Hadfield Developments

Proposed Car Park, Old Mill Lane, Barnsley

Transport Assessment

Final

August 2021

Revision Schedule

Proposed Car Park, Old Mill Lane, Barnsley

Transport Assessment

August 2021
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1 INTRODUCTION

1.1.1 Inspire Design & Development Ltd has been appointed to prepare a Transport Assessment to support a planning application for the use of land as car parking.

1.1.2 The land benefits from an existing access, approved in 2012 (Application 2012/0952).

1.1.3 Highway officers have requested that the application is supported by a Transport Assessment produced by a Transport Consultancy to ensure that the transport aspects of the proposed development are examined fully.

1.1.4 Dialogue with the Highway Authority following submission of this first version of this report identified a number of aspects that they requested be included within the submitted assessment. This document aims to update where necessary and to address the aspects requested by Highway Officers.

1.1.5 This report will consider the transport impacts of the proposed development in respect of:

- The opportunities for travel by sustainable means to and from the site.
- The impact on the capacity of the local highway network.
- The impact on the safety of the local highway network.

1.1.6 The impacts will be considered bearing in mind the need to make best use of existing highway infrastructure.

1.1.7 If there is proven to be any severe detrimental impact on the local highway network, 'hard' and/or 'soft' measures will be proposed to mitigate the impacts of the development.

1.1.8 Barnsley Metropolitan Borough Council (BMBC) are the planning and highway authority for the area and requested that prior to an application, the design team make contact to ensure that the Transport Assessment addressed particular issues that they would like to be examined. After repeated attempts to make contact (See **Appendix A**) no response from BMBC Highway Officers was initially received and as such the initial report was prepared without this input. Since this time, and on submission of the report feedback was obtained and this updated report endeavours to encompass the comments made.

1.2 Existing Site Conditions and Transport Conditions

1.2.1 The site is accessed from A635 Old Mill Lane, Barnsley between two railway bridges A location plan of the site is shown below in Figure 1: Location Plan, below.

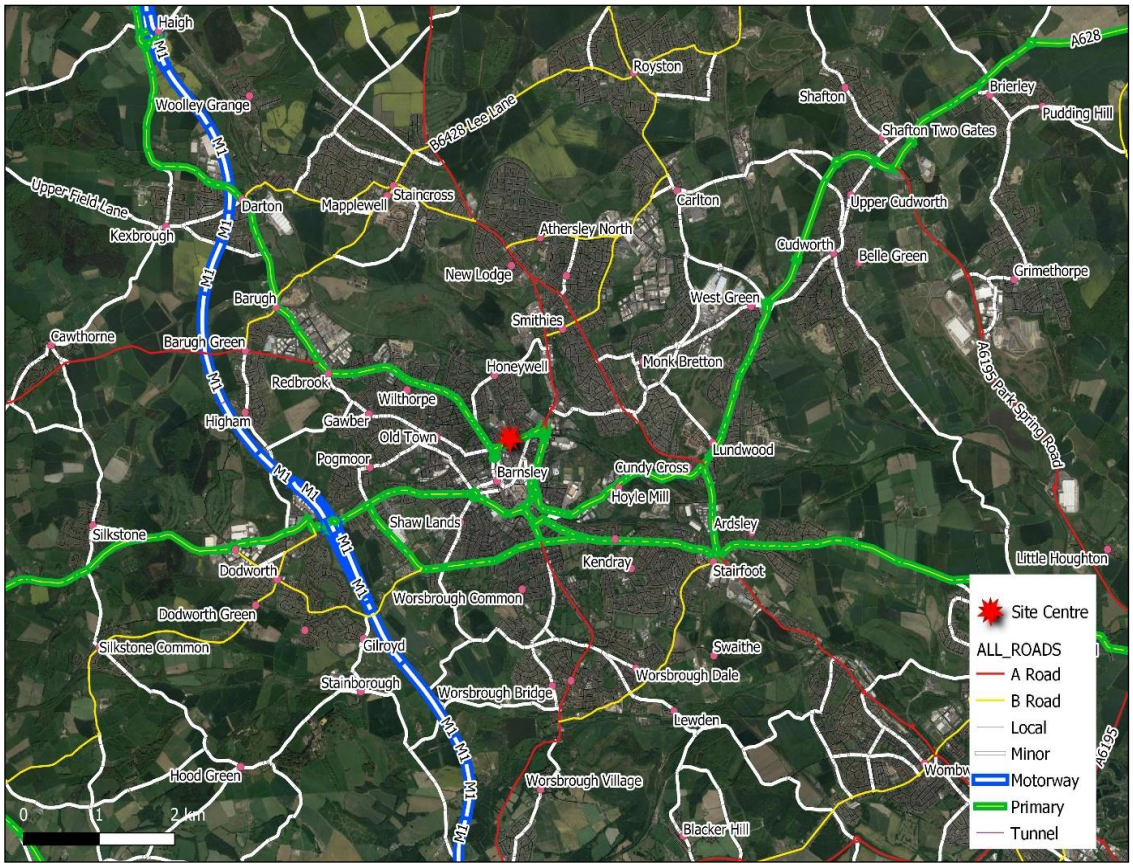

Figure 1: Location Plan (powered by Google)

1.2.2 The A635 Old Mill Lane runs in a broadly east-west alignment, and has junction with Bridge Street to the east and County Way to the west. A closer perspective of the proposed development site can be seen below in Figure 2.

Figure 2: Aerial extract (powered by Google)

2 HIGHWAY NETWORK

2.1 A635 Old Mill Lane

2.1.1 The A635 Old Mill Lane forms an east-west link between A635 Huddersfield Road and the A61 Harborough Hill Road. It benefits from footways and street lighting and in the vicinity of the site access, parking restrictions are in place with no parking at any time to the south side and no parking / loading between 8am – 6pm to the northern side.

2.1.2 To the east of the site is a stone railway bridge abutment and the deck of the railway bridge crosses Old Mill Lane. To the west of the site a similar stone railway bridge can be found.

2.2 Accident History

2.2.1 Detailed Accident records for the last five full years (2015 – 2019 inclusive) have been obtained for the area within the site from the Department for Transport ((Department for Transport, 2021). In addition, provisional data for 2020, between 1st January and 30th June has also been examined (Department for Transport, 2021), however contained no further incidents within the study area.

Figure 3: accidents

2.2.2 The accident record and the study area are presented in Figure 3.

2.2.3 Of the 9 accidents, 6 occurred at the junction of Old Mill Lane with Honeywell Street. No accidents occurred in the vicinity of the proposed site access. Further examination of the temporal and environmental factors is undertaken below.

Year	No
2015	2
2016	3
2017	2
2018	2
2019	0
2020	0

Month	No
January	0
February	0
March	0
April	1
May	3
June	0
July	1
August	0
September	4
October	0
November	0
December	0

Light	No
Daylight	8
Darkness - lights lit	1
Darkness - lights unlit	0
Darkness - no lighting	0
Darkness - lighting unknown	0

Hour	No
00:00	0
01:00	0
02:00	0
03:00	0
04:00	0
05:00	0
06:00	0
07:00	1
08:00	1
09:00	1
10:00	0
11:00	2
12:00	1
13:00	0
14:00	1
15:00	0
16:00	1
17:00	0
18:00	0
19:00	0
20:00	0
21:00	1
22:00	0
23:00	0

Severity	No
Slight	8
Serious	1
Fatal	0

Day	No
Monday	1
Tuesday	5
Wednesday	2
Thursday	0
Friday	0
Saturday	0
Sunday	1

Road Surface Conditions	No
Data missing or out of range	0
Dry	8
Wet or damp	1
Snow	0
Frost or ice	0
Flood over 3cm. deep	0
Oil or diesel	0
Mud	0

Weather	No
Data missing or out of range	0
Fine no high winds	7
Raining no high winds	1
Snowing no high winds	0
Fine + high winds	0
Raining + high winds	0
Snowing + high winds	0
Fog or mist	0
Other	0
Unknown	1

Figure 4: temporal and environmental evaluation

2.2.4 From Figure 4 it can be seen that the majority of accidents occurred in the fine weather, during daylight and on dry roads, indicating no environmental influencing factors.

2.2.5 Of the 9 accidents that occurred, 5 occurred on a Tuesday. It is unknown if this is influenced by some local factors to elevate the Tuesday accident rate, or if this is merely an anomaly.

2.2.6 Of the five accidents occurring at the junction of Old Mill Lane and Honeywell Street. Further analysis of these has been undertaken below.

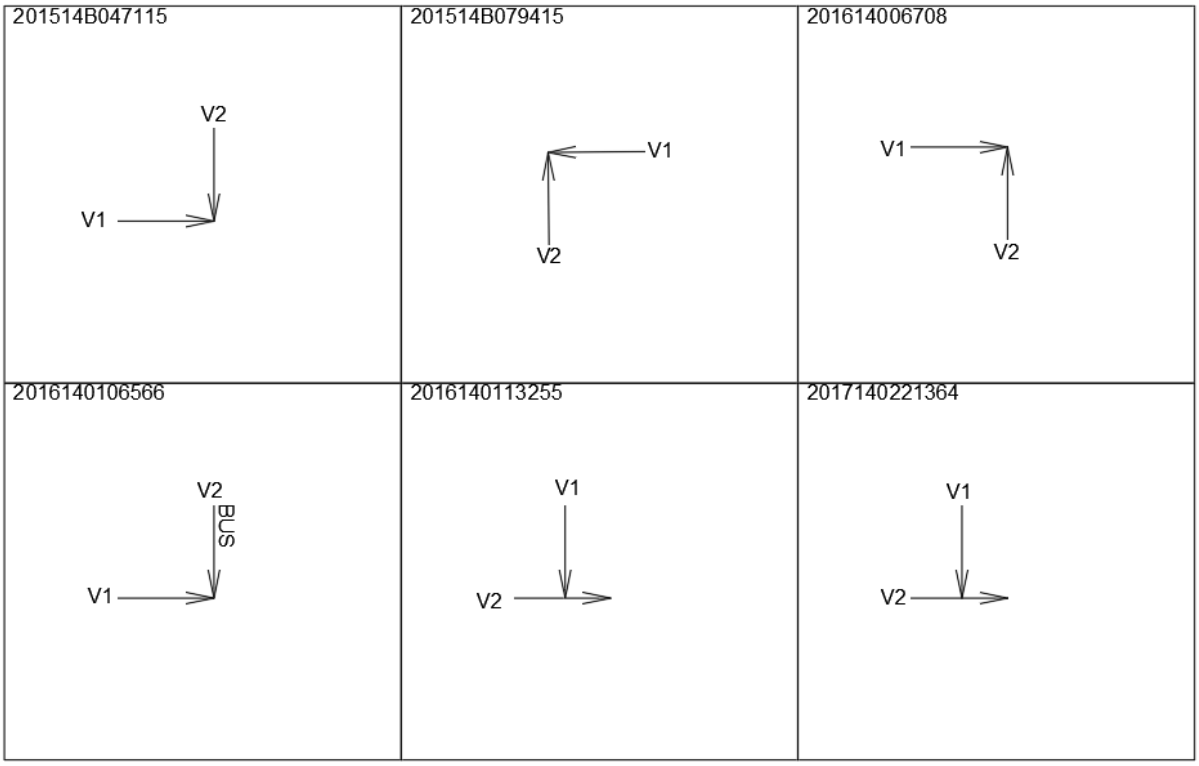

Figure 5: Accident Analysis (Old Mill Lane / Honeywell Street)

2.2.7 It can be seen that four of the six accidents involved vehicles travelling north to south, conflicting with vehicles traveling west to east. It is considered that this indicates an existing accident issue at this location and should be investigated further. However, it is considered that whilst this pre-existing issue exists, the proposed development will not affect this and therefore this existing issue should be a matter to be examined by the local highway authority.

2.2.8 A copy of the accident data used to compile this assessment can be found in **Appendix B**.

2.2.9 As a result of comments received from BMBC following submission of the earlier report, a casualty assessment has been undertaken.

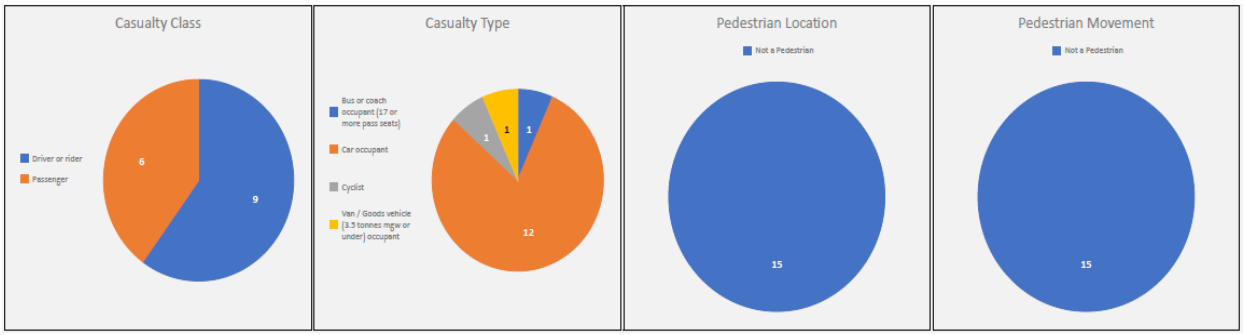

Figure 6: Casualty Analysis

2.2.10 As can be seen in Figure 6, it was found that of the 15 casualties, 9 were drivers / riders and 6 were passengers. None of the casualties were vulnerable road users (pedestrians or cyclists). It is therefore considered that with regard to any existing network concerns that no highway safety issues relating to vulnerable road users are evidential.

3 TRANSPORT POLICY

3.1 National Planning Policy Framework (NPPF)

3.1.1 The NPPF is the primary planning guidance document for the UK. First published in 2012 it replaced fragmented policy documents with a singular policy. Last updated in July 2021.

3.1.2 The essence of NPPF was to promote sustainable development, but to only oppose development where its impact could be considered to be severe. Paragraph 104, requires the consideration of transport issues at the earliest stages of development proposals.

- *"104. Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:*
  - *a) the potential impacts of development on transport networks can be addressed; b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
  - *c) opportunities to promote walking, cycling and public transport use are identified and pursued;*
  - *d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
  - *e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places."*

3.1.3 Pertaining directly to development proposals, paragraphs 110-112 encompass the framework within which development proposals are to be considered.

- *"110. 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 associated standards reflects current national guidance, including 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.*

- *111. 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.*
- *112. Within this context, applications for development should:*
  - *a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*
  - *b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*
  - *c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*
  - *d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and*
  - *e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.*

3.1.4 It is considered that in the context of the proposed use of the facility and its location, that the essence of the NPPF has been observed. The provision of additional private parking at such a modest level will not have a significant impact upon traffic levels within the area as the car park itself will not generate trips, but will receive existing trips and provide a suitable and safe parking location.

3.1.5 More locally, the message of the NPPF is distilled and adopted within local planning policy through Local Plans.

3.2 Barnsley Local Plan

3.2.1 The Barnsley Local Plan was adopted in 2019. The proposed development is located just outside the town centre, within an area described as Urban Fabric.

3.2.2 Reviewing Section 12 of the Local Plan suggests that parking should be managed, and it is noted that there is a lack of long-stay parking within the local area. The proposed development will provide privately owned and managed parking that will support local retail and employment premises in the local area.

4 SUSTAINABLE TRANSPORT

4.1 Introduction

4.1.1 Every transport journey comprises multiple modes. These often commence with a walk to either a car, a bus stop or a local transport interchange and therefore the ability to connect with other modes of transport is an important consideration.

4.1.2 Whilst this proposal for a car park clearly the mode used to travel to and from the proposed site is by private car, however the act of parking in this location which is not a destination in itself means that onward travel, by some mode is required. Therefore, onward journeys by sustainable means are considered. It is considered that these will be predominantly on foot, however for completeness travel by other modes is also examined.

4.2 Walking

4.2.1 The site is located off a main single carriageway route that is subject to a 30mph speed limit. The site has footways to both sides of the carriageway providing connectivity to other footways in the local area. Streetlighting is also present on Old Mill Lane.

Figure 7: walking network

4.2.2 From Figure 7 it can be seen that the largely circular shape of the walking catchment indicates good pedestrian linkage from the site to most of the surrounding area.

4.2.3 It is considered that car park will largely provide for student parking associated with the neighbouring college and therefore these are easily facilitated. To the east of the site, a pedestrian crossing is located between the junctions of Old Mill Lane with Bridge Street and Honeywell Street, providing access to the eastern side of Barnsley.

4.2.4 To the west of the proposed site access, footway continues into the Barnsley College Construction centre and opposite this there is a ghost island facility with back-to-back right turns. Further to the west there is a pedestrian refuge that aids crossing of pedestrians towards the centre of Barnsley.

4.2.5 Further to the west pedestrians are provided for with a number of crossings at the A635 / Victoria Road / Old Mill Lane junction, providing pedestrian controlled crossings over most arms.

4.2.6 It is considered, given the majority of movements are predicted to be between the colleges on the northern side of Old Mill Lane and the proposed car park that crossing needs to the south of Old Mill Lane will be minimal.

4.2.7 It is further considered that given the provision of parking to the south of Old Mill Lane, users of these areas would be more likely to park in the parking areas to the south of Old Mill Lane, than the proposed site.

4.2.8 In addition, the lack of pedestrian accidents in the area would be indicative of a relatively safe pedestrian environment. It is therefore considered at this time that the current provision for pedestrians is sufficient.

4.3 Cycling

4.3.1 Cyclists will primarily use the existing highway networks as well as the network of bridleways.

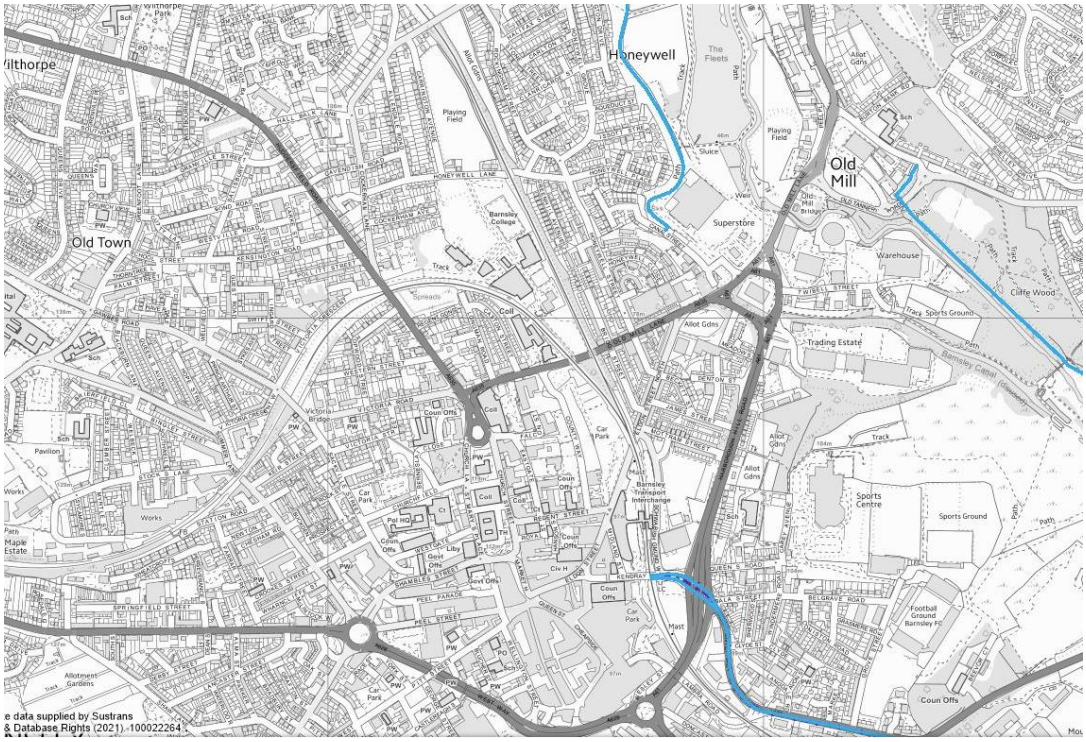

Figure 8:extract from Barnsley MBC cycle mapping

4.3.2 The map extract shown in Figure 8 shows in blue existing cycle routes surrounding the site. It can be seen that they radiate away from the site, but do not connect directly with the site. It is however considered that the existing highway network provides connectivity with these.

4.3.3 To the north the cycle route can be accessed via Old Mill Lane and then Canal Street. To the south-east, the cycle route can be accessed via County Way – Regent Street – Eldon Street North – Midland Street and Kendray Street. To the east the route can be accessed off Old Mill Lane and then Old Tannery Road.

4.3.4 Generally, commuter cyclists will utilise the carriageways of the above roads as they will be more confident; however, it is acknowledged that leisure cyclists and less confident cyclists will not wish to cycle on-road.

4.3.5 Recent research coming out of the National Travel Survey 2018, found that cyclists commuting to a place of work would typically cycle for 23 minutes. Cyclists typically cycle at 12mph. Considering these two factors, a distance of 7.4Km is deemed to be accessible. The figure below shows these catchments along with the places within these catchments.

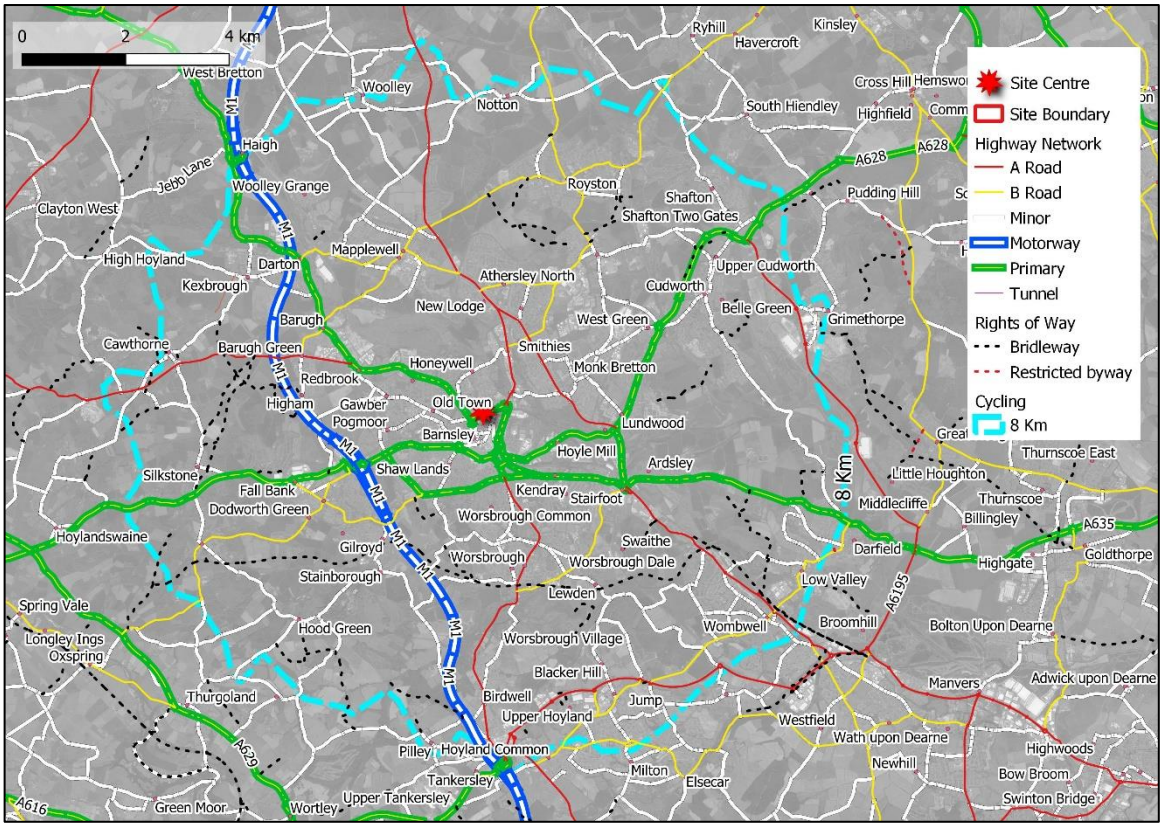

Figure 9: cycling network

4.3.6 With a generally circular cycling catchment it can be concluded that good cycling links can be found in all directions from the site.

4.3.7 It can therefore be stated that cycling and walking opportunities exist locally to access the local area.

4.4 Public Transport

4.4.1 There are a good number of bus services operated which serve stops close the proposed site. Barnsley Interchange (BI) , the bus station is within easy walking distance and benefits from a large number of services. The closest stops on Honeywell Street to the east of the site are served by 3 services (489, X10 and 12). The route numbers and timings are shown in Table 1 below.

Route No	Origin-destination	AM Peak	PM Peak
21A	BI - Penistone	Daily	
22X	BI – Rotherham	15 min	15 min
93A	BI – Kexborough	**	**
94B	Cawthorne – Barnsley	Two per day	
95A	Barnsley – Kexborough -Woolley	15 min	15 min
218A	BI – Rotherham Interchange	30 min	
219	BI – Doncaster Interchange	120 min	160 min

219A	BI – Doncaster Interchange	120 min	160 min
226	BI – Thurnscoe	30 min	30 min
353	Barnsley – Holmfirth	90 min	90 min
482A	Barnsley – Barnsley Academy (Sch)	Daily	
11	BI – Athersley North Circular	20 min	20 min
12	BI – Atheresley North Circular	20 min	20 min
20	BI - Penistone	Hourly	Hourly
21	BI - Penistone	Hourly	Hourly
24A	BI - Penistone	Evening/ Sunday Service	
93	BI – Kexborough	60 min	60 min
94A	BI – Cawthorne	120 min	limited
95	BI – Kexborough – Woolley	30 min	20 min
222	BI – Cortonwood	60 min	60 min
X10	BI - Leeds	60 min	60 min
57	BI – Wakefield	30 min	30 min
59	BI – Wakefield	30 min	30 min
59A	BI – Wakefield	60 min	60 min
94A	BI – Cawthorne	120 min	120 min
96A	Wakefield – Barnsley	Daily	
218	BI – Rotherham Interchange	60 min	60 min
489	BI – Darton Academy	1 service	1 service
X19	BI – Doncaster	60 min	60 min
36	BI – South Elmsall	1 service	-
43	BI - Pogmoor Kingstone Circular	60 min	60 min
44	BI - Pogmoor Kingstone Circular	60 min	60 min
22	BI – Penistone	30 min	30 min
23A	Barnsley – Stocksbridge	1 service	-
97	Wakefield - BI	3 per day	
94	Denby Dale Railway Station – BI	60 min	60 min
96	BI – Wakefield	60 min	60 min
412	Barnsley – Penistone Grammar	Daily	
001	BI – Staincross Circular	25 min	25 min
37	BI – Grimethorpe Interchange	Interpeak hourly service	
478	School service	**	
24	BI – Stocksbridge	6 per day	

Table 1: bus services

** currently suspended service

The bus routes can be seen on the figure below.

