road and continues northeast to meet the A65 in Kirby Lonsdale.
- 3.7.3 To the west of the site Kellet Road meets the B6601 / Kellet Road junction. The B6601 provides access to the M6 (J35) and the A601(M). The M6 provides access to Lancaster approximately 6km southwest of the site before continuing south towards Preston. To the north the M6 provides access to Penrith and Carlisle.

Photograph 5: Kellet Road (view to the east of the site)



Photograph 6: Kellet Road (View to the west of the site)



3.8 BACKGROUND TRAFFIC FLOWS

- 3.8.1 Traffic data has been obtained and is presented in **Appendix C**. A 24-hour full classified turning count was undertaken at the existing site access on Kellet Road on Tuesday 28th June 2022.

3.8.2 A 24-hour full classified turning count was also commissioned at the Kellet Road/B6601 Junction by Focus Transport Planning in August 2022.

3.9 COLLISION ANALYSIS

3.9.1 Personal Injury Collision (PIC) has been obtained from Crashmap for the most recently available five-year period between 2017 and 2021. The study area comprises of Kellet Road in the vicinity of the site, the B6601 and the M6 junction 35 roundabout.

3.9.2 Collision data is presented in **Appendix D** and **Table 3** summarises the recorded PICs.

Table 3: Personal Injury Collisions 2017 to 2021

Year	Severity			Total
	Slight	Serious	Fatal	
2017	3	1	0	4
2018	1	0	0	1
2019	4	0	1	5
2020	1	0	1	2
2021	0	1	0	1

3.9.3 In total there were thirteen collisions that occurred within the study area and of these, nine were slight in severity, two were recorded as serious in severity and two resulted in fatalities.

3.9.4 One slight severity collision occurred on Kellet Road close to the B6601 / Kellet Road junction. The collision involved two vehicles and had three casualties.

3.9.5 All of the remaining 12 collisions occurred at or on the approach to the M6 (J35) / A601 (M) / B6601 roundabout.

3.9.6 One of the fatal collisions occurred on the B6601 approximately 20m south of the M6 (J35) / A601 (M) / B6601 roundabout. The collision involved one vehicle and had a single casualty. The remaining fatal collision occurred on the M6 southbound off-slip. The collision involved three vehicles and had a single casualty.

3.9.7 A serious severity collision occurred on the B6601 approximately 80m south of the M6 (J35) / A601 (M) / B6601 roundabout. The collision involved two vehicles and had two casualties. The remaining serious severity collision occurred on the M6 northbound carriageway at the M6 (J35) / A601 (M) / B6601 roundabout. The collision involved two vehicles and had three casualties.

3.9.8 The remaining eight collisions were all slight in severity and occurred at the M6 (J35) / A601 (M) / B6601 roundabout. Three of the slight severity collisions recorded at this location occurred on the M6 northbound off-slip and two occurred on the M6 northbound carriageway at the M6 (J35) / A601 (M) / B6601 roundabout.

3.9.9 The above PICs do not suggest any spatial clustering or trends. It is concluded that there are no existing road safety problems that are likely to be exacerbated by the proposed development.

4 DEVELOPMENT PROPOSALS

4.1 DEVELOPMENT DETAILS

- 4.1.1 The proposed development relates to the deepening of Leapers Wood Quarry from its existing permitted depth of 38 metres to -37 metres AOD and a time extension of quarry and restoration operations.
- 4.1.2 The existing annual sales from the site of approximately 800,000 tpa would remain unchanged. It is therefore necessary to seek permission for an extension to the extraction period and final restoration date of the site. As the quarry extraction rate will be maintained and the site will be worked in conjunction with the adjacent Back Lane Quarry, an extension to the extraction period until 31st December 2064, with restoration by 31st December 2065 will be required.
- 4.1.3 The existing hours of operation will remain as approved, and no new infrastructure is proposed on site as part of the proposals.

4.2 PROPOSED SITE ACCESS

Vehicles

- 4.2.1 Vehicular access into the site will be provided by the existing ghost island junction on Kellet Road.
- 4.2.2 **Drawing number B040370-TTE-00-ZZ-DR-S-003** contained in **Appendix E** shows the site access arrangement and visibility splays.
- 4.2.3 Visibility splays cannot be achieved in accordance with the speed limit (2.4 x 215m for road subject to the national speed limit). However on-site observations indicate speeds are below the speed limit, there is no increase in trip generation and no road safety issues noted in the vicinity of the site therefore shorter visibility splays are considered appropriate.
- 4.2.4 The site access has the following key characteristics:
- Approximate 7.0m carriageway width
 - Approximate 12m radii on the entry and 12m on the exit
 - Visibility to the east is 2.4 x 175m (measured on site)
 - Visibility to the west is 2.4 x 115m (measured on site)
- 4.2.5 The access is an established junction and on-site observations indicate that it operates satisfactorily.

4.2.6 The junction has been tracked using the largest available articulated vehicle (an articulated vehicle with a 16.5m length) and demonstrates that there will be no problems for HGVs manoeuvring in and out of the site. The vehicle tracking drawing is presented in **Appendix E**. No improvements are proposed to the existing junction.

Pedestrians

4.2.7 Pedestrians will gain access to the development via the same route as vehicular traffic.

4.3 STAFF NUMBERS AND SHIFT TIMES

4.3.1 Tarmac has confirmed that 21 employees are working at Leapers Wood. Contractors also occasionally visit the site on a daily basis.

4.3.2 Tarmac has also provided an indication of typical shift times based on existing operations. A summary is provided below:

- Monday to Friday – shifts start around 06:00 and end around 16:30
- Saturday – shifts start around 06:00 and end around 10:30

4.4 PARKING

4.4.1 A large section of unmarked parking space is provided for HGV's and staff / visitors to park their vehicles within the site.

4.5 SERVICE AND EMERGENCY VEHICLES

4.5.1 Service and emergency vehicles will gain access to the development via the same route as other vehicular traffic.

4.6 PEOPLE WITH DISABILITIES AND OTHER MOBILITY IMPAIRMENTS

4.6.1 The detailed design of the development and its internal transport infrastructure will be undertaken in accordance with the requirements of the 2010 Equality Act and in accordance with current good practice as embodied within the DfT's 'Inclusive Mobility' document.

4.6.2 This approach will ensure that the completed development is fully inclusive and meets the needs of all users, including those with disabilities or temporary mobility impairments.

4.6.3 The requirement to design for disabled people will permeate all aspects of the design process and will include access to and movement within the site, but also the interface between the development and the surrounding highway network and in particular, the pedestrian routes and public transport facilities.

5 FUTURE TRAFFIC FLOWS

5.1 FORECAST GROWTH

5.1.1 Traffic growth factors for a 2028 and 2050 future design year have been derived using the TEMPro software, for the 'Lancaster 002' Middle Super Output Area (MSOA). The future year of 2028 would be five years after submission of the planning application for the site and the future year of 2050 would be close to the end of the proposed extraction period / an appropriate future year in line with TA guidelines. The TEMPro outputs are presented in **Appendix F** and the resulting growth factors are as follows.

- Morning peak hour 2022–2023 = 1.009
- Evening peak hour 2022–2023 = 1.0009
- Morning peak hour 2022-2028 = 1.0531
- Evening peak hour 2022-2028 = 1.5085
- Morning peak hour 2028-2050 = 1.1546
- Evening peak hour 2028-2050 = 1.1509

5.1.2 The growth factors have been applied to the base traffic flows to give 2028 and 2050 background traffic flows as shown in the traffic flow diagrams in **Appendix F**.

5.2 COMMITTED DEVELOPMENTS

5.2.1 Committed schemes are defined as developments or transport schemes which have current planning consent, but which are unimplemented or incomplete, and could in the future have a significant impact on transport conditions or the layout of the local highway network.

5.2.2 The planning portal on Lancaster City Council's website has been reviewed and the following committed developments have been considered in this TA:

- 16/00335/OUT – Outline application for the erection of up to 158 dwellings with associated new vehicular access, incorporating roundabout and access road, and pedestrian/cycle access points.
- 18/00365/OUT – Outline application for residential development comprising 213 dwellings (Use Class C3) with associated vehicular and cycle/pedestrian access to Scotland Road and cycle/pedestrian access to Carnforth Brow/Netherbeck, public open space, creation of wetlands area, construction of attenuation basins, erection of sub-

station, installation of a pumping station and associated earth works and land regrading and landscaping.

5.2.3 In addition, the following planning application has been submitted but at the time of writing this TA, the application has yet to be determined:

- 21/00899/HYB - Hybrid Application comprising a full application for the erection of 81 dwellings with associated vehicular access, incorporating a signalised junction, together with pedestrian and cycle access points, associated earthworks, roads, parking and drainage infrastructure and an outline application for the erection of up to 114 dwellings, including public open space provision and associated infrastructure.

5.2.4 The TAs for each of the above developments have been reviewed and the development traffic flows have been obtained. Where the study areas for the committed developments include the same junctions as in this TA, these flows have then been added to background traffic flows at each TA assessment year. Where the study area for the committed developments do not include the same junctions as in this TA, the distribution of committed development traffic is unknown and as such, it is assumed that growth in traffic from the committed development will be accounted for in the general background traffic growth factors used in this TA.

5.2.5 In terms of application 22/00562/VCN that has yet to be determined, there is no TA or transport related inputs available to view on the City Council's planning portal. As a result, the distribution of the development traffic associated with the application is unknown. It is therefore assumed that growth in traffic from the development will be accounted for in the general background traffic growth factors used in this TA.

5.2.6 With regard to planning application 21/00899/HYB that has yet to be determined, the TA has been reviewed and the study area includes development traffic going to / from the M6 (J35) / A601 (M) / B6601 roundabout via the B6601. However, the study area for the committed development does not include the same junctions as in this TA, therefore the distribution of committed development traffic is unknown and as such, it is assumed that growth in traffic from the committed development will be accounted for in the general background traffic growth factors used in this TA.

5.3 COMMITTED DEVELOPMENT – BACK LANE QUARRY

5.3.1 The development flows associated with the working scheme for Back Lane Quarry have been obtained and added to background traffic flows at each TA assessment year. Traffic flows associated with Back Lane Quarry can be found in the traffic flow diagrams contained in **Appendix F**.

6 TRIP GENERATION AND DISTRIBUTION

6.1 TRIP GENERATION

- 6.1.1 Tarmac have confirmed that the proposed development will not increase the output of material and would not generate any new or additional trips. The proposed development will include the deepening of the existing working and will not result in an increased rate of mineral output. Although the quarry will not generate any new or additional trips, at present the quarry is not operating at its maximum capacity. The existing trip generation (recorded as part of the June 2022 traffic survey) has therefore been growthed in order to reflect the trip generation associated with the quarry operating at its maximum capacity (in line with the average yearly output of around 800,000 tpa).

6.2 EXISTING TRIP GENERATION

- 6.2.1 Existing daily trip generation as observed during the count detailed in **Section 3.8** is detailed in **Table 4**.

Table 4: Existing Trip Generation – Leapers Wood Quarry

Time Period	Inbound (HGVs)	Outbound (HGVs)	Inbound (Vehicles)	Outbound (Vehicles)
00:00-01:00	0	0	0	0
01:00-02:00	0	0	0	0
02:00-03:00	0	0	0	0
03:00-04:00	0	0	0	0
04:00-05:00	0	0	1	0
05:00-06:00	3	0	14	0
06:00-07:00	12	11	2	0
07:00-08:00	16	16	1	0
08:00-09:00	6	10	2	1
09:00-10:00	7	8	0	0
10:00-11:00	10	7	3	5
11:00-12:00	4	6	3	0
12:00-13:00	8	7	3	1
13:00-14:00	7	5	3	6
14:00-15:00	5	9	1	2
15:00-16:00	5	4	4	3
16:00-17:00	0	1	0	16
17:00-18:00	0	0	1	3
18:00-19:00	1	0	0	1
19:00-20:00	0	0	1	0
20:00-21:00	0	0	0	1
21:00-22:00	0	0	0	0
22:00-23:00	0	0	0	0
23:00-00:00	0	0	0	0
Total	84	84	39	39

HGV's

6.2.2 As shown in **Table 4**, Leapers Wood Quarry currently generates 168 HGV movements per day (84 two-way trips). As a worst-case scenario, it is assumed that HGV movements typically take place over a 5-day week. The majority of HGV movements occur between 06:00 and 16:00 with the most HGV trips per hour recorded between 07:00 and 08:00.

Staff Trips / Contractor Movements

6.2.3 As shown in **Table 5**, there are 78 staff / contractor movements associated with Leapers Wood Quarry (39 two-way trips). The majority of staff arrive at the site between 05:00 and 06:00 (14 one-way trips) and depart between 16:00 and 17:00 (16 one-way trips).

6.3 FUTURE HGV TRIP GENERATION

- 6.3.1 Existing daily HGV trip generation observed during the count detailed in **Section 3.8** has been growthed in order to reflect the trip generation associated with Leapers Wood Quarry when it is operating at its maximum capacity (see **Table 5**). Cemex have provided details of HGV movements associated with the busiest year (2021) in comparison to HGV movements in the year the baseline survey took place (2022). HGV movements in 2021 (when the quarry was operating at its maximum capacity) are approximately 46% higher than recorded / forecasted HGV movements associated with the quarry in 2022. The existing daily trip generation observed during the count in 2022 has therefore been increased by 46% to reflect the trip generation associated with Leapers Wood Quarry when it is operating at its maximum capacity.
- 6.3.2 As a worst-case scenario, it is assumed that HGV movements typically take place over a 5-day week. It is assumed that no additional staff will be employed as part of the proposals and therefore vehicle trip generation will remain unchanged (see **Table 4**). Full traffic flow calculations are presented in **Appendix F**.

Table 5: Future HGV Trip Generation – Leapers Wood Quarry

Time Period	Inbound (HGVs)	Outbound (HGVs)
00:00-01:00	0	0
01:00-02:00	0	0
02:00-03:00	0	0
03:00-04:00	0	0
04:00-05:00	0	0
05:00-06:00	1	0
06:00-07:00	5	5
07:00-08:00	7	7
08:00-09:00	3	5
09:00-10:00	3	4
10:00-11:00	5	3
11:00-12:00	2	3
12:00-13:00	4	3
13:00-14:00	3	2
14:00-15:00	2	4
15:00-16:00	2	2
16:00-17:00	0	0
17:00-18:00	0	0
18:00-19:00	0	0
19:00-20:00	0	0
20:00-21:00	0	0
21:00-22:00	0	0
22:00-23:00	0	0
23:00-00:00	0	0
Total	38	38

6.3.3 As shown in **Table 5**, Leapers Wood Quarry when operating at its maximum permitted capacity will generate an additional 76 HGV movements per day (38 two-way trips) based on a worst-case scenario where HGV movements take place over a 5-day week. The majority of HGV movements occur between 06:00 and 16:00 with the most HGV trips per hour recorded between 07:00 and 08:00.

6.4 TOTAL TRIP GENERATION

6.4.1 The total daily trip generation is presented in **Table 6**.

Table 6: Total Daily Trip Generation (Quarry Operating at Full Capacity)

Time Period	Inbound (HGVs)	Outbound (HGVs)	Inbound (Vehicles)	Outbound (Vehicles)
00:00-01:00	0	0	0	0
01:00-02:00	0	0	0	0
02:00-03:00	0	0	0	0
03:00-04:00	0	0	0	0
04:00-05:00	0	0	1	0
05:00-06:00	4	0	14	0
06:00-07:00	17	16	2	0
07:00-08:00	23	23	1	0
08:00-09:00	9	15	2	1
09:00-10:00	10	12	0	0
10:00-11:00	15	10	3	5
11:00-12:00	6	9	3	0
12:00-13:00	12	10	3	1
13:00-14:00	10	7	3	6
14:00-15:00	7	13	1	2
15:00-16:00	7	6	4	3
16:00-17:00	0	1	0	16
17:00-18:00	0	0	1	3
18:00-19:00	1	0	0	1
19:00-20:00	0	0	1	0
20:00-21:00	0	0	0	1
21:00-22:00	0	0	0	0
22:00-23:00	0	0	0	0
23:00-00:00	0	0	0	0
Total	122	122	39	39

HGVs

6.4.2 As shown in **Table 6**, Leapers Wood Quarry when operating at its maximum permitted capacity will generate 245 HGV movements per day (122 two-way trips). As a worst-case scenario, it is assumed that HGV movements typically take place over a 5-day week. The majority of HGV movements occur between 06:00 and 16:00 with the most HGV trips per hour recorded between 07:00 and 08:00.

Staff Trips / Contractor Movements

6.4.3 The number of staff employed at the site will remain the same therefore no additional vehicle trips will be generated.

Total Trips

- 6.4.4 In total Leapers Wood Quarry will generate approximately 323 movements per day (161 two-way trips).

6.5 TRIP DISTRIBUTION

HGVs

- 6.5.1 All HGV trips will travel to / from Kellet Road West towards the Kellet Road / B6601 junction and beyond to the M6 junction 35 (existing trip distribution is presented in **Appendix F**).

Staff Trips

- 6.5.2 The existing trip distribution indicates that 10% of development trips associated with staff will be to / from Kellet Road east (4 trips) and 90% will be to / from Kellet Road west (35 trips).

7 HIGHWAY IMPACT

7.1 INTRODUCTION

- 7.1.1 Capacity assessments have been undertaken for the morning and evening peak hours at the B6601 / Kellet Road junction and the Kellet Road / Site Access junction. Both junctions have been assessed in the '2028 Background', '2050 Background', '2028 Background plus Proposed Development' and 2050 Background plus Proposed Development traffic flow scenarios. The B6601 / Kellet Road junction has also been assessed in the '2023 Background' traffic flow scenario.
- 7.1.2 The assessments have been undertaken using the Junctions 9 computer programme, which is the 'industry standard' traffic modelling computer software package used for assessing the capacity of priority junctions and roundabouts.
- 7.1.3 A Ratio of Flow to Capacity (RFC) value below 0.85 indicates that a junction operates 'within' capacity. An RFC value between 0.85 and 1.00 indicates that there may be occasions during the period modelled when queues will develop, and delays occur. An RFC value greater than 1.00 indicates that a junction operates 'above' capacity.

7.2 RESULTS

- 7.2.1 The results of the junctions 9 assessments can be found in **Appendix G**. A summary of results for the Kellet Road / Site Access junction is presented in **Table 7** and a summary of results for the B6601 / Kellet Road junction is presented in **Table 8**.

Table 7: Kellet Road / Site Access Junction Capacity Assessment Results

2028 Base				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
Site Access	0.02	0.0	0.03	0.0
Kellet Road	0.03	0.0	0.00	0.0
2028 Base Plus Committed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
Site Access	0.02	0.0	0.03	0.0
Kellet Road	0.03	0.0	0.00	0.0
2028 Base + Committed Development + Proposed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
Site Access	0.04	0.0	0.04	0.0
Kellet Road	0.05	0.1	0.01	0.0
2050 Base				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
Site Access	0.03	0.0	0.03	0.0
Kellet Road	0.03	0.0	0.00	0.0
2050 Base + Committed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
Site Access	0.03	0.0	0.03	0.0
Kellet Road	0.03	0.0	0.00	0.0
2050 Base + Committed Development + Proposed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
Site Access	0.05	0.1	0.05	0.1
Kellet Road	0.06	0.1	0.01	0.0

7.2.2 As demonstrated by the results in **Table 7**, the Kellet Road / Site Access junction will operate with spare capacity in 2028 and 2050, inclusive of background traffic growth, committed development and with the addition of the proposed development traffic.

Table 8: B6601 / Kellet Road Junction Capacity Assessment Results

2023 Base				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	0.74	2.7	1.10	33.1
Kellet Road	0.24	0.3	0.11	0.1
2023 Base + Committed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	0.84	4.6	1.10	33.7
Kellet Road	0.25	0.3	0.	0.1
2023 + Committed Development + Proposed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	0.87	5.3	1.11	35.7
Kellet Road	0.28	0.4	0.13	0.1
2028 Base				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	0.79	3.5	1.15	44.9
Kellet Road	0.25	0.3	0.12	0.1
2028 Base + Committed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	0.89	6.3	1.15	45.6
Kellet Road	0.27	0.4	0.12	0.1
2028 Base + Committed Development + Proposed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	0.92	7.8	1.16	48.0
Kellet Road	0.29	0.4	0.13	0.1
2050 Base				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	1.00	14.1	1.36	112.9
Kellet Road	0.30	0.4	0.14	0.2
2050 Base + Committed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	1.09	27.2	1.36	114.2
Kellet Road	0.32	0.5	0.14	0.2
2050 Base + Committed Development + Proposed Development				
Arm	AM		PM	
	RFC	Max Queue	RFC	Max Queue
B6601	1.13	33.7	1.39	121.5
Kellet Road	0.35	0.6	0.15	0.2

7.2.3 As shown in **Table 8**, the B6601 / Kellet Road junction is shown to operate above capacity in the 2023 PM Peak prior to the addition of the proposed development traffic. The B6601 arm of

the junction is shown to have RFC of 1.10 and a maximum queue length of 33.1 in the '2023 Base' PM peak scenario. With the addition of the development traffic, the B6601 arm of the junction is shown to have an RFC of 1.11 and a maximum queue length of 35.7. The worsening of junction performance as a result of the proposed development is considered minimal with RFC values only increasing by a small amount (RFC values increase by 0.01 and maximum queue lengths increase by 2.6). The impact of the development at this location is therefore not considered severe and no mitigation is proposed.

- 7.2.4 Furthermore, the extension of time for quarrying at Leapers Wood Quarry will not result in an increased rate of mineral output and no additional HGV trips are proposed (when the quarry is operating at its maximum capacity).