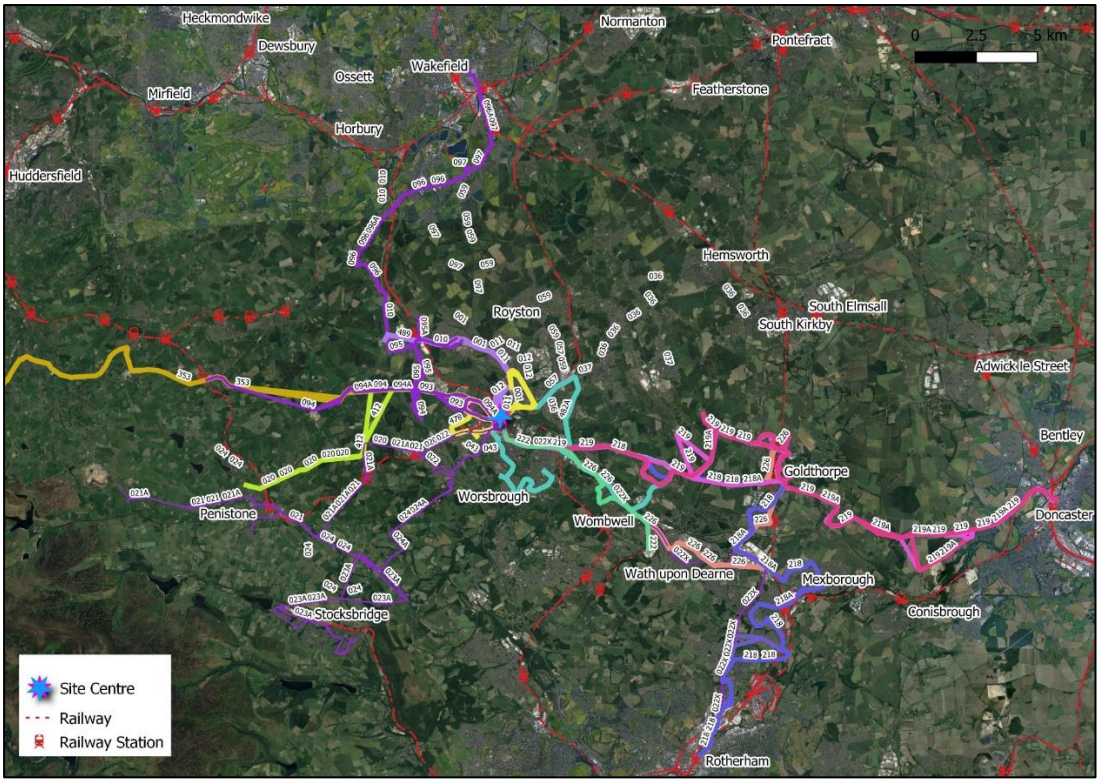

Figure 10: bus routes

4.5 Bus Stop provision

4.5.1 An assessment has been made of the bus stop provision in the vicinity of the site.

4.5.2 The closest bus stops are located to the east of the site on Honeywell Street and are well served. Footways connect the site to the local bus stops,

4.5.3 The southbound stop is 250m from the site, it has a shelter and Kassel kerbs to aid boarding. A photograph of this stop can be seen below in Figure 11.

Figure 11: southbound bus stop on Honeywell Street

4.5.4 For northbound services, the stop is further from the site along Honeywell Street at a walking distance of 220m from the site. Located outside The Honeywell public house, which has a flag stop and timetable.

4.5.5 In the interest of brevity, BMBC requested that copies of timetables be omitted from the report appendices.

5 PROPOSED DEVELOPMENT

5.1.1 The proposal seeks to obtain permission for the provision of around 115 long stay parking spaces.

5.1.2 The proposal considers no change to the current operation, but to provide more attractive and conducive facilities for guests, raising the popularity of the venue.

5.2 Site Access - vehicles

5.2.1 The site will be accessed by the existing vehicle access point from the access off Old Mill Lane, formed as signalised junction. The access has good intervisibility in all directions.

5.2.2 A plan showing the proposed access arrangement (dwg no. HD-1502-01-HW-001) has been submitted in support of the application. This can be found in **Appendix F**.

5.3 Site Access – Walking and cycling

5.3.1 The site is bounded by well-lit footways that can be used by pedestrians accessing onwards destinations on foot. With regard to cyclists, the existing highway network can be used within the local area to the site.

5.4 Site Layout

5.4.1 The proposed car park, considers up to 115 car parking spaces laid out in a traditional block layout, with two rows to the east and western sides and a central double depth block of spaces. Access and egress for vehicles and pedestrians will be via the existing access onto Old Mill Lane.

6 TRAFFIC ANALYSIS

6.1 Traffic Surveys

6.1.1 Following responses from Barnsley MBC, traffic surveys were undertaken by ANSA Traffic Ltd at 3 junctions from 07:00 to 19:00 on the 21st April 2021, recording a 3-hour period in the morning and afternoon. These were;

- Old Mill Lane / County Way / STEM Centre,
- Old Mill Lane / Bridge Street,
- Old Mill Lane / Honeywell Street.

6.1.2 The traffic surveys were enumerated and then upon receipt were further analysed to identify the local network peak hour. This was found to be as follows.

- AM Peak 08:00 – 09:00
- PM Peak 16:15 – 17:15

6.1.3 The traffic flows during these peak hours were used within the assessment. A copy of the traffic surveys can be found in **Appendix C.**

6.1.4 Comments received from BMBC have questioned why no queue surveys were undertaken. Queue surveys are useful when junctions are very congested and traffic demand exceeds capacity by a significant margin. This is the case where heavy traffic movements occur on non-priority movements. Such a combination of heavy traffic flows on non-priority movements can result in queues propagating through each cycle. In a network that has several traffic signal installations within the study area, this can be useful, but where the study area consists of priority junctions has very limited value.

6.1.5 Queue surveys do however add a significant cost to surveys often requiring personnel onsite throughout the survey monitoring queues or additional video cameras for later measurement.

6.1.6 Given that the junctions assessed are all priority junctions and that increases in traffic flows associated with the development would be primarily to the priority movements (i.e., those movements not having to give way) it was concluded that the additional cost of undertaking queue surveys could not be justified. Indeed, the results further validate this approach as all junctions operate well within capacity.

6.2 Traffic Growth

6.2.1 It is usual to provide traffic growth for 5 years post application, therefore growth rates from 2021 to 2026 have been examined.

6.2.2 To provide an assessment of traffic growth TEMPRO v7.2 was used. It was found when examining Regional, County, Borough and MSOA growth rates, that the growth

rate for Barnsley MBC was the highest, at 1.045544, when adjusted by the National Trip End Model.

6.3 Development Traffic

6.3.1 For a development such as this, survey-based tools, such as TRICs cannot be directly used. Therefore, it was initially considered that a first principles approach to traffic generation has to be used that is influenced by empirical data such as TRICS. This is based upon an understanding of the operational regime of the proposed development.

6.3.2 Following submission of Version 1 of this report, where the trip generation had been profiled to reach maximum accumulation during the day, officers of BMBC requested an alternative approach looking at the car park filling during the morning peak hour and fully emptying during the evening peak hour.

6.3.3 The trip generation therefore looked at the arrival of 228 vehicles during the morning network peak hour and 228 vehicles departing during the evening peak hour. As this was modelled within Junctions 10, using the HOUR setting, they will be given a 'bell curve' arrival / departure profile.

6.4 Modal Split

6.4.1 Whilst the modal split for a car park development is perhaps irrelevant, it serves as a good measure for the sustainability of the area. Examining the Workplace Zone (E33010735) that the site is within the following modal split has been retrieved from the 2011 CENSUS.

	Employees	%
All Usual Residents Aged 16 to 74	320	
Work Mainly from Home	26	
Underground, Metro, Light Rail or Tram	0	0.00%
Train	5	1.56%
Minibus or Coach	30	9.38%
Taxi	1	0.31%
Motorcycle, Scooter or Moped	4	1.25%
Driving a Car or Van	186	58.13%
Passenger in a Car or Van	22	6.88%
Bicycle	1	0.31%
On Foot	44	13.75%
Other Method of Travel to Work	1	0.31%
		100%

Table 2: Modal Split

6.4.2 With a modal split of 58% car drivers, the modal split advocates that the area has good sustainable transport links.

6.5 Distribution

6.5.1 The distribution of vehicles to / from a car park will reflect the distribution patterns of the local area largely as it is the commuters that would generally be the dominant share and these will be travelling from surrounding areas. To reflect this an examination of the journey to work data has been undertaken. A copy of the distribution model can be found in **Appendix D**.

6.5.2 This distribution exercise has been undertaken, examining all the commuters to the local output area. This found that a total of 201 people commuted to work within the local output area from 170 different output areas. An assignment exercise has been undertaken using the population weighted centroids as the focal points for each of these home output areas. The assignment has been completed using the Open Route Service set for car use and the fastest route between the site access and each of the 170 home output areas.

6.5.3 When looking at the site access it was found that 76% of these would arrive / depart from the east, with the remaining 24% routing to/from the west. Through the study area, these movements continued out of the network in a straight-ahead movement.

6.5.4 The traffic surveys, growth and development traffic were all assessed in a network spreadsheet which can be found in **Appendix E**.

6.6 Capacity Assessment

Site Access

6.6.1 The site access has been assessed during the peak hours in the 2026 with development scenario only. A signalised installation, due to limitations of visibility to the east of the access preventing a priority junction has been proposed. A LINSIG 3 model has been produced and tested. A Degree of Saturation (DoS) below 90% indicates that a lane is working within operational capacity, and a Practical Reserve Capacity (PRC) of greater than 0% indicates a junction that is operating within operational capacity.

6.6.2 The results from the LINSIG 3 model are shown below. A copy of the output report can be found in **Appendix G**.

	Old Mill Lane West	Site Access	Old Mill Lane East	Cycle Time / PRC
	DoS / MMQ	DoS / MMQ	DoS / MMQ	

2026 peak	AM	46.8% / 5	0.0% / 0	87.0% / 13.3	60 / 3.4%
2026 Peak	PM	38.7% / 4.2	61.7% / 4.2	66.3% / 9.3	60 / 35.8%

Table 3: Site Access Capacity Assessment

6.6.3 From the capacity assessment results shown in **Table 3** it can be seen that the highest ratio of flow to capacity (RFC) is 0.59, compared to an indicative limit of 0.85 for acceptable performance.

Old Mill Lane / County Way

6.6.1 A Junctions 10 model of this crossroads was constructed. The junction features back-to-back ghost island right turn lanes. Three flow scenarios of were examined during morning and evening peak hours. An extract from the Junctions 10 report is shown below.

	AM									PM							
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
2021																		
Stream B-ACD	D1	0.0	0.5	12.16	0.02	B	0.75	A	82 % [Stream D-BC]	D2	0.0	0.5	8.66	0.02	A	1.05	A	54 % [Stream D-BC]
Stream A-D		0.0	0.5	7.17	0.01	A					0.0	0.5	7.76	0.00	A			
Stream D-AB		0.1	0.5	7.49	0.06	A					0.2	0.5	8.87	0.15	A			
Stream D-BC		0.1	0.5	12.19	0.07	B					0.2	0.5	14.23	0.14	B			
Stream C-B		0.1	0.5	8.37	0.12	A					0.1	0.5	7.21	0.07	A			
2026 Base																		
Stream B-ACD	D3	0.0	0.5	12.58	0.02	B	0.76	A	75 % [Stream B-ACD]	D4	0.0	0.5	8.84	0.02	A	1.09	A	48 % [Stream D-BC]
Stream A-D		0.0	0.5	7.27	0.01	A					0.0	0.5	7.91	0.00	A			
Stream D-AB		0.1	0.5	7.61	0.06	A					0.2	0.5	9.16	0.16	A			
Stream D-BC		0.1	0.5	12.63	0.08	B					0.2	0.5	14.99	0.15	B			
Stream C-B		0.1	0.5	8.54	0.12	A					0.1	0.5	7.30	0.07	A			
2026 with Development																		
Stream B-ACD	D5	0.0	0.5	13.12	0.02	B	0.75	A	67 % [Stream B-ACD]	D6	0.0	0.5	8.96	0.02	A	1.08	A	42 % [Stream D-BC]
Stream A-D		0.0	0.5	7.27	0.01	A					0.0	0.5	8.13	0.00	A			
Stream D-AB		0.1	0.5	7.62	0.06	A					0.2	0.5	9.49	0.17	A			
Stream D-BC		0.1	0.5	12.99	0.08	B					0.2	0.5	15.80	0.16	C			
Stream C-B		0.1	0.5	8.80	0.12	A					0.1	0.5	7.30	0.07	A			

Table 4: Old Mill Lane / County Way / STEM Centre

6.6.2 It can be seen from **Table 4** that the junction works well in all scenarios. A copy of the output report can be found in **Appendix H**.

Old Mill Lane / Bridge Street

6.6.1 A Junctions 10 model of this crossroads was constructed. Whilst the road is fairly wide here, it was considered for robustness to model right turning vehicles blocking ahead moves, although it is considered this is unlikely. Three flow scenarios of were examined during morning and evening peak hours. An extract from the Junctions 10 report is shown below.

	AM									PM							
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
	2021																	
Stream B-ACD	D1	0.0	0.6	13.70	0.04	B	0.72	A	67 % [Stream B-ACD]	D2	0.0	0.5	8.28	0.02	A	0.60	A	67 % [Stream C-ABD]
Stream A-BCD		0.1	0.5	4.49	0.05	A					0.0	0.5	4.94	0.03	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.5	1.6	4.97	0.17	A					0.6	1.9	4.17	0.18	A			
	2026 Base																	
Stream B-ACD	D3	0.1	0.6	14.23	0.04	B	0.75	A	60 % [Stream B-ACD]	D4	0.0	0.5	8.46	0.02	A	0.62	A	60 % [Stream C-ABD]
Stream A-BCD		0.1	0.5	4.41	0.05	A					0.0	0.5	4.90	0.03	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.5	1.7	4.95	0.18	A					0.7	2.2	4.14	0.19	A			
	2026 With Development																	
Stream B-ACD	D5	0.1	0.6	15.49	0.05	C	0.76	A	46 % [Stream B-ACD]	D6	0.0	0.5	9.48	0.02	A	0.60	A	55 % [Stream C-ABD]
Stream A-BCD		0.1	0.5	4.51	0.06	A					0.0	0.5	4.38	0.03	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.8	2.5	4.49	0.21	A					0.8	2.7	4.25	0.21	A			

Table 5: Old Mill Lane / Bridge Street Crossroads

6.6.2 From the table above it can be seen that the junction performs well in all scenarios, with the worst RFC being 0.21. A copy of the output report can be found in **Appendix H**.

Old Mill Lane / Honeywell Street

6.6.1 A Junctions 10 model of this crossroads was constructed and the three flow scenarios of interest were examined, an extract from the Junctions 10 report is shown below.

	AM									PM							
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
	2021																	
Stream B-ACD	D1	0.7	3.1	15.39	0.39	C	4.86	A	36 % [Stream B-ACD]	D2	0.6	2.8	13.06	0.36	B	3.87	A	47 % [Stream D-BC]
Stream A-BC		0.8	2.0	4.93	0.30	A					0.5	1.4	5.01	0.21	A			
Stream A-D		0.1	0.5	5.72	0.35	A					0.1	0.5	6.42	0.30	A			
Stream D-AB		0.3	1.5	11.03	0.25	B					0.3	1.3	11.40	0.22	B			
Stream D-BC		0.1	0.5	15.66	0.10	C					0.1	0.5	18.02	0.08	C			
Stream C-B		0.0	0.5	7.19	0.03	A					0.0	0.5	6.54	0.02	A			
	2026																	
Stream B-ACD	D3	0.7	3.4	16.43	0.41	C	4.95	A	30 % [Stream B-ACD]	D4	0.6	3.0	13.84	0.39	B	4.04	A	40 % [Stream D-BC]
Stream A-BC		0.8	2.1	4.80	0.30	A					0.5	1.4	5.11	0.22	A			
Stream A-D		0.1	0.5	5.62	0.36	A					0.2	0.5	6.66	0.31	A			
Stream D-AB		0.4	1.2	11.53	0.28	B					0.3	1.4	11.95	0.23	B			
Stream D-BC		0.1	0.5	16.35	0.11	C					0.1	0.5	18.82	0.09	C			
Stream C-B		0.0	0.5	7.31	0.04	A					0.0	0.5	6.60	0.02	A			
	2026 with DEV																	
Stream B-ACD	D5	0.8	3.8	18.14	0.44	C	4.80	A	23 % [Stream B-ACD]	D6	0.8	3.6	16.54	0.43	C	4.46	A	27 % [Stream B-ACD]
Stream A-BC		0.8	2.3	4.95	0.31	A					0.8	2.0	5.15	0.30	A			
Stream A-D		0.1	0.5	5.93	0.37	A					0.2	0.5	6.55	0.37	A			
Stream D-AB		0.4	1.7	13.21	0.29	B					0.3	1.4	12.44	0.24	B			
Stream D-BC		0.1	0.5	19.05	0.13	C					0.1	0.5	20.73	0.10	C			
Stream C-B		0.0	0.5	7.31	0.04	A					0.0	0.5	7.11	0.02	A			

Table 6: Old Mill Lane / Honeywell Street Crossroads

6.6.2 From **Table 6** it can be seen that the junction operates well within capacity in all scenarios with the highest RFC being 0.62. A copy of the output report can be found in **Appendix H**.

7 CONCLUSION

7.1.1 This report demonstrates that this development in this location is appropriate in transport terms. The surrounding network is adequate to cater for the amount development traffic and suitable accesses can be achieved safely.

7.1.2 From the results of this Assessment, it is concluded that the proposed development can operate safely and without impact upon the surrounding highway environment.

- The analysis of accident data shows that there are no significant highways safety issues on the existing network and a safe access is provided to the development.
- The network is adequate to cater for the vehicular traffic generated by the development.
- The needs of all road users have been taken into consideration and the site is relatively accessible by all modes of transport with particular reference to the needs of pedestrian, cyclists and passenger transport users.

7.1.3 It is concluded that the proposed development is suitable for the proposed location.

Appendix A Correspondence

BARNSLEY
Metropolitan Borough Council

Planning & Building Control Service
Development Management
Westgate Plaza
PO Box 603, Barnsley, S70 9FE
Head of Service: Joe Jenkinson

Our ref	2020/ENQ/00744
Your Ref:	
Date:	15th January 2021
Enquiries to:	developmentmanagement
Direct Dial:	@barnsley.gov.uk

Dear Sir

Planning Enquiry – 2020/ENQ/00744
Proposed surface car park and associated highway mitigation works including traffic signals
Old Mill Lane Barnsley

The proposal is for the change of use of the site which is currently vacant, to a car park with traffic controlled junction. The pre-application form notes the site is 1000sqm in size and is accessed from Old Mill Lane. The site is proposed to be for the provision of around 115 long stay parking spaces.

A traffic assessment has been submitted.

The site

The site is located on the heavily trafficked, classified road (A635) which forms part of the strategic highway network which connects Huddersfield Road to Wakefield Road (A61). The site is located between two railway bridges whereby visibility is restricted by their abutments. In addition the site is near to the north entrance of County Way which provides the access to the largest surface car parks in the town centre that serve the college, Digital Media Centre, the retail areas near by, local businesses and the town's main administrative buildings.

The site comprises of a narrow gated access onto Old Mill Lane which sits between two large retaining walls supporting the railway. The existing access leads into a large expanse of land the surface of which has been treated with loose road planings. Levels rise to the north where the site abuts Barnsley Colleges Honeywell campus and exits on Honeywell Lane, opposite the Miller Homes residential site currently under construction. The rise in levels means that there are direct views from the site across the railway line on the eastern boundary to the terrace houses fronting Bridge Street.

The site entrance is gated and opens onto a dropped crossing the highway boundary is defined in part by as stone wall.

Planning History of the site
2008/0315 construction of site access road approve with conditions

2012/0952 – formation of site access road – approve with conditions

2014/0315 formation of car park (retrospective) refused – appeal dismissed. The Inspector attached significant weight to the inadequacy of the access to allow safe and convenient access to right turning vehicles approaching from Old Mill Lane.

2015/1348 - Formation of Car Park Access– proposal for car park for 120 spaces refused on 21/04/16 on the grounds that the development was considered detrimental to Highway safety and the free flow of traffic, and that no evidence that a right of way had been secured to secure safe egress arrangements in perpetuity.

2017/0898 Formation of car park and associated access/egress (access from Old Mill Lane, egress from Honeywell Campus) – refused. Appeal dismissed. The Inspector found that the proposal would not provide safe means of access and egress and would cause significant harm to highway and pedestrian safety.

The two previous approvals at the site 2008/0315 and 2012/0952 related to the creation of a vehicle entrance. These related to works to regularise the entrance that had previously existed. Fundamentally, the permissions were not tied to a change of use of the land and it is not certain that they have been lawfully implemented as there is no evidence that conditions have been discharged.

Planning Policy

The new Local Plan adopted January 2019 identifies the site as being allocated as Urban Fabric, which has no specific allocation and may be acceptable in land use planning policy terms. However, as the previous planning applications and appeal decisions have established, there are significant obstacles to overcome with regards to the ability for the development to be served by a suitable and safe access and for it not to interfere with heavy traffic flows on the A635, Old Mill Lane and the important role that it plays serving County Way and linking the A635 Church Street/Huddersfield Road with the A61 Wakefield Road and Harborough Hill. Relevant Local Plan Policies include:-

Local Plan
T3 – new development and sustainable travel
T4 new development and transport safety
POLL1 Pollution control and protection

NPPF
The following paragraphs are relevant:

108. 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; and
c) 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.

109. 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.
110. Within this context, applications for development should:
a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

Consultations have been undertaken and the following responses have been received:

Highways

The consultation response from Highways sets out that the existing submission is deficient in detail and that a plethora of additional information would be required to enable an informed assessment of the latest proposal:-

-Whilst the provision of walking and cycling isochrones is noted, as the application seeks no physical development permissions, the sustainable travel catchment for this particular application is a relative moot point and as such no comments are required. This is similarly true for public transport services to the site.

-The TA and supporting plans differ throughout in terms of the potential proposed access solution. For any solution, details should be obtained of current extents of adopted public highway. Should a traffic signal based solution be submitted with any forthcoming application, then possible dedication of land may be required to enable future operation and maintenance.

-It is recommended that a topographical survey is undertaken to present an accurate picture of both the current highway and any proposed access solution. It is recommended that the extents of this cover the potential walk route / highway crossing point for additional walking trips generated by any application.

It is recommended that an appropriate design compliance statement is submitted with the application to support an appropriately detailed technical drawing of the access, including but not limited to, lane widths, visibility distances, technical standard compliance (TAL's or other related documents etc).

Traffic survey data should be obtained for up and down stream junctions. Any proposed access solution may bring about changes to queues and delay on the A635 and these will likely need to be reviewed in detail. It is suggested that this includes County Way / STEM Centre junction; A635 / Bridge Street, A635 / Honeywell Street junctions and the operation of the A635 signal controlled crossing west of Honeywell Street as a minimum.

Whilst use of development related TRIP generations is noted, any approach could not be fully reviewed or commented on without evidence of assessment of existing traffic on the highway. In any event, no clear explanation of the methodology used is provided for review. Further detail would be needed on how a proposed 115 space car park maximum accumulation would be reached through 228 daily vehicle movements. The wording of this sections is also ambiguous – is this intended to mean 228 entry, 228 exit, therefore 456 two-way daily turns? This section of the TA also refers to the form of junction being simple priority in nature, which differs from the submitted site access layout drawing.

Section 6 also presents both a worst case 30min period of 31 vehicles entering the site. Given there is no information or evidence on future pricing strategy for the proposals nor any appreciation for nearby car park pricing or occupation/accumulation, it would be prudent for any assessment to be completed on a worst case operation of full accumulation being reached within the peak hour and similarly for discharge from the proposed site in the opposing peak hour.

Section 6 also references a junction model capacity test being undertaken by inflating flow to a nearside lane, suggesting there are multiple lanes on approach. This does not look to fit with other submission details so this statement and link to proposed access solution should be clarified in any submission.

The concluding section makes the following statements:

- *The analysis of accident data shows that there are no significant highways safety issues on the existing network and a safe access is provided to the development.*
- *The network is adequate to cater for the vehicular traffic generated by the development.*
- *The needs of all road users have been taken into consideration and the site is relatively accessible by all modes of transport with particular reference to the needs of pedestrian, cyclists and passenger transport users.*

It cannot be accepted that the current level of evidence provided is sufficient to qualify such statements for the below reasons:

- *No details are presented to suggest relevant causation factors or cluster sites of PIC's has been effectively assessed.*
- *No details are provided to suggest the current and predicted operation of the public highway have been fully assessed at this time, including existing traffic flows, nearby junction performance, impact resulting from potential queuing or appropriate crossing points for walking transitions between the proposed site and any end destinations.*

Appendices:
Whilst some form of capacity assessment outputs are provided, full junction assessment reports (including diagrammatic labelling/measurement outputs) will be required in a form appropriate to the proposed junction formation – either Junctions 10 for priority controlled or LINISG for traffic signal control.

Internal layout sketch - Whilst at this stage it is noted that high levels of detail are not yet drafted for the proposed application, should an application be forthcoming. This should be provided to enable a further assessment.

Overall we would not recommend that a planning application is submitted to the Council until the additional information set out above has been submitted to and reviewed by the Council. If you do intend to progress further our recommendation is

that it is done so as a continuation of the pre-application process rather than as a planning application, which risks refusal based upon the previous planning application and appeal reasons for refusal not being overcome, and insufficient information being provided to demonstrate the acceptability of the new proposal for the reasons explained in this letter.

Air Quality
An air quality assessment will be required due to concerns about the potential increase in traffic emissions due to queuing traffic. Additionally, EV charging points would be required in compliance with the Council's adopted guidance on sustainable travel. Further detailed comments are contained within the consultation response already sent to you.
https://www.barnsley.gov.uk/media/16257/pdc-2020-mar-bmbc-aqe-technical-planning-guidance-v12.pdf

Yorkshire Water
Yorkshire Water now have a chargeable pre-application service but would request that a future planning application be accompanied by a robust surface water management plan following sustainable drainage principles

Highways Drainage
The Councils Highway drainage officer considers that details submitted are sufficient and has no further comments at this time with respect to temporary and permanent drainage of the site. Further comments may be made should a formal planning application be submitted.

Network Rail
Network Rail are keen to ensure that the scheme had no impact on operational railway safety. Any works to implement the scheme (such as laying a new surface, any earthworks or excavation works etc) should be discussed and agreed with Network Rail Asset Protection Team prior to work commencing.

Although the site is separated from the railway by 1.8m palisade fencing to prevent trespass on to the railway, however, given the number of vehicle movements to be introduced to this area, Network Rail consider that improvements to boundary treatments to include Armco barriers would be appropriate to prevent vehicle incursion into the operational railway environment. Further details are contained within the network Rail consultation response.

Other issues

Residential amenity
Consideration in this regard would be limited to disturbance arising from vehicle headlights. The sites elevated nature means that properties on Bridge Street could be susceptible to this. Whilst this may be a problem, it could be adequately mitigated against by the provision of boundary screening.

Summary

In summary there remain significant obstacles to overcome with regards to highway safety and the ability for the development to be served by a suitable and safe access and for it not to interfere with heavy traffic flows on the A635, Old Mill Lane and the important role that it plays serving County Way and linking the A635 Church Street/Huddersfield Road with the A61 Wakefield Road and Harborough Hill.

This response sets out the range of additional information that Highways would require to be able to offer more detailed consideration to the proposals. If you do intend to progress further our recommendation is that it is done so as a continuation of the pre-application process rather than as a planning application, which risks refusal based upon the previous planning application and appeal reasons for refusal not being overcome and insufficient information being provided to demonstrate the acceptability of the latest proposal for the reasons explained in this letter.

Should your client wish to wish to submit a planning application, you should be informed by the contents of this letter and by the detailed consultation responses previously sent to you and attached to the accompanying email.

This letter and the comments it contains will be treated as a material consideration in relation to any planning application submitted in the next 2 years. However, please note that the views and opinions in this letter do not constitute a formal response or decision of the Council in relation to any future planning application.

Validation requirements would be:-

The standard national list and other documents /assessments mentioned above or in consultation responses already forwarded to you.

Yours sincerely

Development Management

BARNSLEY
Metropolitan Borough Council

Planning & Building Control Service
Development Management
Westgate Plaza
PO Box 603, Barnsley, S70 9FE
Head of Service: Joe Jenkinson

Our ref	2020/ENQ/00744
Your Ref:	
Date:	18th January 2021
Enquiries to:	developmentmanagement
Direct Dial:	01226 774731

Dear Sir

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T4 new development and transport safety
POLL1 Pollution control and protection

NPPF
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b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

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It is recommended that an appropriate design compliance statement is submitted with the application to support an appropriately detailed technical drawing of the access, including but not limited to, lane widths, visibility distances, technical standard compliance (TAL's or other related documents etc).

Traffic survey data should be obtained for up and down stream junctions. Any proposed access solution may bring about changes to queues and delay on the A635 and these will likely need to be reviewed in detail. It is suggested that this includes County Way / STEM Centre junction; A635 / Bridge Street, A635 / Honeywell Street junctions and the operation of the A635 signal controlled crossing west of Honeywell Street as a minimum. Data collection should also consider capturing of flow and

queue lengths at A635 Old Mill Lane / Huddersfield Road junction. Further development details will determine modelling requirements for this junction but broadening any data capture exercise to ensure network movements are obtained for the same period as other data could be of benefit when considering how the current highway operates.

Whilst use of development related TRIP generations is noted, any approach could not be fully reviewed or commented on without evidence of assessment of existing traffic on the highway. In any event, no clear explanation of the methodology used is provided for review. Further detail would be needed on how a proposed 115 space car park maximum accumulation would be reached through 228 daily vehicle movements. The wording of this sections is also ambiguous – is this intended to mean 228 entry, 228 exit, therefore 456 two-way daily turns? This section of the TA also refers to the form of junction being simple priority in nature, which differs from the submitted site access layout drawing.

Section 6 also presents both a worst case 30min period of 31 vehicles entering the site. Given there is no information or evidence on future pricing strategy for the proposals nor any appreciation for nearby car park pricing or occupation/accumulation, it would be prudent for any assessment to be completed on a worst case operation of full accumulation being reached within the peak hour and similarly for discharge from the proposed site in the opposing peak hour.

Section 6 also references a junction model capacity test being undertaken by inflating flow to a nearside lane, suggesting there are multiple lanes on approach. This does not look to fit with other submission details so this statement and link to proposed access solution should be clarified in any submission.

The concluding section makes the following statements:

- *The analysis of accident data shows that there are no significant highways safety issues on the existing network and a safe access is provided to the development.*
- *The network is adequate to cater for the vehicular traffic generated by the development.*
- *The needs of all road users have been taken into consideration and the site is relatively accessible by all modes of transport with particular reference to the needs of pedestrian, cyclists and passenger transport users.*

It cannot be accepted that the current level of evidence provided is sufficient to qualify such statements for the below reasons: No details are presented to suggest relevant causation factors or cluster sites of PIC's has been effectively assessed. No details are provided to suggest the current and predicted operation of the public highway have been fully assessed at this time, including existing traffic flows, nearby junction performance, impact resulting from potential queuing or appropriate crossing points for walking transitions between the proposed site and any end destinations.

Appendices:
Whilst some form of capacity assessment outputs are provided, full junction assessment reports (including diagrammatic labelling/measurement outputs) will be required in a form appropriate to the proposed junction formation – either Junctions 10 for priority controlled or LINISG for traffic signal control.

Internal layout sketch - Whilst at this stage it is noted that high levels of detail are not yet drafted for the proposed application, should an application be forthcoming. This should be provided to enable a further assessment.

Overall we would not recommend that a planning application is submitted to the Council until the additional information set out above has been submitted to and reviewed by the Council. If you do intend to progress further our recommendation is that it is done so as a continuation of the pre-application process rather than as a planning application, which risks refusal based upon the previous planning application and appeal reasons for refusal not being overcome, and insufficient information being provided to demonstrate the acceptability of the new proposal for the reasons explained in this letter.

Air Quality
An air quality assessment will be required due to concerns about the potential increase in traffic emissions due to queuing traffic. Additionally, EV charging points would be required in compliance with the Council's adopted guidance on sustainable travel. Further detailed comments are contained within the consultation response already sent to you.
https://www.barnsley.gov.uk/media/16257/pdc-2020-mar-bmbc-aqe-technical-planning-guidance-v12.pdf

Yorkshire Water
Yorkshire Water now have a chargeable pre-application service but would request that a future planning application be accompanied by a robust surface water management plan following sustainable drainage principles

Highways Drainage
The Councils Highway drainage officer considers that details submitted are sufficient and has no further comments at this time with respect to temporary and permanent drainage of the site. Further comments may be made should a formal planning application be submitted.

Network Rail
Network Rail are keen to ensure that the scheme had no impact on operational railway safety. Any works to implement the scheme (such as laying a new surface, any earthworks or excavation works etc) should be discussed and agreed with Network Rail Asset Protection Team prior to work commencing.

Although the site is separated from the railway by 1.8m palisade fencing to prevent trespass on to the railway, however, given the number of vehicle movements to be introduced to this area, Network Rail consider that improvements to boundary treatments to include Armco barriers would be appropriate to prevent vehicle incursion into the operational railway environment. Further details are contained within the network Rail consultation response.

Other issues

Residential amenity
Consideration in this regard would be limited to disturbance arising from vehicle headlights. The sites elevated nature means that properties on Bridge Street could be susceptible to this. Whilst this may be a problem, it could be adequately mitigated against by the provision of boundary screening.

Summary

In summary there remain significant obstacles to overcome with regards to highway safety and the ability for the development to be served by a suitable and safe access and for it not to interfere with heavy traffic flows on the A635, Old Mill Lane and the

important role that it plays serving County Way and linking the A635 Church Street/Huddersfield Road with the A61 Wakefield Road and Harborough Hill.

This response sets out the range of additional information that Highways would require to be able to offer more detailed consideration to the proposals. If you do intend to progress further our recommendation is that it is done so as a continuation of the pre-application process rather than as a planning application, which risks refusal based upon the previous planning application and appeal reasons for refusal not being overcome and insufficient information being provided to demonstrate the acceptability of the latest proposal for the reasons explained in this letter.

Should your client wish to wish to submit a planning application, you should be informed by the contents of this letter and by the detailed consultation responses previously sent to you and attached to the accompanying email.

This letter and the comments it contains will be treated as a material consideration in relation to any planning application submitted in the next 2 years. However, please note that the views and opinions in this letter do not constitute a formal response or decision of the Council in relation to any future planning application.

Validation requirements would be:-

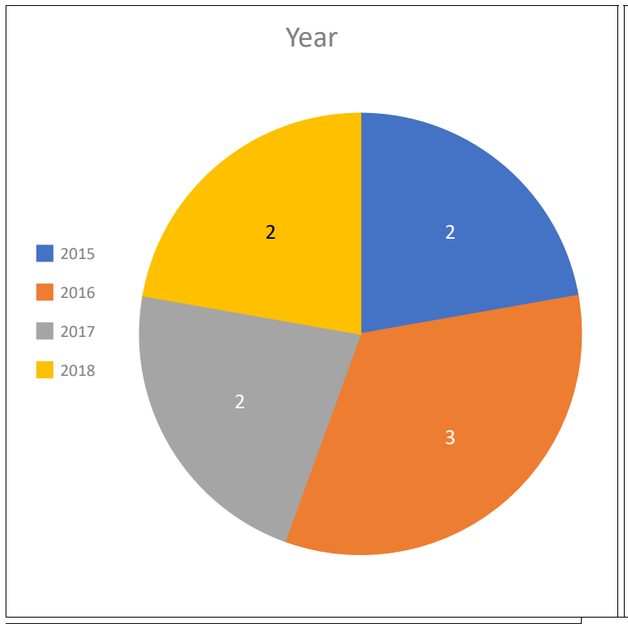
The standard national list and other documents /assessments mentioned above or in consultation responses already forwarded to you.

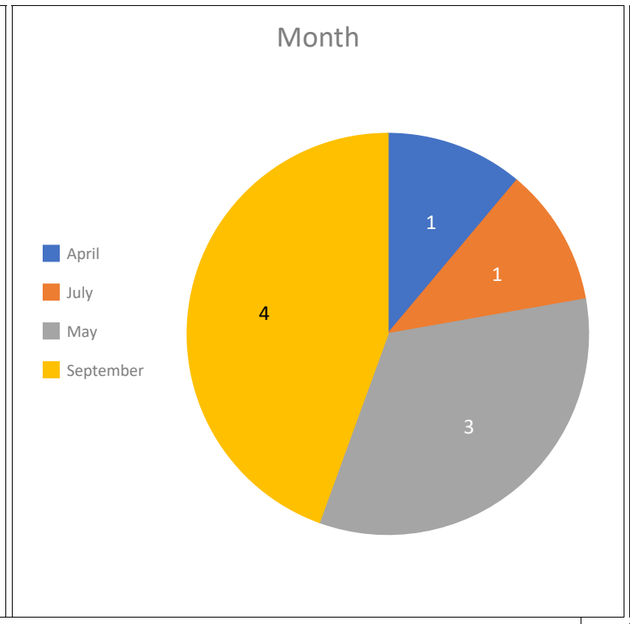
Yours sincerely

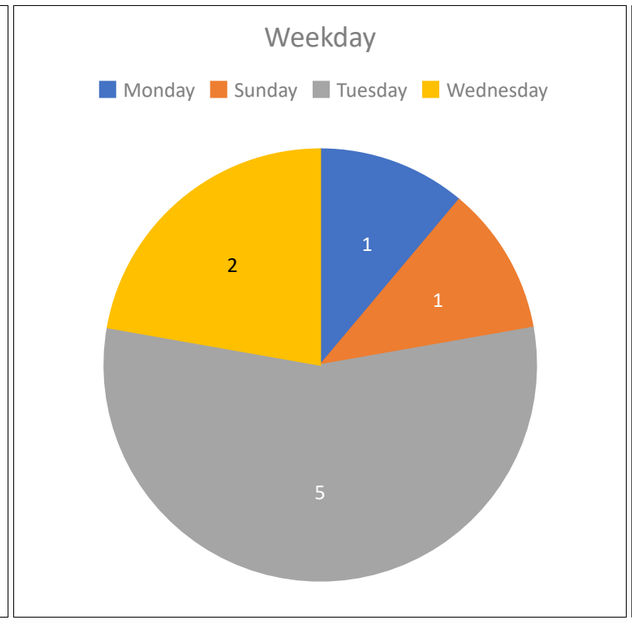
Development Management

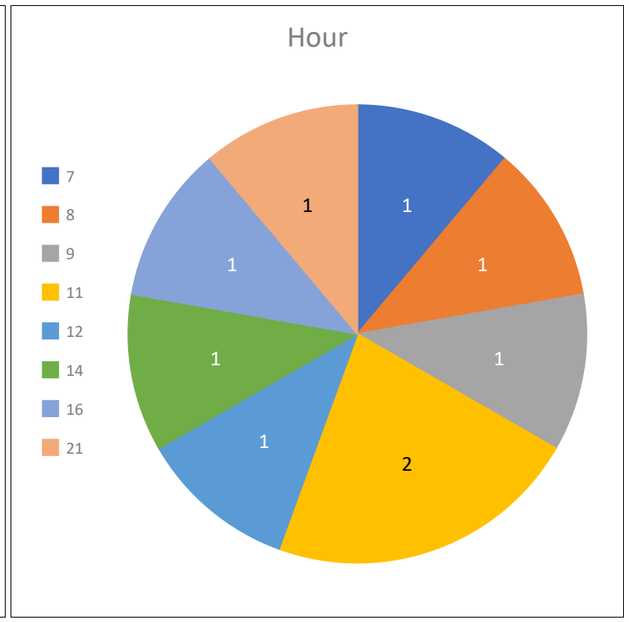
Appendix B Accident Data

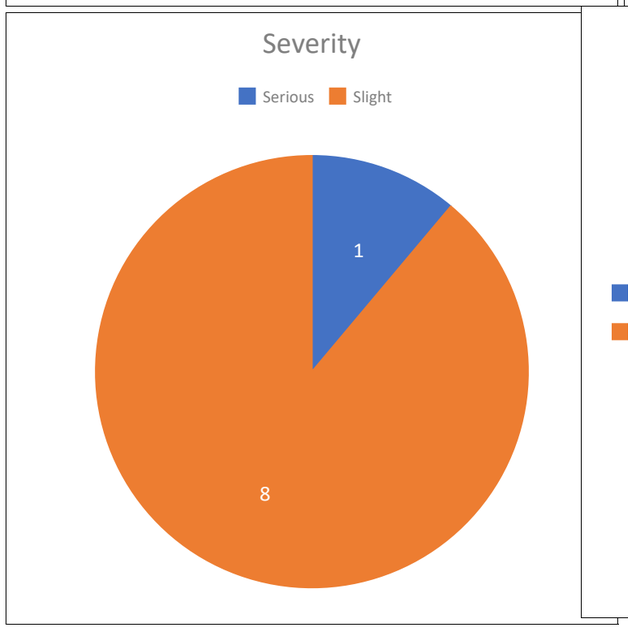
Summary Interpretative Report

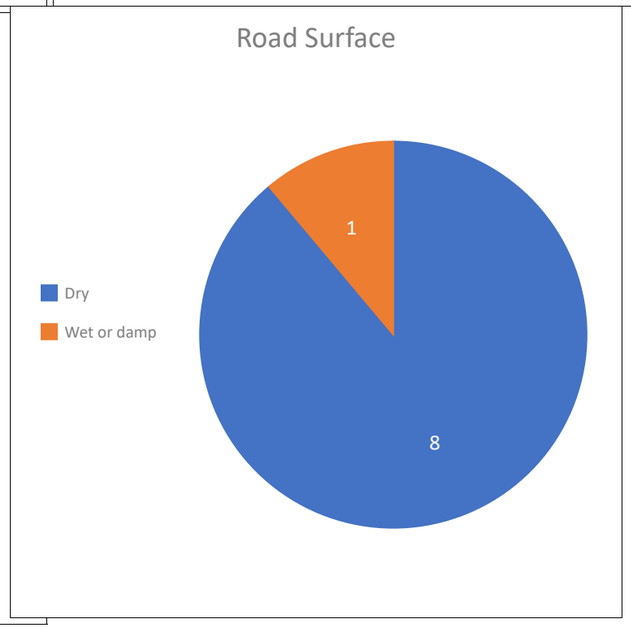


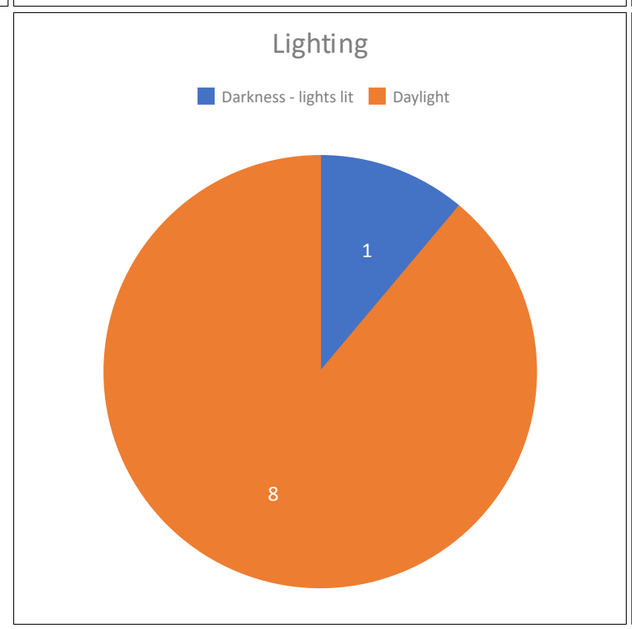


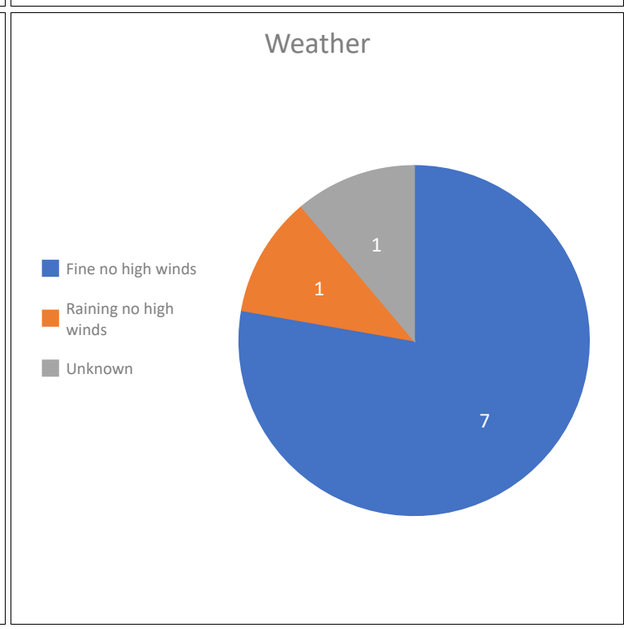








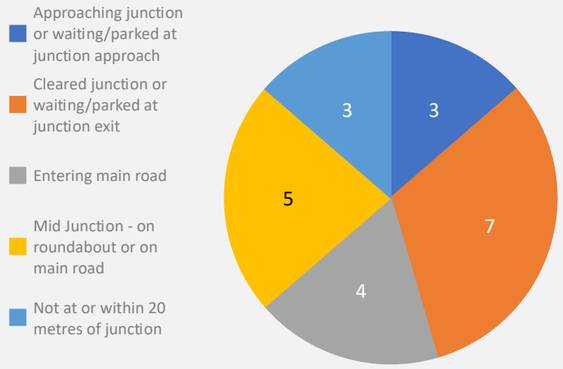




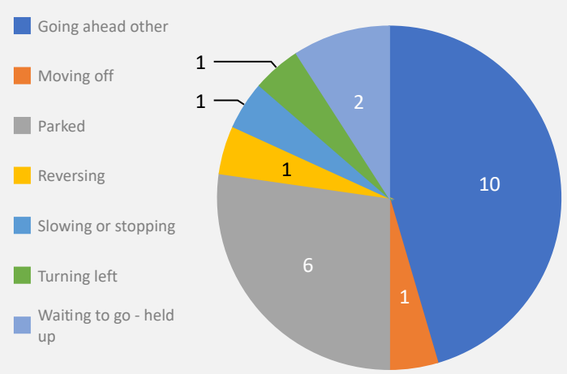
Date: 21/04/2021

Time: 20:02:53

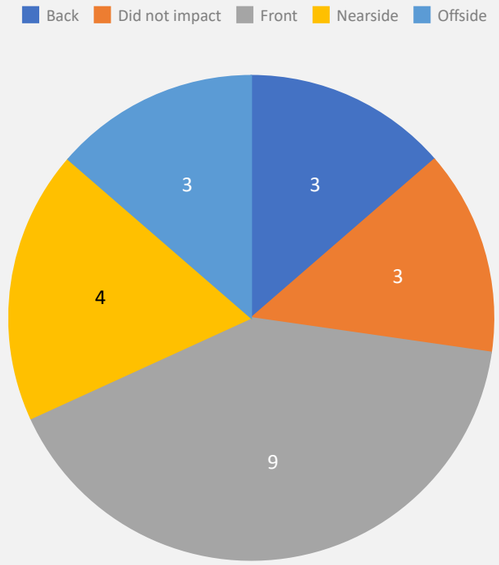
Junction Location



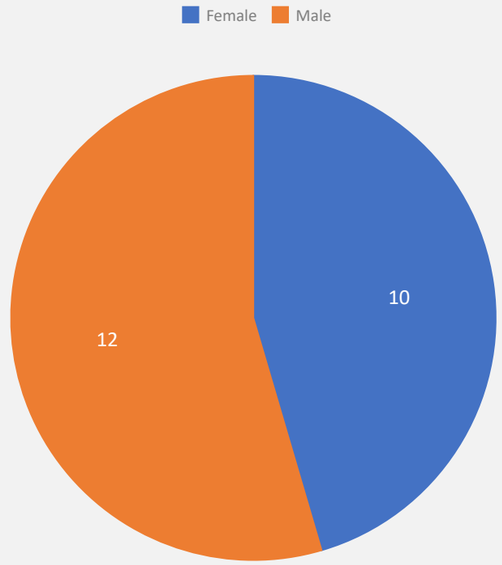
Vehicle Manoevre



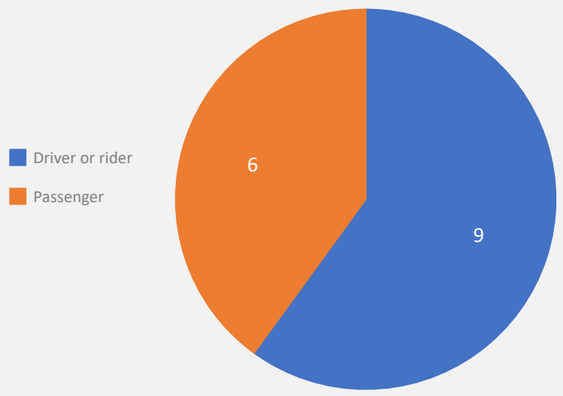
First Point of Impact



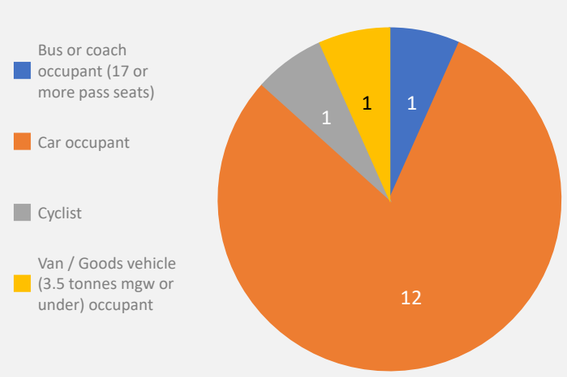
Sex of Driver



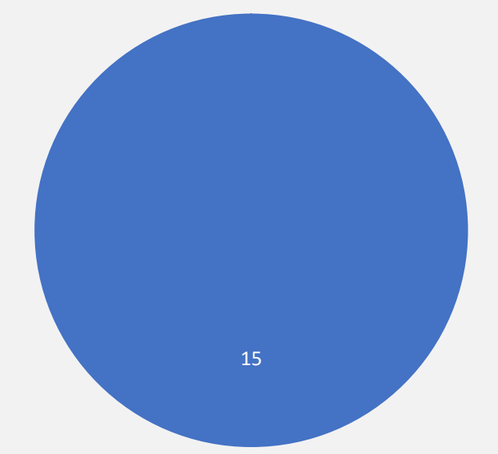
Casualty Class



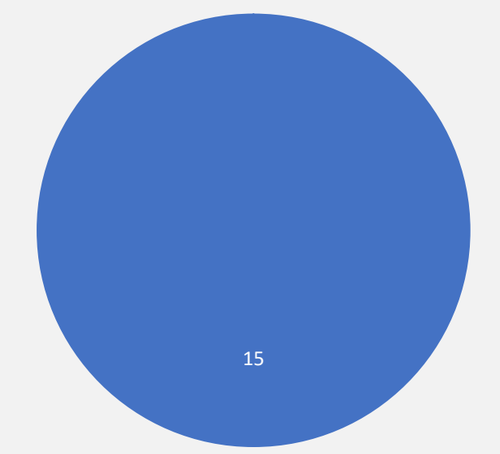
Casualty Type



Pedestrian Location



Pedestrian Movement



Date: 21/04/2021

Time: 20:02:54

Accident Data Detailled Reports - produced uing data obtained under free licence from
https://data.gov.uk/dataset/cb7ae6f0-4be6-4935-9277-47e5ce24a11f/road-safety-data

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
201514B047115	434702	406963	2	2	Slight	19/05/2015	Tuesday	11:14:00	E01007336

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Human Pedestrian Crossing
None within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Fine no high winds	Dry	None	None

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Crossroads	Give way or uncontrolled	A	635	Single carriageway	30 MPH	Unclassified	0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
1	Car	No tow/articulation	Going ahead other	Front	W	E		Approaching junction or waiting/parked at junction approach	None	None	Did not leave carriageway	None	No	Male		-1	-1	
2	Car	No tow/articulation	Going ahead other	Front	N	S		Entering main road	None	None	Did not leave carriageway	None	No	Female		1798	6	Petrol

Casualties

Reference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
1	1	Driver or rider	Male	44	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area
2	2	Driver or rider	Female	56	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
201514B079415	434702	406959	2	1	Slight	08/09/2015	Tuesday	16:50:00	E01007336

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Unknown	Dry	None	None

Human Pedestrian Crossing
None within 50 metres

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Crossroads	Give way or uncontrolled	A	635	Single carriageway	30 MPH	Unclassified	0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
1	Car	No tow/articulation	Waiting to go - held up	Nearside	E	W		Mid Junction - on roundabout or on main road	None	None	Nearside	None	No	Female		1399	7	Petrol
2	Car	No tow/articulation	Going ahead other	Offside	S	N		Mid Junction - on roundabout or on main road	None	None	Did not leave carriageway	None	No	Male		1950	16	Heavy oil

Casualties

Reference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
2	1	Passenger	Female	27	Slight	Not a Pedestrian	Not a Pedestrian	Front seat passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
2016140067080	434702	406963	2	1	Slight	04/05/2016	Wednesday	14:53:00	E01007336

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Human Pedestrian Crossing
None within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Fine no high winds	Dry	None	None

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Crossroads	Stop sign	A	635	Single carriageway	30 MPH	Unclassified	0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
1	Pedal cycle	No tow/articulation	Going ahead other	Front	W	E	Turning right	Approaching junction or waiting/parked at junction approach	None	None	Did not leave carriageway	None	No	Male		-1	-1	
2	Car	No tow/articulation	Going ahead other	Offside	S	N		Entering main road	None	None	Did not leave carriageway	None	No	Female		1588	12	Petrol

Casualties

Reference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
1	1	Driver or rider	Male	19	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Cyclist	Small town

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
2016140106566	434700	406966	2	3	Slight	12/09/2016	Monday	07:53:00	E01007410

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Human Pedestrian Crossing
None within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Fine no high winds	Dry	None	None

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Crossroads	Stop sign	A	635	Single carriageway	30 MPH	Unclassified	0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
2	Bus or coach (17 or more pass seats)	No tow/articulation	Moving off	Front	N	S		Entering main road	None	None	Did not leave carriageway	None	No	Female		4580	6	Heavy oil
1	Car	No tow/articulation	Going ahead other	Front	W	E		Mid Junction - on roundabout or on main road	None	None	Nearside	None	No	Female		1598	5	Petrol

Casualties

Reference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
1	1	Driver or rider	Female	25	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area
1	3	Passenger	Male	23	Slight	Not a Pedestrian	Not a Pedestrian	Front seat passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area
2	2	Driver or rider	Female	33	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Bus or coach occupant (17 or more pass seats)	Urban area

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
2016140113255	434704	406965	2	1	Slight	28/09/2016	Wednesday	08:12:00	E01007410

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Human Pedestrian Crossing
None within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Fine no high winds	Dry	None	None

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Crossroads	Give way or uncontrolled	A	635	Single carriageway	30 MPH	Unclassified	0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
2	Car	No tow/articulation	Going ahead other	Nearside	W	E		Mid Junction - on roundabout or on main road	None	None	Did not leave carriageway	None	No	Female		1995	5	Heavy oil
1	Car	No tow/articulation	Turning left	Front	N	E		Entering main road	None	None	Did not leave carriageway	None	No	Male		1598	6	Petrol

Casualties

Reference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
2	1	Driver or rider	Female	54	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
2017140205738	434621	406928	1	4	Slight	11/07/2017	Tuesday	21:33:00	E01007410

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Human Pedestrian Crossing
None within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Darkness - lights lit	Raining no high winds	Wet or damp	None	None

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Not at junction or within 20 metres	Data missing or out of range	Unclassified	0	Single carriageway	30 MPH		0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
1	Car	No tow/articulation	Slowing or stopping	Back	N	S		Not at or within 20 metres of junction	Skidded	None	Offside	None	No	Male		1197	4	Petrol