7.3 HIGHWAY IMPACT AT OFF-SITE JUNCTIONS

- 7.3.1 To show the impact that the proposed development will have on the surrounding highway network, the 2023, 2028 and 2050 base flows have been compared to the proposed development traffic. **Table 9** shows the change at traffic flows at the B6601 / Kellet Road junction and the percentage change when comparing 'with' and 'without' development flows.

Table 9: Highway Impact at the B6601 / Kellet Road junction

Junction	AM Peak Hour			PM Peak Hour		
	2023 Without Development Flows	Development Flows (PCUs)	% Change	2023 Without Development Flows	Development Flows (PCUs)	% Change
B6601 / Kellet Road	1163	29	2.49%	1095	13	1.19%
Junction	AM Peak Hour			PM Peak Hour		
	2028 Without Development Flows	Development Flows (PCUs)	% Change	2028 Without Development Flows	Development Flows (PCUs)	% Change
B6601 / Kellet Road	1210	29	2.40%	1140	13	1.14%
Junction	AM Peak Hour			PM Peak Hour		
	2050 Without Development Flows	Development Flows (PCUs)	% Change	2050 Without Development Flows	Development Flows (PCUs)	% Change
B6601 / Kellet Road	1386	29	2.10%	1312	13	0.99%

- 7.3.2 As shown in **Table 9**, the estimated increase in traffic at the B6601 / Kellet Road junction is minimal, particularly when considered alongside the 2050 'without development' traffic flows. The increase at this junction is considered to be negligible as day-to-day variation could result in a larger increase in traffic flows than the proposed increase in traffic associated with the extension of time at Leapers Wood Quarry. It is therefore concluded that the proposed development will not have a 'severe' impact upon the operation of off-site junctions in the TA study area.

7.4 TRAFFIC RELATED ENVIRONMENTAL IMPACTS

7.4.1 The Institute of Environmental Assessment (IEMA) Guidance Note “Guidelines for the Environmental Assessment of Road Traffic” sets out when traffic related environmental impacts can be scoped out further. The guidance states to ‘include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles will increase by more than 30%). The percentage highway impact on Kellet Road is:

- 6.5% in the morning peak hour.
- 3.1% in the evening peak hour.

7.4.2 In this case, the increase in traffic flows is no more than 30% or more on any highway links within the vicinity of the proposed development site. The above scenario is assessed as a ‘worst case scenario’ and includes HGV trips as well as light vehicle trips associated with the site.

7.4.3 Whilst the proposals will increase the number of HGVs on Kellet Road, this is not considered to be significant and will take place on a short section of road where there are not considered to be any sensitive environmental receptors within the immediate vicinity. There is therefore no need for further assessment.

7.4.4 Generally, the site will therefore fall below the threshold for requiring any further assessments of the environmental impacts of traffic and the development will have no demonstrable impact on severance, driver delay, pedestrian delay, amenity, fear and intimidation. In any event, there are no limited receptors in terms of schools, housing etc. which might be affected. On this basis it is concluded that the proposals will have no material impact in this regard.

8 SUMMARY

- 8.1.1 Tetra Tech has been appointed by Tarmac to prepare a Transport Assessment (TA) in support of a planning application for an extension of time at Leapers Wood Quarry in Carnforth, Lancashire.
- 8.1.2 The proposed development includes the deepening of the existing Leapers Wood Quarry from its permitted depth of 38 metres to -37 metres AOD and a time extension of quarrying and restoration operations.
- 8.1.3 Vehicular access into the site will be provided by the existing ghost island junction on Kellet Road.
- 8.1.4 The site is located approximately 400m from the nearest set of bus stops on Back Lane. These bus stops are served by bus route 49. Additional bus stops are located on Kellet Road approximately 750m west of the site access. These bus stops are served by the more frequent bus services (route numbers: 5 and 55).
- 8.1.5 A review of Personal Injury Collision data confirms that there are no existing road safety issues which could be exacerbated by the development proposals.
- 8.1.6 Tarmac have provided information about existing vehicle movements, staff numbers and shift times at Leapers Wood Quarry.
- 8.1.7 Tarmac have confirmed that the proposed development will not generate any new trips. The proposed development will include the deepening of the existing working and will not result in an increased rate of mineral output.
- 8.1.8 Based on the findings of this report it is considered that the proposed development would not have a severe impact on the highway network and is in accordance with relevant policy and design guidance. Given the findings of this report it is considered that the proposed development is acceptable in transport terms. It is concluded that the proposals are acceptable in terms of road safety and amenity, and it is respectfully recommended for approval by the highway authority.

FIGURES

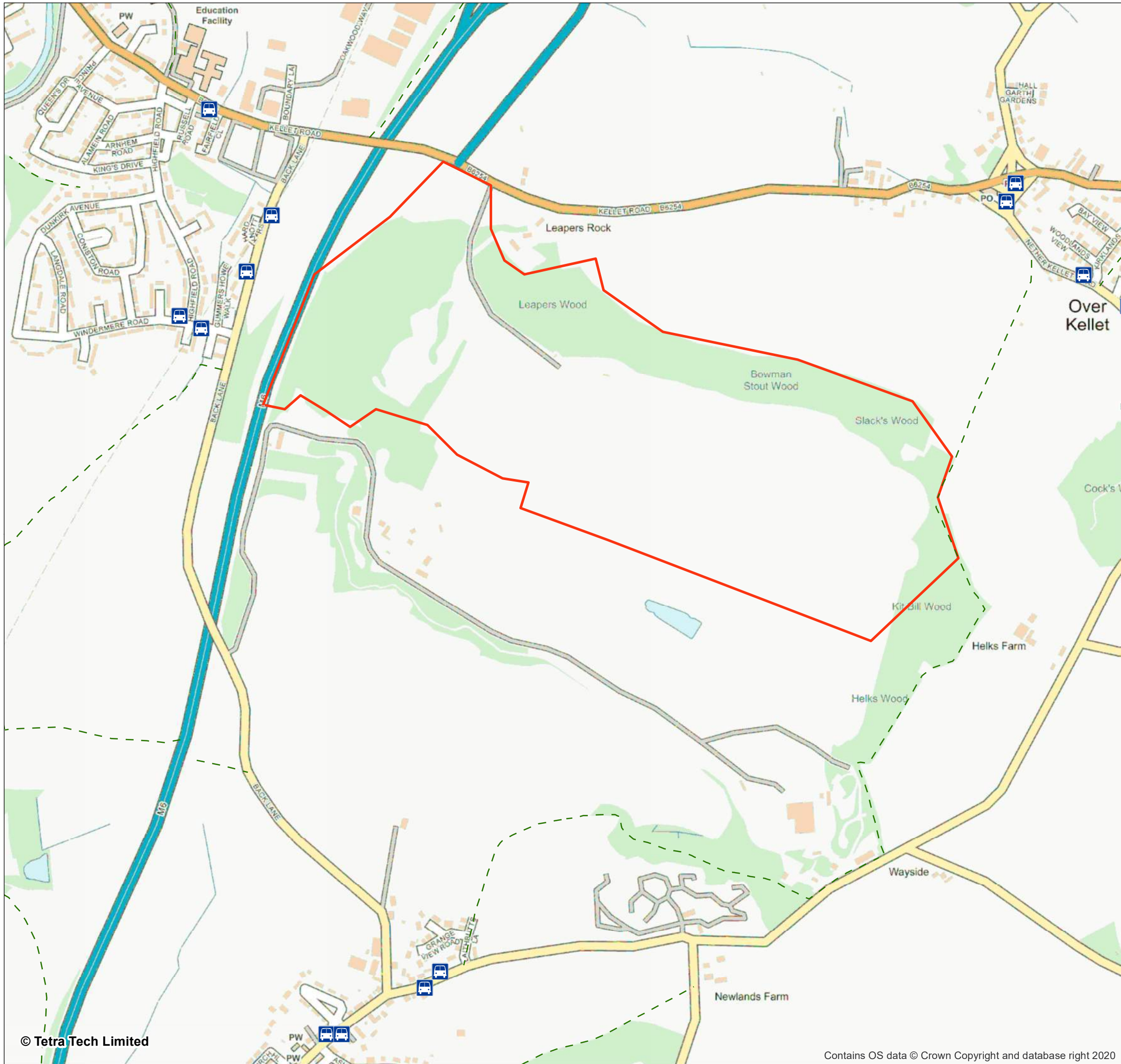





Figure 1 Site Location Plan Leapers Quarry

Carnforth



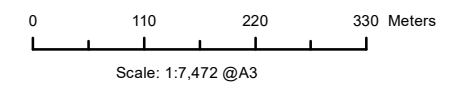
Legend

-  Site Boundary
-  Bus Stops
-  Public Rights of Way

Notes:

Drawn by: KK
Checked by: RJH
Office: Leicester

Drawing No. 001
Revision No.



30 June 2022

NGR: 351,109 E / 469,313 N

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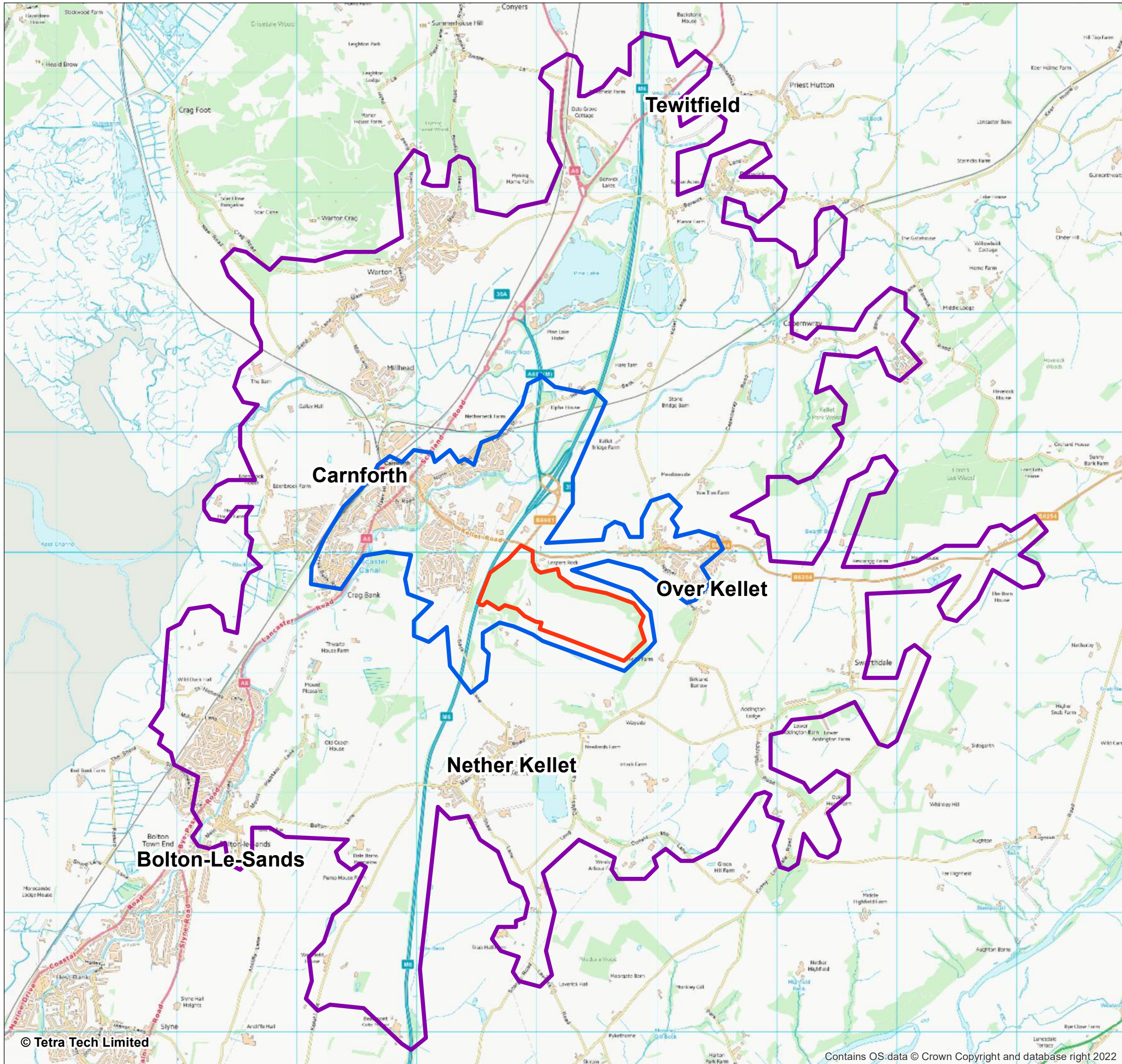


Figure 2 2km and 5km Catchment Plan
Leapers Quarry
 Carnforth



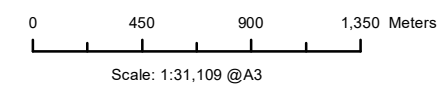
Legend

-  Site Boundary
-  2km Catchment
-  5km Catchment

Notes:

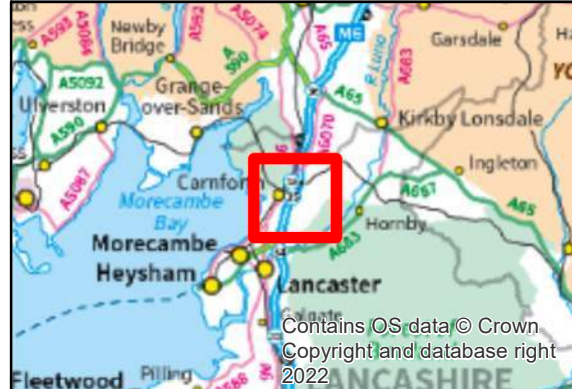
Drawn by: KK
 Checked by: RJH
 Office: Leicester

Drawing No. 002
 Revision No.



26 July 2022
 NGR: 351,224 E / 470,150 N

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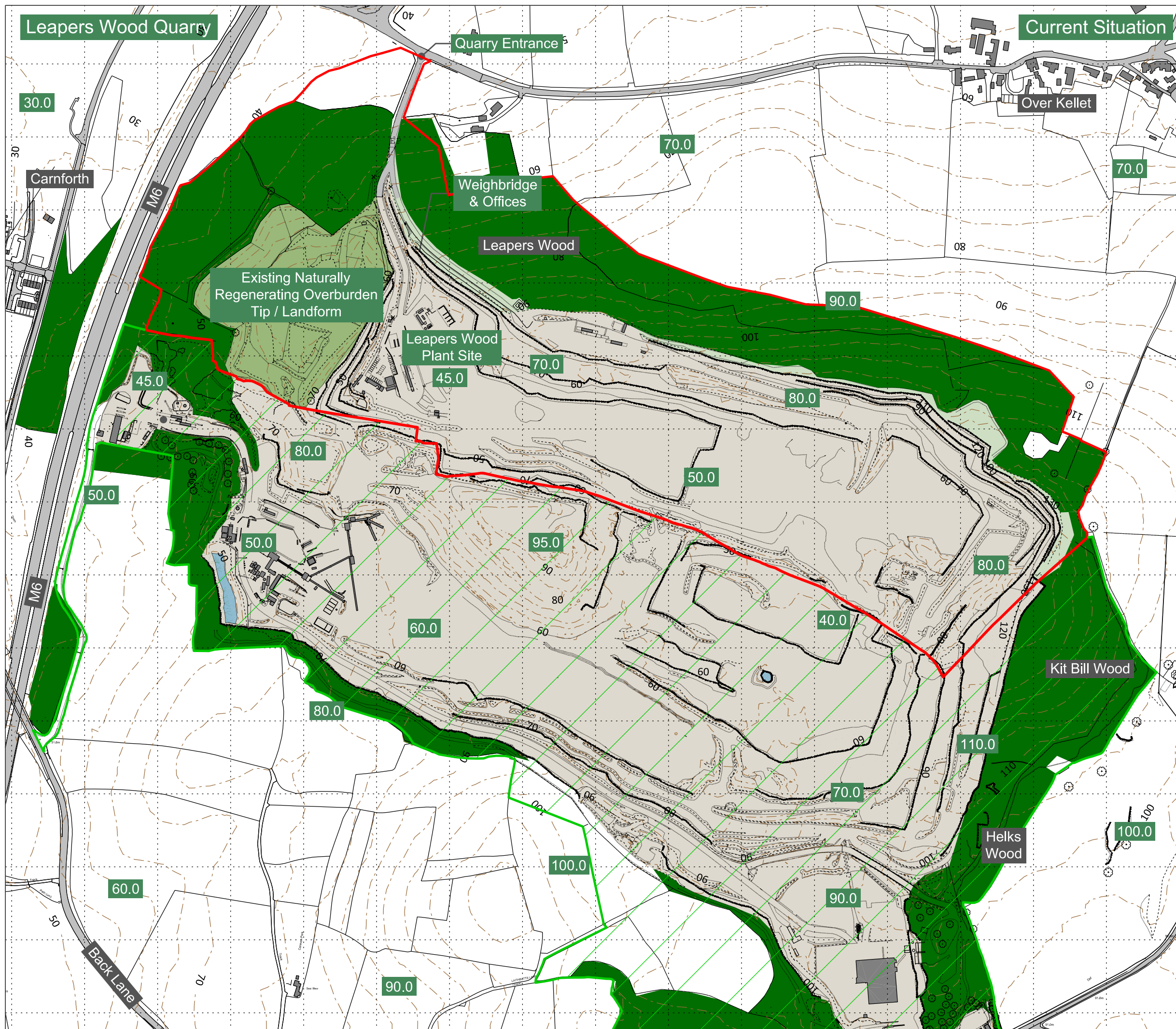


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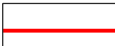






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APPENDICES

APPENDIX A –PROPOSED SITE MASTERPLAN



LEGEND

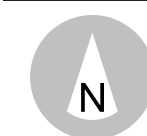
-  Application Boundary
-  Back Lane Quarry
-  Surrounding Woodland
-  Buildings & Roads
-  Disturbed Land - Leapers Wood & Back Lane Quarries
-  Existing Overburden Tip / Landform
-  Contours (5m Intervals) & Spot Heights (m AOD)



PROJECT
Leapers Wood Quarry
 DRAWING TITLE
Current Situation

DATE
 Sept 2021

REFERENCE
 TAR-132-M.D.002



SCALE
 1:5,000 @ A3

STATUS
FINAL



LEGEND

- Application Boundary
- Back Lane Quarry
- Surrounding Woodland
- Buildings & Roads
- Proposed Extent of Operational Land / Mineral Extraction
- Existing Overburden Tip / Landform
- Proposed Overburden Tip / Landform
- Contours (5m Intervals) & Spot Heights (m AOD)

NOTE. This drawing illustrates the proposed full footprint and depth of extraction.



PROJECT
Leapers Wood Quarry
 DRAWING TITLE
Proposals Plan

DATE: Sept 2021
 REFERENCE: TAR-132-M.D.003



SCALE
 1:5,000 @ A3
 STATUS
FINAL

APPENDIX B – SCOPING CORRESPONDENCE

Hello Lauren, LCC Highways are satisfied with your proposals.

Can I just query the reference to infilling below. It is not an aspect of the development that I have any knowledge of and wasn't included in the scoping application.

Your list of other developments appears acceptable. The only other proposals that I am aware of relate to the land off the A601(M). I think there may be some unimplemented planning permissions in that area. The other thing you might wish to look at is any update of the Lancaster Local Plan. There was a draft plan published several years ago but was then withdrawn after examination so I am expecting a new version to be issued at some stage which might contain housing proposals in the Carnforth area.

You have said that the assessment year will be 2027. Is this appropriate when the timescale of the quarry with the proposed deepening will be until 2060?

Other than these points, I am happy with your proposals.