Casualties

Reference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
1	1	Driver or rider	Male	17	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Data missing or out of range
1	2	Passenger	Male	18	Slight	Not a Pedestrian	Not a Pedestrian	Front seat passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Data missing or out of range
1	3	Passenger	Female	16	Slight	Not a Pedestrian	Not a Pedestrian	Rear seat passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Data missing or out of range
1	4	Passenger	Female	17	Slight	Not a Pedestrian	Not a Pedestrian	Rear seat passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Data missing or out of range

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
2017140221364	434701	406966	2	1	Slight	12/09/2017	Tuesday	09:00:00	E01007410

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Human Pedestrian Crossing
None within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Fine no high winds	Dry	None	None

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Crossroads	Stop sign	A	635	Single carriageway	30 MPH	Unclassified	0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
1	Car	No tow/articulation	Going ahead other	Front	N	S		Approaching junction or waiting/parked at junction approach	None	None	Did not leave carriageway	None	No	Female		1560	1	Heavy oil
2	Car	No tow/articulation	Going ahead other	Nearside	W	E		Mid Junction - on roundabout or on main road	Skidded	None	Did not leave carriageway	None	No	Male		1399	-1	Petrol

Casualties

eference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
2	1	Passenger	Female	71	Slight	Not a Pedestrian	Not a Pedestrian	Front seat passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
2018140287673	434695	406979	7	1	Serious	08/04/2018	Sunday	11:17:00	E01007410

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	Yes	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Human Pedestrian Crossing
None within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Fine no high winds	Dry	None	None

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
T or staggered junction	Stop sign	Unclassified	0	Single carriageway	30 MPH	A	635

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
2	Van / Goods 3.5 tonnes mgw or under	No tow/articulation	Parked	Front	Parked	Parked		Cleared junction or waiting/parked at iunction exit	None	None	Did not leave carriageway	None	No	Male		1870	13	Heavy oil
3	Car	No tow/articulation	Parked	Offside	Parked	Parked		Cleared junction or waiting/parked at iunction exit	None	None	Did not leave carriageway	None	No	Female		1598	5	Petrol
4	Car	No tow/articulation	Parked	Nearside	Parked	Parked		Cleared junction or waiting/parked at iunction exit	None	None	Did not leave carriageway	None	No	Female		1997	13	Heavy oil
5	Car	No tow/articulation	Parked	Did not impact	Parked	Parked		Cleared junction or waiting/parked at iunction exit	None	None	Did not leave carriageway	None	No	Male		1598	3	Heavy oil
6	Car	No tow/articulation	Parked	Did not impact	Parked	Parked		Cleared junction or waiting/parked at iunction exit	None	None	Did not leave carriageway	None	No	Male		2179	11	Heavy oil
7	Car	No tow/articulation	Parked	Did not impact	Parked	Parked		Cleared junction or waiting/parked at iunction exit	None	None	Did not leave carriageway	None	No	Female		1596	11	Petrol
1	Car	No tow/articulation	Reversing	Back	W	N		Cleared junction or waiting/parked at iunction exit	None	Parked vehicle	Did not leave carriageway	None	No	Male		1360	12	Petrol

Casualties

Reference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
1	1	Driver or rider	Male	58	Serious	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Car occupant	Urban area

Accident Index	Easting	Northing	Number of Vehicles	Number of Casualties	Severity	Date	Day	Time	LSOA
2018140292632	434686	406959	2	1	Slight	01/05/2018	Tuesday	12:47:00	E01007410

Urban/Rural	Police Officer Attended	Police Force	District	Highway Authority
Urban	No	South Yorkshire	Barnsley	Barnsley

Physical Pedestrian Crossing
No physical crossing facilities within 50 metres

Lighting	Weather	Surface	SpecialConditions	Carriageway Hazards
Daylight	Fine no high winds	Dry	None	None

Human Pedestrian Crossing
None within 50 metres

JunctionDetail	JunctionControl	FirstRoadClass	1st_Road_Number	RoadType	SpeedLimit	SecondRoadClass	2nd_Road_Number
Not at junction or within 20 metres	Data missing or out of range	A	635	Single carriageway	30 MPH		0

Vehicles

Veh	VehicleType	Towing	Manoevre	First Point Of Impact	DirFrom	DirTo	VehLocation	JunctionLocation	SkidOrOverturn	VehHitObjInCW	VehleftCW	VehHitObjOFFCW	LHD	Sex	Age	Engine Size	'eh Ag	Propulsion
1	Van / Goods 3.5 tonnes mgw or under	No tow/articulation	Waiting to go - held up	Back	E	S		Not at or within 20 metres of junction	None	None	Did not leave carriageway	None	No	Male		1995	1	Heavy oil
2	Car	No tow/articulation	Going ahead other	Front	E	S		Not at or within 20 metres of junction	None	None	Did not leave carriageway	None	No	Male		1248	5	Heavy oil

Casualties

eference	Reference	CLASS	SEX	Casualty	SEVERITY	PedLocation	PedMovement	CarPass	BusPass	RoadWorker	CasualtyType	HomeArea
1	1	Driver or rider	Male	28	Slight	Not a Pedestrian	Not a Pedestrian	Not car passenger	Not a bus or coach passenger	No / Not applicable	Van / Goods vehicle (3.5 tonnes mgw or under) occupant	Urban area

Appendix C Traffic Surveys

ANSA Traffic & Construction Ltd.

Place:	**Barnsley**	**Weather:**	**Sunny**	**Survey Ref. No:**		**Page:** 1
Date:	**21.04.2021**	**Traffic entering on**	**County Way NB**	**Client:**		**of:** 4

Time	Left turn to:	A635 WB								Straight on to:	Stem Centre NB									Right turn to:	A635 EB									U turn to:	County Way SB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		2	
0715	0	0	0	2	1	0	0	0	3		0	0	0	0	0	0	0	0	0		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		5	
0730	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0		2	
0745	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		2	
0800	0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0		4	
0815	0	0	0	5	0	0	0	0	5		0	0	0	1	0	0	0	0	1		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		9	
0830	0	0	0	7	4	0	0	0	11		0	0	0	0	0	0	0	0	0		0	1	0	3	4	0	0	0	8		0	0	0	0	0	0	0	0	0		19	
0845	0	0	0	4	1	0	0	1	6		0	0	0	0	0	0	0	0	0		0	0	0	8	1	0	0	0	9		0	0	0	0	0	0	0	0	0		15	
0900	0	1	0	4	0	0	0	0	5		0	0	0	0	0	0	0	0	0		0	0	0	2	1	0	0	0	3		0	0	0	0	0	0	0	0	0		8	
0915	0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	6	3	0	0	0	9		0	0	0	0	0	0	0	0	0		11	
0930	0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	1	0	2		0	0	0	0	0	0	0	0	0		8	
0945	0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		6	
Totals	0	1	0	37	7	0	0	1	46		0	0	0	2	0	0	0	0	2		0	1	0	29	12	0	1	0	43		0	0	0	0	0	0	0	0	0		91	
1600	0	0	0	15	2	1	0	0	18		0	0	0	0	0	0	0	0	0		0	0	0	13	0	0	0	0	13		0	0	0	0	0	0	0	0	0		31	
1615	0	0	0	8	0	0	0	0	8		0	0	0	0	0	0	0	0	0		0	0	0	5	0	0	0	0	5		0	0	0	0	0	0	0	0	0		13	
1630	0	1	0	23	1	0	0	0	25		0	0	0	0	0	0	0	0	0		0	1	0	9	2	0	0	0	12		0	0	0	0	0	0	0	0	0		37	
1645	0	0	0	9	2	0	0	0	11		0	0	0	0	0	0	0	0	0		0	0	0	10	2	0	0	0	12		0	0	0	0	0	0	0	0	0		23	
1700	0	0	0	22	1	0	0	0	23		0	0	0	0	0	0	0	0	0		0	0	0	7	2	0	0	0	9		0	0	0	0	0	0	0	0	0		32	
1715	0	0	0	17	0	0	0	0	17		0	0	0	0	0	0	0	0	0		0	0	0	4	2	0	0	0	6		0	0	0	0	0	0	0	0	0		23	
1730	0	0	0	12	2	0	0	0	14		0	0	0	0	0	0	0	0	0		0	1	0	8	1	0	0	0	10		0	0	0	0	0	0	0	0	0		24	
1745	0	0	0	15	0	0	0	0	15		0	0	0	0	0	0	0	0	0		0	0	0	10	0	0	0	0	10		0	0	0	0	0	0	0	0	0		25	
1800	0	0	0	10	0	0	0	0	10		0	0	0	0	0	0	0	0	0		0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		16	
1815	0	0	0	8	0	0	0	0	8		0	0	0	0	0	0	0	0	0		0	0	0	4	0	0	0	0	4		0	0	0	0	0	0	0	0	0		12	
1830	0	0	0	9	0	0	0	0	9		0	0	0	0	0	0	0	0	0		0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		15	
1845	0	0	0	8	0	0	0	0	8		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		8	
Totals	0	1	0	156	8	1	0	0	166		0	0	0	0	0	0	0	0	0		0	2	0	82	9	0	0	0	93		0	0	0	0	0	0	0	0	0		259	

Place:	Barnsley	Weather:	Sunny	Survey Ref. No:		Page:	2
Date:	21.04.2021	Traffic entering on	A635 EB	Client:		of:	4

Time	Left turn to:	Stem Centre NB								Straight on to:	A635 EB									Right turn to:	County Way SB									U turn to:	A635 WB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	0	0	0	0	0	0		0	0	0	60	13	0	2	2	77		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		79	
0715	0	0	0	1	0	0	0	0	1		0	0	0	75	9	0	5	0	89		0	0	0	5	0	0	0	0	5		0	0	0	0	0	0	0	0	0		95	
0730	0	0	0	0	0	0	0	0	0		0	0	0	109	16	1	0	1	127		0	0	0	2	3	0	0	0	5		0	0	0	0	0	0	0	0	0		132	
0745	0	0	0	2	0	0	0	0	2		0	0	0	89	16	0	3	2	110		0	0	0	7	0	0	0	0	7		0	0	0	0	0	0	0	0	0		119	
0800	0	0	0	3	0	0	0	0	3		0	0	1	107	25	1	8	1	143		0	0	0	4	0	0	0	0	4		0	0	0	0	0	0	0	0	0		150	
0815	0	0	0	2	0	0	0	0	2		0	0	0	116	13	1	2	0	132		0	0	0	14	1	0	0	0	15		0	0	0	0	0	0	0	0	0		149	
0830	0	0	0	0	0	0	0	0	0		0	0	0	113	16	1	1	1	132		0	0	0	12	0	0	0	0	12		0	0	0	0	0	0	0	0	0		144	
0845	0	0	0	0	0	0	0	0	0		0	0	0	124	7	0	3	2	136		0	0	0	19	1	0	0	0	20		0	0	0	0	0	0	0	0	0		156	
0900	0	0	0	0	0	0	0	0	0		0	0	0	133	24	0	3	3	163		0	0	0	16	0	0	0	0	16		0	0	0	1	0	0	0	0	1		180	
0915	0	0	0	0	0	0	0	0	0		0	0	0	123	14	5	2	2	146		0	0	0	12	1	0	0	0	13		0	0	0	0	0	0	0	0	0		159	
0930	0	0	0	1	0	0	0	0	1		0	0	0	122	24	0	3	1	150		0	0	0	16	1	0	1	0	18		0	0	0	0	0	0	0	0	0		169	
0945	0	0	0	1	0	0	0	0	1		0	0	0	119	17	0	3	1	140		0	0	0	8	1	0	0	0	9		0	0	0	0	0	0	0	0	0		150	
Totals	0	0	0	9	1	0	0	0	10		0	0	1	####	194	9	35	16	####		0	0	0	117	8	0	1	0	126		0	0	0	1	0	0	0	0	1		1682	
1600	0	0	0	0	0	0	0	0	0		0	0	0	180	32	2	0	1	215		0	0	0	5	1	0	0	0	6		0	0	0	0	0	0	0	0	0		221	
1615	0	0	0	0	0	0	0	0	0		0	0	0	175	16	0	4	1	196		0	0	0	6	1	0	0	0	7		0	0	0	0	0	0	0	0	0		203	
1630	0	0	0	0	0	0	0	0	0		0	0	2	173	20	0	1	2	198		0	0	0	12	0	0	0	0	12		0	0	0	1	0	0	0	0	1		211	
1645	0	0	0	0	0	0	0	0	0		0	0	0	142	17	1	2	1	163		0	0	0	5	0	0	0	0	5		0	0	0	0	0	0	0	0	0		168	
1700	0	0	0	0	0	0	0	0	0		0	0	0	185	11	1	5	0	202		0	0	0	8	1	0	0	0	9		0	0	0	0	0	0	0	0	0		211	
1715	0	0	0	1	0	0	0	0	1		0	0	1	165	19	0	1	0	186		0	0	0	17	2	0	0	0	19		0	0	0	0	0	0	0	0	0		206	
1730	0	0	0	0	0	0	0	0	0		0	0	0	152	13	1	3	0	169		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		171	
1745	0	0	0	0	0	0	0	0	0		0	1	2	178	15	1	0	1	198		0	0	0	5	0	0	0	0	5		0	0	0	0	0	0	0	0	0		203	
1800	0	0	0	0	0	0	0	0	0		0	1	0	182	8	0	2	0	193		0	0	0	9	0	0	0	0	9		0	0	0	0	0	0	0	0	0		202	
1815	0	1	0	0	0	0	0	0	1		0	0	0	126	11	0	0	0	137		0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		144	
1830	0	0	0	0	0	0	0	0	0		0	1	0	116	8	0	0	1	126		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		128	
1845	0	0	0	0	0	0	0	0	0		0	0	0	103	12	0	0	0	115		0	0	0	4	0	0	0	0	4		0	0	0	0	0	0	0	0	0		119	
Totals	0	1	0	1	0	0	0	0	2		0	3	5	####	182	6	18	7	####		0	0	0	81	5	0	0	0	86		0	0	0	1	0	0	0	0	1		2187	

Place:	Barnsley	Weather:	Sunny	Survey Ref. No:		Page:	3
Date:	21.04.2021	Traffic entering on	Stem Centre SB	Client:		of:	4

Time	Left turn to:	A635 EB								Straight on to:	County Way SB								Right turn to:	A635 WB								U turn to:	Stem Centre NB								Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
0715	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
0730	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
0745	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
0800	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	1	
0815	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0	3	
0830	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	1	
0845	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	1	
0900	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
0915	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	1	
0930	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	1	
0945	0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	2	
Totals	0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	8	0	0	0	0	8		0	0	0	0	0	0	0	0	0	10	
1600	0	0	1	0	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	1	
1615	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
1630	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	1	
1645	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	2	
1700	0	0	0	3	0	0	0	0	3		0	0	0	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	
1715	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	1	
1730	0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	2	
1745	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	
1800	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0	2	
1815	0	0	0	0	0	0	0	0	0		0	1	0	0	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	1	
1830	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	1	
1845	0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	2	
Totals	0	0	1	8	0	0	0	0	9		0	1	0	3	0	0	0	0	4		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0	16	

Place:	Barnsley	Weather:	Sunny	Survey Ref. No:		Page:	4
Date:	21.04.2021	Traffic entering on	A635 WB	Client:		of:	4

Time	Left turn to:	County Way SB								Straight on to:	A635 WB									Right turn to:	Stem Centre NB									U turn to:	A635 EB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	0	2	0	0	0	2		0	0	0	43	5	1	1	1	51		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		53	
0715	0	0	0	4	2	0	0	0	6		0	0	0	66	12	4	0	0	82		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		90	
0730	0	0	0	6	0	0	0	0	6		0	0	1	80	14	1	1	1	98		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		107	
0745	0	0	0	12	1	0	0	0	13		0	0	0	98	18	0	2	2	120		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		134	
0800	0	0	0	16	2	0	0	0	18		0	0	0	115	11	0	3	2	131		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		152	
0815	0	0	0	27	1	0	0	1	29		0	0	0	108	11	0	3	0	122		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		152	
0830	0	0	0	22	1	0	0	0	23		0	0	0	132	11	3	2	1	149		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		172	
0845	0	0	0	44	2	1	0	1	48		0	0	0	108	5	0	0	1	114		0	0	0	1	0	0	0	0	1		0	0	0	2	0	0	0	0	2		165	
0900	0	0	0	25	2	0	0	0	27		0	0	1	79	3	0	4	1	88		0	0	1	0	0	0	0	0	1		0	0	0	1	0	0	0	0	1		117	
0915	0	0	0	22	4	0	0	0	26		0	0	0	78	10	0	2	1	91		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		117	
0930	0	0	0	14	3	0	0	0	17		0	0	0	68	12	0	2	1	83		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		101	
0945	0	0	0	12	2	0	0	0	14		0	0	0	67	11	2	6	1	87		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		101	
Totals	0	0	0	204	22	1	0	2	229		0	0	2	####	123	11	26	12	####		0	0	1	11	1	0	0	0	13		0	0	0	3	0	0	0	0	3		1461	
1600	0	0	0	6	0	0	0	0	6		0	0	0	84	9	0	3	0	96		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		103	
1615	0	0	0	5	1	0	0	0	6		0	0	0	87	7	0	0	1	95		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		102	
1630	0	0	0	6	0	1	0	0	7		0	0	0	82	6	1	0	1	90		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		97	
1645	0	0	0	12	1	0	1	0	14		0	0	0	85	8	0	1	0	94		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		108	
1700	0	0	0	3	1	0	0	0	4		0	0	0	105	5	1	3	1	115		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		119	
1715	0	0	0	8	2	0	0	0	10		0	0	0	73	5	0	1	0	79		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		89	
1730	0	0	0	2	1	0	0	0	3		0	0	0	93	8	0	0	0	101		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		104	
1745	0	0	0	2	0	0	0	0	2		0	0	1	57	3	0	0	1	62		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		64	
1800	0	0	0	2	0	0	0	0	2		0	0	0	79	2	0	0	0	81		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		83	
1815	0	0	0	2	0	0	0	0	2		0	0	0	77	3	0	0	0	80		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		82	
1830	0	0	0	11	0	0	0	0	11		0	0	0	78	4	0	1	0	83		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		94	
1845	0	0	0	5	1	0	0	0	6		0	0	0	70	2	0	0	1	73		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		79	
Totals	0	0	0	64	7	1	1	0	73		0	0	1	970	62	2	9	5	####		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		1124	

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Place:	**Barnsley**	**Weather:**	**Sunny**	**Survey Ref. No:**		**Page:** 1
Date:	**21.04.2021**	**Traffic entering on**	**Bridge Street NB**	**Client:**		**of:** 4

Time	Left turn to: A635 WB									Straight on to: Bridge Street NB									Right turn to: A635 EB									U turn to: Bridge Street SB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0715	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0730	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0745	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0800	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0815	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0830	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0845	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0900	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0915	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0930	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
0945	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
Totals	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1600	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1615	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1630	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1645	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1700	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1715	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1730	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1745	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1800	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1815	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1830	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
1845	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	
Totals	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	

Place:	Barnsley	Weather:	Sunny	Survey Ref. No:		Page:	2
Date:	21.04.2021	Traffic entering on	A635 EB	Client:		of:	4

Time	Left turn to:	Bridge Street NB								Straight on to:	A635 EB									Right turn to:	Bridge Street SB									U turn to:	A635 WB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	0	0	0	0	0	0		0	0	0	54	11	0	2	2	69		0	0	0	5	2	0	0	0	7		0	0	0	0	0	0	0	0	0		76	
0715	0	0	0	1	0	0	0	0	1		0	0	0	68	10	0	4	0	82		0	0	0	6	0	0	1	0	7		0	0	0	0	0	0	0	0	0		90	
0730	0	0	0	1	0	0	0	0	1		0	0	0	90	13	1	0	1	105		0	0	0	15	4	0	0	0	19		0	0	0	0	0	0	0	0	0		125	
0745	0	0	0	0	0	0	0	0	0		0	0	0	86	15	0	3	2	106		0	0	0	8	1	0	0	0	9		0	0	0	0	0	0	0	0	0		115	
0800	0	0	0	0	0	0	0	0	0		0	0	1	96	23	1	8	1	130		0	0	0	11	2	0	0	0	13		0	0	0	0	0	0	0	0	0		143	
0815	0	0	0	0	0	0	0	0	0		0	0	0	117	11	1	2	0	131		0	0	0	5	2	0	0	0	7		0	0	0	0	0	0	0	0	0		138	
0830	0	0	0	0	0	0	0	0	0		0	1	0	105	17	1	1	1	126		0	0	0	12	1	0	0	0	13		0	0	0	0	0	0	0	0	0		139	
0845	0	0	0	2	0	0	0	0	2		0	0	0	118	7	0	3	2	130		0	0	0	14	1	0	0	0	15		0	0	0	0	0	0	0	0	0		147	
0900	0	0	0	2	0	0	0	0	2		0	0	0	122	23	0	2	3	150		0	0	0	10	2	0	0	0	12		0	0	0	0	0	0	0	0	0		164	
0915	0	0	0	0	0	0	0	0	0		0	0	0	123	18	4	3	2	150		0	0	0	7	1	0	0	0	8		0	0	0	0	0	0	0	0	0		158	
0930	0	0	0	0	0	0	0	0	0		0	0	0	114	23	1	4	1	143		0	0	0	7	1	0	0	0	8		0	0	0	0	0	0	0	0	0		151	
0945	0	0	0	2	0	0	0	0	2		0	0	0	115	14	0	3	1	133		0	0	0	8	2	0	0	0	10		0	0	0	0	0	0	0	0	0		145	
Totals	0	0	0	8	0	0	0	0	8		0	1	1	####	185	9	35	16	####		0	0	0	108	19	0	1	0	128		0	0	0	0	0	0	0	0	0		1591	
1600	0	0	0	2	1	0	0	0	3		0	0	1	174	29	2	0	1	207		0	0	0	13	0	0	0	0	13		0	0	0	0	0	0	0	0	0		223	
1615	0	0	0	2	0	0	0	0	2		0	0	0	166	15	0	4	1	186		0	0	0	11	2	0	0	0	13		0	0	0	0	0	0	0	0	0		201	
1630	0	0	0	2	1	0	0	0	3		0	1	2	173	18	0	1	2	197		0	0	0	8	2	0	0	0	10		0	0	0	0	0	0	0	0	0		210	
1645	0	0	0	0	0	0	0	0	0		0	0	0	141	19	1	2	1	164		0	0	0	7	1	0	0	0	8		0	0	0	0	0	0	0	0	0		172	
1700	0	0	0	1	0	0	0	0	1		0	0	0	181	12	1	5	0	199		0	0	0	14	0	0	0	0	14		0	0	0	0	0	0	0	0	0		214	
1715	0	0	0	0	0	0	0	0	0		0	0	1	164	19	0	1	0	185		0	0	0	5	1	0	0	0	6		0	0	0	0	0	0	0	0	0		191	
1730	0	0	0	0	0	0	0	0	0		0	1	0	160	15	1	3	0	180		0	0	0	8	1	0	0	0	9		0	0	0	0	0	0	0	0	0		189	
1745	0	0	0	2	0	0	0	0	2		0	1	2	172	12	1	0	1	189		0	0	0	9	2	0	0	0	11		0	0	0	0	0	0	0	0	0		202	
1800	0	0	0	2	0	0	0	0	2		0	1	0	186	6	0	2	0	195		0	0	0	7	1	0	0	0	8		0	0	0	0	0	0	0	0	0		205	
1815	0	0	0	1	0	0	0	0	1		0	0	0	122	10	0	0	0	132		0	0	0	7	0	0	0	0	7		0	0	0	0	0	0	0	0	0		140	
1830	0	0	0	0	0	0	0	0	0		0	1	0	122	8	0	0	1	132		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		135	
1845	0	0	0	2	0	0	0	0	2		0	0	0	104	12	0	0	0	116		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		120	
Totals	0	0	0	14	2	0	0	0	16		0	5	6	####	175	6	18	7	####		0	0	0	93	11	0	0	0	104		0	0	0	0	0	0	0	0	0		2202	

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Place:	**Barnsley**	**Weather:**	**Sunny**	**Survey Ref. No:**		**Page:** **3**
Date:	**21.04.2021**	**Traffic entering on**	**Bridge Street SB**	**Client:**		**of:** **4**

Time	Left turn to: A635 EB									Straight on to: Bridge Street SB									Right turn to: A635 WB									U turn to: Bridge Street NB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	0	1	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		4	
0715	0	0	0	2	0	0	0	0	2		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		3	
0730	0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		4	
0745	0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		3	
0800	0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		4	
0815	0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	2	0	3		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		4	
0830	0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		2	
0845	0	0	0	0	0	0	0	0	0		0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		1	
0900	0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		3	
0915	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0		2	
0930	0	0	0	0	0	0	0	0	0		0	0	0	0	1	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		2	
0945	0	0	0	1	0	0	0	0	1		0	0	0	0	1	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		3	
Totals	0	0	0	12	2	0	0	0	14		0	0	0	5	3	0	2	0	10		0	0	0	9	2	0	0	0	11		0	0	0	0	0	0	0	0	0		35	
1600	0	0	0	3	1	0	0	0	4		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		5	
1615	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		1	
1630	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		2	
1645	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		1	
1700	0	0	0	2	0	0	0	0	2		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		3	
1715	0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		2	
1730	0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		3	
1745	0	0	0	1	0	0	0	0	1		0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		2	
1800	0	0	0	2	0	0	0	0	2		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		3	
1815	0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		1	
1830	0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		2	
1845	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0	0	0	1		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		2	
Totals	0	0	0	17	1	0	0	0	18		0	0	0	5	1	0	0	0	6		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		27	

Place:	**Barnsley**	**Weather:**	**Sunny**	**Survey Ref. No:**	
Date:	**21.04.2021**	**Traffic entering on**	**A635 WB**	**Client:**	

Page: 4 **of:** 4

Time	Left turn to:				Bridge Street SB						Straight on to:				A635 WB						Right turn to:				Bridge Street NB						U turn to:				A635 EB						Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	1	0	0	0	0	1		0	0	0	42	9	1	1	1	54		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		55	
0715	0	0	0	1	0	0	0	0	1		0	0	0	73	14	4	0	0	91		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		93	
0730	0	0	0	1	0	0	0	0	1		0	0	1	85	11	1	1	1	100		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		101	
0745	0	0	0	2	0	0	0	0	2		0	0	0	114	18	0	2	2	136		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		139	
0800	0	0	0	1	0	0	0	0	1		0	0	0	135	14	0	3	2	154		0	0	0	1	0	0	2	0	3		0	0	0	0	0	0	0	0	0		158	
0815	0	0	0	0	0	0	0	0	0		0	0	0	141	11	0	3	1	156		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		158	
0830	0	0	0	1	0	0	0	0	1		0	0	0	150	12	3	2	2	169		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		172	
0845	0	0	0	0	0	0	0	0	0		0	0	0	155	7	1	0	1	164		0	0	0	5	0	0	0	0	5		0	0	0	0	0	0	0	0	0		169	
0900	0	0	0	4	1	0	0	0	5		0	0	2	100	6	0	4	1	113		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		119	
0915	0	0	0	1	0	0	0	0	1		0	0	0	101	13	0	2	1	117		0	0	0	0	1	0	0	0	1		0	0	0	2	0	0	0	0	2		121	
0930	0	0	0	4	0	0	0	0	4		0	1	0	82	15	0	2	2	102		0	0	0	1	2	0	0	0	3		0	0	0	0	0	0	0	0	0		109	
0945	0	0	0	2	0	0	0	0	2		0	0	0	85	12	2	6	0	105		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		108	
Totals	0	0	0	18	1	0	0	0	19		0	1	3	####	142	12	26	14	####		0	0	0	14	4	0	2	0	20		0	0	0	2	0	0	0	0	2		1502	
1600	0	0	0	3	0	0	0	0	3		0	0	0	96	8	0	3	0	107		0	0	0	5	0	0	0	0	5		0	0	0	0	0	0	0	0	0		115	
1615	0	0	0	2	0	0	0	0	2		0	0	0	96	8	0	0	1	105		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		109	
1630	0	0	0	2	0	0	0	0	2		0	0	0	87	6	2	0	1	96		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		100	
1645	0	0	0	2	0	0	0	0	2		0	0	0	92	9	0	2	0	103		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		107	
1700	0	0	0	3	0	0	0	0	3		0	0	0	106	6	1	3	1	117		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		122	
1715	0	0	0	1	0	0	0	0	1		0	0	0	82	7	0	1	0	90		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		93	
1730	0	0	0	3	0	0	0	0	3		0	0	0	99	9	0	0	0	108		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		111	
1745	0	0	0	5	1	0	0	0	6		0	0	1	60	3	0	0	1	65		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		74	
1800	0	0	0	1	0	0	0	0	1		0	0	0	82	2	0	0	0	84		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		87	
1815	0	0	0	1	0	0	0	0	1		0	0	0	78	2	0	0	0	80		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		81	
1830	0	0	1	1	0	0	0	0	2		0	0	0	81	4	0	1	0	86		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		88	
1845	0	0	0	2	0	0	0	0	2		0	0	0	74	4	0	0	1	79		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		83	
Totals	0	0	1	26	1	0	0	0	28		0	0	1	####	68	3	10	5	####		0	0	0	19	3	0	0	0	22		0	0	0	0	0	0	0	0	0		1170	

ANSA Traffic & Construction Ltd.