Regards

Jonathan

Jonathan Haine
Team Leader Development Management
Planning and Environment Service
Lancashire County Council
PO Box 100
County Hall
Preston
PR1 0LD

APPENDIX C – SURVEY DATA

MANUAL CLASSIFIED COUNTS



JOB REF: 27279

JOB NAME: CARNFORTH

SITE: 1

LOCATION: KELLET ROAD / TARMAC ACCESS

DATE: 28/06/2022

DAY: TUESDAY

TIME	A - C									A - B								
	FROM KELLET ROAD (W) TO KELLET ROAD (E)									FROM KELLET ROAD (W) TO TARMAC ACCESS								
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		
00:00	1	1	2	0	0	0	0	0	4	0	0	0	0	0	0	0		
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
00:45	1	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0		
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:45	1	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0		
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:30	2	0	2	0	0	0	0	0	4	0	0	0	0	0	0	0		
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:30	1	0	1	0	1	0	1	0	4	0	0	0	0	0	0	0		
03:45	1	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0		
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:15	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0		
04:30	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2		
04:45	1	2	3	0	0	0	0	0	6	0	0	0	0	0	0	0		
05:00	1	1	2	0	0	0	0	0	4	1	0	1	0	0	0	2		
05:15	3	1	4	0	0	0	0	0	8	0	0	0	0	0	0	0		
05:30	1	1	2	0	0	0	0	0	4	5	2	7	0	2	0	18		
05:45	3	1	4	2	0	0	2	0	12	2	4	6	0	1	0	14		
06:00	2	0	2	0	0	0	0	0	4	0	0	0	0	3	0	6		
06:15	5	1	6	0	0	0	0	0	12	0	0	0	0	3	0	6		
06:30	3	0	3	1	1	0	2	0	10	0	0	0	0	1	0	2		
06:45	4	5	9	0	0	0	0	0	18	1	0	1	0	4	0	10		
07:00	10	6	16	0	0	0	0	0	32	0	1	1	0	2	0	6		
07:15	24	7	31	0	1	1	2	0	66	0	0	0	0	5	0	10		
07:30	18	18	36	1	2	1	4	0	80	0	0	0	0	3	0	6		
07:45	20	9	29	2	0	0	2	0	62	0	0	0	0	6	0	12		
08:00	21	9	30	1	1	0	2	0	64	0	1	1	0	0	0	2		
08:15	24	13	37	2	0	0	2	0	78	0	1	1	1	3	0	10		
08:30	25	8	33	2	0	0	2	0	70	0	0	0	0	0	0	0		
08:45	36	4	40	0	0	0	0	0	80	0	0	0	0	2	0	4		
09:00	21	11	32	2	0	0	2	0	68	0	0	0	0	2	0	4		
09:15	18	5	23	4	0	0	4	0	54	0	0	0	0	1	0	2		
09:30	19	9	28	0	0	1	1	1	61	0	0	0	0	4	0	8		
09:45	24	9	33	1	0	0	1	0	68	0	0	0	0	0	0	0		
10:00	30	4	34	4	0	0	4	0	76	0	0	0	0	3	0	6		
10:15	13	6	19	2	3	0	5	0	49	1	0	1	0	2	0	6		
10:30	15	4	19	2	1	1	4	0	47	0	1	1	0	2	0	6		
10:45	20	4	24	2	0	0	2	0	53	0	1	1	0	3	0	8		
11:00	23	3	26	4	0	0	4	0	61	1	1	2	0	0	0	4		
11:15	16	3	19	3	1	0	4	0	46	0	0	0	0	1	0	2		
11:30	26	3	29	2	0	1	3	0	64	0	1	1	0	1	0	4		
11:45	28	2	30	0	0	0	0	0	60	0	0	0	0	2	0	4		

MANUAL CLASSIFIED COUNTS



JOB REF: 27279

JOB NAME: CARNFORTH

SITE: 1

LOCATION: KELLET ROAD / TARMAC ACCESS

DATE: 28/06/2022

DAY: TUESDAY

TIME	B - A									B - C								
	FROM TARMAC ACCESS TO KELLET ROAD (W)									FROM TARMAC ACCESS TO KELLET ROAD (E)								
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
06:15	0	0	0	0	4	0	4	0	0	8	0	0	0	0	0	0		
06:30	0	0	0	0	6	0	6	0	0	12	0	0	0	0	0	0		
06:45	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		
07:00	0	0	0	0	6	0	6	0	0	12	0	0	0	0	0	0		
07:15	0	0	0	0	2	0	2	0	0	4	0	0	0	0	0	0		
07:30	0	0	0	0	5	0	5	0	0	10	0	0	0	0	0	0		
07:45	0	0	0	0	3	0	3	0	0	6	0	0	0	0	0	0		
08:00	0	1	1	0	5	0	5	0	0	12	0	0	0	0	0	0		
08:15	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		
08:30	0	0	0	1	2	0	3	0	0	6	0	0	0	0	0	0		
08:45	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		
09:00	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		
09:15	0	0	0	0	2	0	2	0	0	4	0	0	0	0	0	0		
09:30	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		
09:45	0	0	0	0	4	0	4	0	0	8	0	0	0	0	0	0		
10:00	0	1	1	0	2	0	2	0	0	6	0	0	0	0	0	0		
10:15	1	0	1	0	3	0	3	0	0	8	0	0	0	0	0	0		
10:30	0	3	3	0	1	0	1	0	0	8	0	0	0	0	0	0		
10:45	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		
11:00	0	0	0	0	4	0	4	0	0	8	0	0	0	0	0	0		
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11:30	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		
11:45	0	0	0	0	1	0	1	0	0	2	0	0	0	0	0	0		

MANUAL CLASSIFIED COUNTS



JOB REF: 27279

JOB NAME: CARNFORTH

SITE: 1

LOCATION: KELLET ROAD / TARMAC ACCESS

DATE: 28/06/2022

DAY: TUESDAY

TIME	C - B									C - A								
	FROM KELLET ROAD (E) TO TARMAC ACCESS									FROM KELLET ROAD (E) TO KELLET ROAD (W)								
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT		
00:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
00:30	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:45	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	4	
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:15	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	4	
03:30	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	4	
03:45	0	0	0	0	0	0	0	0	0	1	1	2	0	1	0	0	6	
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
05:00	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	6	
05:15	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	4	
05:30	0	0	0	0	0	0	0	0	0	8	0	8	0	1	0	0	18	
05:45	0	0	0	0	0	0	0	0	0	7	0	7	0	3	0	0	20	
06:00	0	0	0	0	0	0	0	0	0	7	1	8	1	1	0	2	20	
06:15	0	0	0	0	1	0	1	0	2	7	2	9	1	0	0	1	20	
06:30	0	0	0	0	0	0	0	0	0	8	3	11	1	1	0	2	26	
06:45	0	1	1	0	0	0	0	0	2	10	4	14	1	1	0	2	32	
07:00	0	0	0	0	0	0	0	0	0	12	6	18	0	1	0	1	38	
07:15	0	0	0	0	0	0	0	0	0	14	8	22	0	0	0	0	44	
07:30	0	0	0	0	0	0	0	0	0	21	7	28	0	1	0	1	58	
07:45	0	0	0	0	0	0	0	0	0	36	7	43	2	0	0	2	90	
08:00	0	0	0	0	0	0	0	0	0	33	3	36	2	2	1	5	82	
08:15	0	0	0	0	0	0	0	0	0	23	5	28	3	0	0	3	63	
08:30	0	0	0	0	0	0	0	0	0	30	10	40	0	1	1	2	84	
08:45	0	0	0	0	0	0	0	0	0	44	8	52	1	0	0	1	106	
09:00	0	0	0	0	0	0	0	0	0	41	6	47	3	1	0	4	102	
09:15	0	0	0	0	0	0	0	0	0	26	5	31	2	0	0	2	67	
09:30	0	0	0	0	0	0	0	0	0	25	5	30	0	1	0	1	63	
09:45	0	0	0	0	0	0	0	0	0	27	6	33	2	0	0	2	71	
10:00	0	0	0	0	0	0	0	0	0	26	4	30	2	0	1	3	66	
10:15	0	0	0	0	0	0	0	0	0	29	0	29	0	0	0	0	58	
10:30	0	0	0	0	0	0	0	0	0	28	5	33	4	2	0	6	79	
10:45	0	0	0	0	0	0	0	0	0	31	7	38	2	1	0	3	82	
11:00	0	0	0	0	0	0	0	0	0	20	6	26	2	1	1	4	67	
11:15	0	0	0	0	0	0	0	0	0	26	9	35	1	0	0	1	72	
11:30	0	0	0	0	0	0	0	0	0	21	4	25	3	1	0	4	58	
11:45	0	0	0	0	0	0	0	0	0	17	6	23	2	0	0	2	50	

MANUAL CLASSIFIED COUNTS



JOB REF: 27279

JOB NAME: CARNFORTH

SITE: 1

LOCATION: KELLET ROAD / TARMAC ACCESS

DATE: 28/06/2022

DAY: TUESDAY

TIME	TO ARM A KELLET ROAD (W)								FROM ARM A KELLET ROAD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
00:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
01:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	1	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0
03:30	2	0	0	0	0	0	0	2	1	0	0	1	0	0	0	2
03:45	1	1	0	1	0	0	0	3	1	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
04:30	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
04:45	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
05:00	2	1	0	0	0	0	0	3	2	1	0	0	0	0	0	3
05:15	1	1	0	0	0	0	0	2	3	1	0	0	0	0	0	4
05:30	8	0	0	1	0	0	0	9	6	3	0	2	0	0	0	11
05:45	7	0	0	3	0	0	0	10	5	5	2	1	0	0	0	13
06:00	7	1	1	1	0	0	0	10	2	0	0	3	0	0	0	5
06:15	7	2	1	4	0	0	0	14	5	1	0	3	0	0	0	9
06:30	8	3	1	7	0	0	0	19	3	0	1	2	0	0	0	6
06:45	10	4	1	2	0	0	0	17	5	5	0	4	0	0	0	14
07:00	12	6	0	7	0	0	0	25	10	7	0	2	0	0	0	19
07:15	14	8	0	2	0	0	0	24	24	7	0	6	1	0	0	38
07:30	21	7	0	6	0	0	0	34	18	18	1	5	1	0	0	43
07:45	36	7	2	3	0	0	0	48	20	9	2	6	0	0	0	37
08:00	33	4	2	7	1	0	0	47	21	10	1	1	0	0	0	33
08:15	23	5	3	1	0	1	0	33	24	14	3	3	0	0	0	44
08:30	30	10	1	3	1	0	0	45	25	8	2	0	0	0	0	35
08:45	44	8	1	1	0	0	0	54	36	4	0	2	0	0	0	42
09:00	41	6	3	2	0	0	0	52	21	11	2	2	0	0	0	36
09:15	26	5	2	2	0	1	0	36	18	5	4	1	0	0	0	28
09:30	25	5	0	2	0	0	1	33	19	9	0	4	1	1	2	36
09:45	27	6	2	4	0	0	1	40	24	9	1	0	0	0	0	34
10:00	26	5	2	2	1	0	0	36	30	4	4	3	0	0	0	41
10:15	30	0	0	3	0	0	0	33	14	6	2	5	0	0	1	28
10:30	28	8	4	3	0	0	1	44	15	5	2	3	1	0	1	27
10:45	31	7	2	2	0	0	0	42	20	5	2	3	0	0	1	31
11:00	20	6	2	5	1	0	7	41	24	4	4	0	0	0	1	33
11:15	26	9	1	0	0	0	0	36	16	3	3	2	0	0	0	24
11:30	21	4	3	2	0	0	0	30	26	4	2	1	1	0	0	34
11:45	17	6	2	1	0	0	0	26	28	2	0	2	0	0	0	32

MANUAL CLASSIFIED COUNTS



JOB REF: 27279

JOB NAME: CARNFORTH

SITE: 1

LOCATION: KELLET ROAD / TARMAC ACCESS

DATE: 28/06/2022

DAY: TUESDAY

TIME	TO ARM A KELLET ROAD (W)								FROM ARM A KELLET ROAD (W)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
12:00	32	1	1	1	1	0	0	36	25	6	6	0	0	0	0	37
12:15	27	6	3	2	0	0	0	38	17	2	1	2	0	0	0	22
12:30	32	3	2	5	0	0	0	42	26	3	0	4	1	0	0	34
12:45	23	8	2	2	0	0	0	35	24	5	3	2	0	0	0	34
13:00	24	6	0	3	1	0	0	34	27	5	1	2	0	0	0	35
13:15	25	14	2	1	0	0	0	42	24	4	0	5	0	0	0	33
13:30	21	8	0	0	0	0	0	29	14	6	2	1	1	0	0	24
13:45	33	8	3	2	0	0	0	46	26	2	1	1	0	0	0	30
14:00	21	5	1	6	1	0	0	34	31	2	2	2	0	0	0	37
14:15	20	6	0	2	0	0	0	28	15	7	1	3	0	0	0	26
14:30	16	6	3	1	0	0	0	26	36	4	2	0	1	0	0	43
14:45	29	7	0	1	0	1	0	38	41	10	2	3	1	2	0	59
15:00	23	6	0	1	1	0	0	31	37	4	0	3	0	0	0	44
15:15	33	9	2	4	0	0	0	48	31	4	3	1	0	0	0	39
15:30	30	11	0	1	0	0	0	42	30	7	1	3	1	0	0	42
15:45	30	11	1	0	0	0	0	42	26	4	1	2	1	0	0	34
16:00	26	5	0	2	0	0	0	33	27	7	0	2	0	0	0	36
16:15	39	9	2	0	0	0	0	50	37	7	0	1	0	0	0	45
16:30	20	9	0	0	0	0	0	29	31	3	0	0	0	0	0	34
16:45	31	18	0	0	2	0	0	51	35	1	0	1	0	0	0	37
17:00	41	7	0	0	0	0	0	48	41	2	0	0	0	0	0	43
17:15	31	4	1	1	0	0	0	37	30	4	1	1	1	0	0	37
17:30	19	13	3	0	0	0	0	35	36	6	1	0	0	0	0	43
17:45	17	9	0	0	2	0	0	28	27	7	3	0	0	0	0	37
18:00	16	7	1	0	0	0	0	24	26	5	0	0	0	0	0	31
18:15	19	1	1	0	0	0	0	21	26	1	0	0	0	0	0	27
18:30	24	2	2	0	0	1	0	29	23	1	1	2	0	0	0	27
18:45	19	1	0	0	0	0	0	20	21	3	0	0	0	0	0	24
19:00	19	1	0	0	0	0	0	20	18	1	2	0	0	0	0	21
19:15	12	3	0	0	0	0	0	15	13	3	1	0	0	0	0	17
19:30	14	3	0	0	0	0	0	17	12	2	1	0	0	0	0	15
19:45	8	0	0	0	0	0	0	8	11	1	0	0	0	0	0	12
20:00	10	0	0	0	0	0	0	10	6	1	0	0	0	0	0	7
20:15	7	1	0	0	0	0	0	8	12	1	0	0	0	0	0	13
20:30	6	0	0	0	0	0	0	6	10	0	0	0	0	0	0	10
20:45	3	0	0	0	0	0	0	3	13	2	1	0	0	0	0	16
21:00	4	1	0	0	0	0	0	5	9	0	0	0	0	0	0	9
21:15	4	0	1	0	0	0	0	5	11	1	0	0	0	0	0	12
21:30	8	1	0	0	0	0	0	9	9	0	0	0	0	0	0	9
21:45	1	1	0	0	0	0	0	2	8	1	0	0	0	0	0	9
22:00	3	0	0	0	0	0	0	3	4	0	0	0	0	0	0	4
22:15	5	0	0	0	0	0	0	5	5	1	0	0	0	0	0	6
22:30	8	1	0	0	0	0	0	9	4	0	0	0	0	1	0	5
22:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
23:00	2	1	0	0	0	0	0	3	3	0	0	0	0	0	0	3
23:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
23:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
23:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1

MANUAL CLASSIFIED COUNTS



JOB REF: 27279

JOB NAME: CARNFORTH

SITE: 1

LOCATION: KELLET ROAD / TARMAC ACCESS

DATE: 28/06/2022

DAY: TUESDAY

TIME	TO ARM B TARMAC ACCESS								FROM ARM B TARMAC ACCESS							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	5	2	0	2	0	0	0	9	0	0	0	0	0	0	0	0
05:45	2	4	0	1	0	0	0	7	0	0	0	0	0	0	0	0
06:00	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0
06:15	0	0	0	4	0	0	0	4	0	0	0	4	0	0	0	4
06:30	0	0	0	1	0	0	0	1	0	0	0	6	0	0	0	6
06:45	1	1	0	4	0	0	0	6	0	0	0	1	0	0	0	1
07:00	0	1	0	2	0	0	0	3	0	0	0	6	0	0	0	6
07:15	0	0	0	5	0	0	0	5	0	0	0	2	0	0	0	2
07:30	0	0	0	3	0	0	0	3	0	0	0	5	0	0	0	5
07:45	0	0	0	6	0	0	0	6	0	0	0	3	0	0	0	3
08:00	0	1	0	0	0	0	0	1	0	1	0	5	0	0	0	6
08:15	0	1	1	3	0	0	0	5	0	0	0	1	0	0	0	1
08:30	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3
08:45	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1
09:00	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1
09:15	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2
09:30	0	0	0	4	0	0	0	4	0	0	0	1	0	0	0	1
09:45	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4
10:00	0	0	0	3	0	0	0	3	0	1	0	2	0	0	0	3
10:15	1	0	0	2	0	0	0	3	1	0	0	3	0	0	0	4
10:30	0	1	0	2	0	0	0	3	0	3	0	1	0	0	0	4
10:45	0	1	0	3	0	0	0	4	0	0	0	1	0	0	0	1
11:00	1	1	0	0	0	0	0	2	0	0	0	4	0	0	0	4
11:15	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
11:30	0	1	0	1	0	0	0	2	0	0	0	1	0	0	0	1
11:45	0	0	0	2	0	0	0	2	0	0	0	1	0	0	0	1