Place:	**Barnsley**	**Weather:**	**Sunny**	**Survey Ref. No:**		**Page:** 1
Date:	**21.04.2021**	**Traffic entering on**	**Honeywell Street NB**	**Client:**		**of:** 4

Time	Left turn to:	A635 WB								Straight on to:	Honeywell Street NB									Right turn to:	A635 EB									U turn to:	Honeywell Street SB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	4	1	0	0	0	5		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		6	
0715	0	0	0	3	2	2	0	0	7		0	0	0	6	1	2	0	0	9		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		17	
0730	0	0	0	4	1	1	0	0	6		0	0	0	13	2	1	0	0	16		0	0	0	0	0	0	1	0	1		0	0	0	0	0	0	0	0	0		23	
0745	0	0	0	17	2	0	1	0	20		0	0	0	7	4	1	0	0	12		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		33	
0800	0	0	0	19	0	0	1	0	20		0	1	0	5	1	0	0	0	7		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		27	
0815	0	0	0	15	1	0	0	0	16		0	0	0	3	1	2	0	0	6		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		24	
0830	0	0	0	14	0	0	0	0	14		0	1	0	5	1	1	1	0	9		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		24	
0845	0	0	0	26	0	0	0	0	26		0	0	0	13	2	2	0	0	17		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		43	
0900	0	0	1	11	0	0	0	0	12		0	0	0	5	2	1	0	0	8		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		20	
0915	0	0	0	12	1	0	0	0	13		0	0	0	5	0	1	0	0	6		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		20	
0930	0	0	0	7	4	0	0	0	11		0	0	0	3	2	1	0	0	6		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		17	
0945	0	1	0	9	2	0	0	0	12		0	0	0	7	0	1	0	0	8		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		22	
Totals	0	1	1	141	14	3	2	0	162		0	2	0	73	16	13	1	0	105		0	0	0	7	1	0	1	0	9		0	0	0	0	0	0	0	0	0		276	
1600	0	0	0	11	0	0	0	0	11		0	0	0	11	1	1	0	0	13		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		24	
1615	0	0	0	10	3	0	0	0	13		0	0	0	3	1	0	1	0	5		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		18	
1630	0	0	0	14	0	0	0	0	14		0	0	0	6	1	0	1	0	8		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		22	
1645	0	0	0	12	0	0	0	0	12		0	0	0	3	2	0	0	0	5		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		19	
1700	0	0	0	23	2	0	0	0	25		0	0	0	12	0	1	0	0	13		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		38	
1715	0	0	0	11	0	0	0	0	11		0	0	0	11	1	1	0	0	13		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		24	
1730	0	0	0	15	0	0	0	0	15		0	0	0	9	3	1	0	0	13		0	0	0	0	1	0	0	0	1		0	0	0	0	0	0	0	0	0		29	
1745	0	0	0	9	0	0	0	0	9		0	0	0	12	0	1	0	0	13		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		22	
1800	0	0	0	2	1	0	0	0	3		0	0	0	4	0	1	0	0	5		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		8	
1815	0	0	0	4	0	0	0	0	4		0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		10	
1830	0	1	0	5	1	0	0	0	7		0	0	0	2	2	1	0	0	5		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		13	
1845	0	0	0	6	0	0	0	0	6		0	1	0	5	1	0	0	0	7		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		13	
Totals	0	1	0	122	7	0	0	0	130		0	1	0	84	12	7	2	0	106		0	0	0	3	1	0	0	0	4		0	0	0	0	0	0	0	0	0		240	

Place:	Barnsley	Weather:	Sunny	Survey Ref. No:		Page: 2
Date:	21.04.2021	Traffic entering on	A635 EB	Client:		of: 4

Time	Left turn to:	Honeywell Street NB								Straight on to:	A635 EB									Right turn to:	Honeywell Street SB									U turn to:	A635 WB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	0	0	0	0	0	0		0	0	0	59	12	0	2	2	75		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		75	
0715	0	0	0	1	0	0	0	0	1		0	0	0	67	10	0	4	0	81		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		83	
0730	0	0	0	5	1	1	0	0	7		0	0	0	87	11	0	0	1	99		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		107	
0745	0	0	0	1	2	0	0	0	3		0	0	0	82	15	0	3	2	102		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		107	
0800	0	0	0	5	2	0	1	0	8		0	0	1	87	19	1	7	1	116		0	0	0	2	1	0	0	0	3		0	0	0	0	0	0	0	0	0		127	
0815	0	0	0	3	0	0	0	0	3		0	0	0	107	11	1	2	0	121		0	0	0	8	1	0	0	0	9		0	0	0	0	0	0	0	0	0		133	
0830	0	1	0	4	3	0	0	0	8		0	0	0	102	13	1	1	1	118		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		128	
0845	0	0	0	4	1	0	0	0	5		0	0	0	112	5	0	3	2	122		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		129	
0900	0	0	0	6	1	0	0	0	7		0	0	0	114	22	0	2	3	141		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		151	
0915	0	0	0	9	0	0	0	0	9		0	0	0	112	19	4	3	2	140		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		151	
0930	0	0	0	5	2	0	2	0	9		0	0	0	107	18	1	2	1	129		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		140	
0945	0	0	0	5	1	0	1	0	7		0	0	0	107	13	0	2	1	123		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		132	
Totals	0	1	0	48	13	1	4	0	67		0	0	1	####	168	8	31	16	####		0	0	0	25	4	0	0	0	29		0	0	0	0	0	0	0	0	0		1463	
1600	0	0	0	8	5	1	0	0	14		0	0	1	166	29	1	0	1	198		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		214	
1615	0	0	0	8	0	0	0	0	8		0	0	0	157	14	0	5	1	177		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		186	
1630	0	0	0	5	0	0	0	0	5		0	1	2	165	18	0	1	2	189		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		196	
1645	0	0	0	7	2	0	0	0	9		0	0	0	134	14	1	2	1	152		0	0	0	1	3	0	0	0	4		0	0	0	0	0	0	0	0	0		165	
1700	0	0	0	6	0	0	0	0	6		0	0	0	168	10	1	4	0	183		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		192	
1715	0	0	0	5	0	0	0	0	5		0	0	0	163	18	0	2	0	183		0	0	0	1	1	0	0	0	2		0	0	0	0	0	0	0	0	0		190	
1730	0	0	0	6	0	0	0	0	6		0	1	1	153	15	1	2	0	173		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		181	
1745	0	0	1	6	1	0	0	0	8		0	1	1	164	12	1	0	1	180		0	0	0	4	0	0	0	0	4		0	0	0	0	0	0	0	0	0		192	
1800	0	0	0	7	0	0	0	0	7		0	1	0	180	5	0	2	0	188		0	0	0	2	1	0	0	0	3		0	0	0	0	0	0	0	0	0		198	
1815	0	0	0	1	0	0	0	0	1		0	0	0	121	10	0	0	0	131		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		133	
1830	0	0	0	6	0	0	0	0	6		0	0	0	119	6	0	0	1	126		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		132	
1845	0	0	0	4	1	0	0	0	5		0	0	0	99	10	0	0	0	109		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		114	
Totals	0	0	1	69	9	1	0	0	80		0	4	5	####	161	5	18	7	####		0	0	0	18	6	0	0	0	24		0	0	0	0	0	0	0	0	0		2093	

Place:	Barnsley	Weather:	Sunny	Survey Ref. No:		Page:	3
Date:	21.04.2021	Traffic entering on	Honeywell Street SB	Client:		of:	4

Time	Left turn to:	A635 EB								Straight on to:	Honeywell Street SB									Right turn to:	A635 WB									U turn to:	Honeywell Street NB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	6	2	0	1	0	9		0	0	0	4	2	0	0	0	6		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		15	
0715	0	0	0	8	3	0	0	0	11		0	0	0	6	3	1	0	0	10		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		24	
0730	0	0	0	10	1	0	1	0	12		0	1	0	5	1	1	0	1	9		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		24	
0745	0	0	0	5	2	0	0	0	7		0	0	0	10	1	0	0	0	11		0	0	0	1	0	0	0	0	1		0	0	0	0	0	0	0	0	0		19	
0800	0	0	0	17	0	0	0	0	17		0	1	0	9	0	1	0	0	11		0	0	0	5	1	0	2	0	8		0	0	0	0	0	0	0	0	0		36	
0815	0	0	0	6	3	0	0	0	9		0	0	0	12	1	2	0	0	15		0	0	0	1	2	0	0	0	3		0	0	0	0	0	0	0	0	0		27	
0830	0	0	2	8	3	0	1	0	14		0	0	0	10	1	0	0	0	11		0	0	0	7	0	0	0	0	7		0	0	0	0	0	0	0	0	0		32	
0845	0	0	0	19	5	0	0	0	24		0	0	0	7	2	1	0	0	10		0	0	0	10	0	0	0	0	10		0	0	0	0	0	0	0	0	0		44	
0900	0	0	0	9	0	0	2	0	11		0	0	0	9	0	1	1	0	11		0	0	0	9	0	0	0	0	9		0	0	0	0	0	0	0	0	0		31	
0915	0	0	0	15	4	0	0	0	19		0	0	0	10	2	2	0	0	14		0	0	0	7	1	0	0	0	8		0	0	0	0	0	0	0	0	0		41	
0930	0	0	0	14	3	0	1	0	18		0	0	0	10	1	1	0	0	12		0	0	0	7	0	0	0	0	7		0	0	0	0	0	0	0	0	0		37	
0945	0	0	0	10	2	0	1	0	13		0	0	0	8	1	1	0	0	10		0	0	0	3	3	0	0	0	6		0	0	0	0	0	0	0	0	0		29	
Totals	0	0	2	127	28	0	7	0	164		0	2	0	100	15	11	1	1	130		0	0	0	56	7	0	2	0	65		0	0	0	0	0	0	0	0	0		359	
1600	0	0	1	13	4	1	0	0	19		0	0	1	11	1	1	0	0	14		0	0	0	7	2	0	0	0	9		0	0	0	0	0	0	0	0	0		42	
1615	0	0	0	24	4	0	0	0	28		0	0	0	9	1	1	0	0	11		0	0	0	2	0	0	0	0	2		0	0	0	0	0	0	0	0	0		41	
1630	0	0	0	14	1	0	0	0	15		0	0	0	14	0	1	0	0	15		0	0	0	5	0	0	0	0	5		0	0	0	0	0	0	0	0	0		35	
1645	0	0	0	14	2	0	0	0	16		0	0	0	10	1	1	0	0	12		0	0	0	3	1	0	0	0	4		0	0	0	0	0	0	0	0	0		32	
1700	0	0	0	17	1	0	0	0	18		0	0	0	9	0	2	0	0	11		0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		35	
1715	0	0	0	10	0	0	0	0	10		0	0	0	12	1	0	0	0	13		0	0	0	4	0	0	0	0	4		0	0	0	0	0	0	0	0	0		27	
1730	0	0	0	16	3	0	0	0	19		0	0	0	7	0	1	0	0	8		0	0	0	4	1	0	0	0	5		0	0	0	0	0	0	0	0	0		32	
1745	0	0	0	9	0	0	0	0	9		0	0	0	5	0	2	0	0	7		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		19	
1800	0	1	0	13	2	0	0	0	16		0	0	0	8	2	1	0	0	11		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		30	
1815	0	0	0	10	2	0	0	0	12		0	0	0	6	0	1	0	0	7		0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		25	
1830	0	0	0	18	3	0	0	0	21		0	0	0	10	0	0	0	0	10		0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0		31	
1845	0	0	0	11	0	0	0	0	11		0	0	0	11	0	1	0	0	12		0	0	0	4	0	0	0	0	4		0	0	0	0	0	0	0	0	0		27	
Totals	0	1	1	169	22	1	0	0	194		0	0	1	112	6	12	0	0	131		0	0	0	47	4	0	0	0	51		0	0	0	0	0	0	0	0	0		376	

Place:	Barnsley	Weather:	Sunny	Survey Ref. No:		Page:	4
Date:	21.04.2021	Traffic entering on	A635 WB	Client:		of:	4

Time	Left turn to:	Honeywell Street SB								Straight on to:	A635 WB									Right turn to:	Honeywell Street NB									U turn to:	A635 EB									Total	
Begin		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs		PC	MC	Cars	LGV	Bus	OGV1	OGV2	Vehs	PCUs	Vehs	PCUs
0700	0	0	0	1	0	0	0	0	1		0	0	0	38	8	1	1	1	49		0	0	0	6	0	0	0	0	6		0	0	0	0	0	0	0	0	0		56	
0715	0	0	0	0	0	0	0	0	0		0	0	0	67	12	2	0	0	81		0	0	0	3	0	0	0	0	3		0	0	0	0	0	0	0	0	0		84	
0730	0	0	0	0	0	0	0	0	0		0	0	1	77	9	0	1	1	89		0	0	0	3	3	0	0	0	6		0	0	0	0	0	0	0	0	0		95	
0745	0	0	0	1	0	0	0	0	1		0	0	0	98	17	0	1	2	118		0	0	0	5	1	0	0	0	6		0	0	0	0	0	0	0	0	0		125	
0800	0	0	0	0	0	0	0	0	0		0	0	0	114	12	0	3	2	131		0	0	0	14	1	0	0	0	15		0	0	0	0	0	0	0	0	0		146	
0815	0	0	0	0	0	0	0	0	0		0	0	0	125	8	1	2	1	137		0	0	0	13	1	0	0	0	14		0	0	0	0	0	0	0	0	0		151	
0830	0	0	0	0	0	0	0	0	0		0	0	0	130	13	2	2	2	149		0	0	1	14	3	0	0	0	18		0	0	0	0	0	0	0	0	0		167	
0845	0	0	0	1	0	0	0	0	1		0	0	0	123	8	1	1	1	134		0	0	0	21	2	0	0	0	23		0	0	0	0	0	0	0	0	0		158	
0900	0	0	0	0	0	0	0	0	0		0	0	1	87	6	0	3	1	98		0	0	0	12	6	0	0	0	18		0	0	0	0	0	0	0	0	0		116	
0915	0	0	0	0	0	0	0	0	0		0	0	0	88	12	0	2	1	103		0	0	0	11	0	0	1	0	12		0	0	0	0	0	0	0	0	0		115	
0930	0	0	0	0	0	0	0	0	0		0	0	0	71	13	0	2	2	88		0	0	0	6	3	0	0	0	9		0	0	0	0	0	0	0	0	0		97	
0945	0	0	0	0	0	0	0	0	0		0	0	0	77	7	2	4	0	90		0	0	0	9	3	0	1	0	13		0	0	0	0	0	0	0	0	0		103	
Totals	0	0	0	3	0	0	0	0	3		0	0	2	####	125	9	22	14	####		0	0	1	117	23	0	2	0	143		0	0	0	0	0	0	0	0	0		1413	
1600	0	0	0	0	0	0	0	0	0		0	0	0	85	7	0	3	0	95		0	0	0	11	2	0	0	0	13		0	0	0	0	0	0	0	0	0		108	
1615	0	0	0	0	0	0	0	0	0		0	0	0	91	5	0	0	1	97		0	0	0	16	5	0	1	0	22		0	0	0	0	0	0	0	0	0		119	
1630	0	0	0	0	0	0	0	0	0		0	0	0	73	6	2	1	1	83		0	0	0	16	1	0	1	0	18		0	0	0	0	0	0	0	0	0		101	
1645	0	0	0	0	0	0	0	0	0		0	0	0	80	8	0	1	0	89		0	0	0	14	0	0	0	0	14		0	0	0	0	0	0	0	0	0		103	
1700	0	0	0	0	0	0	0	0	0		0	0	0	82	5	1	3	1	92		0	0	0	17	2	0	1	0	20		0	0	0	0	0	0	0	0	0		112	
1715	0	0	0	1	1	0	0	0	2		0	0	0	73	8	0	1	0	82		0	0	0	16	0	0	0	0	16		0	0	0	0	0	0	0	0	0		100	
1730	0	0	0	0	0	0	0	0	0		0	0	0	82	8	0	0	0	90		0	0	0	18	0	0	1	0	19		0	0	0	0	0	0	0	0	0		109	
1745	0	0	0	0	0	0	0	0	0		0	0	1	54	4	0	0	1	60		0	0	0	18	0	0	0	0	18		0	0	0	0	0	0	0	0	0		78	
1800	0	0	0	0	0	0	0	0	0		0	0	0	78	2	0	0	0	80		0	0	0	15	1	0	0	0	16		0	0	0	0	0	0	0	0	0		96	
1815	0	0	0	0	0	0	0	0	0		0	0	0	68	2	0	0	0	70		0	0	0	21	3	0	0	0	24		0	0	0	0	0	0	0	0	0		94	
1830	0	0	0	1	0	0	0	0	1		0	0	1	78	3	0	1	0	83		0	0	0	11	1	0	1	0	13		0	0	0	0	0	0	0	0	0		97	
1845	0	0	0	0	0	0	0	0	0		0	0	0	68	4	0	0	1	73		0	0	0	18	2	0	0	0	20		0	0	0	0	0	0	0	0	0		93	
Totals	0	0	0	2	1	0	0	0	3		0	0	2	912	62	3	10	5	994		0	0	0	191	17	0	5	0	213		0	0	0	0	0	0	0	0	0		1210	

Appendix D Distribution

Employmei	Home OA	Commuter	Percentage
E00037558	E00037086	1	0.50%
E00037558	E00037087	1	0.50%
E00037558	E00037091	1	0.50%
E00037558	E00037098	1	0.50%
E00037558	E00037105	1	0.50%
E00037558	E00037107	1	0.50%
E00037558	E00037133	1	0.50%
E00037558	E00037136	1	0.50%
E00037558	E00037137	1	0.50%
E00037558	E00037138	2	1.00%
E00037558	E00037140	1	0.50%
E00037558	E00037142	1	0.50%
E00037558	E00037168	1	0.50%
E00037558	E00037171	1	0.50%
E00037558	E00037172	1	0.50%
E00037558	E00037174	1	0.50%
E00037558	E00037176	2	1.00%
E00037558	E00037183	1	0.50%
E00037558	E00037194	1	0.50%
E00037558	E00037200	1	0.50%
E00037558	E00037201	1	0.50%
E00037558	E00037202	1	0.50%
E00037558	E00037208	1	0.50%
E00037558	E00037210	1	0.50%
E00037558	E00037211	1	0.50%
E00037558	E00037213	1	0.50%
E00037558	E00037218	1	0.50%
E00037558	E00037220	2	1.00%
E00037558	E00037226	1	0.50%
E00037558	E00037227	1	0.50%
E00037558	E00037229	1	0.50%
E00037558	E00037230	1	0.50%
E00037558	E00037239	2	1.00%
E00037558	E00037241	1	0.50%
E00037558	E00037242	1	0.50%
E00037558	E00037244	1	0.50%
E00037558	E00037246	1	0.50%
E00037558	E00037251	1	0.50%
E00037558	E00037261	1	0.50%
E00037558	E00037276	1	0.50%
E00037558	E00037287	1	0.50%
E00037558	E00037290	1	0.50%
E00037558	E00037295	1	0.50%
E00037558	E00037297	1	0.50%
E00037558	E00037309	1	0.50%
E00037558	E00037312	1	0.50%
E00037558	E00037317	2	1.00%
E00037558	E00037346	1	0.50%
E00037558	E00037369	1	0.50%

E00037558	E00037398	1	0.50%
E00037558	E00037403	1	0.50%
E00037558	E00037411	1	0.50%
E00037558	E00037425	2	1.00%
E00037558	E00037437	1	0.50%
E00037558	E00037439	1	0.50%
E00037558	E00037444	1	0.50%
E00037558	E00037447	2	1.00%
E00037558	E00037451	1	0.50%
E00037558	E00037482	1	0.50%
E00037558	E00037483	1	0.50%
E00037558	E00037494	1	0.50%
E00037558	E00037507	2	1.00%
E00037558	E00037508	2	1.00%
E00037558	E00037510	1	0.50%
E00037558	E00037516	1	0.50%
E00037558	E00037519	1	0.50%
E00037558	E00037522	1	0.50%
E00037558	E00037530	1	0.50%
E00037558	E00037533	3	1.49%
E00037558	E00037535	1	0.50%
E00037558	E00037538	3	1.49%
E00037558	E00037539	2	1.00%
E00037558	E00037541	1	0.50%
E00037558	E00037542	2	1.00%
E00037558	E00037548	4	1.99%
E00037558	E00037555	1	0.50%
E00037558	E00037558	2	1.00%
E00037558	E00037562	1	0.50%
E00037558	E00037563	3	1.49%
E00037558	E00037566	1	0.50%
E00037558	E00037585	1	0.50%
E00037558	E00037586	1	0.50%
E00037558	E00037590	1	0.50%
E00037558	E00037591	1	0.50%
E00037558	E00037596	2	1.00%
E00037558	E00037602	1	0.50%
E00037558	E00037603	2	1.00%
E00037558	E00037604	1	0.50%
E00037558	E00037605	1	0.50%
E00037558	E00037608	1	0.50%
E00037558	E00037622	1	0.50%
E00037558	E00037627	1	0.50%
E00037558	E00037634	1	0.50%
E00037558	E00037646	1	0.50%
E00037558	E00037647	1	0.50%
E00037558	E00037660	1	0.50%
E00037558	E00037668	1	0.50%
E00037558	E00037674	2	1.00%
E00037558	E00037681	1	0.50%

E00037558	E00037700	1	0.50%
E00037558	E00037706	1	0.50%
E00037558	E00037709	1	0.50%
E00037558	E00037710	1	0.50%
E00037558	E00037714	2	1.00%
E00037558	E00037722	1	0.50%
E00037558	E00037725	1	0.50%
E00037558	E00037727	2	1.00%
E00037558	E00037733	1	0.50%
E00037558	E00037734	1	0.50%
E00037558	E00037735	1	0.50%
E00037558	E00037737	1	0.50%
E00037558	E00037738	1	0.50%
E00037558	E00037741	1	0.50%
E00037558	E00037753	1	0.50%
E00037558	E00037756	2	1.00%
E00037558	E00037765	2	1.00%
E00037558	E00037775	1	0.50%
E00037558	E00037779	2	1.00%
E00037558	E00037785	1	0.50%
E00037558	E00037786	1	0.50%
E00037558	E00037793	2	1.00%
E00037558	E00037800	1	0.50%
E00037558	E00037801	1	0.50%
E00037558	E00037811	1	0.50%
E00037558	E00038618	1	0.50%
E00037558	E00038974	1	0.50%
E00037558	E00038982	1	0.50%
E00037558	E00038988	1	0.50%
E00037558	E00039066	1	0.50%
E00037558	E00039215	1	0.50%
E00037558	E00039565	1	0.50%
E00037558	E00039583	1	0.50%
E00037558	E00039596	1	0.50%
E00037558	E00039607	1	0.50%
E00037558	E00039836	1	0.50%
E00037558	E00040011	1	0.50%
E00037558	E00040145	1	0.50%
E00037558	E00040146	1	0.50%
E00037558	E00040153	1	0.50%
E00037558	E00040315	1	0.50%
E00037558	E00040434	1	0.50%
E00037558	E00041034	1	0.50%
E00037558	E00055481	1	0.50%
E00037558	E00056006	1	0.50%
E00037558	E00056039	1	0.50%
E00037558	E00056218	1	0.50%
E00037558	E00056456	1	0.50%
E00037558	E00056552	1	0.50%
E00037558	E00056565	1	0.50%

E00037558	E00056566	1	0.50%
E00037558	E00059296	1	0.50%
E00037558	E00059351	1	0.50%
E00037558	E00059452	1	0.50%
E00037558	E00060099	1	0.50%
E00037558	E00060177	1	0.50%
E00037558	E00060242	1	0.50%
E00037558	E00069506	1	0.50%
E00037558	E00098564	1	0.50%
E00037558	E00098858	1	0.50%
E00037558	E00100137	1	0.50%
E00037558	E00142838	1	0.50%
E00037558	E00168689	1	0.50%
E00037558	E00168698	2	1.00%
E00037558	E00168702	1	0.50%
E00037558	E00168705	1	0.50%
E00037558	E00168708	1	0.50%
E00037558	E00168726	1	0.50%
E00037558	E00168747	1	0.50%
E00037558	E00172378	1	0.50%
E00037558	E00172521	1	0.50%
		201	100%

Appendix E Traffic Network Spreadsheets

Proposed Car Park - Barnsley

	A	B	C	D	
A	0	1	0	5	6
B	51	0	5	543	599
C	1	21	0	25	47
D	118	516	5	2	641
	170	538	10	575	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	21	21
C	0	0	0	1	1
D	3	15	0	0	18
	3	15	0	22	

	A	B	C	D	
A	0	1	0	5	6
B	51	0	5	558	613.6
C	1	20	0	26	47.5
D	122	528	5	2	656.8
	173.6	549.4	10	590.9	

	A	B	C	
A			538	538
B				0
C	519			519
	519	0	538	

	A	B	C	
A			15	15
B				0
C	21			21
	21	0	15	

	A	B	C	
A			549.4	549.4
B				0
C	532.8			532.8
	532.8	0	549.4	

	A	B	C	D	
A	0	4	5	2	11
B	48	0	2	517	567
C	0	0	0	0	0
D	0	643	12	0	655
	48	647	19	519	

	A	B	C	D	
A	0	0	2	0	2
B	0	0	0	21	21
C	0	0	0	0	0
D	0	18	2	0	20
	0	18	4	21	

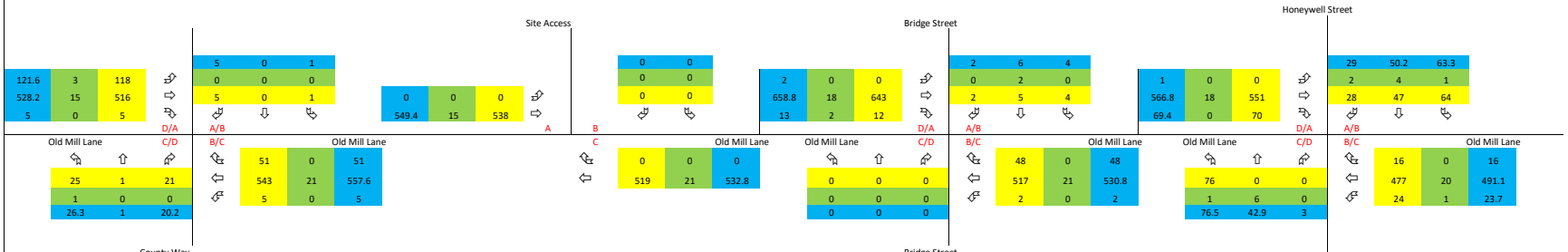
	A	B	C	D	
A	0	4	6	2	12
B	48	0	2	531	580.8
C	0	0	0	0	0
D	2	659	13	0	673.8
	50	662.8	21	532.8	

	A	B	C	D	
A	0	64	47	28	139
B	16	0	24	477	517
C	0	0	0	76	76
D	0	551	70	0	621
	16	615	141	581	

	A	B	C	D	
A	0	1	4	2	7
B	0	0	1	20	21
C	6	0	0	1	7
D	0	18	0	0	18
	6	19	5	23	

	A	B	C	D	
A	0	63	50	29	142.5
B	16	0	24	491	530.8
C	43	3	0	77	122.4
D	1	567	69	0	637.2
	59.9	633.1	143.3	596.6	

Vehicles
Heavies
PCU



Transposed for Junction Model

Vehicles	A	B	C	D
A		118	516	5
B	5		1	0
C	543	51		5
D	25	1	21	

Heavies	A	B	C	D
A		3	15	0
B	0		0	0
C	21	0		0
D	1	0	0	

PCU	A	B	C	D
A		121.6	528.2	5
B	5		1	0
C	557.6	51		5
D	26.3	1	20.2	

HGV%

PCU	A	B	C	D
A	-	3	3	0
B	0	-	0	-
C	4	0	-	0
D	4	0	0	-

Transposed for Junction Model

	A	B	C	D
A		0	643	12
B	2		4	5
C	517	48		2
D	0	0	0	

	A	B	C	D
A		0	18	2
B	0		0	2
C	21	0		0
D	0	0	0	

	A	B	C	D
A		2	658.8	13
B	2		4	6
C	530.8	48		2
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	3	17
B	0	-	0	40
C	4	0	-	0
D	-	-	-	-

Transposed for Junction Model

	A	B	C	D
A		0	551	70
B	28		64	47
C	477	16		24
D	76	0	0	

	A	B	C	D
A		0	18	0
B	2		1	4
C	20	0		1
D	1	6	0	

	A	B	C	D
A		1	566.8	69.4
B	29		63.3	50.2
C	491.1	16		23.7
D	76.5	42.9	3	

HGV%

PCU	A	B	C	D
A	-	-	3	0
B	7	-	2	9
C	4	0	-	4
D	1	-	-	-

#VALUE!