MANUAL CLASSIFIED COUNTS



JOB REF: 27279

JOB NAME: CARNFORTH

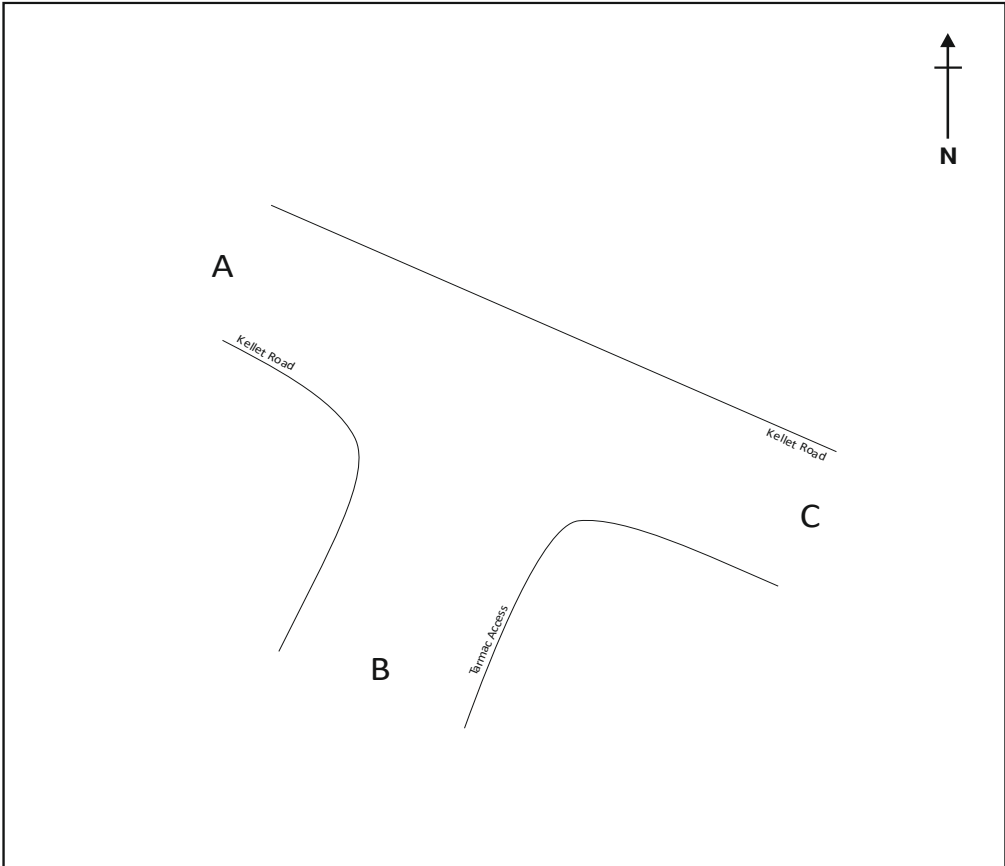
SITE: 1

LOCATION: KELLET ROAD / TARMAC ACCESS

DATE: 28/06/2022

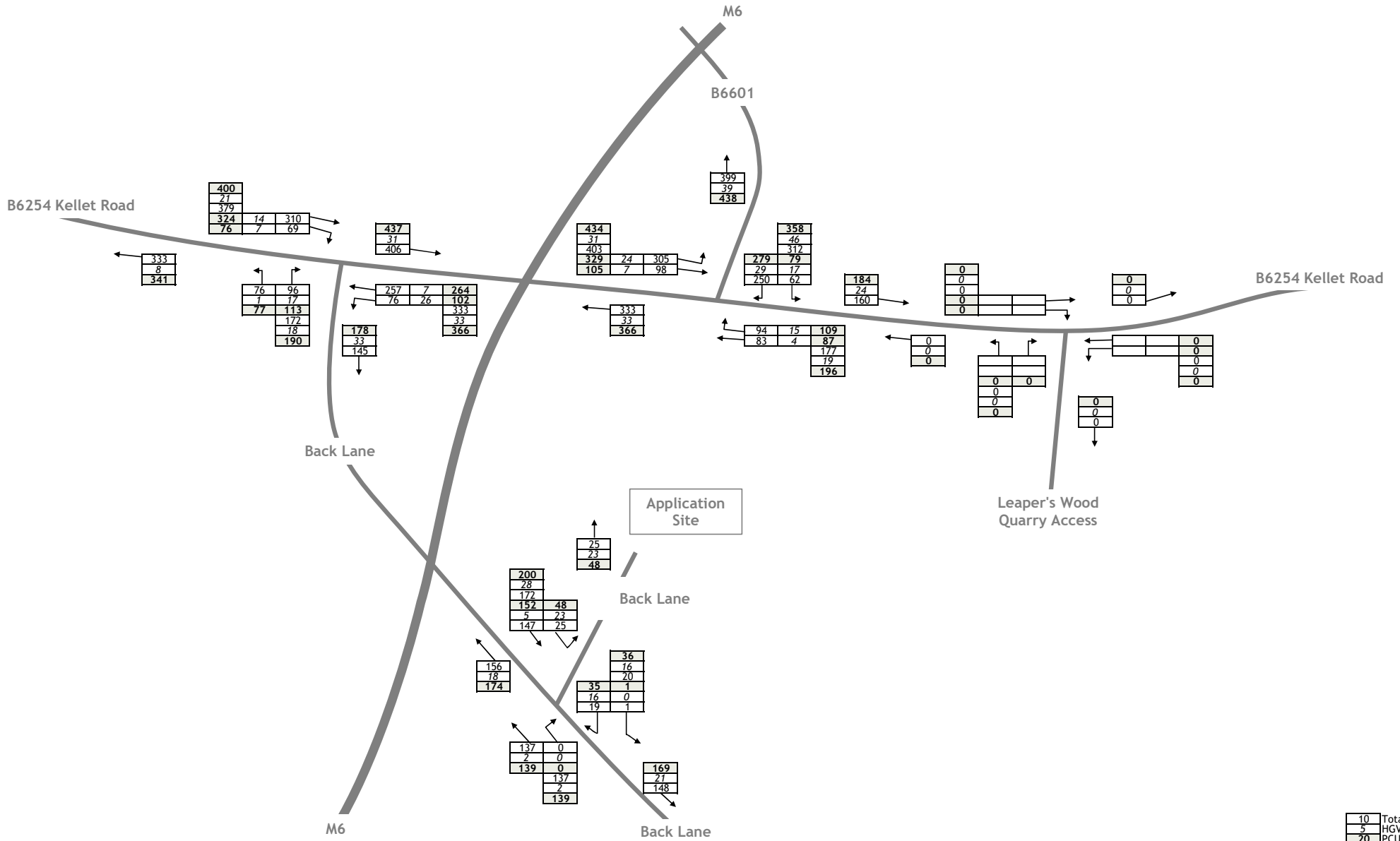
DAY: TUESDAY

TIME	TO ARM C KELLET ROAD (E)								FROM ARM C KELLET ROAD (E)							
	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
00:00	1	1	0	0	0	0	0	2	1	0	0	0	0	0	0	1
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
00:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
03:30	1	0	0	1	0	0	0	2	2	0	0	0	0	0	0	2
03:45	1	0	0	0	0	0	0	1	1	1	0	1	0	0	0	3
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
04:45	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0
05:00	1	1	0	0	0	0	0	2	2	1	0	0	0	0	0	3
05:15	3	1	0	0	0	0	0	4	1	1	0	0	0	0	0	2
05:30	1	1	0	0	0	0	0	2	8	0	0	1	0	0	0	9
05:45	3	1	2	0	0	0	0	6	7	0	0	3	0	0	0	10
06:00	2	0	0	0	0	0	0	2	7	1	1	1	0	0	0	10
06:15	5	1	0	0	0	0	0	6	7	2	1	1	0	0	0	11
06:30	3	0	1	1	0	0	0	5	8	3	1	1	0	0	0	13
06:45	4	5	0	0	0	0	0	9	10	5	1	1	0	0	0	17
07:00	10	6	0	0	0	0	0	16	12	6	0	1	0	0	0	19
07:15	24	7	0	1	1	0	0	33	14	8	0	0	0	0	0	22
07:30	18	18	1	2	1	0	0	40	21	7	0	1	0	0	0	29
07:45	20	9	2	0	0	0	0	31	36	7	2	0	0	0	0	45
08:00	21	9	1	1	0	0	0	32	33	3	2	2	1	0	0	41
08:15	24	13	2	0	0	0	0	39	23	5	3	0	0	1	0	32
08:30	25	8	2	0	0	0	0	35	30	10	0	1	1	0	0	42
08:45	36	4	0	0	0	0	0	40	44	8	1	0	0	0	0	53
09:00	21	11	2	0	0	0	0	34	41	6	3	1	0	0	0	51
09:15	18	5	4	0	0	0	0	27	26	5	2	0	0	1	0	34
09:30	19	9	0	0	1	1	2	32	25	5	0	1	0	0	1	32
09:45	24	9	1	0	0	0	0	34	27	6	2	0	0	0	1	36
10:00	30	4	4	0	0	0	0	38	26	4	2	0	1	0	0	33
10:15	13	6	2	3	0	0	1	25	29	0	0	0	0	0	0	29
10:30	15	4	2	1	1	0	1	24	28	5	4	2	0	0	1	40
10:45	20	4	2	0	0	0	1	27	31	7	2	1	0	0	0	41
11:00	23	3	4	0	0	0	1	31	20	6	2	1	1	0	7	37
11:15	16	3	3	1	0	0	0	23	26	9	1	0	0	0	0	36
11:30	26	3	2	0	1	0	0	32	21	4	3	1	0	0	0	29
11:45	28	2	0	0	0	0	0	30	17	6	2	0	0	0	0	25



CARNFORTH
Tuesday 28 June 2022
0000-2400

Drawing N^o: 27279 - 01
Site: 1
Location: Kellet Road /
Tarmac Access



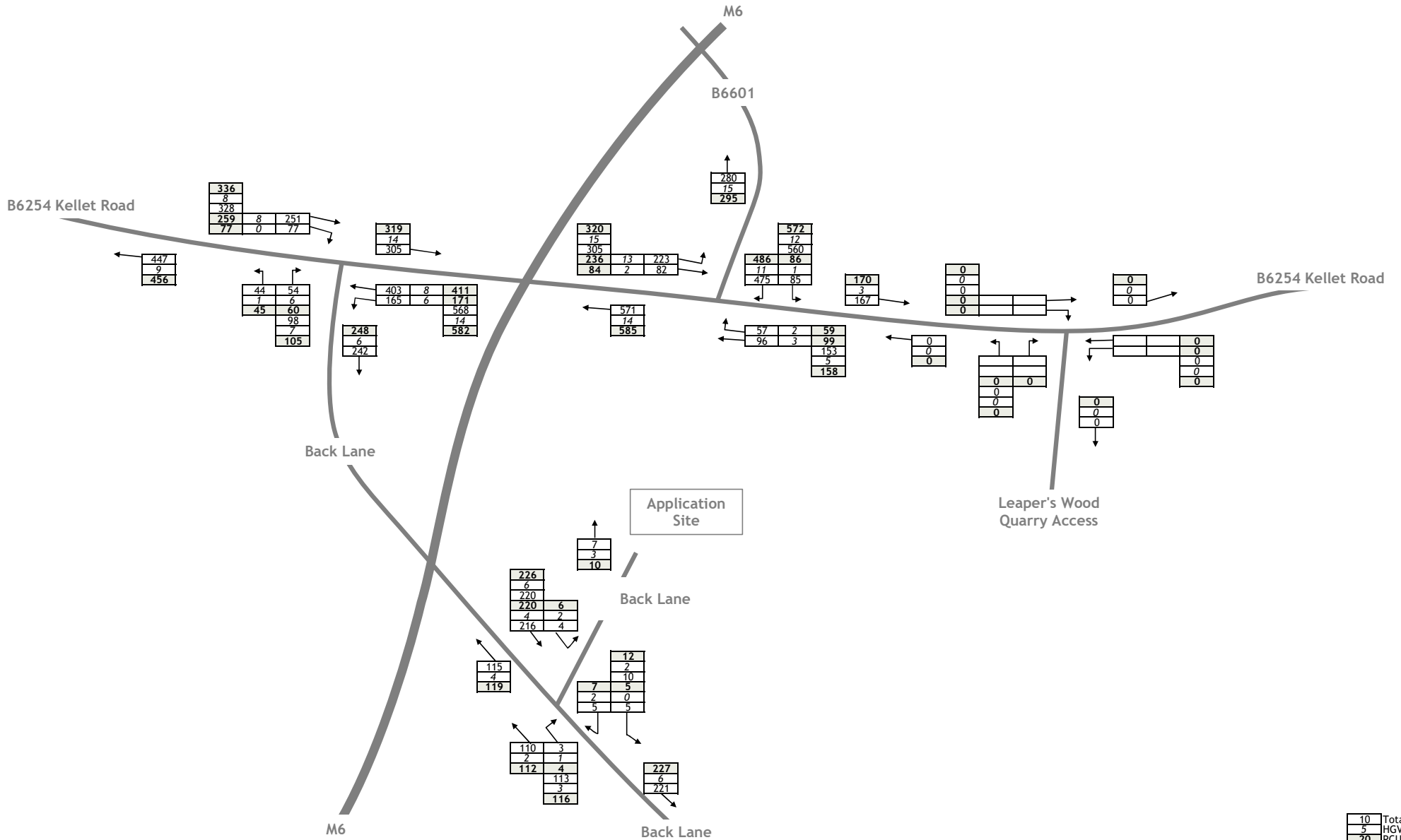


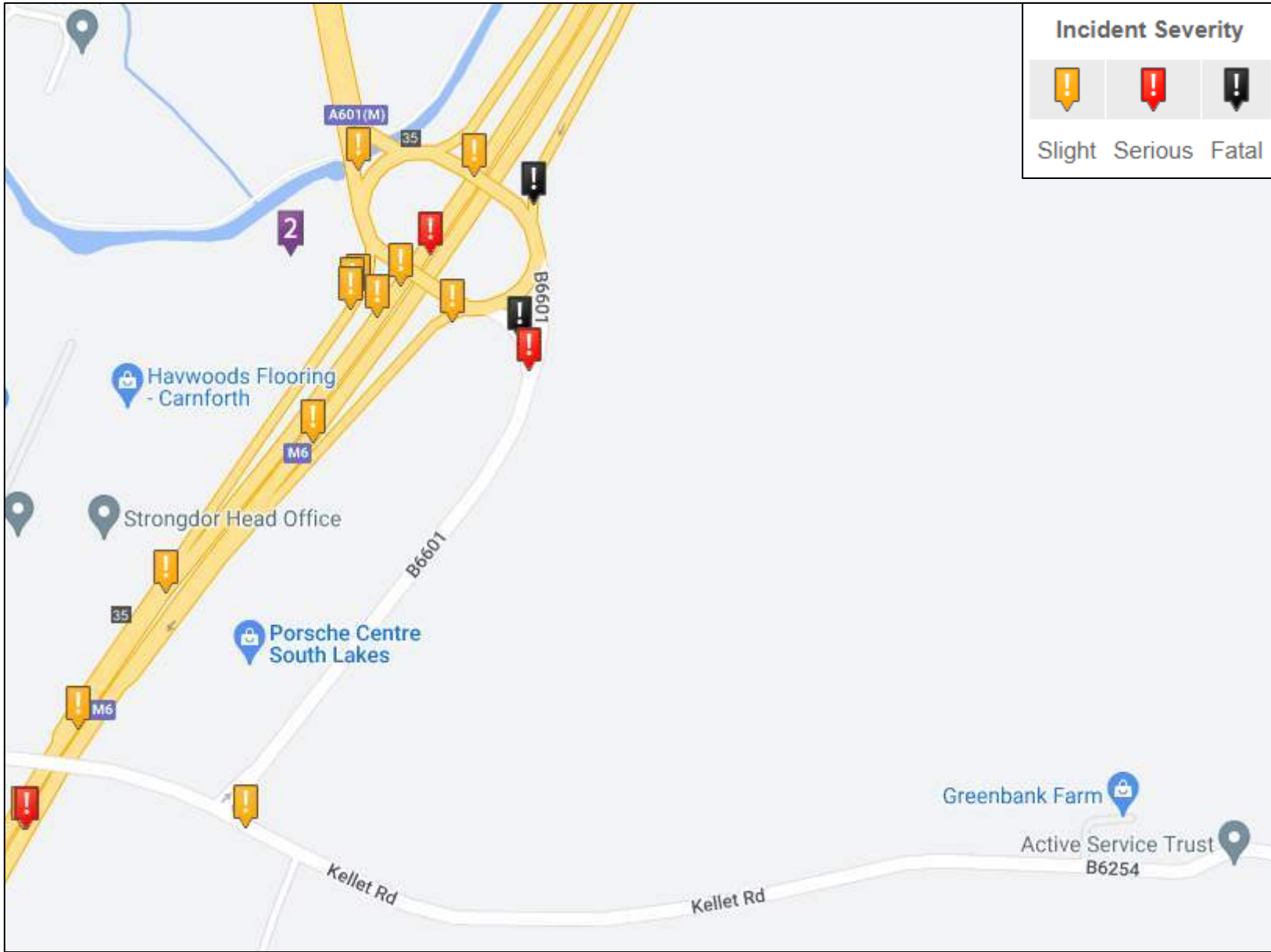
Figure TA6a 2022 Surveyed Traffic Flows - PM Peak (16:45 - 17:45)

J000362 Back Lane Quarry, Carnforth

August 2022



APPENDIX D– COLLISION DATA

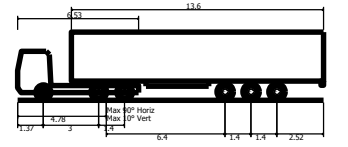


APPENDIX E – SITE ACCESS ARRANGEMENT AND VEHICLE TRACKING



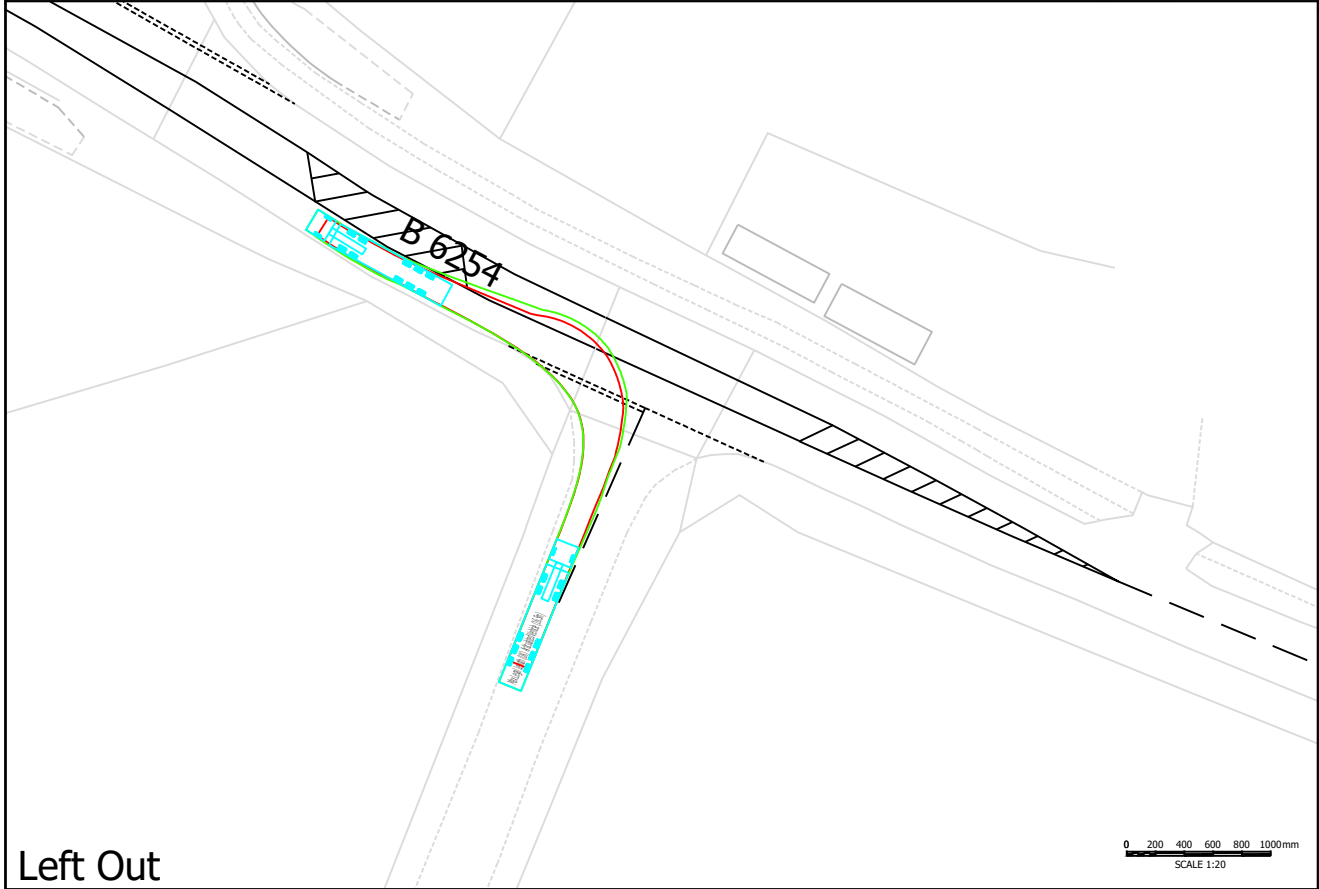
2.4m x 115m Visibility Splay

2.4m x 175m Visibility Splay

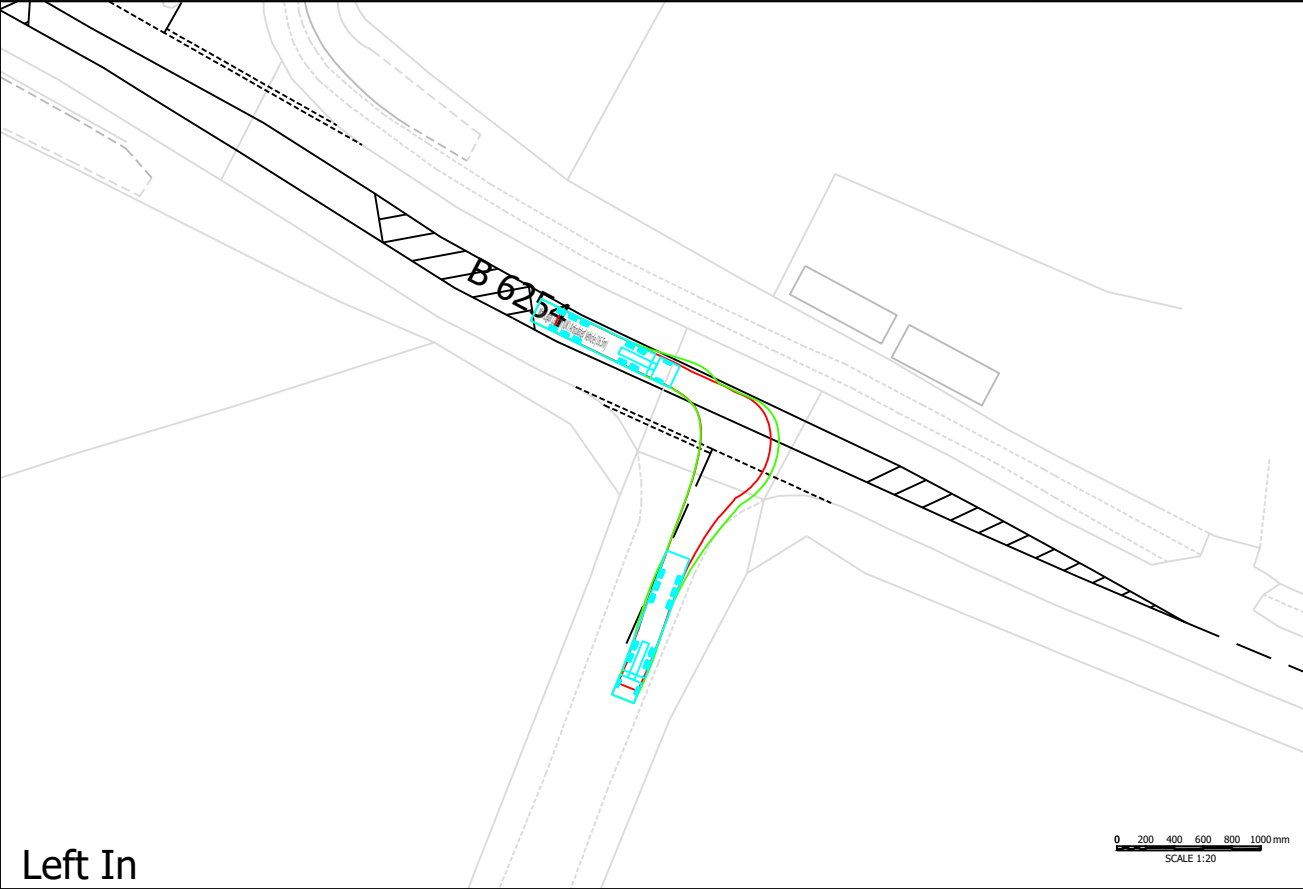


Max Legal Length (UK) Articulated Vehicle (16.5m)	16.500m
Overall Length	2.550m
Overall Width	3.881m
Overall Body Height	0.411m
Min Body Ground Clearance	2.500m
Max Track Width	6.00s
Lock to lock time	6.530m
Kerb to Kerb Turning Radius	

0 200 400 600 800 1000mm
SCALE 1:20



Left Out



Left In

Rev	Description	Date	Dr / Crk / App

Document Control

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Tetra Tech Leicester
 Executive Park, Avon Way, Anstey,
 Leicester, United Kingdom, LE7 7GR
 Tel: +44 (0)11 6234 8000
 www.tetratech.europa.com



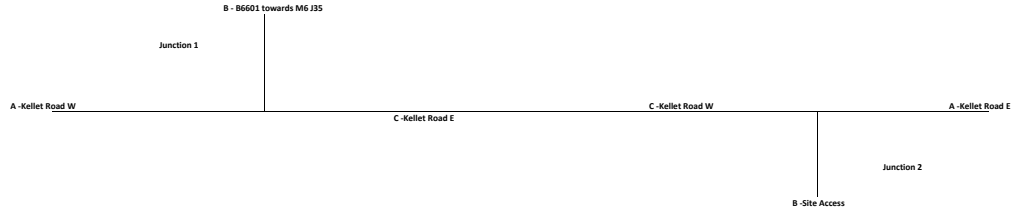
Client
TARMAC

Project Name
**LEAPERS WOOD QUARRY, KELLET ROAD
 CARNFORTH, LANCASHIRE**

Sheet Title
**PROPOSED SITE ACCESS JUNCTION WITH
 ARTICULATED VEHICLE TRACKING**

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Substability
BD40370	LP	July '22	RJH	July '22	PG	July '22	As Shown	S0
Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision	
PRJ01	TTE	- 00	- ZZ	- DR	- S	- 003	P01	

APPENDIX F – TRAFFIC FLOW CALCULATIONS



Junction 1

2022 AM Base Flows

	A	B	C	2-way
A	0	353	112	864
B	308	0	96	894
C	91	124	0	423

2022 to 2028 AM Growth Factor 1.053187
 2022 to 2028 PM Growth Factor 1.050855
 2028 to 2050 AM Growth Factor 1.154667
 2028 to 2050 PM Growth Factor 1.15096