TIME PERIOD: 08:00AM - 09:00AM NETWORK PEAK HOUR
SHEET TITLE: AM Peak Hour Survey

Proposed Car Park - Barnsley

	A	B	C	D	
A	0	4	1	1	6
B	33	1	0	759	793
C	0	38	0	67	105
D	31	394	1	0	426
	64	437	2	827	

	A	B	C	
A	AA	AB	AC	0
B	BA	BB	BC	0
C	CA	CB	CC	0
	0	0	0	

	A	B	C	D	
A	0	5	1	1	7
B	45	0	6	746	797
C	0	0	0	0	0
D	0	421	8	0	429
	45	426	15	747	

	A	B	C	D	
A	0	77	49	17	143
B	10	0	28	701	739
C	31	2	0	64	97
D	0	361	74	0	435
	41	440	151	782	

Vehicles
Heavies
PCU

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	18	18
C	0	0	0	0	0
D	2	9	0	0	11
	2	9	0	18	

	A	B	C	
A	AA	AB	AC	0
B	BA	BB	BC	0
C	CA	CB	CC	0
	0	0	0	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	18	18
C	0	0	0	0	0
D	0	11	0	0	11
	0	11	0	18	

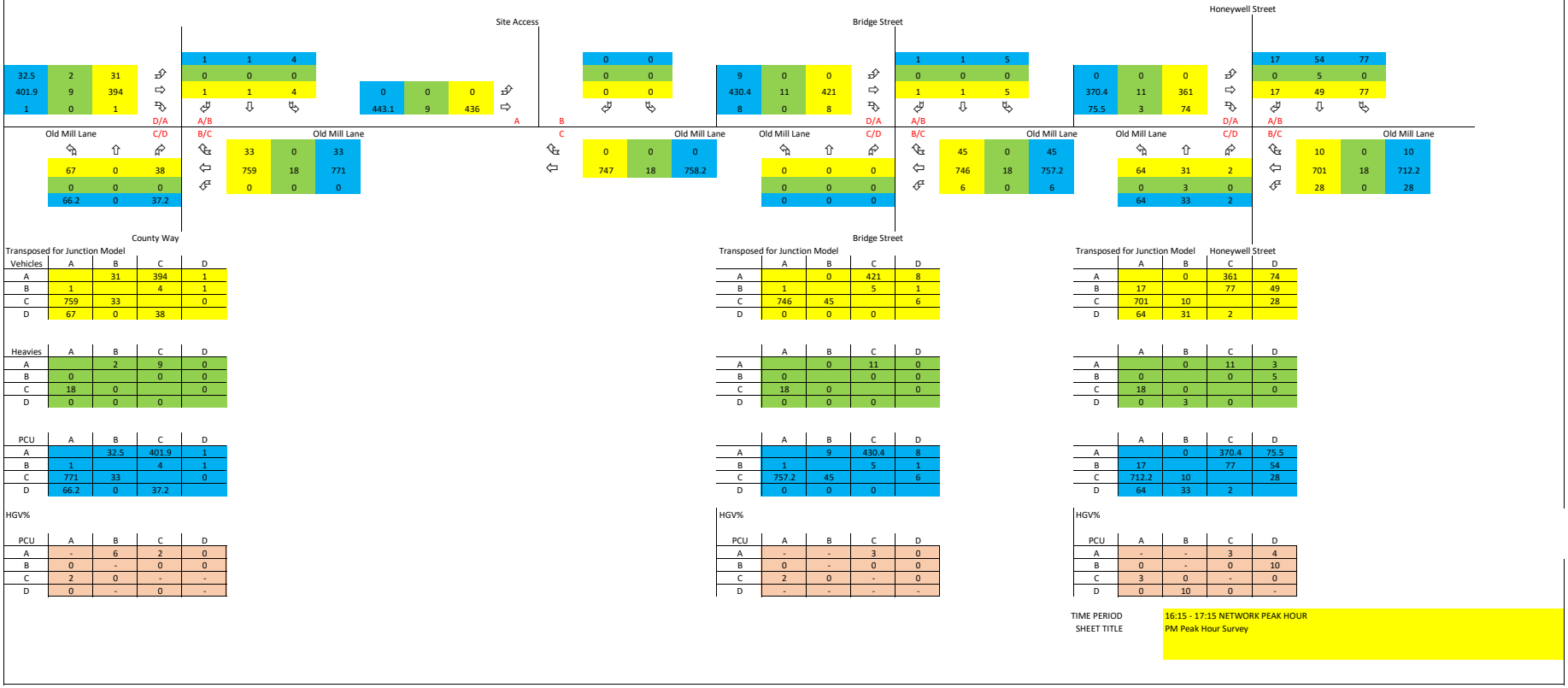
	A	B	C	D	
A	0	0	5	0	5
B	0	0	0	18	18
C	3	0	0	0	3
D	0	11	3	0	14
	3	11	8	18	

	A	B	C	D	
A	0	4	1	1	6
B	33	1	0	771	805
C	0	37	0	66	103.4
D	33	402	1	0	435.4
	65.5	444.1	2	838.2	

	A	B	C	
A	AA	AB	AC	0
B	BA	BB	BC	0
C	CA	CB	CC	0
	0	0	0	

	A	B	C	D	
A	0	5	1	1	7
B	45	0	6	757	808.2
C	0	0	0	0	0
D	9	430	8	0	447.4
	54	435.4	15	758.2	

	A	B	C	D	
A	0	77	54	17	148
B	10	0	28	712	750.2
C	33	2	0	64	99
D	0	370	76	0	445.9
	43	449.4	157.5	793.2	



Transposed for Junction Model

Vehicles	A	B	C	D
A		31	394	1
B	1		4	1
C	759	33		0
D	67	0	38	

Heavies	A	B	C	D
A		2	9	0
B	0		0	0
C	18	0		0
D	0	0	0	

PCU	A	B	C	D
A		32.5	401.9	1
B	1		4	1
C	771	33		0
D	66.2	0	37.2	

HGV%

PCU	A	B	C	D
A	-	6	2	0
B	0	-	0	0
C	2	0	-	-
D	0	-	0	-

Transposed for Junction Model

	A	B	C	D
A		0	421	8
B	1		5	1
C	746	45		6
D	0	0	0	

	A	B	C	D
A		0	11	0
B	0		0	0
C	18	0		0
D	0	0	0	

	A	B	C	D
A		9	430.4	8
B	1		5	1
C	757.2	45		6
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	3	0
B	0	-	0	0
C	2	0	-	0
D	-	-	-	-

Transposed for Junction Model

	A	B	C	D
A		0	361	74
B	17		77	49
C	701	10		28
D	64	31	2	

	A	B	C	D
A		0	11	3
B	0		0	5
C	18	0		0
D	0	3	0	

	A	B	C	D
A		0	370.4	75.5
B	17		77	54
C	712.2	10		28
D	64	33	2	

HGV%

PCU	A	B	C	D
A	-	-	3	4
B	0	-	0	10
C	3	0	-	0
D	0	10	0	-

TIME PERIOD: 16:15 - 17:15 NETWORK PEAK HOUR
SHEET TITLE: PM Peak Hour Survey

TEMPRO AM

Level	Area	Local Growth Figure
Region	YH	1.044335
County	South York	1.044033
Authority	Barnsley	1.045544
E02001518	Barnsley 01	1.044487

TEMPRO PM

Level	Area	Local Growth Figure
Region	YH	1.043933
County	South York	1.044033
Authority	Barnsley	1.045544
E02001518	Barnsley 01	1.04353

Proposed Car Park - Barnsley

1.045544

	A	B	C	D	
A	0	1	0	5	6
B	53	0	5	568	626
C	1	22	0	26	49
D	123	540	5	2	670
	178	563	10	601	

	A	B	C	
A	0	0	563	563
B	0	0	0	0
C	543	0	0	543
	543	0	563	

	A	B	C	D	
A	0	4	5	2	12
B	50	0	2	541	593
C	0	0	0	0	0
D	0	672	13	0	685
	50	676	20	543	

	A	B	C	D	
A	0	67	49	29	145
B	17	0	25	499	541
C	0	0	0	79	79
D	0	576	73	0	649
	17	643	147	607	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	22	22
C	0	0	0	1	1
D	3	16	0	0	19
	3	16	0	23	

	A	B	C	
A	0	0	16	16
B	0	0	0	0
C	22	0	0	22
	22	0	16	

	A	B	C	D	
A	0	0	2	0	2
B	0	0	0	22	22
C	0	0	0	0	0
D	0	19	2	0	21
	0	19	4	22	

	A	B	C	D	
A	0	1	4	2	7
B	0	0	1	21	22
C	6	0	0	1	7
D	0	19	0	0	19
	6	20	5	24	

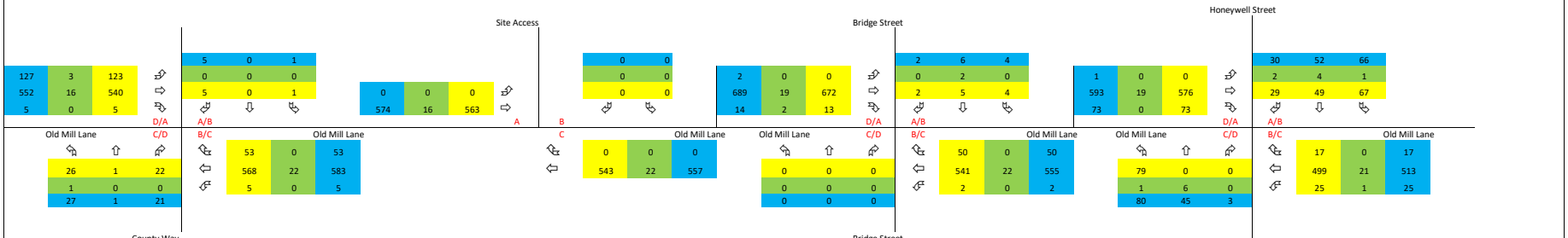
	A	B	C	D	
A	0	1	0	5	6
B	53	0	5	583	642
C	1	21	0	27	50
D	127	552	5	2	687
	182	574	10	618	

	A	B	C	
A	0	0	574	574
B	0	0	0	0
C	557	0	0	557
	557	0	574	

	A	B	C	D	
A	0	4	6	2	13
B	50	0	2	555	607
C	0	0	0	0	0
D	2	689	14	0	704
	52	693	22	557	

	A	B	C	D	
A	0	66	52	30	149
B	17	0	25	513	555
C	45	3	0	80	128
D	1	593	73	0	666
	63	662	150	624	

Vehicles
Heavies
PCU



Transposed for Junction Model

Vehicles	A	B	C	D
A		123	540	5
B	5		1	0
C	568	53		5
D	26	1	22	

Heavies	A	B	C	D
A		3	16	0
B	0		0	0
C	22	0		0
D	1	0	0	

PCU	A	B	C	D
A		127	552	5
B	5		1	0
C	583	53		5
D	27	1	21	

HGV%

PCU	A	B	C	D
A	-	2.5	2.9	0.0
B	0.0	-	0.0	-
C	3.9	0.0	-	0.0
D	4.0	0.0	0.0	-

Transposed for Junction Model

	A	B	C	D
A		0	672	13
B	2		4	5
C	541	50		2
D	0	0	0	

	A	B	C	D
A		0	19	2
B	0		0	2
C	22	0		0
D	0	0	0	

	A	B	C	D
A		2	689	14
B	2		4	6
C	555	50		2
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	2.8	16.7
B	0.0	-	0.0	40.0
C	4.1	0.0	-	0.0
D	-	-	-	-

Transposed for Junction Model Honeywell Street

	A	B	C	D
A		0	576	73
B	29		67	49
C	499	17		25
D	79	0	0	

	A	B	C	D
A		0	19	0
B	2		1	4
C	21	0		1
D	1	6	0	

	A	B	C	D
A		1	593	73
B	30		66	52
C	513	17		25
D	80	45	3	

HGV%

PCU	A	B	C	D
A	-	-	3.3	0.0
B	7.1	-	1.6	8.5
C	4.2	0.0	-	4.2
D	1.3	-	-	-

TIME PERIOD 08:00AM - 09:00AM NETWORK PEAK HOUR
SHEET TITLE AM 2026 BASE Traffic

Proposed Car Park - Barnsley

1.045544

	A	B	C	D	
A	0	4	1	1	6
B	35	1	0	794	829
C	0	40	0	70	110
D	32	412	1	0	445
	67	457	2	865	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	19	19
C	0	0	0	0	0
D	2	9	0	0	12
	2	9	0	19	

	A	B	C	D	
A	0	4	1	1	6
B	35	1	0	806	842
C	0	39	0	69	108
D	34	420	1	0	455
	68	464	2	876	

	A	B	C	
A			456	456
B				0
C	781			781
	781	0	456	

	A	B	C	
A			9	9
B				0
C	19			19
	19	0	9	

	A	B	C	
A			463	463
B				0
C	793			793
	793	0	463	

	A	B	C	D	
A	0	5	1	1	7
B	47	0	6	780	833
C	0	0	0	0	0
D	0	440	8	0	449
	47	445	16	781	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	19	19
C	0	0	0	0	0
D	0	12	0	0	12
	0	12	0	19	

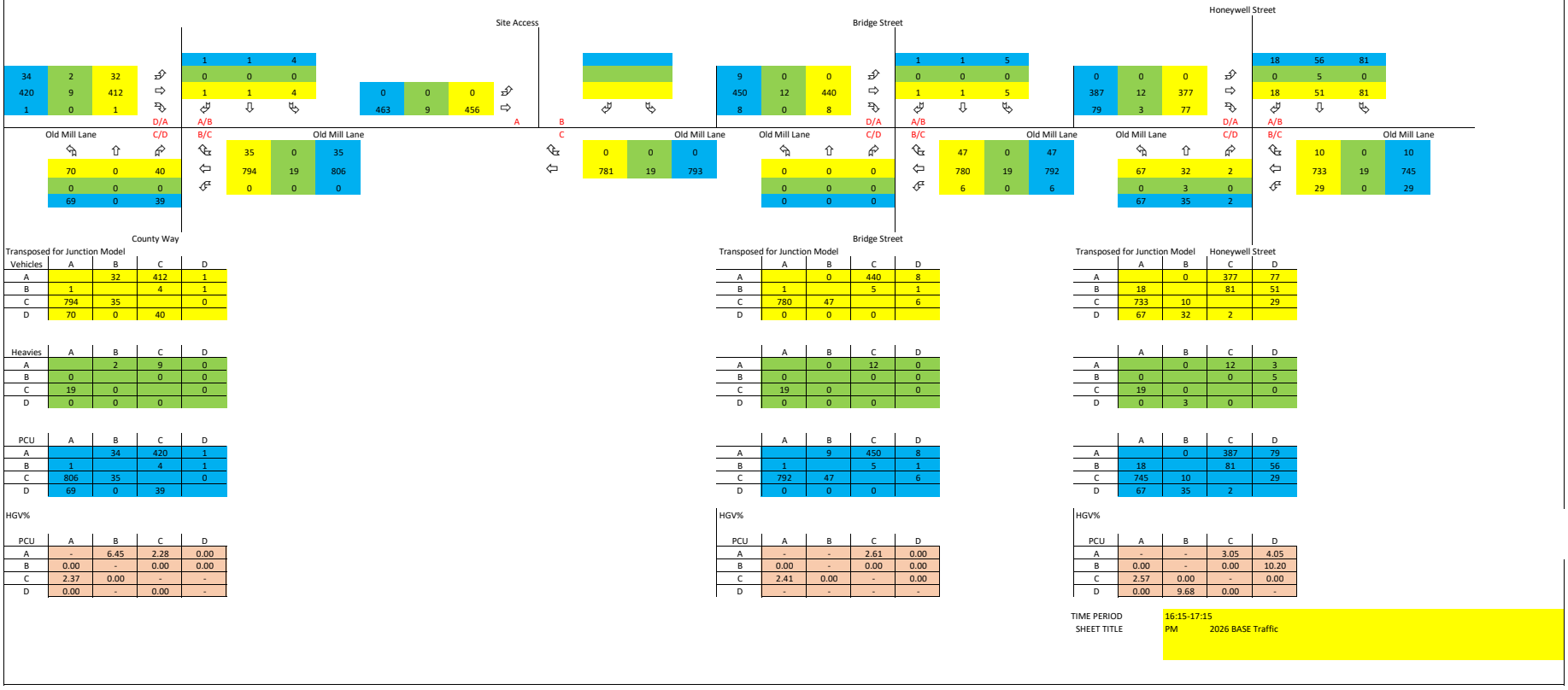
	A	B	C	D	
A	0	5	1	1	7
B	47	0	6	792	845
C	0	0	0	0	0
D	9	450	8	0	468
	56	455	16	793	

	A	B	C	D	
A	0	81	51	18	150
B	10	0	29	733	773
C	32	2	0	67	101
D	0	377	77	0	455
	43	460	158	818	

	A	B	C	D	
A	0	0	5	0	5
B	0	0	0	19	19
C	3	0	0	0	3
D	0	12	3	0	15
	3	12	8	19	

	A	B	C	D	
A	0	81	56	18	155
B	10	0	29	745	784
C	35	2	0	67	104
D	0	387	79	0	466
	45	470	165	829	

Vehicles
Heavies
PCU



Transposed for Junction Model

Vehicles

	A	B	C	D
A		32	412	1
B	1		4	1
C	794	35		0
D	70	0	40	

Heavies

	A	B	C	D
A		2	9	0
B	0		0	0
C	19	0		0
D	0	0	0	

PCU

	A	B	C	D
A		34	420	1
B	1		4	1
C	806	35		0
D	69	0	39	

HGV%

PCU	A	B	C	D
A	-	6.45	2.28	0.00
B	0.00	-	0.00	0.00
C	2.37	0.00	-	-
D	0.00	-	0.00	-

Transposed for Junction Model

	A	B	C	D
A		0	440	8
B	1		5	1
C	780	47		6
D	0	0	0	

	A	B	C	D
A		0	12	0
B	0		0	0
C	19	0		0
D	0	0	0	

	A	B	C	D
A		9	450	8
B	1		5	1
C	792	47		6
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	2.61	0.00
B	0.00	-	0.00	0.00
C	2.41	0.00	-	0.00
D	-	-	-	-

Transposed for Junction Model

	A	B	C	D
A		0	377	77
B	18		81	51
C	733	10		29
D	67	32	2	

	A	B	C	D
A		0	12	3
B	0		0	5
C	19	0		0
D	0	3	0	

	A	B	C	D
A		0	387	79
B	18		81	56
C	745	10		29
D	67	35	2	

HGV%

PCU	A	B	C	D
A	-	-	3.05	4.05
B	0.00	-	0.00	10.20
C	2.57	0.00	-	0.00
D	0.00	9.68	0.00	-

TIME PERIOD: 16:15-17:15
SHEET TITLE: PM 2026 BASE Traffic

Proposed Car Park - Barnsley

	A	B	C	D	
A					0
B				23.88%	0.238806
C					0
D		23.88%			0.238806
	0	0.238806	0	0.238806	

	A	B	C	
A		23.88%		0.238806
B	23.88%		76.12%	1
C		76.12%		0.761194
	0.238806	1	0.761194	

	A	B	C	D	
A					0
B				76.12%	0.761194
C					0
D		76.12%			0.761194
	0	0.761194	0	0.761194	

	A	B	C	D	
A					0
B				76.12%	0.761194
C					0
D		76.12%			0.761194
	0	0.761194	0	0.761194	

	A	B	C	D	
A					0
B				23.88%	0.238806
C					0
D		23.88%			0.238806
	0	0.238806	0	0.238806	

	A	B	C	
A		23.88%		0.238806
B	23.88%		76.12%	1
C		76.12%		0.761194
	0.238806	1	0.761194	

	A	B	C	D	
A					0
B				76.12%	0.761194
C					0
D		76.12%			0.761194
	0	0.761194	0	0.761194	

	A	B	C	D	
A					0
B				76.12%	0.761194
C					0
D		76.12%			0.761194
	0	0.761194	0	0.761194	

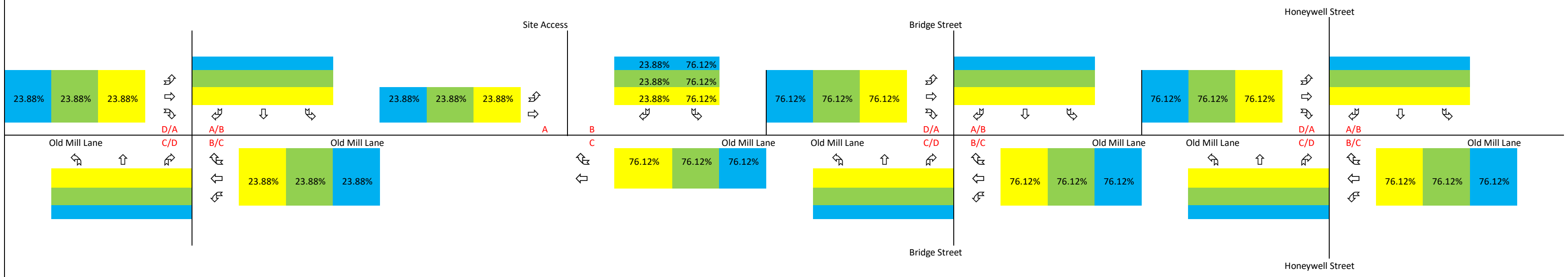
	A	B	C	D	
A					0
B				23.88%	0.238806
C					0
D		23.88%			0.238806
	0	0.238806	0	0.238806	

	A	B	C	
A		23.88%		0.238806
B	23.88%		76.12%	1
C		76.12%		0.761194
	0.238806	1	0.761194	

	A	B	C	D	
A					0
B				76.12%	0.761194
C					0
D		76.12%			0.761194
	0	0.761194	0	0.761194	

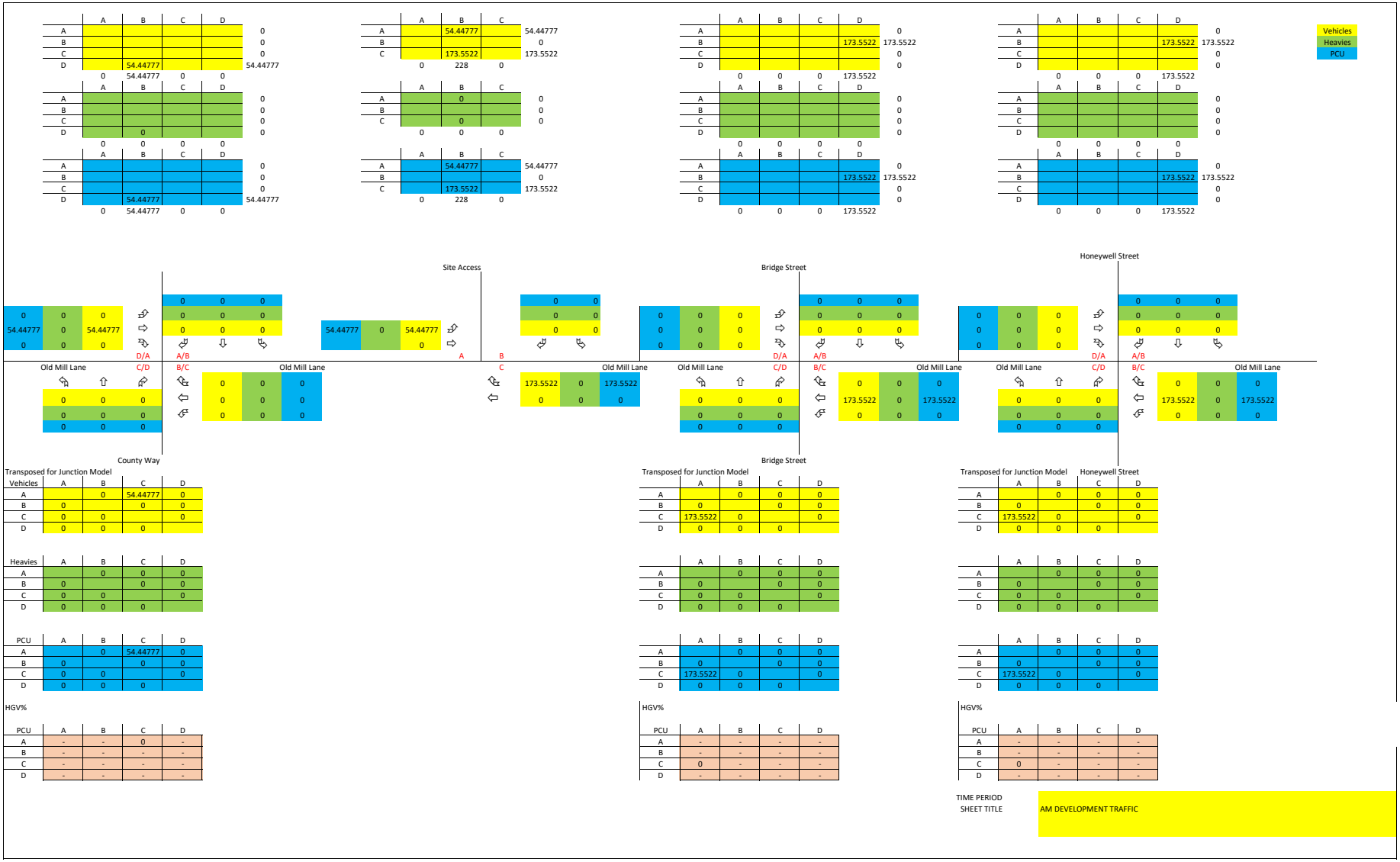
	A	B	C	D	
A					0
B				76.12%	0.761194
C					0
D		76.12%			0.761194
	0	0.761194	0	0.761194	