2028 AM Base Flows

	A	B	C	2-way
A	0	372	118	910
B	324	0	101	928
C	96	131	0	445

2050 AM Base Flows

	A	B	C	2-way
A	0	429	136	1051
B	375	0	117	1071
C	111	151	0	514

Trip Distribution HGV

AM	A	B	C
A	0%	0%	0%
B	0%	0%	100%
C	0%	100%	0%

Trip Assignment- Additional Trips to show maximum operating capacity (in PCUs)

AM	A	B	C
A	0	0	0
B	0	0	15
C	0	15	0

Back Lane Quarry - Committed Development (in PCUs)

AM	A	B	C
A	0	25	6
B	33	0	0
C	0	4	0

2028 Base + Committed Development Flows

AM	A	B	C
A	0	397	124
B	357	0	117
C	96	135	0

2050 Base + Committed Development Flows

AM	A	B	C
A	0	454	142
B	408	0	117
C	111	155	0

2028 Base + Committed Development + Development Flows

AM	A	B	C
A	0	397	124
B	357	0	116
C	96	149	0

2050 Base + Committed Development + Development Flows

AM	A	B	C
A	0	454	142
B	408	0	131
C	111	169	0

2022 PM Base Flows

	A	B	C	2-way
A	0	249	86	934
B	497	0	87	894
C	102	61	0	336

2028 PM Base Flows

	A	B	C	2-way
A	0	262	90	981
B	522	0	91	939
C	107	64	0	353

2050 PM Base Flows

	A	B	C	2-way
A	0	301	104	1130
B	601	0	105	1081
C	123	74	0	406

PM

	A	B	C
A	0%	0%	0%
B	0%	0%	100%
C	0%	100%	0%

PM

	A	B	C
A	0	0	0
B	0	0	5
C	0	5	0

PM

	A	B	C
A	0	1	4
B	1	0	0
C	0	0	0

PM

	A	B	C
A	0	263	91
B	523	0	91
C	107	64	0

PM

	A	B	C
A	0	302	105
B	602	0	105
C	123	74	0

PM

	A	B	C
A	0	263	91
B	523	0	96
C	107	72	0

PM

	A	B	C
A	0	302	105
B	602	0	110
C	123	82	0

Junction 2

2022 AM Base Flows

	A	B	C	2-way
A	0	0	167	341
B	0	0	12	29
C	154	17	0	370

2022 to 2028 AM Growth Factor 1.053187
 2022 to 2028 PM Growth Factor 1.050855
 2028 to 2050 AM Growth Factor 1.154667
 2028 to 2050 PM Growth Factor 1.15096

2028 AM Base Flows

	A	B	C	2-way
A	0	0	197	359
B	0	0	13	31
C	162	18	0	390

2050 AM Base Flows

	A	B	C	2-way
A	0	0	227	415
B	0	0	15	35
C	187	21	0	450

Trip Distribution HGV

AM	A	B	C
A	0%	0%	0%
B	0%	0%	100%
C	0%	100%	0%

Trip Assignment- Additional Trips to show maximum operating capacity (in PCUs)

AM	A	B	C
A	0	0	0
B	0	0	15
C	0	15	0

Back Lane Quarry - Committed Development (in PCUs)

AM	A	B	C
A	0	0	4
B	0	0	0
C	6	0	0

2028 Base + Committed Development Flows

AM	A	B	C
A	0	0	201
B	0	0	13
C	168	18	0

2050 Base + Committed Development Flows

AM	A	B	C
A	0	0	231
B	0	0	15
C	193	21	0

2028 Base + Committed Development + Development Flows

AM	A	B	C
A	0	0	201
B	0	0	27
C	168	33	0

2050 Base + Committed Development + Development Flows

AM	A	B	C
A	0	0	231
B	0	0	29
C	193	35	0

2022 PM Base Flows

	A	B	C	2-way
A	0	0	167	329
B	1	0	15	16
C	161	0	0	343

2028 PM Base Flows

	A	B	C	2-way
A	0	0	175	346
B	1	0	16	17
C	169	0	0	360

2050 PM Base Flows

	A	B	C	2-way
A	0	0	202	398
B	1	0	18	19
C	195	0	0	415

PM

	A	B	C
A	0%	0%	0%
B	0%	0%	100%
C	0%	100%	0%

PM

	A	B	C
A	0	0	0
B	0	0	8
C	0	5	0

PM

	A	B	C
A	0	0	0
B	0	0	0
C	1	0	0

PM

	A	B	C
A	0	0	175
B	1	0	16
C	170	0	0

PM

	A	B	C
A	0	0	202
B	1	0	18
C	196	0	0

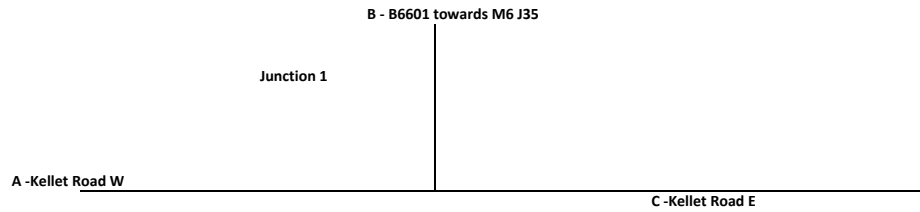
PM

	A	B	C
A	0	0	175
B	1	0	24
C	170	5	0

PM

	A	B	C
A	0	0	202
B	1	0	26
C	196	5	0

B040370
Leapers Wood Quarry



Junction 1

2022 AM Base Flows

	A	B	C	2-way
A	0	353	112	864
B	308	0	96	881
C	91	124	0	423

2022 PM Base Flows

	A	B	C	2-way
A	0	249	86	934
B	497	0	87	894
C	102	61	0	336

2022 to 2023 AM Growth Factor 1.00972
2022 to 2023 PM Growth Factor 1.009168

Junction 1

2023 AM Base Flows

	A	B	C	2-way
A	0	356	113	872
B	311	0	97	890
C	92	125	0	427.1115

2023 PM Base Flows

	A	B	C	2-way
A	0	251	87	942.5634
B	502	0	88	902.1966
C	103	62	0	339.0806

Junction 1

2023 + Com Dev AM Base Flows

	A	B	C	2-way
A	0	381	119	936
B	344	0	97	952
C	92	129	0	437.1115

2023 + Com Dev PM Base Flows

	A	B	C	2-way
A	0	252	88	945.5634
B	503	0	88	904.1966
C	103	62	0	340.0806

2023 + Dev AM Base Flows

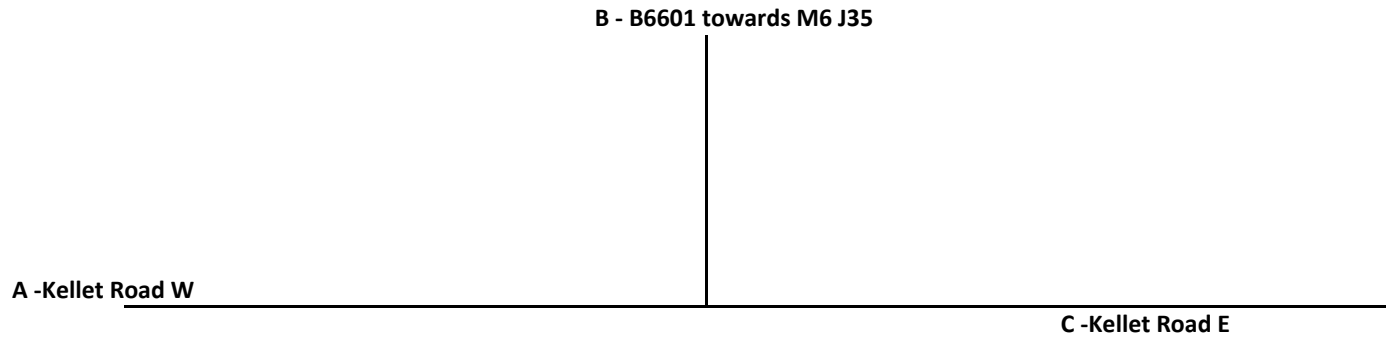
	A	B	C	2-way
A	0	381	119	936
B	344	0	112	981
C	92	144	0	466.3454

2023 + Dev PM Base Flows

	A	B	C	2-way
A	0	252	88	945.5634
B	503	0	92	916.9864
C	103	70	0	352.8704

Junction 1

August 2022 - Survey conducted by Focus Transport Planning



2022 Base AM VEH

	A	B	C	2-way
A	0	305	98	736
B	250	0	62	711
C	83	94	0	337

2022 Base PM HGV

	A	B	C	2-way
A	0	223	82	876
B	475	0	85	840
C	96	57	0	320

2022 Base AM HGV

	A	B	C	2-way
A	0	24	7	64
B	29	0	17	85
C	4	15	0	43

2022 Base PM HGV

	A	B	C	2-way
A	0	13	2	29
B	11	0	1	27
C	3	2	0	8

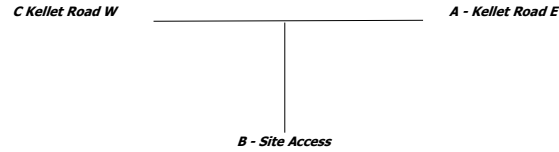
2022 Base AM PCU

	A	B	C	2-way
A	0	353	112	864
B	308	0	96	881
C	91	124	0	423

2022 Base PM PCU

	A	B	C	2-way
A	0	249	86	934
B	497	0	87	894
C	102	61	0	336

B040370 - Leapers Wood Quarry
Manual Classified Traffic Count
Kellet Road E / Site Access / Kellet Road W
28 June 2022, Tuesday



Note PM - C-B no flows to and from site access

AM Peak :-

To:

	A	B	C
From : A	0	0	187
B	0	0	12
C	154	17	0

From :

PM Peak :-

To:

	A	B	C
From : A	0	0	167
B	1	0	15
C	161	0	0

From :

SUMMARY OF MANUAL CLASSIFIED TURNING COUNT AT LONDON ROAD / PARK ROAD JUNCTION																														
Time Period		Movements																								TOTALS (VPH)	VPH			
		A - A			A - B			A - C			B - A			B - B			B - C			C - A			C - B					C-C		
		VPH	HGV	PCU	VPH	HGV	PCU	VPH	HGV	PCU	VPH	HGV	PCU	VPH	HGV	PCU	VPH	HGV	PCU	VPH	HGV	PCU	VPH	HGV	PCU			VPH	HGV	PCU
00:00	00:15	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	3	3	
00:15	00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
00:30	00:45	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	4	
00:45	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	5	5	
01:00	01:15	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	
01:15	01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
01:30	01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
01:45	02:00	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	4	
02:00	02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
02:15	02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
02:30	02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2	5	5	
02:45	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
03:00	03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
03:15	03:30	0	0	0	0	0	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	
03:30	03:45	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	1	1	3	0	0	0	0	0	0	3	4	4
03:45	04:00	0	0	0	0	0	0	2	1	4	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3	7	7
04:00	04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	
04:15	04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	7	7	
04:30	04:45	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	6	6	
04:45	05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	3	6	6
05:00	05:15	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	2	0	2	1	0	1	0	0	6	12	12	
05:15	05:30	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	6	17	17	
05:30	05:45	0	0	0	0	0	0	8	1	10	0	0	0	0	0	0	0	0	2	0	2	7	2	11	0	0	17	32	32	
05:45	06:00	0	0	0	0	0	0	7	3	13	0	0	0	0	0	0	0	0	4	2	8	6	1	8	0	0	17	46	46	
06:00	06:15	0	0	0	0	0	0	8	2	12	0	0	0	0	0	0	0	0	2	0	2	0	3	6	0	0	10	50	50	
06:15	06:30	0	0	0	0	1	2	9	1	11	0	0	0	0	0	0	0	0	4	8	6	0	3	6	0	0	15	59	59	
06:30	06:45	0	0	0	0	0	0	11	2	15	0	0	0	0	0	0	0	6	12	3	2	7	0	1	2	0	14	56	56	
06:45	07:00	0	0	0	1	0	1	14	2	18	0	0	0	0	0	0	0	1	2	9	0	9	1	4	9	0	25	64	64	
07:00	07:15	0	0	0	0	0	0	18	1	20	0	0	0	0	0	0	0	6	12	16	0	16	1	2	5	0	35	89	89	

07:15	07:30	0	0	0	0	0	0	22	0	22	0	0	0	0	0	0	0	2	4	31	2	35	0	5	10	0	0	0	53	127
07:30	07:45	0	0	0	0	0	0	28	1	30	0	0	0	0	0	0	5	10	36	4	44	0	3	6	0	0	0	64	177	
07:45	08:00	0	0	0	0	0	0	43	2	47	0	0	0	0	0	0	3	6	29	2	33	0	6	12	0	0	0	72	224	
08:00	08:15	0	0	0	0	0	0	36	5	46	0	0	0	0	0	1	5	11	30	2	34	1	0	1	0	0	0	68	257	
08:15	08:30	0	0	0	0	0	0	28	3	34	0	0	0	0	0	0	1	2	37	2	41	1	4	9	0	0	0	66	270	
08:30	08:45	0	0	0	0	0	0	40	2	44	0	0	0	0	0	0	3	6	33	2	37	0	0	0	0	0	0	73	279	
08:45	09:00	0	0	0	0	0	0	52	1	54	0	0	0	0	0	0	1	2	40	0	40	0	2	4	0	0	0	92	299	
09:00	09:15	0	0	0	0	0	0	47	4	55	0	0	0	0	0	0	1	2	32	2	36	0	2	4	0	0	0	79	310	
09:15	09:30	0	0	0	0	0	0	31	2	35	0	0	0	0	0	0	2	4	23	4	31	0	1	2	0	0	0	54	298	
09:30	09:45	0	0	0	0	0	0	30	1	32	0	0	0	0	0	0	1	2	28	1	30	0	4	8	0	0	0	58	283	
09:45	10:00	0	0	0	0	0	0	33	2	37	0	0	0	0	0	0	4	8	33	1	35	0	0	0	0	0	0	66	257	
10:00	10:15	0	0	0	0	0	0	30	3	36	0	0	0	0	0	0	1	2	5	34	4	42	0	3	6	0	0	65	243	
10:15	10:30	0	0	0	0	0	0	29	0	29	0	0	0	0	0	0	1	3	7	19	5	29	1	2	5	0	0	50	239	
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10:45	11:00	0	0	0	0	0	0	38	3	44	0	0	0	0	0	0	1	2	24	2	28	1	3	7	0	0	0	63	234	
11:00	11:15	0	0	0	0	0	0	26	4	34	0	0	0	0	0	0	4	8	26	4	34	2	0	2	0	0	0	54	223	
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12:00	12:15	0	0	0	1	0	1	33	2	37	0	0	0	0	0	0	1	2	30	5	40	1	1	3	0	0	0	65	227	
12:15	12:30	0	0	0	0	0	0	33	4	41	0	0	0	0	0	0	1	2	19	1	21	0	2	4	0	0	0	52	225	
12:30	12:45	0	0	0	0	0	0	34	4	42	0	0	0	0	0	0	1	3	7	29	1	31	0	4	8	0	0	64	234	
12:45	13:00	0	0	0	0	0	0	31	2	35	0	0	0	0	0	0	2	4	28	4	36	1	1	3	0	0	0	60	241	
13:00	13:15	0	0	0	1	0	1	28	2	32	0	0	0	0	0	0	2	2	6	32	1	34	0	2	4	0	0	63	239	
13:15	13:30	0	0	0	0	0	0	39	2	43	1	0	1	0	0	0	1	2	27	1	29	1	4	9	0	0	0	68	255	
13:30	13:45	0	0	0	0	0	0	27	0	27	0	0	0	0	0	0	2	0	2	19	3	25	1	1	3	0	0	49	240	
13:45	14:00	0	0	0	0	0	0	40	3	46	0	0	0	0	0	0	1	2	5	28	2	32	0	0	0	0	0	69	249	
14:00	14:15	0	0	0	0	0	0	26	3	32	0	0	0	0	0	0	5	10	33	2	37	0	2	4	0	0	0	59	245	
14:15	14:30	0	0	0	0	0	0	26	0	26	1	0	1	0	0	0	2	4	22	2	26	0	2	4	0	0	0	49	226	
14:30	14:45	0	0	0	0	0	0	22	3	28	0	0	0	0	0	0	1	2	40	3	46	0	0	0	0	0	0	62	239	
14:45	15:00	0	0	0	0	0	0	35	0	35	0	0	0	0	0	0	1	1	3	50	5	60	1	1	3	0	0	87	257	
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15:45	16:00	0	0	0	0	0	0	38	1	40	0	0	0	0	0	0	3	0	3	28	3	34	2	1	4	0	0	71	296	
16:00	16:15	0	0	0	0	0	0	30	1	32	1	0	1	0	0	0	1	1	3	34	2	38	0	0	0	0	0	66	292	
16:15	16:30	0	0	0	0	0	0	48	2	52	0	0	0	0	0	0	0	0	44	1	46	0	0	0	0	0	0	92	307	
16:30	16:45	0	0	0	0	0	0	29	0	29	1	0	1	0	0	0	0	0	34	0	34	0	0	0	0	0	0	64	293	
16:45	17:00	0	0	0	0	0	0	36	2	40	0	0	0	0	0	0	13	0	13	36	1	38	0	0	0	0	0	85	307	
17:00	17:15	0	0	0	0	0	0	46	0	46	0	0	0	0	0	0	2	0	2	43	0	43	0	0	0	0	0	91	332	

17:15	17:30	0	0	0	0	0	0	35	2	39	0	0	0	0	0	0	0	0	34	3	40	0	0	0	0	0	0	0	69	309
17:30	17:45	0	0	0	0	0	0	32	3	38	0	0	0	0	0	0	0	0	42	1	44	0	0	0	0	0	0	0	74	319
17:45	18:00	0	0	0	0	0	0	25	2	29	0	0	0	0	0	0	1	0	1	33	3	39	1	0	1	0	0	0	60	294
18:00	18:15	0	0	0	0	0	0	23	1	25	0	0	0	0	0	0	0	0	0	31	0	31	0	0	0	0	0	0	54	257
18:15	18:30	0	0	0	0	0	0	20	1	22	0	0	0	0	0	0	0	0	27	0	27	0	0	0	0	0	0	47	235	
18:30	18:45	0	0	0	0	0	0	25	2	29	0	0	0	0	0	0	1	0	1	24	2	28	0	1	2	0	0	0	50	211
18:45	19:00	0	0	0	0	0	0	20	0	20	0	0	0	0	0	0	0	0	24	0	24	0	0	0	0	0	0	44	195	
19:00	19:15	0	0	0	0	0	0	20	0	20	0	0	0	0	0	0	0	0	19	2	23	0	0	0	0	0	0	39	180	
19:15	19:30	0	0	0	0	0	0	15	0	15	0	0	0	0	0	0	0	0	16	1	18	0	0	0	0	0	0	31	164	
19:30	19:45	0	0	0	0	0	0	17	0	17	0	0	0	0	0	0	0	0	14	1	16	0	0	0	0	0	0	31	145	
19:45	20:00	0	0	0	1	0	1	8	0	8	0	0	0	0	0	0	0	0	12	0	12	0	0	0	0	0	0	21	122	
20:00	20:15	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	1	0	1	7	0	7	0	0	0	0	0	17	100	
20:15	20:30	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	0	0	13	0	13	0	0	0	0	0	0	21	90	
20:30	20:45	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	0	10	0	10	0	0	0	0	0	0	16	75	
20:45	21:00	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	15	1	17	0	0	0	0	0	0	18	72	
21:00	21:15	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	14	69	
21:15	21:30	0	0	0	0	0	0	4	1	6	0	0	0	0	0	0	0	0	12	0	12	0	0	0	0	0	0	16	64	
21:30	21:45	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	18	66	
21:45	22:00	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	11	59	
22:00	22:15	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	7	52	
22:15	22:30	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	6	0	6	0	0	0	0	0	0	11	47	
22:30	22:45	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	13	42	
22:45	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	4	35	
23:00	23:15	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	6	34	
23:15	23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	3	26	
23:30	23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2	15	
23:45	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	12	

AM	0	0	0	0	0	0	167	10	187	0	0	0	0	0	6	12	142	6	154	1	8	17	0	0	0	0
PM	0	0	0	0	0	0	159	4	167	1	0	1	0	0	15	0	15	157	2	161	0	0	0	0	0	0
	A - A			A - B			A - C			B - A			B - B			B - C			C - A			C - B			C-C	

Light Vehicle Trip Generation

Time Range	Arrivals	Departures	Total
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	1	0	1
05:00-06:00	14	0	14
06:00-07:00	2	0	2
07:00-08:00	1	0	1
08:00-09:00	2	1	3
09:00-10:00	0	0	0
10:00-11:00	3	5	8
11:00-12:00	3	0	3
12:00-13:00	3	1	4
13:00-14:00	3	6	9
14:00-15:00	1	2	3
15:00-16:00	4	3	7
16:00-17:00	0	16	16
17:00-18:00	1	3	4
18:00-19:00	0	1	1
19:00-20:00	1	0	1
20:00-21:00	0	1	1
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-24:00	0	0	0
Total	39	39	78

HGV Trip Generation

Time Range	Arrivals	Departures	Total
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	0	0	0
05:00-06:00	3	0	3
06:00-07:00	12	11	23
07:00-08:00	16	16	32
08:00-09:00	6	10	16
09:00-10:00	7	8	15
10:00-11:00	10	7	17
11:00-12:00	4	6	10
12:00-13:00	8	7	15
13:00-14:00	7	5	12
14:00-15:00	5	9	14
15:00-16:00	5	4	9
16:00-17:00	0	1	1
17:00-18:00	0	0	0
18:00-19:00	1	0	1
19:00-20:00	0	0	0
20:00-21:00	0	0	0
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-24:00	0	0	0
Total	84	84	168