Vehicles
Heavies
PCU

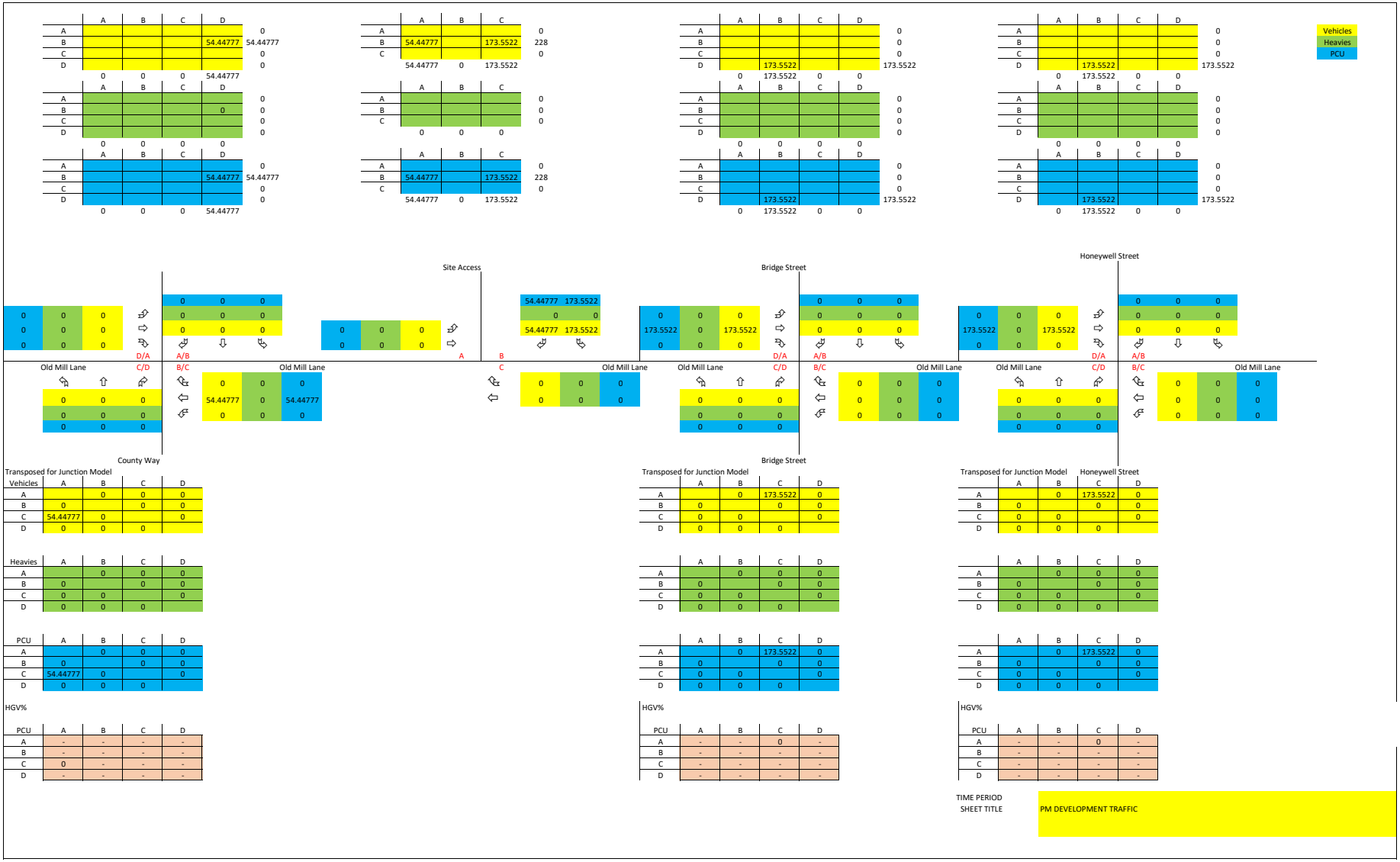


TIME PERIOD
SHEET TITLE
TRIP DISTRIBUTION

Proposed Car Park - Barnsley



Proposed Car Park - Barnsley



Transposed for Junction Model

Vehicles

	A	B	C	D
A		0	0	0
B	0		0	0
C	54.44777	0		0
D	0	0	0	

Heavies

	A	B	C	D
A		0	0	0
B	0		0	0
C	0	0		0
D	0	0	0	

PCU

	A	B	C	D
A		0	0	0
B	0		0	0
C	54.44777	0		0
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	-	-
B	-	-	-	-
C	0	-	-	-
D	-	-	-	-

Transposed for Junction Model

	A	B	C	D
A		0	173.5522	0
B	0		0	0
C	0	0		0
D	0	0	0	

	A	B	C	D
A		0	0	0
B	0		0	0
C	0	0		0
D	0	0	0	

	A	B	C	D
A		0	173.5522	0
B	0		0	0
C	0	0		0
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	0	-
B	-	-	-	-
C	-	-	-	-
D	-	-	-	-

Transposed for Junction Model

	A	B	C	D
A		0	173.5522	0
B	0		0	0
C	0	0		0
D	0	0	0	

	A	B	C	D
A		0	0	0
B	0		0	0
C	0	0		0
D	0	0	0	

	A	B	C	D
A		0	173.5522	0
B	0		0	0
C	0	0		0
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	-	-
B	-	-	-	-
C	-	-	-	-
D	-	-	-	-

TIME PERIOD
SHEET TITLE

PM DEVELOPMENT TRAFFIC

Proposed Car Park - Barnsley

	A	B	C	D	
A	0	1	0	5	6
B	53	0	5	568	626
C	1	22	0	26	49
D	123	594	5	2	725
	178	617	10	601	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	22	22
C	0	0	0	1	1
D	3	16	0	0	19
	3	16	0	23	

	A	B	C	D	
A	0	1	0	5	6
B	53	0	5	583	642
C	1	21	0	27	50
D	127	607	5	2	741
	182	629	10	618	

	A	B	C	
A	0	54	563	617
B	0	0	0	0
C	543	174	0	716
	543	228	563	

	A	B	C	
A	0	0	16	16
B	0	0	0	0
C	22	0	0	22
	22	0	16	

	A	B	C	
A	0	54	574	629
B	0	0	0	0
C	557	174	0	731
	557	228	574	

	A	B	C	D	
A	0	4	5	2	12
B	50	0	2	714	766
C	0	0	0	0	0
D	0	672	13	0	685
	50	676	20	716	

	A	B	C	D	
A	0	0	2	0	2
B	0	0	0	22	22
C	0	0	0	0	0
D	0	19	2	0	21
	0	19	4	22	

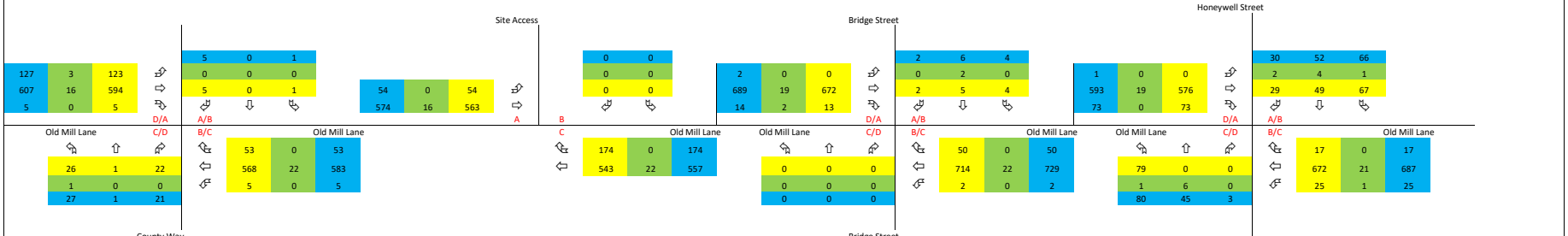
	A	B	C	D	
A	0	4	6	2	13
B	50	0	2	729	781
C	0	0	0	0	0
D	2	689	14	0	704
	52	693	22	731	

	A	B	C	D	
A	0	67	49	29	145
B	17	0	25	672	714
C	0	0	0	79	79
D	0	576	73	0	649
	17	643	147	781	

	A	B	C	D	
A	0	1	4	2	7
B	0	0	1	21	22
C	6	0	0	1	7
D	0	19	0	0	19
	6	20	5	24	

	A	B	C	D	
A	0	66	52	30	149
B	17	0	25	687	729
C	45	3	0	80	128
D	1	593	73	0	666
	63	662	150	797	

Vehicles
Heavies
PCU



Transposed for Junction Model

Vehicles	A	B	C	D
A		123	594	5
B	5		1	0
C	568	53		5
D	26	1	22	

Heavies	A	B	C	D
A		3	16	0
B	0		0	0
C	22	0		0
D	1	0	0	

PCU	A	B	C	D
A		127	607	5
B	5		1	0
C	583	53		5
D	27	1	21	

HGV%

PCU	A	B	C	D
A	-	2.54	2.64	0.00
B	0.00	-	0.00	-
C	3.87	0.00	-	0.00
D	4.00	0.00	0.00	-

PCU	A	B	C
A	0%	0%	3%
B	0%	0%	0%
C	4%	0%	0%

Transposed for Junction Model

	A	B	C	D
A		0	672	13
B	2		4	5
C	714	50		2
D	0	0	0	

	A	B	C	D
A		0	19	2
B	0		0	2
C	22	0		0
D	0	0	0	

	A	B	C	D
A		2	689	14
B	2		4	6
C	729	50		2
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	2.80	16.67
B	0.00	-	0.00	40.00
C	3.07	0.00	-	0.00
D	-	-	-	-

Transposed for Junction Model

	A	B	C	D
A		0	576	73
B	29		67	49
C	672	17		25
D	79	0	0	

	A	B	C	D
A		0	19	0
B	2		1	4
C	21	0		1
D	1	6	0	

	A	B	C	D
A		1	593	73
B	30		66	52
C	687	17		25
D	80	45	3	

HGV%

PCU	A	B	C	D
A	-	-	3.27	0.00
B	7.14	-	1.56	8.51
C	3.11	0.00	-	4.17
D	1.32	-	-	-

TIME PERIOD: AM PEAK
SHEET TITLE: 2026 BASE PLUS DEVELOPMENT

Proposed Car Park - Barnsley

	A	B	C	D	
A	0	4	1	1	6
B	35	1	0	848	884
C	0	40	0	70	110
D	32	412	1	0	445
	67	457	2	919	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	19	19
C	0	0	0	0	0
D	2	9	0	0	12
	2	9	0	19	

	A	B	C	D	
A	0	4	1	1	6
B	35	1	0	861	896
C	0	39	0	69	108
D	34	420	1	0	455
	68	464	2	931	

	A	B	C	
A	0	0	456	456
B	54	0	174	228
C	781	0	0	781
	835	0	629	

	A	B	C	
A	0	0	9	9
B	0	0	0	0
C	19	0	0	19
	19	0	9	

	A	B	C	
A	0	0	463	463
B	54	0	174	228
C	793	0	0	793
	847	0	637	

	A	B	C	D	
A	0	5	1	1	7
B	47	0	6	780	833
C	0	0	0	0	0
D	0	614	8	0	622
	47	619	16	781	

	A	B	C	D	
A	0	0	0	0	0
B	0	0	0	19	19
C	0	0	0	0	0
D	0	12	0	0	12
	0	12	0	19	

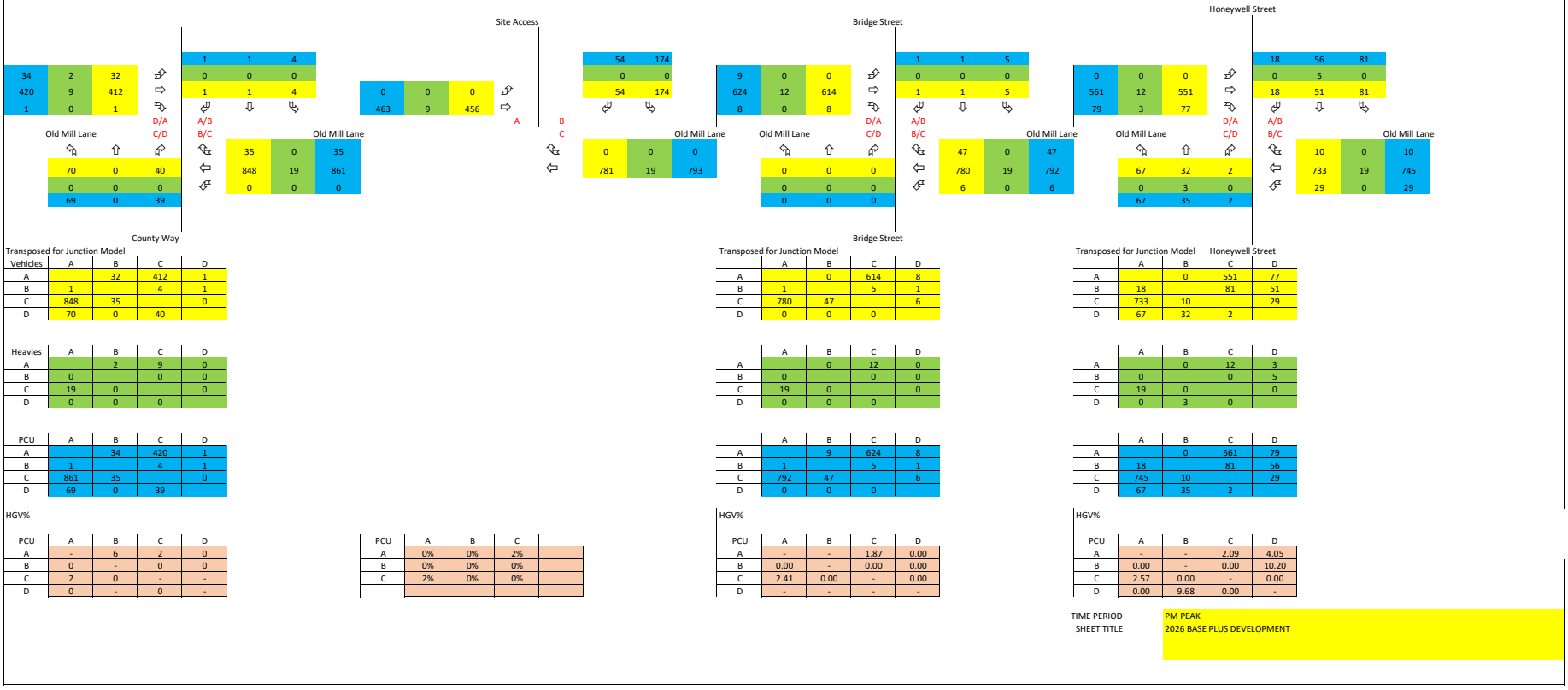
	A	B	C	D	
A	0	5	1	1	7
B	47	0	6	792	845
C	0	0	0	0	0
D	9	624	8	0	641
	56	629	16	793	

	A	B	C	D	
A	0	81	51	18	150
B	10	0	29	733	773
C	32	2	0	67	101
D	0	551	77	0	628
	43	634	158	818	

	A	B	C	D	
A	0	0	5	0	5
B	0	0	0	19	19
C	3	0	0	0	3
D	0	12	3	0	15
	3	12	8	19	

	A	B	C	D	
A	0	81	56	18	155
B	10	0	29	745	784
C	35	2	0	67	104
D	0	561	79	0	640
	45	643	165	829	

Vehicles
Heavies
PCU



Transposed for Junction Model

Vehicles	A	B	C	D
A		32	412	1
B	1		4	1
C	848	35		0
D	70	0	40	

Heavies	A	B	C	D
A		2	9	0
B	0		0	0
C	19	0		0
D	0	0	0	

PCU	A	B	C	D
A		34	420	1
B	1		4	1
C	861	35		0
D	69	0	39	

HGV%

PCU	A	B	C	D
A	-	6	2	0
B	0	-	0	0
C	2	0	-	-
D	0	-	0	-

PCU	A	B	C	
A	0%	0%	2%	
B	0%	0%	0%	
C	2%	0%	0%	

Transposed for Junction Model

	A	B	C	D
A		0	614	8
B	1		5	1
C	780	47		6
D	0	0	0	

	A	B	C	D
A		0	12	0
B	0		0	0
C	19	0		0
D	0	0	0	

	A	B	C	D
A		9	624	8
B	1		5	1
C	792	47		6
D	0	0	0	

HGV%

PCU	A	B	C	D
A	-	-	1.87	0.00
B	0.00	-	0.00	0.00
C	2.41	0.00	-	0.00
D	-	-	-	-

Transposed for Junction Model

	A	B	C	D
A		0	551	77
B	18		81	51
C	733	10		29
D	67	32	2	

	A	B	C	D
A		0	12	3
B	0		0	5
C	19	0		0
D	0	3	0	

	A	B	C	D
A		0	561	79
B	18		81	56
C	745	10		29
D	67	35	2	

HGV%

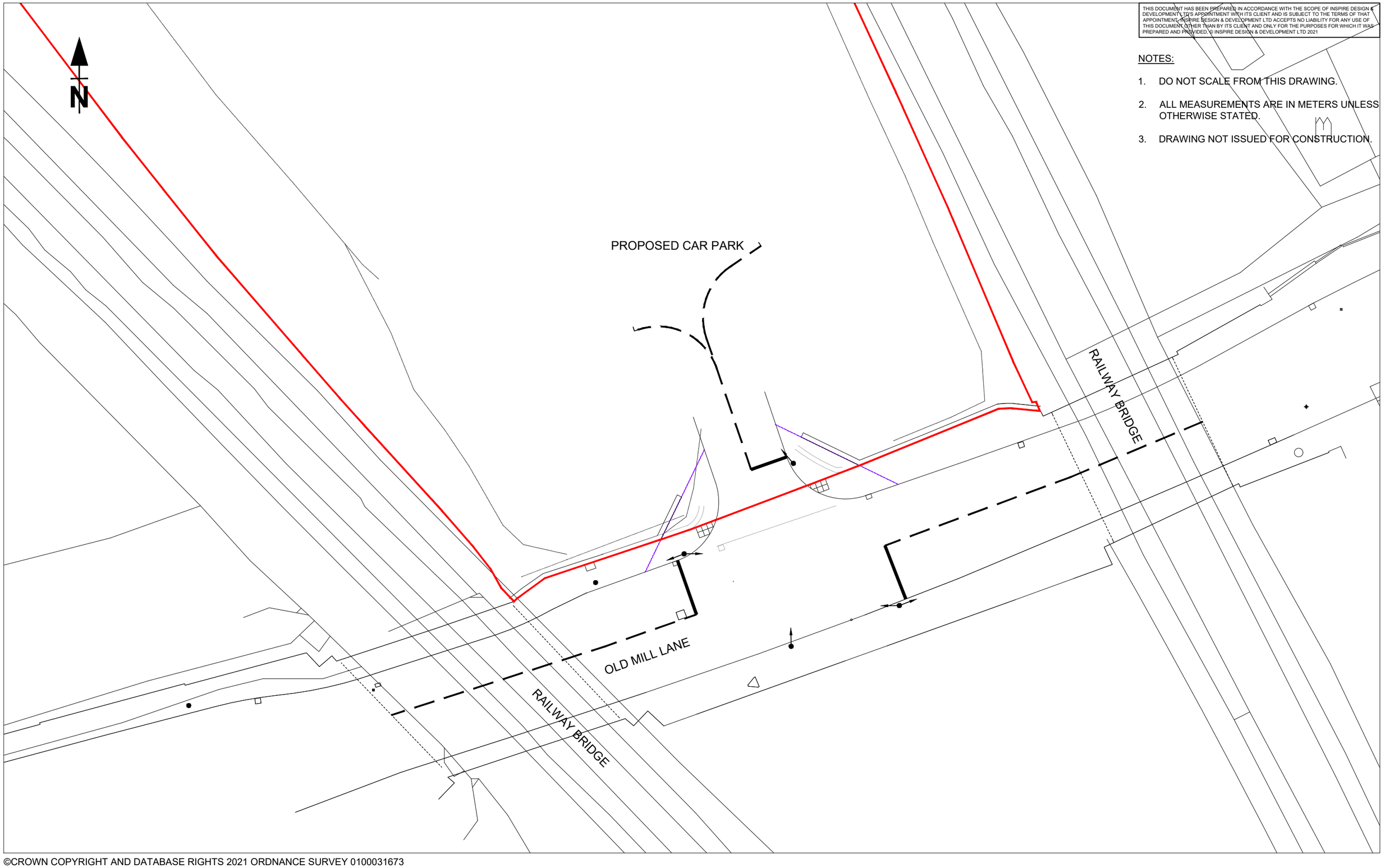
PCU	A	B	C	D
A	-	-	2.09	4.05
B	0.00	-	0.00	10.20
C	2.57	0.00	-	0.00
D	0.00	9.68	0.00	-

TIME PERIOD: PM PEAK
SHEET TITLE: 2026 BASE PLUS DEVELOPMENT

Appendix F Site Access Proposal

NOTES:

1. DO NOT SCALE FROM THIS DRAWING.
2. ALL MEASUREMENTS ARE IN METERS UNLESS OTHERWISE STATED.
3. DRAWING NOT ISSUED FOR CONSTRUCTION.



REV	DATE	NAME	CHECK	NOTES

CLIENT: HADFIELD DEVELOPMENTS

PROJECT: CAR PARK, OLD MILL LANE, BARNSLEY

DRAWING TITLE: JUNCTION FEASIBILITY LAYOUT

DRAWING STATUS: FOR INFORMATION

DRAWN: AJS | CHECKED: CGR | APPROVED: CGR

DATE: 24 August 2021

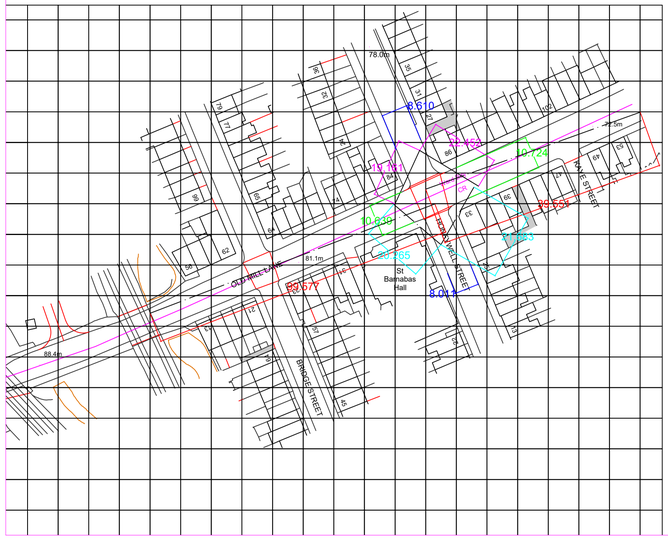
SCALE @ A3: 1:250

DRAWING No: HD-1502-01-HW-001

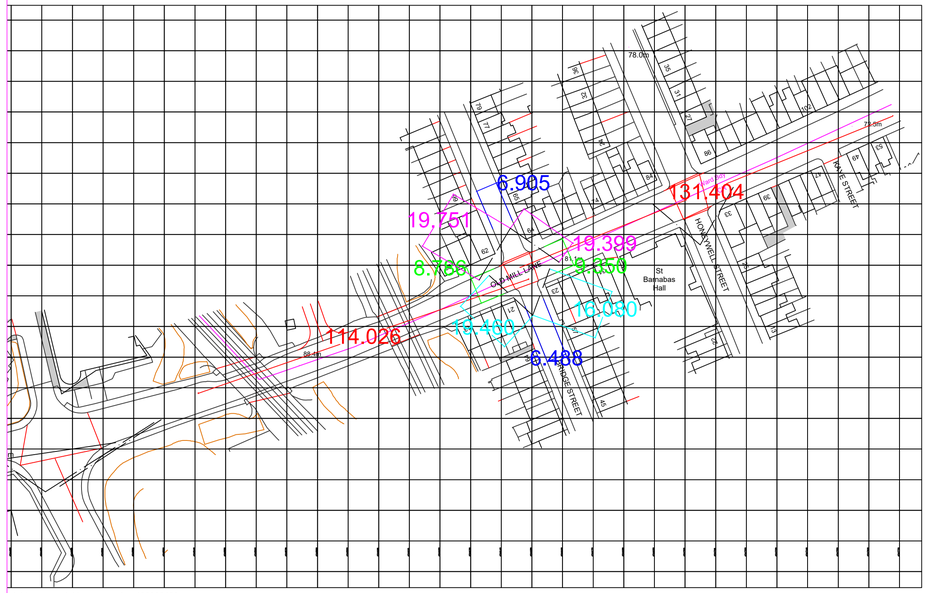
REVISION No:

Appendix G Capacity Assessments

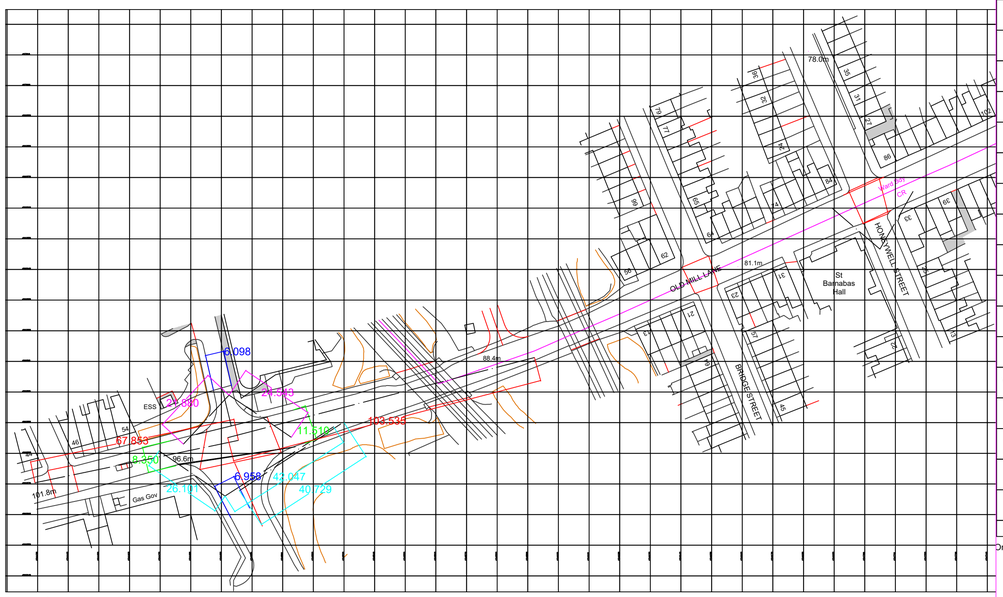
Old Mll Lane / Honeywell Street Junction Capacity Geometry