HGV Trip Generation Growthed

Time Range	Arrivals	Departures	Total
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	0	0	0
05:00-06:00	4	0	4
06:00-07:00	17	16	34
07:00-08:00	23	23	47
08:00-09:00	9	15	23
09:00-10:00	10	12	22
10:00-11:00	15	10	25
11:00-12:00	6	9	15
12:00-13:00	12	10	22
13:00-14:00	10	7	17
14:00-15:00	7	11	20
15:00-16:00	7	6	13
16:00-17:00	0	1	1
17:00-18:00	0	0	0
18:00-19:00	1	0	1
19:00-20:00	0	0	0
20:00-21:00	0	0	0
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-24:00	0	0	0
Total	122	122	245

Difference in Trip Generation (Growthed minus existing)

Time Range	Arrivals	Departures	Total
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	0	0	0
05:00-06:00	1	0	1
06:00-07:00	5	5	11
07:00-08:00	7	7	15
08:00-09:00	3	5	7
09:00-10:00	3	4	7
10:00-11:00	5	3	8
11:00-12:00	2	3	5
12:00-13:00	4	3	7
13:00-14:00	3	2	5
14:00-15:00	2	4	6
15:00-16:00	2	2	4
16:00-17:00	0	0	0
17:00-18:00	0	0	0
18:00-19:00	0	0	0
19:00-20:00	0	0	0
20:00-21:00	0	0	0
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-24:00	0	0	0
Total	38	38	77

Difference in Trip Generation (Growthed minus existing in PCU's)

Time Range	Arrivals	Departures	Total
00:00-01:00	0	0	0
01:00-02:00	0	0	0
02:00-03:00	0	0	0
03:00-04:00	0	0	0
04:00-05:00	0	0	0
05:00-06:00	3	0	3
06:00-07:00	11	10	21
07:00-08:00	15	15	29
08:00-09:00	5	9	15
09:00-10:00	6	7	14
10:00-11:00	9	6	16
11:00-12:00	4	5	9
12:00-13:00	7	6	14
13:00-14:00	6	5	11
14:00-15:00	5	9	15
15:00-16:00	5	4	8
16:00-17:00	0	1	1
17:00-18:00	0	0	0
18:00-19:00	1	0	1
19:00-20:00	0	0	0
20:00-21:00	0	0	0
21:00-22:00	0	0	0
22:00-23:00	0	0	0
23:00-24:00	0	0	0
Total	77	77	153

Assumed no new staff employed as part of extension

2021

Period	Tonnes	Wagons
Q1	243402.65	10,582
Q2	232618.21	10,113

2022

Period	Tonnes	Wagons
Q1	194957.2	8,476
Q2	131798.76	5,730

Total Wagons yearly (2021 busiest year = worst case scenario)	41,390
---	--------

Weekly	796
Daily based on 5 Days	159
Daily based on 6 Days	133

2022	28,412
------	--------

Weekly	546
Daily based on 5 Days	109
Daily based on 6 Days	91

Factor up to Busier Year

	1.46
	1.46
	1.46
	1.46

Staff Trip Distribution based on existing traffic survey (June 2022)

Total Staff	39	
Kellet Road E	4	10%
Kellet Road W	35	90%

Growth Factors

2022-2028 AM	Level E02005222	Area Lancaster 002	Local Growth Figure 1.053187333
2022-2028 PM	Level E02005222	Area Lancaster 002	Local Growth Figure 1.050855366
AM 2028-2050	Level E02005222	Area Lancaster 002	Local Growth Figure 1.154667241
PM 2028-2050	Level E02005222	Area Lancaster 002	Local Growth Figure 1.150958405

MSOA_Name	Local Authority District	County	MSOA_Code	Inward Trips	Split	Route
Bolton 014	Bolton	Greater Manchester	E02000997	1	1	C
Bolton 028	Bolton	Greater Manchester	E02001011	1	1	C
Oldham 006	Oldham	Greater Manchester	E02001103	2	2	C
Oldham 018	Oldham	Greater Manchester	E02001115	1	1	C
Oldham 031	Oldham	Greater Manchester	E02001128	1	1	C
Rochdale 012	Rochdale	Greater Manchester	E02001143	1	1	C
Rochdale 016	Rochdale	Greater Manchester	E02001147	1	1	C
Salford 004	Salford	Greater Manchester	E02001160	1	1	C
Salford 015	Salford	Greater Manchester	E02001171	1	1	C
Salford 018	Salford	Greater Manchester	E02001174	1	1	C
Trafford 002	Trafford	Greater Manchester	E02001260	1	1	C
Trafford 004	Trafford	Greater Manchester	E02001262	1	1	C
Trafford 021	Trafford	Greater Manchester	E02001279	1	1	C
Wigan 001	Wigan	Greater Manchester	E02001287	1	1	C
Wigan 021	Wigan	Greater Manchester	E02001307	2	2	C
Wigan 029	Wigan	Greater Manchester	E02001315	1	1	C
Wigan 038	Wigan	Greater Manchester	E02001324	1	1	C
Knowsley 001	Knowsley	Merseyside	E02001327	1	1	C
Liverpool 042	Liverpool	Merseyside	E02001388	1	1	C
Liverpool 043	Liverpool	Merseyside	E02001389	1	1	C
St. Helens 007	St. Helens	Merseyside	E02001412	1	1	C
Sefton 013	Sefton	Merseyside	E02001441	1	1	C
Bradford 047	Bradford	West Yorkshire	E02002229	1	0.5	C
					0.5	A
Leeds 023	Leeds	West Yorkshire	E02002352	1	0.5	A
					0.5	C
Leeds 044	Leeds	West Yorkshire	E02002373	1	0.5	A
					0.5	C
Leeds 074	Leeds	West Yorkshire	E02002403	1	0.5	A
					0.5	C
Leeds 106	Leeds	West Yorkshire	E02002435	1	0.5	A
					0.5	C
Warrington 003	Warrington	Warrington	E02002592	1	1	C
Warrington 016	Warrington	Warrington	E02002605	1	1	C
Blackburn with Darwen 001	Blackburn with Darwen	Blackburn with Darwen	E02002615	1	1	C
Blackpool 003	Blackpool	Blackpool	E02002635	1	1	C
Blackpool 011	Blackpool	Blackpool	E02002643	1	1	C
East Riding of Yorkshire 002	East Riding of Yorkshire	East Riding of Yorkshire	E02002685	1	0.5	A
					0.5	C
Luton 020	Luton	Luton	E02003277	1	1	C
Cheshire West and Chester 023	Cheshire West and Chester	Cheshire West and Chester	E02003883	1	1	C
Barrow-in-Furness 001	Barrow-in-Furness	Cumbria	E02003977	1	1	C
Barrow-in-Furness 002	Barrow-in-Furness	Cumbria	E02003978	3	3	C
Barrow-in-Furness 003	Barrow-in-Furness	Cumbria	E02003979	1	1	C
Carlisle 004	Carlisle	Cumbria	E02003990	1	1	C
Carlisle 006	Carlisle	Cumbria	E02003992	1	1	C
Carlisle 013	Carlisle	Cumbria	E02003999	1	1	C
Eden 005	Eden	Cumbria	E02004012	1	1	C
Eden 006	Eden	Cumbria	E02004013	2	2	C
Eden 007	Eden	Cumbria	E02004014	2	2	C
South Lakeland 001	South Lakeland	Cumbria	E02004015	1	1	C
South Lakeland 002	South Lakeland	Cumbria	E02004016	2	2	C
South Lakeland 003	South Lakeland	Cumbria	E02004017	6	6	C
South Lakeland 004	South Lakeland	Cumbria	E02004018	5	5	C
South Lakeland 005	South Lakeland	Cumbria	E02004019	4	4	C
South Lakeland 006	South Lakeland	Cumbria	E02004020	9	9	C
South Lakeland 007	South Lakeland	Cumbria	E02004021	6	6	C
South Lakeland 008	South Lakeland	Cumbria	E02004022	2	2	C
South Lakeland 009	South Lakeland	Cumbria	E02004023	42	42	C
South Lakeland 010	South Lakeland	Cumbria	E02004024	36	36	C
South Lakeland 011	South Lakeland	Cumbria	E02004025	26	26	C
South Lakeland 012	South Lakeland	Cumbria	E02004026	3	3	C
South Lakeland 013	South Lakeland	Cumbria	E02004027	4	4	C
South Lakeland 014	South Lakeland	Cumbria	E02004028	2	2	C
Chorley 001	Chorley	Lancashire	E02005189	2	2	C
Chorley 004	Chorley	Lancashire	E02005192	1	1	C
Chorley 005	Chorley	Lancashire	E02005193	1	1	C

Chorley 007	Chorley	Lancashire	E02005195	1	1	C
Chorley 010	Chorley	Lancashire	E02005198	1	1	C
Fylde 001	Fylde	Lancashire	E02005203	3	3	C
Fylde 002	Fylde	Lancashire	E02005204	1	1	C
Fylde 003	Fylde	Lancashire	E02005205	1	1	C
Fylde 006	Fylde	Lancashire	E02005208	1	1	C
Fylde 007	Fylde	Lancashire	E02005209	1	1	C
Fylde 009	Fylde	Lancashire	E02005211	1	1	C
Hyndburn 009	Hyndburn	Lancashire	E02005220	1	1	C
Lancaster 001	Lancaster	Lancashire	E02005221	100	100	C
Lancaster 002	Lancaster	Lancashire	E02005222	156	156	A
Lancaster 003	Lancaster	Lancashire	E02005223	40	20	A
					20	B
Lancaster 004	Lancaster	Lancashire	E02005224	14	14	B
Lancaster 005	Lancaster	Lancashire	E02005225	86	28.7	A
					28.7	B
					28.7	C
Lancaster 006	Lancaster	Lancashire	E02005226	21	7	A
					7	B
					7	C
Lancaster 008	Lancaster	Lancashire	E02005228	13	6.5	B
					6.5	C
Lancaster 009	Lancaster	Lancashire	E02005229	20	10	B
					10	C
Lancaster 010	Lancaster	Lancashire	E02005230	12	6	B
					6	C
Lancaster 011	Lancaster	Lancashire	E02005231	32	16	B
					16	C
Lancaster 013	Lancaster	Lancashire	E02005233	14	7	B
					7	C
Lancaster 014	Lancaster	Lancashire	E02005234	11	11	C
Lancaster 015	Lancaster	Lancashire	E02005235	4	4	C
Lancaster 016	Lancaster	Lancashire	E02005236	27	27	C
Lancaster 017	Lancaster	Lancashire	E02005237	22	22	C
Lancaster 018	Lancaster	Lancashire	E02005238	12	12	C
Lancaster 019	Lancaster	Lancashire	E02005239	6	6	C
Pendle 008	Pendle	Lancashire	E02005247	1	0.5	A
					0.5	C
Preston 002	Preston	Lancashire	E02005254	1	1	C
Preston 005	Preston	Lancashire	E02005257	2	2	C
Preston 009	Preston	Lancashire	E02005261	1	1	C
Preston 014	Preston	Lancashire	E02005266	3	3	C
Preston 017	Preston	Lancashire	E02005269	1	1	C
Ribble Valley 003	Ribble Valley	Lancashire	E02005272	1	1	C
Ribble Valley 005	Ribble Valley	Lancashire	E02005274	3	3	C
Ribble Valley 007	Ribble Valley	Lancashire	E02005276	1	1	C
South Ribble 002	South Ribble	Lancashire	E02005288	2	2	C
South Ribble 017	South Ribble	Lancashire	E02005303	1	1	C
Wyre 002	Wyre	Lancashire	E02005320	1	1	C
Wyre 004	Wyre	Lancashire	E02005322	2	2	C
Wyre 005	Wyre	Lancashire	E02005323	1	1	C
Wyre 006	Wyre	Lancashire	E02005324	4	4	C
Wyre 007	Wyre	Lancashire	E02005325	2	2	C
Wyre 009	Wyre	Lancashire	E02005327	3	3	C
Wyre 013	Wyre	Lancashire	E02005331	1	1	C
Wyre 014	Wyre	Lancashire	E02005332	2	2	C
Craven 001	Craven	North Yorkshire	E02005742	82	82	A
Craven 003	Craven	North Yorkshire	E02005744	9	9	A
Craven 004	Craven	North Yorkshire	E02005745	1	1	A
Craven 008	Craven	North Yorkshire	E02005749	1	1	A
Selby 009	Selby	North Yorkshire	E02005817	1	1	C
Lancaster 020	Lancaster	Lancashire	E02006871	54	27	B
					27	C

Route	Description	Total	%
A	Kellet Road E	308.16	31%
B	Kellet Road W	142.16	14%
C	B6601	532.66	54%

APPENDIX G – CAPACITY ASSESSMENT RESULTS

<h1>Junctions 9</h1>
<h2>PICADY 9 - Priority Intersection Module</h2>
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: Kellet Road_Site Access.j9

Path: T:\Projects\784-B040370 Leapers Wood Quarry\60. Project Output\61. Work In Progress\Calculations\Capacity Assessment

Report generation date: 12/09/2023 15:44:31

- »2028 Base, AM
- »2028 Base, PM
- »2028 Base + Com, AM
- »2028 Base + Com, PM
- »2028 Base + Com + Dev, AM
- »2028 Base + Com + Dev, PM
- »2050 Base, AM
- »2050 Base, PM
- »2050 Base + Com, AM
- »2050 Base + Com, PM
- »2050 Base + Com + Dev, AM
- »2050 Base + Com + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2028 Base										
Stream B-AC	D1	0.0	5.51	0.02	A	D2	0.0	5.61	0.03	A
Stream C-B		0.0	5.48	0.03	A		0.0	0.00	0.00	A
2028 Base + Com										
Stream B-AC	D3	0.0	5.52	0.02	A	D4	0.0	5.61	0.03	A
Stream C-B		0.0	5.49	0.03	A		0.0	0.00	0.00	A
2028 Base + Com + Dev										
Stream B-AC	D5	0.0	5.65	0.04	A	D6	0.0	5.65	0.04	A
Stream C-B		0.1	5.63	0.05	A		0.0	5.31	0.01	A
2050 Base										
Stream B-AC	D7	0.0	5.60	0.03	A	D8	0.0	5.69	0.03	A
Stream C-B		0.0	5.59	0.03	A		0.0	0.00	0.00	A
2050 Base + Com										
Stream B-AC	D9	0.0	5.61	0.03	A	D10	0.0	5.69	0.03	A
Stream C-B		0.0	5.60	0.03	A		0.0	0.00	0.00	A
2050 Base + Com + Dev										
Stream B-AC	D11	0.1	5.75	0.05	A	D12	0.1	6.31	0.05	A
Stream C-B		0.1	5.73	0.06	A		0.0	5.91	0.01	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	Kellet Road_Site Access
Location	Carnforth
Site number	
Date	26/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TT\LAUREN.PHILLIPS
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Base	AM	ONE HOUR	00:00	01:30	15
D2	2028 Base	PM	ONE HOUR	00:00	01:30	15
D3	2028 Base + Com	AM	ONE HOUR	00:00	01:30	15
D4	2028 Base + Com	PM	ONE HOUR	00:00	01:30	15
D5	2028 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15
D6	2028 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15
D7	2050 Base	AM	ONE HOUR	00:00	01:30	15
D8	2050 Base	PM	ONE HOUR	00:00	01:30	15
D9	2050 Base + Com	AM	ONE HOUR	00:00	01:30	15
D10	2050 Base + Com	PM	ONE HOUR	00:00	01:30	15
D11	2050 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15
D12	2050 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Kellet Road E		Major
B	Site Access		Minor
C	Kellet Road W		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.07		✓	3.30	143.1		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.25	54	34

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	576	0.100	0.253	0.159	0.361
B-C	726	0.106	0.268	-	-
C-B	735	0.272	0.272	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

--	--	--	--	--	--	--	--

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Base	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	197	100.000
B		✓	13	100.000
C		✓	180	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	0	197
	B	0	0	13
	C	162	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	5.51	0.0	A
C-A				
C-B	0.03	5.48	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	686	0.014	10	0.0	5.321	A
C-A	122			122			
C-B	14	695	0.019	13	0.0	5.281	A
A-B	0			0			
A-C	148			148			

00:15 - 00:30

Stream	Total Demand	Capacity	RFC	Throughput	End queue	Delay (s)	Unsignalised
--------	--------------	----------	-----	------------	-----------	-----------	--------------

	(PCU/hr)	(PCU/hr)		(PCU/hr)	(PCU)		level of service
B-AC	12	679	0.017	12	0.0	5.398	A
C-A	146			146			
C-B	16	687	0.024	16	0.0	5.363	A
A-B	0			0			
A-C	177			177			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	668	0.021	14	0.0	5.507	A
C-A	178			178			
C-B	20	677	0.029	20	0.0	5.481	A
A-B	0			0			
A-C	217			217			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	668	0.021	14	0.0	5.507	A
C-A	178			178			
C-B	20	677	0.029	20	0.0	5.481	A
A-B	0			0			
A-C	217			217			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	679	0.017	12	0.0	5.400	A
C-A	146			146			
C-B	16	687	0.024	16	0.0	5.363	A
A-B	0			0			
A-C	177			177			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	686	0.014	10	0.0	5.323	A
C-A	122			122			
C-B	14	695	0.019	14	0.0	5.283	A
A-B	0			0			
A-C	148			148			

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028 Base	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	175	100.000
B		✓	17	100.000
C		✓	169	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	175
	B	1	0	16
	C	169	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	5.61	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	678	0.019	13	0.0	5.412	A
C-A	127			127			
C-B	0	700	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	132			132			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	671	0.023	15	0.0	5.493	A
C-A	152			152			
C-B	0	693	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	157			157			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	661	0.028	19	0.0	5.608	A
C-A	186			186			
C-B	0	683	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	193			193			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	661	0.028	19	0.0	5.608	A
C-A	186			186			
C-B	0	683	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	193			193			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	671	0.023	15	0.0	5.493	A
C-A	152			152			
C-B	0	693	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	157			157			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	678	0.019	13	0.0	5.413	A
C-A	127			127			
C-B	0	700	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	132			132			

2028 Base + Com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028 Base + Com	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	201	100.000
B		✓	13	100.000
C		✓	186	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	201
	B	0	0	13
	C	168	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	5.52	0.0	A
C-A				
C-B	0.03	5.49	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	685	0.014	10	0.0	5.327	A
C-A	126			126			
C-B	14	694	0.020	13	0.0	5.287	A
A-B	0			0			
A-C	151			151			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	678	0.017	12	0.0	5.405	A
C-A	151			151			
C-B	16	686	0.024	16	0.0	5.371	A
A-B	0			0			
A-C	181			181			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	667	0.021	14	0.0	5.517	A
C-A	185			185			
C-B	20	675	0.029	20	0.0	5.491	A
A-B	0			0			
A-C	221			221			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	667	0.021	14	0.0	5.517	A
C-A	185			185			
C-B	20	675	0.029	20	0.0	5.491	A
A-B	0			0			
A-C	221			221			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	678	0.017	12	0.0	5.406	A
C-A	151			151			
C-B	16	686	0.024	16	0.0	5.373	A
A-B	0			0			
A-C	181			181			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	685	0.014	10	0.0	5.329	A
C-A	126			126			
C-B	14	694	0.020	14	0.0	5.289	A
A-B	0			0			
A-C	151			151			

2028 Base + Com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028 Base + Com	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	175	100.000
B		✓	17	100.000
C		✓	170	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	175
	B	1	0	16
	C	170	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	5.61	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	678	0.019	13	0.0	5.412	A
C-A	128			128			
C-B	0	700	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	132			132			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	671	0.023	15	0.0	5.493	A
C-A	153			153			
C-B	0	693	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	157			157			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	661	0.028	19	0.0	5.608	A
C-A	187			187			
C-B	0	683	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	193			193			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	661	0.028	19	0.0	5.608	A
C-A	187			187			
C-B	0	683	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	193			193			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	671	0.023	15	0.0	5.495	A
C-A	153			153			
C-B	0	693	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	157			157			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	678	0.019	13	0.0	5.415	A
C-A	128			128			
C-B	0	700	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	132			132			

2028 Base + Com + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	201	100.000
B		✓	27	100.000
C		✓	201	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	201
	B	0	0	27
	C	168	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	5.65	0.0	A
C-A				
C-B	0.05	5.63	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	685	0.030	20	0.0	5.412	A
C-A	126			126			
C-B	25	694	0.036	25	0.0	5.374	A
A-B	0			0			
A-C	151			151			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	678	0.036	24	0.0	5.510	A
C-A	151			151			
C-B	30	686	0.043	30	0.0	5.481	A
A-B	0			0			
A-C	181			181			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	667	0.045	30	0.0	5.651	A
C-A	185			185			
C-B	36	675	0.054	36	0.1	5.633	A
A-B	0			0			
A-C	221			221			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	667	0.045	30	0.0	5.651	A
C-A	185			185			
C-B	36	675	0.054	36	0.1	5.633	A
A-B	0			0			
A-C	221			221			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	678	0.036	24	0.0	5.512	A
C-A	151			151			
C-B	30	686	0.043	30	0.0	5.484	A
A-B	0			0			
A-C	181			181			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	685	0.030	20	0.0	5.414	A
C-A	126			126			
C-B	25	694	0.036	25	0.0	5.379	A
A-B	0			0			
A-C	151			151			

2028 Base + Com + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	175	100.000
B		✓	25	100.000
C		✓	175	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	175
	B	1	0	24
	C	170	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	5.65	0.0	A
C-A				
C-B	0.01	5.31	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	682	0.028	19	0.0	5.429	A
C-A	128			128			
C-B	4	700	0.005	4	0.0	5.172	A
A-B	0			0			
A-C	132			132			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	675	0.033	22	0.0	5.519	A
C-A	153			153			
C-B	4	693	0.006	4	0.0	5.230	A
A-B	0			0			
A-C	157			157			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	665	0.041	27	0.0	5.649	A
C-A	187			187			
C-B	6	683	0.008	5	0.0	5.312	A
A-B	0			0			
A-C	193			193			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	665	0.041	28	0.0	5.649	A
C-A	187			187			
C-B	6	683	0.008	6	0.0	5.312	A
A-B	0			0			
A-C	193			193			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	675	0.033	23	0.0	5.522	A
C-A	153			153			
C-B	4	693	0.006	5	0.0	5.232	A
A-B	0			0			
A-C	157			157			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	682	0.028	19	0.0	5.430	A
C-A	128			128			
C-B	4	700	0.005	4	0.0	5.172	A
A-B	0			0			
A-C	132			132			

2050 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2050 Base	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	227	100.000
B		✓	15	100.000
C		✓	208	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	227
	B	0	0	15
	C	187	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	5.60	0.0	A
C-A				
C-B	0.03	5.59	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	680	0.017	11	0.0	5.381	A
C-A	141			141			
C-B	16	689	0.023	16	0.0	5.346	A
A-B	0			0			
A-C	171			171			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	671	0.020	13	0.0	5.472	A
C-A	168			168			
C-B	19	680	0.028	19	0.0	5.444	A
A-B	0			0			
A-C	204			204			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	659	0.025	16	0.0	5.602	A
C-A	206			206			
C-B	23	668	0.035	23	0.0	5.585	A
A-B	0			0			
A-C	250			250			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	659	0.025	17	0.0	5.602	A
C-A	206			206			
C-B	23	668	0.035	23	0.0	5.585	A
A-B	0			0			
A-C	250			250			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	671	0.020	14	0.0	5.472	A
C-A	168			168			
C-B	19	680	0.028	19	0.0	5.445	A
A-B	0			0			
A-C	204			204			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	680	0.017	11	0.0	5.381	A
C-A	141			141			
C-B	16	689	0.023	16	0.0	5.349	A
A-B	0			0			
A-C	171			171			

2050 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2050 Base	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	202	100.000
B		✓	19	100.000
C		✓	195	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	202
	B	1	0	18
	C	195	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	5.69	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	673	0.021	14	0.0	5.461	A
C-A	147			147			
C-B	0	694	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	152			152			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	665	0.026	17	0.0	5.554	A
C-A	175			175			
C-B	0	686	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	182			182			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	654	0.032	21	0.0	5.690	A
C-A	215			215			
C-B	0	675	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	222			222			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	654	0.032	21	0.0	5.690	A
C-A	215			215			
C-B	0	675	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	222			222			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	665	0.026	17	0.0	5.555	A
C-A	175			175			
C-B	0	686	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	182			182			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	673	0.021	14	0.0	5.463	A
C-A	147			147			
C-B	0	694	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	152			152			

2050 Base + Com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2050 Base + Com	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	231	100.000
B		✓	15	100.000
C		✓	214	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	231
	B	0	0	15
	C	193	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	5.61	0.0	A
C-A				
C-B	0.03	5.60	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	679	0.017	11	0.0	5.387	A
C-A	145			145			
C-B	16	688	0.023	16	0.0	5.353	A
A-B	0			0			
A-C	174			174			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	670	0.020	13	0.0	5.480	A
C-A	174			174			
C-B	19	679	0.028	19	0.0	5.452	A
A-B	0			0			
A-C	208			208			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	658	0.025	16	0.0	5.613	A
C-A	212			212			
C-B	23	666	0.035	23	0.0	5.596	A
A-B	0			0			
A-C	254			254			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	658	0.025	17	0.0	5.613	A
C-A	212			212			
C-B	23	666	0.035	23	0.0	5.596	A
A-B	0			0			
A-C	254			254			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	670	0.020	14	0.0	5.482	A
C-A	174			174			
C-B	19	679	0.028	19	0.0	5.453	A
A-B	0			0			
A-C	208			208			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	679	0.017	11	0.0	5.388	A
C-A	145			145			
C-B	16	688	0.023	16	0.0	5.355	A
A-B	0			0			
A-C	174			174			

2050 Base + Com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2050 Base + Com	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	202	100.000
B		✓	19	100.000
C		✓	196	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	202
	B	1	0	18
	C	196	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	5.69	0.0	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	673	0.021	14	0.0	5.461	A
C-A	148			148			
C-B	0	694	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	152			152			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	665	0.026	17	0.0	5.555	A
C-A	176			176			
C-B	0	686	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	182			182			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	654	0.032	21	0.0	5.690	A
C-A	216			216			
C-B	0	675	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	222			222			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	21	654	0.032	21	0.0	5.690	A
C-A	216			216			
C-B	0	675	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	222			222			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	665	0.026	17	0.0	5.555	A
C-A	176			176			
C-B	0	686	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	182			182			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	673	0.021	14	0.0	5.461	A
C-A	148			148			
C-B	0	694	0.000	0	0.0	0.000	A
A-B	0			0			
A-C	152			152			

2050 Base + Com + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2050 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	231	100.000
B		✓	29	100.000
C		✓	228	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	231
	B	0	0	29
	C	193	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.05	5.75	0.1	A
C-A				
C-B	0.06	5.73	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	679	0.032	22	0.0	5.472	A
C-A	145			145			
C-B	26	688	0.038	26	0.0	5.436	A
A-B	0			0			
A-C	174			174			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	670	0.039	26	0.0	5.587	A
C-A	174			174			
C-B	31	679	0.046	31	0.0	5.558	A
A-B	0			0			
A-C	208			208			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	658	0.049	32	0.1	5.751	A
C-A	212			212			
C-B	39	666	0.058	38	0.1	5.733	A
A-B	0			0			
A-C	254			254			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	658	0.049	32	0.1	5.751	A
C-A	212			212			
C-B	39	666	0.058	39	0.1	5.733	A
A-B	0			0			
A-C	254			254			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	26	670	0.039	26	0.0	5.588	A
C-A	174			174			
C-B	31	679	0.046	32	0.0	5.561	A
A-B	0			0			
A-C	208			208			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	679	0.032	22	0.0	5.476	A
C-A	145			145			
C-B	26	688	0.038	26	0.0	5.439	A
A-B	0			0			
A-C	174			174			

2050 Base + Com + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2050 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	202	100.000
B		✓	27	100.000
C		✓	201	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	202
	B	1	0	26
	C	196	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.05	6.31	0.1	A
C-A				
C-B	0.01	5.91	0.0	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	677	0.030	20	0.0	6.029	A
C-A	148			148			
C-B	4	694	0.005	4	0.0	5.735	A
A-B	0			0			
A-C	152			152			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	669	0.036	24	0.0	6.145	A
C-A	176			176			
C-B	4	686	0.007	4	0.0	5.809	A
A-B	0			0			
A-C	182			182			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	657	0.045	30	0.1	6.310	A
C-A	216			216			
C-B	6	675	0.008	5	0.0	5.914	A
A-B	0			0			
A-C	222			222			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	30	657	0.045	30	0.1	6.310	A
C-A	216			216			
C-B	6	675	0.008	6	0.0	5.914	A
A-B	0			0			
A-C	222			222			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	24	669	0.036	24	0.0	6.146	A
C-A	176			176			
C-B	4	686	0.007	5	0.0	5.809	A
A-B	0			0			
A-C	182			182			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	677	0.030	20	0.0	6.032	A

C-A	148			148			
C-B	4	694	0.005	4	0.0	5.735	A
A-B	0			0			
A-C	152			152			

Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: Kellet Road_B6601.j9

Path: T:\Projects\784-B040370 Leapers Wood Quarry\60. Project Output\61. Work In Progress\Calculations\Capacity Assessment

Report generation date: 12/09/2023 16:11:43

- »2023 Base, AM
- »2023 Base, PM
- »2023 Base + Com, AM
- »2023 Base + Com, PM
- »2023 Base + Com + Dev, AM
- »2023 Base + Com + Dev, PM
- »2028 Base, AM
- »2028 Base, PM
- »2028 Base + Com, AM
- »2028 Base + Com, PM
- »2028 Base + Com + Dev, AM
- »2028 Base + Com + Dev, PM
- »2050 Base, AM
- »2050 Base, PM
- »2050 Base + Com, AM
- »2050 Base + Com, PM
- »2050 Base + Com + Dev, AM
- »2050 Base + Com + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2023 Base										
Stream B-C	D1	0.5	16.74	0.33	C	D2	7.6	311.86	1.10	F
Stream B-A		2.7	30.18	0.74	D		33.1	206.31	1.10	F
Stream C-B		0.3	8.23	0.24	A		0.1	6.62	0.11	A
2023 Base + Com										
Stream B-C	D3	0.8	29.29	0.47	D	D4	7.7	315.05	1.10	F
Stream B-A		4.6	46.35	0.84	E		33.7	209.66	1.10	F
Stream C-B		0.3	8.49	0.25	A		0.1	6.63	0.11	A
2023 Base + Com + Dev										
Stream B-C	D5	1.3	39.72	0.58	E	D6	8.3	322.21	1.12	F
Stream B-A		5.3	54.61	0.87	F		35.7	221.91	1.11	F
Stream C-B		0.4	8.83	0.28	A		0.1	6.74	0.13	A
2028 Base										
Stream B-C	D7	0.6	21.30	0.40	C	D8	9.3	368.29	1.15	F
Stream B-A		3.5	37.11	0.79	E		44.9	284.84	1.15	F
Stream C-B		0.3	8.47	0.25	A		0.1	6.70	0.12	A
2028 Base + Com										
Stream B-C	D9	1.6	54.97	0.64	F	D10	9.4	372.97	1.15	F
Stream B-A		6.3	62.59	0.89	F		45.6	290.57	1.15	F

Stream C-B		0.4	8.74	0.27	A		0.1	6.71	0.12	A
2028 Base + Com + Dev										
Stream B-C	D11	3.4	102.95	0.85	F	D12	10.2	388.65	1.16	F
Stream B-A		7.8	76.88	0.92	F		48.0	312.80	1.16	F
Stream C-B		0.4	9.08	0.29	A		0.1	6.82	0.13	A
2050 Base										
Stream B-C	D13	6.5	189.38	1.00	F	D14	20.5	830.94	1.31	F
Stream B-A		14.1	125.31	1.00	F		112.9	772.01	1.36	F
Stream C-B		0.4	9.43	0.30	A		0.2	7.04	0.14	A
2050 Base + Com										
Stream B-C	D15	9.5	283.57	1.10	F	D16	20.7	838.73	1.31	F
Stream B-A		27.2	210.48	1.09	F		114.2	779.82	1.36	F
Stream C-B		0.5	9.77	0.32	A		0.2	7.05	0.14	A
2050 Base + Com + Dev										
Stream B-C	D17	12.3	327.56	1.14	F	D18	23.0	897.12	1.34	F
Stream B-A		33.7	262.03	1.13	F		121.5	836.51	1.39	F
Stream C-B		0.6	11.21	0.35	B		0.2	7.89	0.15	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	B6601 / Kellet Road
Location	Carnforth
Site number	
Date	26/07/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TT\LAUREN.PHILLIPS
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Base	AM	ONE HOUR	00:00	01:30	15
D2	2023 Base	PM	ONE HOUR	00:00	01:30	15
D3	2023 Base + Com	AM	ONE HOUR	00:00	01:30	15
D4	2023 Base + Com	PM	ONE HOUR	00:00	01:30	15
D5	2023 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15
D6	2023 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15
D7	2028 Base	AM	ONE HOUR	00:00	01:30	15
D8	2028 Base	PM	ONE HOUR	00:00	01:30	15
D9	2028 Base + Com	AM	ONE HOUR	00:00	01:30	15
D10	2028 Base + Com	PM	ONE HOUR	00:00	01:30	15
D11	2028 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15
D12	2028 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

D13	2050 Base	AM	ONE HOUR	00:00	01:30	15
D14	2050 Base	PM	ONE HOUR	00:00	01:30	15
D15	2050 Base + Com	AM	ONE HOUR	00:00	01:30	15
D16	2050 Base + Com	PM	ONE HOUR	00:00	01:30	15
D17	2050 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15
D18	2050 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.01	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Kellet Road W		Major
B	B6601		Minor
C	Kellet Road E		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.56		✓	3.30	98.8		-

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	8.08	5.75	4.14	3.54		1.00	60	88

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	618	0.105	0.265	0.167	0.379
B-C	690	0.099	0.249	-	-
C-B	707	0.255	0.255	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 Base	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	469	100.000
B		✓	408	100.000
C		✓	217	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	356	113
	B	311	0	97
	C	92	125	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.33	16.74	0.5	C
B-A	0.74	30.18	2.7	D
C-A				
C-B	0.24	8.23	0.3	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	524	0.139	72	0.2	7.962	A
B-A	234	516	0.453	231	0.8	12.477	B
C-A	69			69			
C-B	94	617	0.153	93	0.2	6.873	A
A-B	268			268			
A-C	85			85			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	457	0.191	87	0.2	9.716	A
B-A	280	494	0.566	278	1.3	16.510	C
C-A	83			83			
C-B	112	599	0.188	112	0.2	7.389	A
A-B	320			320			
A-C	102			102			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	331	0.323	106	0.5	15.915	C
B-A	342	460	0.744	337	2.6	28.008	D
C-A	101			101			
C-B	138	575	0.239	137	0.3	8.220	A
A-B	392			392			
A-C	124			124			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	322	0.332	107	0.5	16.745	C
B-A	342	460	0.745	342	2.7	30.183	D
C-A	101			101			
C-B	138	575	0.239	138	0.3	8.232	A
A-B	392			392			
A-C	124			124			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	448	0.195	88	0.2	10.043	B
B-A	280	493	0.567	285	1.4	17.707	C
C-A	83			83			
C-B	112	599	0.188	113	0.2	7.405	A
A-B	320			320			
A-C	102			102			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	519	0.141	73	0.2	8.088	A
B-A	234	516	0.454	236	0.9	12.965	B
C-A	69			69			
C-B	94	617	0.153	94	0.2	6.897	A
A-B	268			268			
A-C	85			85			

2023 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		120.24	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 Base	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	338	100.000
B		✓	590	100.000
C		✓	165	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	251	87
	B	502	0	88
	C	103	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.10	311.86	7.6	F
B-A	1.10	206.31	33.1	F
C-A				
C-B	0.11	6.62	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	383	0.173	65	0.2	11.306	B
B-A	378	549	0.688	370	2.1	19.248	C
C-A	78			78			
C-B	47	642	0.073	46	0.1	6.044	A
A-B	189			189			
A-C	65			65			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	228	0.347	78	0.5	23.824	C
B-A	451	531	0.850	441	4.5	36.601	E
C-A	93			93			
C-B	56	629	0.089	56	0.1	6.277	A
A-B	226			226			
A-C	78			78			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	88	1.102	76	5.7	197.324	F
B-A	553	507	1.090	492	19.8	108.945	F
C-A	113			113			
C-B	68	612	0.112	68	0.1	6.620	A
A-B	276			276			
A-C	96			96			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	95	1.015	89	7.6	311.860	F
B-A	553	504	1.097	499	33.1	206.315	F
C-A	113			113			
C-B	68	612	0.112	68	0.1	6.623	A
A-B	276			276			
A-C	96			96			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	79	98	0.807	86	5.9	266.635	F
B-A	451	521	0.866	506	19.4	190.710	F
C-A	93			93			
C-B	56	629	0.089	56	0.1	6.279	A
A-B	226			226			
A-C	78			78			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	259	0.255	88	0.4	23.731	C
B-A	378	541	0.698	445	2.6	54.654	F
C-A	78			78			
C-B	47	642	0.073	47	0.1	6.052	A
A-B	189			189			
A-C	65			65			

2023 Base + Com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		17.11	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2023 Base + Com	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	500	100.000
B		✓	441	100.000
C		✓	221	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	381	119
	B	344	0	97
	C	92	129	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.47	29.29	0.8	D
B-A	0.84	46.35	4.6	E
C-A				
C-B	0.25	8.49	0.3	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	495	0.147	72	0.2	8.501	A
B-A	259	512	0.505	255	1.0	13.788	B
C-A	69			69			
C-B	97	611	0.159	96	0.2	6.990	A
A-B	287			287			
A-C	90			90			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	411	0.212	87	0.3	11.084	B
B-A	309	489	0.633	307	1.6	19.503	C
C-A	83			83			
C-B	116	592	0.196	116	0.2	7.555	A
A-B	343			343			
A-C	107			107			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	249	0.429	105	0.7	24.696	C
B-A	379	452	0.838	369	4.1	39.257	E
C-A	101			101			
C-B	142	566	0.251	142	0.3	8.473	A
A-B	419			419			
A-C	131			131			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	107	229	0.467	106	0.8	29.292	D
B-A	379	451	0.840	377	4.6	46.349	E
C-A	101			101			
C-B	142	566	0.251	142	0.3	8.486	A
A-B	419			419			
A-C	131			131			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	87	391	0.223	89	0.3	12.030	B
B-A	309	487	0.634	320	1.8	22.727	C
C-A	83			83			
C-B	116	592	0.196	116	0.2	7.575	A
A-B	343			343			
A-C	107			107			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	73	487	0.150	73	0.2	8.707	A
B-A	259	512	0.506	262	1.1	14.590	B
C-A	69			69			
C-B	97	611	0.159	97	0.2	7.018	A
A-B	287			287			
A-C	90			90			

2023 Base + Com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		121.89	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2023 Base + Com	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	340	100.000
B		✓	591	100.000
C		✓	165	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	252	88
	B	503	0	88
	C	103	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.10	315.05	7.7	F
B-A	1.10	209.66	33.7	F
C-A				
C-B	0.11	6.63	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	382	0.174	65	0.2	11.359	B
B-A	379	549	0.690	370	2.1	19.345	C
C-A	78			78			
C-B	47	641	0.073	46	0.1	6.047	A
A-B	190			190			
A-C	66			66			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	225	0.351	78	0.5	24.216	C
B-A	452	531	0.852	442	4.6	36.970	E
C-A	93			93			
C-B	56	629	0.089	56	0.1	6.282	A
A-B	227			227			
A-C	79			79			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	88	1.105	76	5.7	198.710	F
B-A	554	507	1.093	492	20.1	110.329	F
C-A	113			113			
C-B	68	611	0.112	68	0.1	6.627	A
A-B	277			277			
A-C	97			97			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	97	95	1.018	89	7.7	315.049	F
B-A	554	504	1.099	499	33.7	209.663	F
C-A	113			113			
C-B	68	611	0.112	68	0.1	6.630	A
A-B	277			277			
A-C	97			97			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	79	98	0.810	86	6.0	270.605	F
B-A	452	521	0.868	506	20.2	195.597	F
C-A	93			93			
C-B	56	629	0.089	56	0.1	6.284	A
A-B	227			227			
A-C	79			79			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	66	251	0.263	89	0.4	25.147	D
B-A	379	541	0.700	449	2.6	58.082	F
C-A	78			78			
C-B	47	641	0.073	47	0.1	6.054	A
A-B	190			190			
A-C	66			66			

2023 Base + Com + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		20.56	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2023 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	500	100.000
B		✓	456	100.000
C		✓	236	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	381	119
	B	344	0	112
	C	92	144	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.58	39.72	1.3	E
B-A	0.87	54.61	5.3	F
C-A				
C-B	0.28	8.83	0.4	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	84	495	0.170	84	0.2	8.740	A
B-A	259	506	0.512	255	1.0	14.150	B
C-A	69			69			
C-B	108	611	0.178	108	0.2	7.144	A
A-B	287			287			
A-C	90			90			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	101	407	0.247	100	0.3	11.697	B
B-A	309	480	0.645	306	1.7	20.447	C
C-A	83			83			
C-B	129	592	0.219	129	0.3	7.775	A
A-B	343			343			
A-C	107			107			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	237	0.520	121	1.0	30.252	D
B-A	379	439	0.863	367	4.6	44.103	E
C-A	101			101			
C-B	159	566	0.280	158	0.4	8.813	A
A-B	419			419			
A-C	131			131			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	211	0.583	122	1.3	39.721	E
B-A	379	437	0.867	376	5.3	54.613	F
C-A	101			101			
C-B	159	566	0.280	159	0.4	8.830	A
A-B	419			419			
A-C	131			131			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	101	382	0.264	104	0.4	13.143	B
B-A	309	478	0.647	323	2.0	24.948	C
C-A	83			83			
C-B	129	592	0.219	130	0.3	7.798	A
A-B	343			343			
A-C	107			107			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	84	486	0.173	85	0.2	8.984	A
B-A	259	505	0.513	262	1.1	15.055	C
C-A	69			69			
C-B	108	611	0.178	109	0.2	7.177	A
A-B	287			287			
A-C	90			90			

2023 Base + Com + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		127.92	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2023 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	340	100.000
B		✓	595	100.000
C		✓	173	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	252	88
	B	503	0	92
	C	103	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.12	322.21	8.3	F
B-A	1.11	221.91	35.7	F
C-A				
C-B	0.13	6.74	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	380	0.182	68	0.2	11.531	B
B-A	379	546	0.693	370	2.1	19.645	C
C-A	78			78			
C-B	53	641	0.082	52	0.1	6.107	A
A-B	190			190			
A-C	66			66			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	83	221	0.375	81	0.6	25.566	D
B-A	452	527	0.859	442	4.7	38.219	E
C-A	93			93			
C-B	63	629	0.100	63	0.1	6.362	A
A-B	227			227			
A-C	79			79			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	101	91	1.115	79	6.0	199.733	F
B-A	554	502	1.103	488	21.1	115.381	F
C-A	113			113			
C-B	77	611	0.126	77	0.1	6.736	A
A-B	277			277			
A-C	97			97			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	101	98	1.032	92	8.3	322.213	F
B-A	554	499	1.110	495	35.7	221.914	F
C-A	113			113			
C-B	77	611	0.126	77	0.1	6.739	A
A-B	277			277			
A-C	97			97			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	83	101	0.822	90	6.6	282.175	F
B-A	452	517	0.874	503	23.0	213.158	F
C-A	93			93			
C-B	63	629	0.100	63	0.1	6.365	A
A-B	227			227			
A-C	79			79			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	227	0.305	94	0.5	31.738	D
B-A	379	536	0.706	460	2.8	71.397	F
C-A	78			78			
C-B	53	641	0.082	53	0.1	6.116	A
A-B	190			190			
A-C	66			66			

2028 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		13.38	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2028 Base	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	490	100.000
B		✓	425	100.000
C		✓	227	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	372	118
	B	324	0	101
	C	96	131	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.40	21.30	0.6	C
B-A	0.79	37.11	3.5	E
C-A				
C-B	0.25	8.47	0.3	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	512	0.149	75	0.2	8.228	A
B-A	244	511	0.477	240	0.9	13.122	B
C-A	72			72			
C-B	99	613	0.161	98	0.2	6.984	A
A-B	280			280			
A-C	89			89			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	437	0.208	90	0.3	10.384	B
B-A	291	488	0.597	289	1.4	17.941	C
C-A	86			86			
C-B	118	594	0.198	118	0.2	7.547	A
A-B	334			334			
A-C	106			106			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	294	0.379	110	0.6	19.447	C
B-A	357	451	0.790	349	3.2	33.159	D
C-A	106			106			
C-B	144	569	0.253	144	0.3	8.461	A
A-B	410			410			
A-C	130			130			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	280	0.398	111	0.6	21.297	C
B-A	357	450	0.792	356	3.5	37.105	E
C-A	106			106			
C-B	144	569	0.253	144	0.3	8.474	A
A-B	410			410			
A-C	130			130			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	91	423	0.215	92	0.3	10.930	B
B-A	291	487	0.598	299	1.6	19.867	C
C-A	86			86			
C-B	118	594	0.198	118	0.2	7.568	A
A-B	334			334			
A-C	106			106			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	505	0.150	76	0.2	8.401	A
B-A	244	511	0.478	246	0.9	13.740	B
C-A	72			72			
C-B	99	613	0.161	99	0.2	7.010	A
A-B	280			280			
A-C	89			89			

2028 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		160.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2028 Base	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	352	100.000
B		✓	613	100.000
C		✓	171	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	262	90
	B	522	0	91
	C	107	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.15	368.29	9.3	F
B-A	1.15	284.84	44.9	F
C-A				
C-B	0.12	6.70	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	358	0.191	68	0.2	12.365	B
B-A	393	546	0.719	384	2.4	21.077	C
C-A	81			81			
C-B	48	639	0.075	48	0.1	6.087	A
A-B	197			197			
A-C	68			68			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	82	184	0.445	80	0.8	33.917	D
B-A	469	526	0.892	456	5.7	44.054	E
C-A	96			96			
C-B	58	626	0.092	57	0.1	6.332	A
A-B	236			236			
A-C	81			81			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	87	1.152	77	6.5	221.081	F
B-A	575	504	1.141	494	25.9	135.407	F
C-A	118			118			
C-B	70	608	0.116	70	0.1	6.696	A
A-B	288			288			
A-C	99			99			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	93	1.075	89	9.3	368.290	F
B-A	575	501	1.147	499	44.9	269.518	F
C-A	118			118			
C-B	70	608	0.116	70	0.1	6.698	A
A-B	288			288			
A-C	99			99			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	82	95	0.857	85	8.5	367.788	F
B-A	469	519	0.904	508	35.2	284.845	F
C-A	96			96			
C-B	58	626	0.092	58	0.1	6.335	A
A-B	236			236			
A-C	81			81			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	102	0.672	90	3.1	251.333	F
B-A	393	531	0.740	516	4.6	149.203	F
C-A	81			81			
C-B	48	639	0.075	48	0.1	6.093	A
A-B	197			197			
A-C	68			68			

2028 Base + Com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		24.03	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2028 Base + Com	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	521	100.000
B		✓	458	100.000
C		✓	231	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	397	124
	B	357	0	101
	C	96	135	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.64	54.97	1.6	F
B-A	0.89	62.59	6.3	F
C-A				
C-B	0.27	8.74	0.4	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	481	0.158	75	0.2	8.854	A
B-A	269	507	0.530	264	1.1	14.578	B
C-A	72			72			
C-B	102	607	0.168	101	0.2	7.118	A
A-B	299			299			
A-C	93			93			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	387	0.234	90	0.3	12.077	B
B-A	321	482	0.666	318	1.9	21.508	C
C-A	86			86			
C-B	121	587	0.207	121	0.3	7.720	A
A-B	357			357			
A-C	111			111			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	204	0.545	108	1.1	36.388	E
B-A	393	443	0.888	379	5.4	48.466	E
C-A	106			106			
C-B	149	560	0.265	148	0.4	8.730	A
A-B	437			437			
A-C	137			137			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	111	172	0.645	109	1.6	54.974	F
B-A	393	440	0.893	389	6.3	62.593	F
C-A	106			106			
C-B	149	560	0.265	149	0.4	8.744	A
A-B	437			437			
A-C	137			137			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	91	355	0.256	96	0.4	14.137	B
B-A	321	480	0.669	338	2.2	27.759	D
C-A	86			86			
C-B	121	587	0.207	122	0.3	7.742	A
A-B	357			357			
A-C	111			111			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	76	471	0.161	77	0.2	9.133	A
B-A	269	507	0.530	273	1.2	15.643	C
C-A	72			72			
C-B	102	607	0.168	102	0.2	7.135	A
A-B	299			299			
A-C	93			93			

2028 Base + Com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		163.60	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2028 Base + Com	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	354	100.000
B		✓	614	100.000
C		✓	171	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	263	91
	B	523	0	91
	C	107	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.15	372.97	9.4	F
B-A	1.15	290.57	45.6	F
C-A				
C-B	0.12	6.71	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	356	0.192	68	0.2	12.433	B
B-A	394	546	0.721	384	2.4	21.188	C
C-A	81			81			
C-B	48	639	0.075	48	0.1	6.090	A
A-B	198			198			
A-C	69			69			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	82	181	0.451	80	0.8	34.746	D
B-A	470	526	0.894	456	5.8	44.541	E
C-A	96			96			
C-B	58	625	0.092	57	0.1	6.337	A
A-B	236			236			
A-C	82			82			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	87	1.155	77	6.5	222.785	F
B-A	576	503	1.144	494	26.3	137.080	F
C-A	118			118			
C-B	70	607	0.116	70	0.1	6.703	A
A-B	290			290			
A-C	100			100			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	100	93	1.078	89	9.4	371.921	F
B-A	576	501	1.150	499	45.6	273.409	F
C-A	118			118			
C-B	70	607	0.116	70	0.1	6.705	A
A-B	290			290			
A-C	100			100			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	82	95	0.860	85	8.7	372.966	F
B-A	470	519	0.906	508	36.1	290.573	F
C-A	96			96			
C-B	58	625	0.092	58	0.1	6.342	A
A-B	236			236			
A-C	82			82			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	69	102	0.674	90	3.2	257.366	F
B-A	394	530	0.742	517	5.3	155.678	F
C-A	81			81			
C-B	48	639	0.075	48	0.1	6.099	A
A-B	198			198			
A-C	69			69			

2028 Base + Com + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		32.88	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2028 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	521	100.000
B		✓	473	100.000
C		✓	245	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	397	124
	B	357	0	116
	C	96	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.85	102.95	3.4	F
B-A	0.92	76.88	7.8	F
C-A				
C-B	0.29	9.08	0.4	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	481	0.182	86	0.2	9.115	A
B-A	269	501	0.537	264	1.1	14.966	B
C-A	72			72			
C-B	112	607	0.185	111	0.2	7.254	A
A-B	299			299			
A-C	93			93			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	104	383	0.272	104	0.4	12.847	B
B-A	321	473	0.678	318	2.0	22.626	C
C-A	86			86			
C-B	134	587	0.228	134	0.3	7.933	A
A-B	357			357			
A-C	111			111			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	128	191	0.670	122	1.7	49.386	E
B-A	393	429	0.916	376	6.2	55.193	F
C-A	106			106			
C-B	164	560	0.293	164	0.4	9.063	A
A-B	437			437			
A-C	137			137			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	128	150	0.850	121	3.4	102.953	F
B-A	393	425	0.925	387	7.8	76.876	F
C-A	106			106			
C-B	164	560	0.293	164	0.4	9.084	A
A-B	437			437			
A-C	137			137			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	104	340	0.307	116	0.5	16.903	C
B-A	321	468	0.686	343	2.4	32.632	D
C-A	86			86			
C-B	134	587	0.228	134	0.3	7.958	A
A-B	357			357			
A-C	111			111			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	87	470	0.186	88	0.2	9.460	A
B-A	269	500	0.538	273	1.2	16.214	C
C-A	72			72			
C-B	112	607	0.185	112	0.2	7.288	A
A-B	299			299			
A-C	93			93			

2028 Base + Com + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		174.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2028 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	354	100.000
B		✓	619	100.000
C		✓	179	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	263	91
	B	523	0	96
	C	107	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.16	388.65	10.2	F
B-A	1.16	312.80	48.0	F
C-A				
C-B	0.13	6.82	0.1	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	354	0.204	71	0.3	12.679	B
B-A	394	543	0.726	384	2.4	21.572	C
C-A	81			81			
C-B	54	639	0.085	54	0.1	6.151	A
A-B	198			198			
A-C	69			69			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	86	176	0.490	84	0.9	38.046	E
B-A	470	521	0.902	455	6.1	46.365	E
C-A	96			96			
C-B	65	625	0.103	65	0.1	6.419	A
A-B	236			236			
A-C	82			82			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	106	91	1.165	81	7.0	224.838	F
B-A	576	499	1.155	490	27.6	143.726	F
C-A	118			118			
C-B	79	607	0.131	79	0.1	6.815	A
A-B	290			290			
A-C	100			100			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	106	97	1.095	93	10.2	381.113	F
B-A	576	496	1.161	494	48.0	288.805	F
C-A	118			118			
C-B	79	607	0.131	79	0.1	6.817	A
A-B	290			290			
A-C	100			100			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	86	99	0.872	89	9.6	388.652	F
B-A	470	515	0.913	504	39.5	312.800	F
C-A	96			96			
C-B	65	625	0.103	65	0.1	6.422	A
A-B	236			236			
A-C	82			82			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	105	0.685	96	3.6	275.186	F
B-A	394	526	0.748	513	9.6	180.766	F
C-A	81			81			
C-B	54	639	0.085	54	0.1	6.162	A
A-B	198			198			
A-C	69			69			

2050 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		53.50	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2050 Base	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	565	100.000
B		✓	492	100.000
C		✓	262	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	429	136
	B	375	0	117
	C	111	151	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.00	189.38	6.5	F
B-A	1.00	125.31	14.1	F
C-A				
C-B	0.30	9.43	0.4	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	457	0.193	87	0.2	9.716	A
B-A	282	493	0.573	277	1.3	16.321	C
C-A	84			84			
C-B	114	598	0.190	113	0.2	7.403	A
A-B	323			323			
A-C	102			102			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	343	0.306	104	0.4	15.019	C
B-A	337	463	0.728	333	2.4	26.606	D
C-A	100			100			
C-B	136	577	0.235	135	0.3	8.147	A
A-B	386			386			
A-C	122			122			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	129	1.002	109	5.3	133.706	F
B-A	413	416	0.992	384	9.7	76.781	F
C-A	122			122			
C-B	166	548	0.303	166	0.4	9.407	A
A-B	472			472			
A-C	150			150			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	137	0.943	124	6.5	189.375	F
B-A	413	411	1.004	395	14.1	125.308	F
C-A	122			122			
C-B	166	548	0.303	166	0.4	9.431	A
A-B	472			472			
A-C	150			150			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	105	247	0.425	128	0.8	35.492	E
B-A	337	451	0.748	380	3.5	63.603	F
C-A	100			100			
C-B	136	577	0.235	136	0.3	8.176	A
A-B	386			386			
A-C	122			122			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	439	0.200	90	0.3	10.366	B
B-A	282	492	0.574	291	1.4	18.554	C
C-A	84			84			
C-B	114	598	0.190	114	0.2	7.439	A
A-B	323			323			
A-C	102			102			

2050 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		421.83	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2050 Base	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	405	100.000
B		✓	706	100.000
C		✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	301	104
	B	601	0	105
	C	123	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.31	830.94	20.5	F
B-A	1.36	772.01	112.9	F
C-A				
C-B	0.14	7.04	0.2	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	241	0.328	77	0.5	21.721	C
B-A	452	531	0.852	435	4.5	32.830	D
C-A	93			93			
C-B	56	629	0.089	55	0.1	6.272	A
A-B	227			227			
A-C	78			78			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	88	1.074	75	5.3	189.338	F
B-A	540	510	1.060	491	16.9	98.674	F
C-A	111			111			
C-B	67	614	0.108	66	0.1	6.577	A
A-B	271			271			
A-C	93			93			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	91	1.269	88	12.1	416.013	F
B-A	662	486	1.361	485	61.2	305.881	F
C-A	135			135			
C-B	81	593	0.137	81	0.2	7.035	A
A-B	331			331			
A-C	115			115			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	88	1.311	87	19.2	692.903	F
B-A	662	487	1.358	487	104.8	615.061	F
C-A	135			135			
C-B	81	593	0.137	81	0.2	7.038	A
A-B	331			331			
A-C	115			115			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	94	91	1.041	89	20.5	830.945	F
B-A	540	508	1.063	508	112.9	772.010	F
C-A	111			111			
C-B	67	614	0.108	67	0.1	6.580	A
A-B	271			271			
A-C	93			93			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	93	0.847	89	18.1	784.673	F
B-A	452	523	0.865	519	96.4	727.323	F
C-A	93			93			
C-B	56	629	0.089	56	0.1	6.282	A
A-B	227			227			
A-C	78			78			

2050 Base + Com, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		86.93	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D15	2050 Base + Com	AM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	596	100.000
B		✓	525	100.000
C		✓	266	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	454	142
	B	408	0	117
	C	111	155	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.10	283.57	9.5	F
B-A	1.09	210.48	27.2	F
C-A				
C-B	0.32	9.77	0.5	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	419	0.210	87	0.3	10.796	B
B-A	307	489	0.629	301	1.6	18.600	C
C-A	84			84			
C-B	117	592	0.197	116	0.2	7.540	A
A-B	342			342			
A-C	107			107			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	105	279	0.377	104	0.6	20.416	C
B-A	367	457	0.803	359	3.4	34.550	D
C-A	100			100			
C-B	139	570	0.244	139	0.3	8.348	A
A-B	408			408			
A-C	128			128			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	117	1.098	104	6.8	171.147	F
B-A	449	414	1.085	398	16.3	111.839	F
C-A	122			122			
C-B	171	539	0.316	170	0.5	9.738	A
A-B	500			500			
A-C	156			156			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	125	1.034	118	9.5	283.566	F
B-A	449	411	1.094	406	27.2	210.476	F
C-A	122			122			
C-B	171	539	0.316	171	0.5	9.767	A
A-B	500			500			
A-C	156			156			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	105	132	0.795	120	5.7	230.303	F
B-A	367	440	0.834	424	12.9	176.598	F
C-A	100			100			
C-B	139	570	0.244	140	0.3	8.381	A
A-B	408			408			
A-C	128			128			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	88	342	0.257	109	0.4	16.853	C
B-A	307	480	0.640	351	1.9	35.955	E
C-A	84			84			
C-B	117	592	0.197	117	0.2	7.580	A
A-B	342			342			
A-C	107			107			

2050 Base + Com, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		425.66	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D16	2050 Base + Com	PM	ONE HOUR	00:00	01:30	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	407	100.000
B		✓	707	100.000
C		✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	302	105
	B	602	0	105
	C	123	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.31	838.73	20.7	F
B-A	1.36	779.82	114.2	F
C-A				
C-B	0.14	7.05	0.2	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	239	0.330	77	0.5	21.973	C
B-A	453	531	0.853	435	4.5	33.069	D
C-A	93			93			
C-B	56	629	0.089	55	0.1	6.276	A
A-B	227			227			
A-C	79			79			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	94	88	1.076	75	5.3	190.433	F
B-A	541	509	1.063	491	17.2	99.751	F
C-A	111			111			
C-B	67	613	0.108	66	0.1	6.582	A
A-B	271			271			
A-C	94			94			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	91	1.272	88	12.2	419.146	F
B-A	663	486	1.364	485	61.7	309.056	F
C-A	135			135			
C-B	81	592	0.138	81	0.2	7.043	A
A-B	333			333			
A-C	116			116			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	116	88	1.314	87	19.3	698.638	F
B-A	663	487	1.361	487	105.8	620.868	F
C-A	135			135			
C-B	81	592	0.138	81	0.2	7.045	A
A-B	333			333			
A-C	116			116			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service

B-C	94	91	1.043	89	20.7	838.730	F
B-A	541	508	1.065	508	114.2	779.816	F
C-A	111			111			
C-B	67	613	0.108	67	0.1	6.589	A
A-B	271			271			
A-C	94			94			

01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	79	93	0.849	89	18.3	793.962	F
B-A	453	523	0.866	519	97.8	736.784	F
C-A	93			93			
C-B	56	629	0.089	56	0.1	6.286	A
A-B	227			227			
A-C	79			79			

2050 Base + Com + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		107.22	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D17	2050 Base + Com + Dev	AM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	596	100.000
B		✓	539	100.000
C		✓	280	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	454	142
	B	408	0	131
	C	111	169	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.14	327.56	12.3	F
B-A	1.13	262.03	33.7	F
C-A				
C-B	0.35	11.21	0.6	B
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	409	0.241	97	0.3	12.634	B
B-A	307	480	0.640	300	1.8	21.222	C
C-A	84			84			
C-B	127	592	0.215	126	0.3	8.474	A
A-B	342			342			
A-C	107			107			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	260	0.453	116	0.9	27.069	D
B-A	367	444	0.826	357	4.2	41.755	E
C-A	100			100			
C-B	152	570	0.267	152	0.4	9.455	A
A-B	408			408			
A-C	128			128			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	144	127	1.137	114	8.3	189.274	F
B-A	449	400	1.122	387	19.7	135.560	F
C-A	122			122			
C-B	186	539	0.345	185	0.6	11.168	B
A-B	500			500			
A-C	156			156			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	144	133	1.081	128	12.3	327.559	F
B-A	449	397	1.132	393	33.7	262.028	F
C-A	122			122			
C-B	186	539	0.345	186	0.6	11.210	B
A-B	500			500			
A-C	156			156			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	118	142	0.831	134	8.3	288.142	F
B-A	367	426	0.862	412	22.4	247.462	F
C-A	100			100			
C-B	152	570	0.267	153	0.4	9.505	A
A-B	408			408			

A-C	128			128			
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01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	258	0.382	129	0.7	37.544	E
B-A	307	462	0.664	387	2.5	80.147	F
C-A	84			84			
C-B	127	592	0.215	128	0.3	8.531	A
A-B	342			342			
A-C	107			107			

2050 Base + Com + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		455.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D18	2050 Base + Com + Dev	PM	ONE HOUR	00:00	01:30	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	407	100.000
B		✓	712	100.000
C		✓	205	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	302	105
	B	602	0	110
	C	123	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.34	897.12	23.0	F
B-A	1.39	836.51	121.5	F
C-A				
C-B	0.15	7.89	0.2	A
A-B				
A-C				

Main Results for each time segment

00:00 - 00:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	83	228	0.363	80	0.6	26.444	D
B-A	453	525	0.863	433	5.1	37.121	E
C-A	93			93			
C-B	62	629	0.098	61	0.1	6.975	A
A-B	227			227			
A-C	79			79			

00:15 - 00:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	91	1.091	78	5.9	203.634	F
B-A	541	503	1.077	485	19.1	111.773	F
C-A	111			111			
C-B	74	613	0.120	74	0.1	7.334	A
A-B	271			271			
A-C	94			94			

00:30 - 00:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	94	1.295	91	13.4	447.652	F
B-A	663	479	1.385	477	65.5	336.443	F
C-A	135			135			
C-B	90	592	0.152	90	0.2	7.882	A
A-B	333			333			
A-C	116			116			

00:45 - 01:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	121	91	1.335	90	21.3	744.366	F
B-A	663	480	1.382	479	111.4	665.051	F
C-A	135			135			
C-B	90	592	0.152	90	0.2	7.887	A
A-B	333			333			
A-C	116			116			

01:00 - 01:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	99	93	1.058	92	23.0	897.117	F
B-A	541	501	1.080	501	121.5	836.507	F
C-A	111			111			
C-B	74	613	0.120	74	0.2	7.342	A
A-B	271			271			

A-C	94			94			
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01:15 - 01:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	83	96	0.862	92	20.8	862.395	F
B-A	453	516	0.878	512	106.9	804.338	F
C-A	93			93			
C-B	62	629	0.098	62	0.1	6.991	A
A-B	227			227			
A-C	79			79			



Junctions 1 and 2
Scale 1:200 @ A3