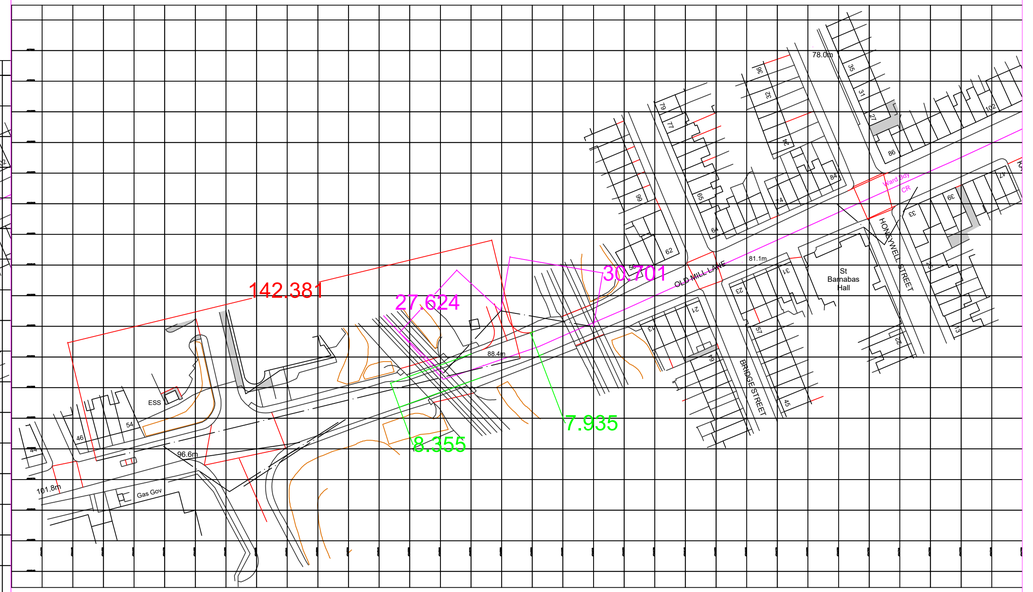
Old Mll Lane / Bridge Street Junction Capacity Geometry



Old Mll Lane / County Way / STEM Centre Junction Capacity Geometry



Proposed Site Access Junction Capacity Geometry



Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

Key Plan

Legend

P01 01.01.00 Preliminary Issue HAC MJ

KEI Services Ltd
connecting places

CLIENT
INSPIRE

PROJECT TITLE
CAR PARK, BARNSLEY

DRAWING TITLE
JUNCTION CAPACITY PARAMETERS

STATUS

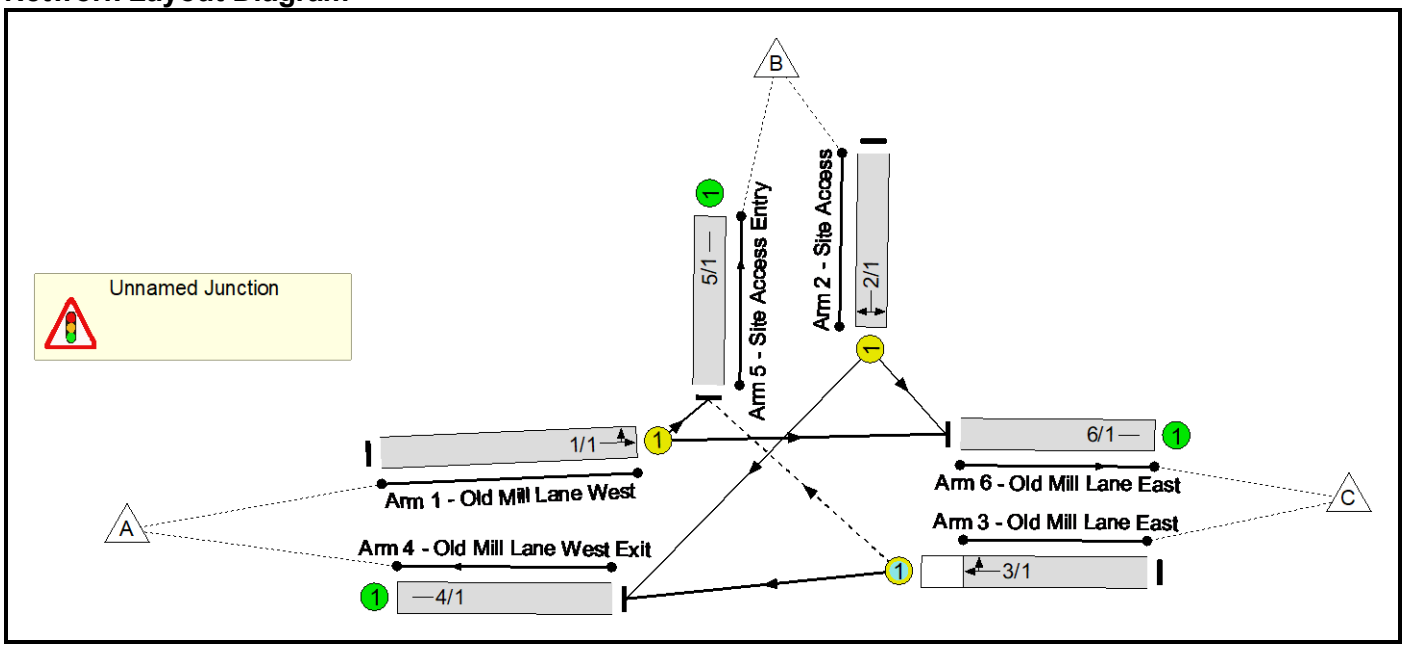
DRAWN BY IKE
REVIEWED IKE
SCALE 1:1000 @ A1
DRAWING NUMBER
KEI023-001

Full Input Data And Results

User and Project Details

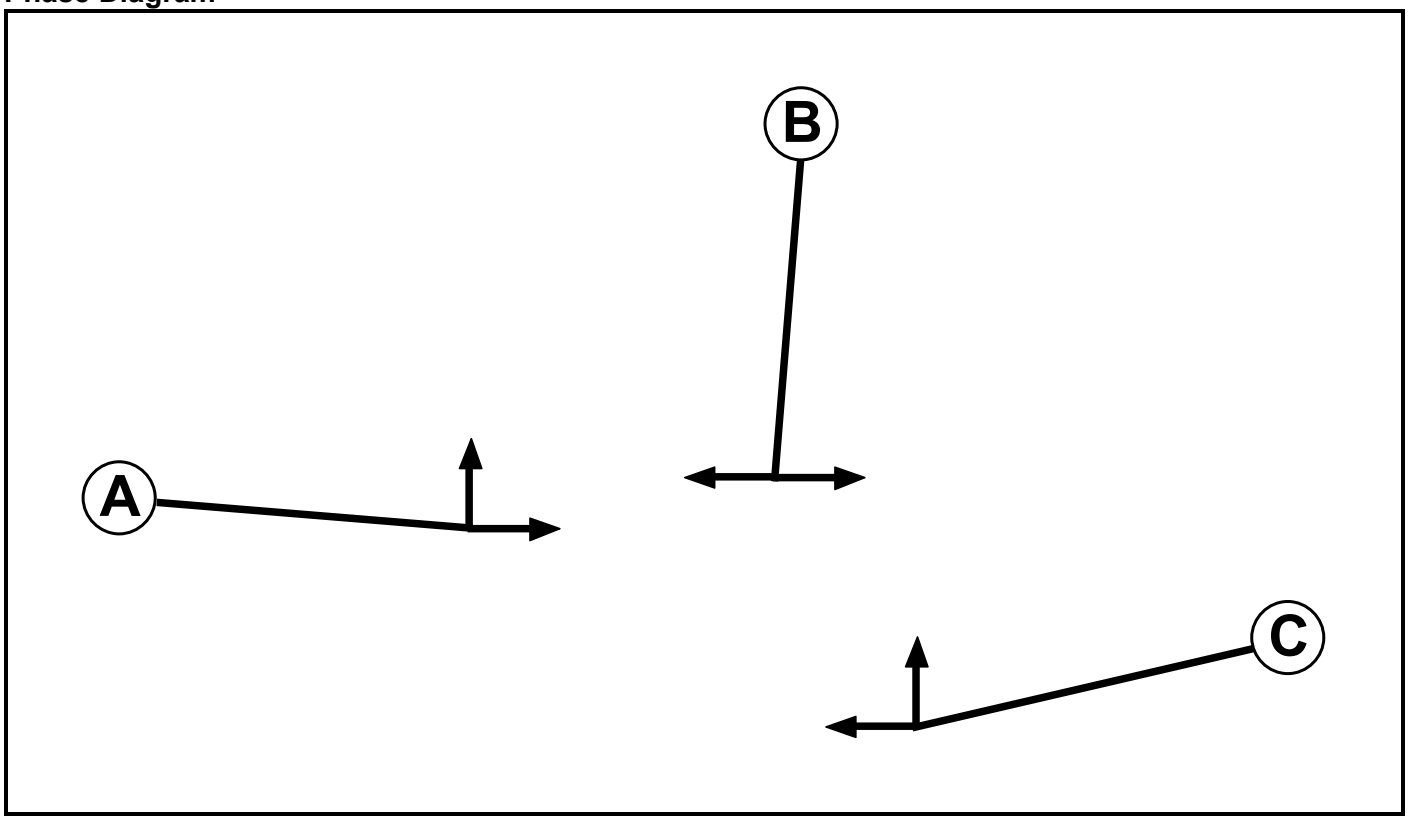
Project:	
Title:	**Old Mill Lane**
Location:	
Client:	Inspire
Checked By:	I Kirk-Ellis MSc, I.Eng, FIHE, FCIHT. MTPS, MIEnvSc, ACIWEM
Checked By Date:	23/08/21
Additional detail:	
File name:	Site Access.lsg3x
Author:	Ian Kirk-Ellis
Company:	KEI Services Ltd
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

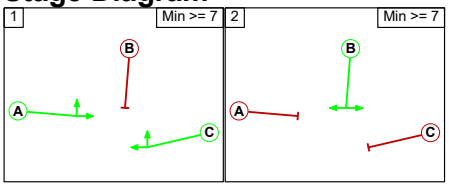
Phase Intergreens Matrix

		Starting Phase		
		A	B	C
Terminating Phase	A		6	-
	B	6		6
	C	-	6	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B

Stage Diagram



Full Input Data And Results

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

	To Stage		
		1	2
From Stage	1		6
	2	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
3/1 (Old Mill Lane East)	5/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Old Mill Lane West)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Left	10.00
											Arm 6 Ahead	Inf
2/1 (Site Access)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Right	15.00
											Arm 6 Left	10.00
3/1 (Old Mill Lane East)	O	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Right	15.00
4/1 (Old Mill Lane West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Site Access Entry)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Old Mill Lane East)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 WD AM Peak'	08:00	09:00	01:00	
2: '2026 WD PM Peak'	17:00	18:00	01:00	

Scenario 1: 'AM 2026 WD' (FG1: '2026 WD AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	54	574	628
	B	0	0	0	0
	C	557	174	0	731
	Tot.	557	228	574	1359

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM 2026 WD
Junction: Unnamed Junction	
1/1	628
2/1	0
3/1	731
4/1	557
5/1	228
6/1	574

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Old Mill Lane West)	3.25	0.00	Y	Arm 5 Left	10.00	8.6 %	1915	1915
				Arm 6 Ahead	Inf	91.4 %		
2/1 (Site Access)	3.25	0.00	Y	Arm 4 Right	15.00	0.0 %	1940	1940
				Arm 6 Left	10.00	0.0 %		
3/1 (Old Mill Lane East)	3.25	0.00	Y	Arm 4 Ahead	Inf	76.2 %	1895	1895
				Arm 5 Right	15.00	23.8 %		
4/1 (Old Mill Lane West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Site Access Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Old Mill Lane East Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM 2026 WD' (FG2: '2026 WD PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	0	463	463
	B	54	0	174	228
	C	793	0	0	793
	Tot.	847	0	637	1484

Full Input Data And Results

Traffic Lane Flows

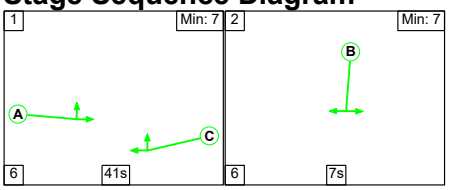
Lane	Scenario 2: PM 2026 WD
Junction: Unnamed Junction	
1/1	463
2/1	228
3/1	793
4/1	847
5/1	0
6/1	637

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Old Mill Lane West)	3.25	0.00	Y	Arm 5 Left	10.00	0.0 %	1940	1940
				Arm 6 Ahead	Inf	100.0 %		
2/1 (Site Access)	3.25	0.00	Y	Arm 4 Right	15.00	23.7 %	1705	1705
				Arm 6 Left	10.00	76.3 %		
3/1 (Old Mill Lane East)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
				Arm 5 Right	15.00	0.0 %		
4/1 (Old Mill Lane West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Site Access Entry Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Old Mill Lane East Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'AM 2026 WD' (FG1: '2026 WD AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

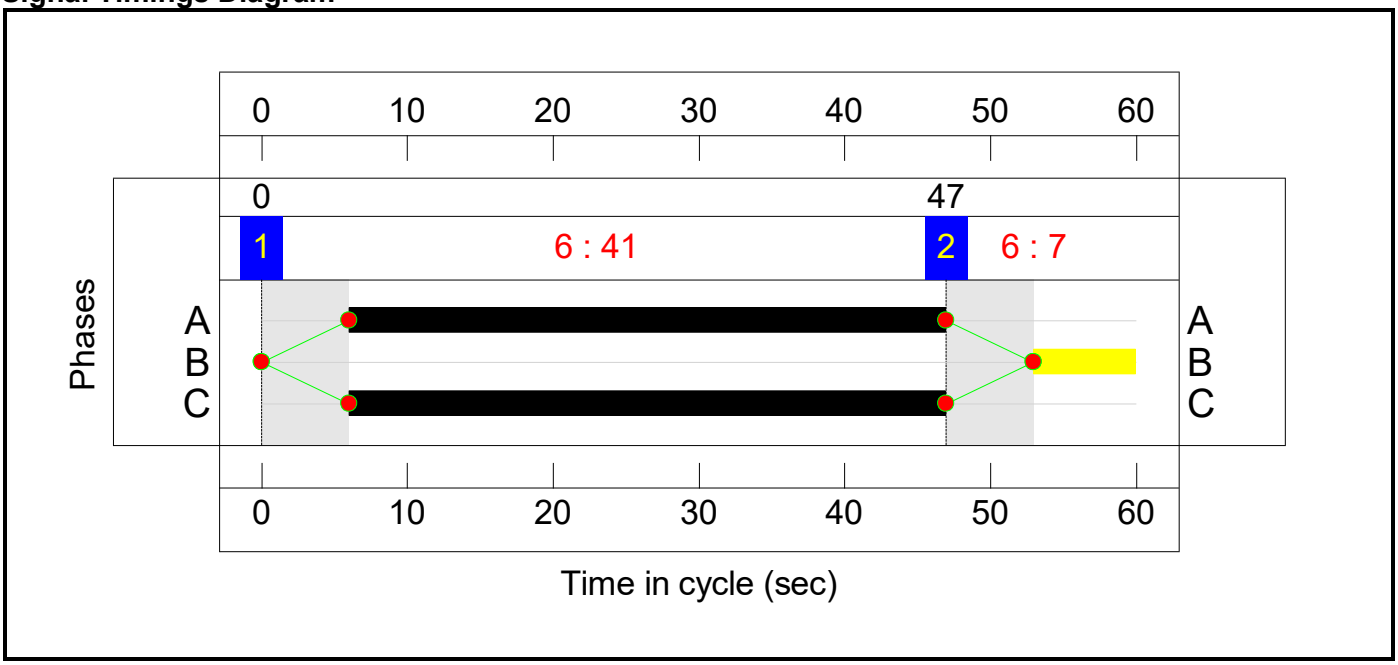


Stage Timings

Stage	1	2
Duration	41	7
Change Point	0	47

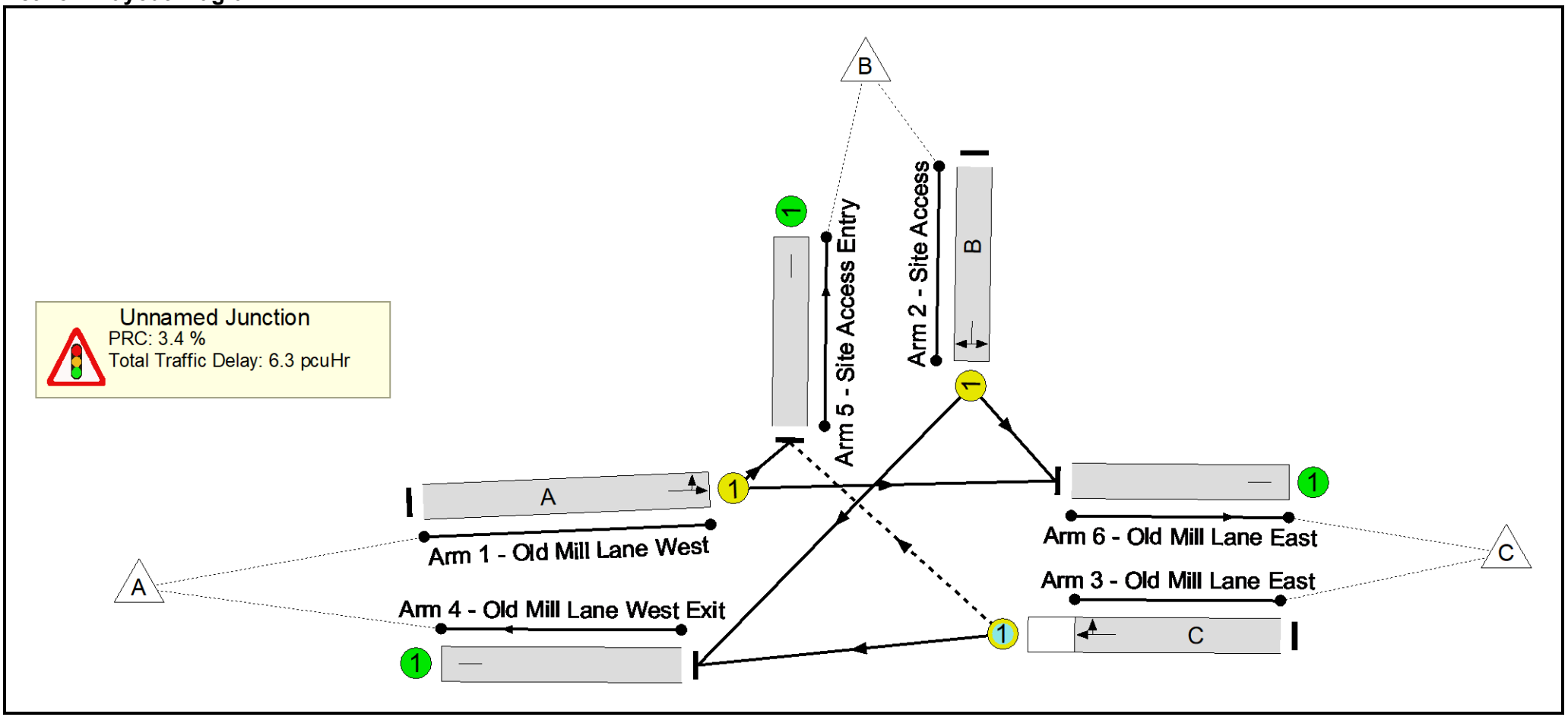
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Old Mill Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.0%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.0%**
1/1	Old Mill Lane West Left Ahead	U	N/A	N/A	A		1	41	-	628	1915	1340	46.8%
2/1	Site Access Right Left	U	N/A	N/A	B		1	7	-	0	1940	259	0.0%
3/1	Old Mill Lane East Ahead Right	O	N/A	N/A	C		1	41	-	731	1895	840	87.0%
4/1	Old Mill Lane West Exit	U	N/A	N/A	-		-	-	-	557	Inf	Inf	0.0%
5/1	Site Access Entry	U	N/A	N/A	-		-	-	-	228	Inf	Inf	0.0%
6/1	Old Mill Lane East	U	N/A	N/A	-		-	-	-	574	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Old Mill Lane	**-**	**-**	**168**	**0**	**6**	**2.6**	**3.6**	**0.2**	**6.3**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**168**	**0**	**6**	**2.6**	**3.6**	**0.2**	**6.3**	**-**	**-**	**-**	**-**
1/1	628	628	-	-	-	0.7	0.4	-	1.1	6.5	4.5	0.4	5.0
2/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	731	731	168	0	6	1.9	3.2	0.2	5.2	25.6	10.2	3.2	13.3
4/1	557	557	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	228	228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

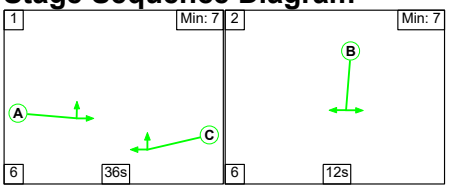
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	3.4	Total Delay for Signalled Lanes (pcuHr):	6.34	Cycle Time (s):	60
	PRC Over All Lanes (%):	3.4	Total Delay Over All Lanes(pcuHr):	6.34		

Full Input Data And Results

Scenario 2: 'PM 2026 WD' (FG2: '2026 WD PM Peak', Plan 1: 'Network Control Plan 1')

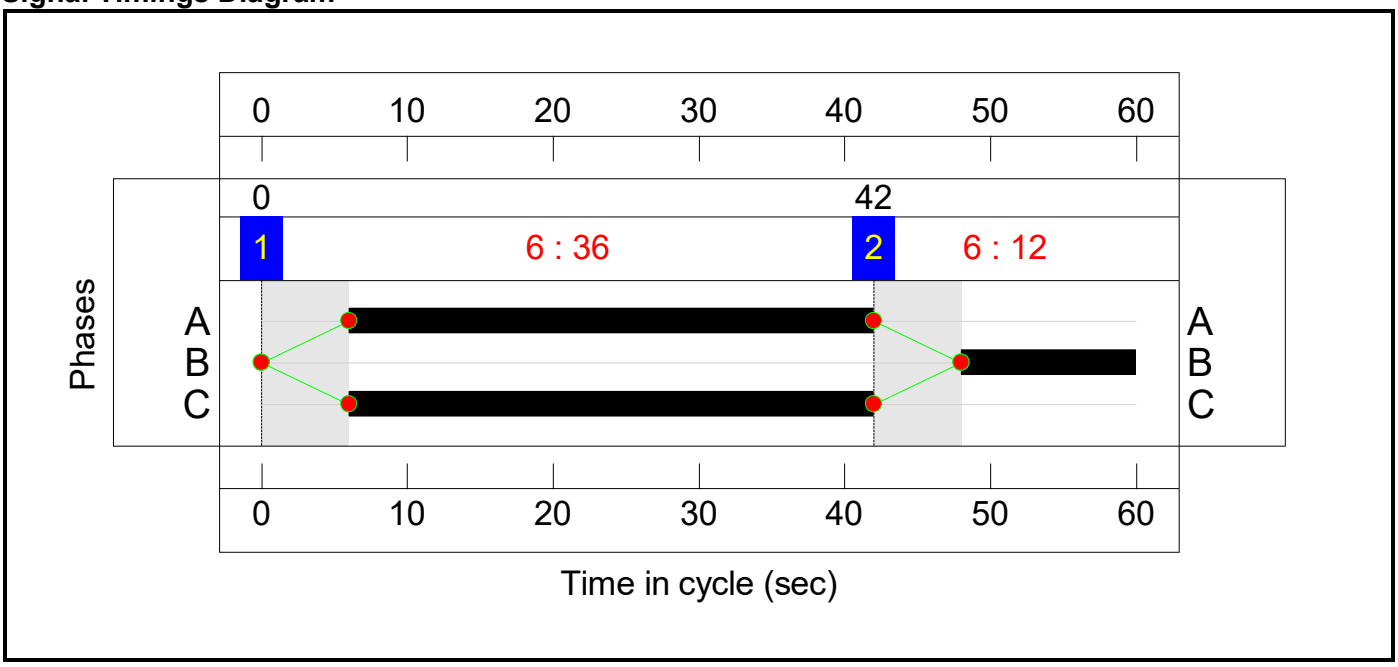
Stage Sequence Diagram



Stage Timings

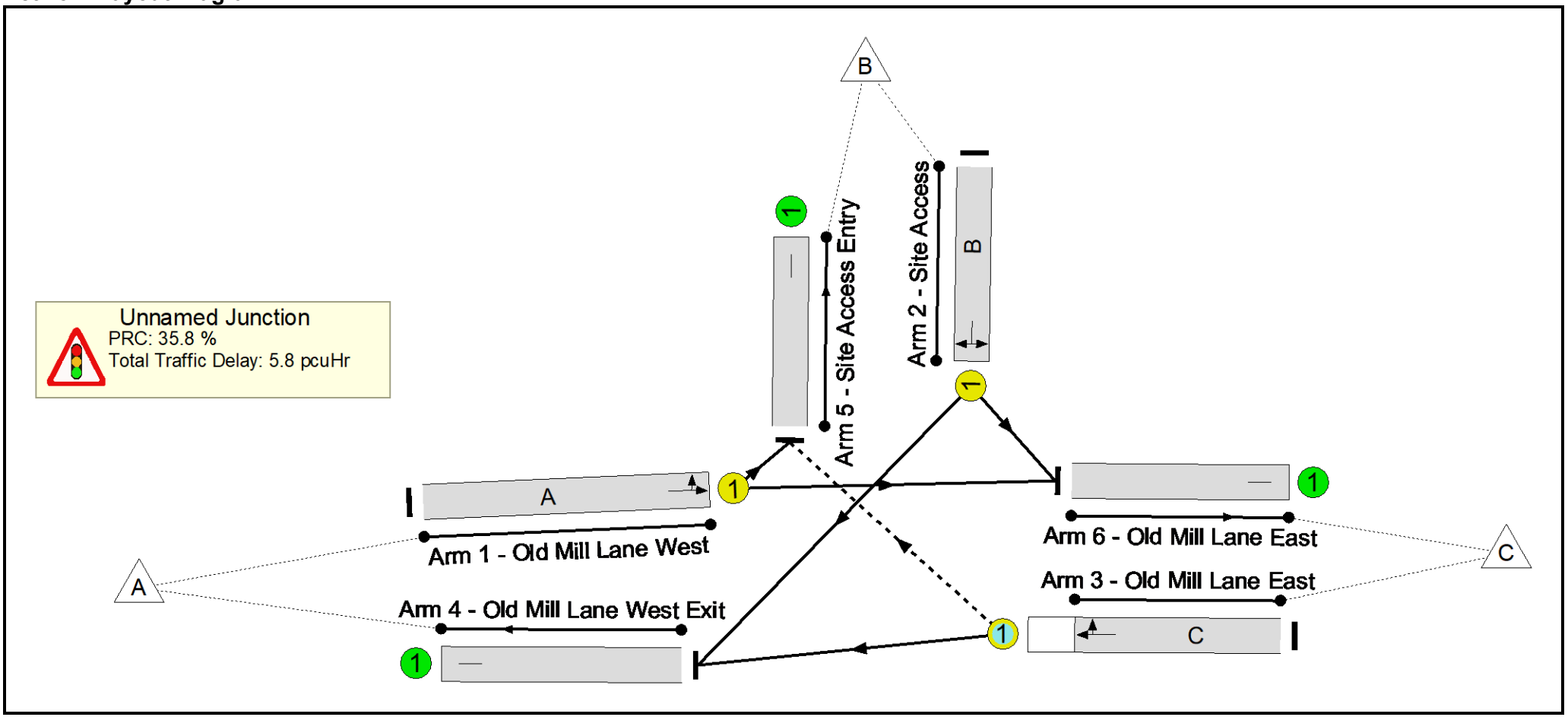
Stage	1	2
Duration	36	12
Change Point	0	42

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Old Mill Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.3%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.3%**
1/1	Old Mill Lane West Left Ahead	U	N/A	N/A	A		1	36	-	463	1940	1196	38.7%
2/1	Site Access Right Left	U	N/A	N/A	B		1	12	-	228	1705	369	61.7%
3/1	Old Mill Lane East Ahead Right	O	N/A	N/A	C		1	36	-	793	1940	1196	66.3%
4/1	Old Mill Lane West Exit	U	N/A	N/A	-		-	-	-	847	Inf	Inf	0.0%
5/1	Site Access Entry	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1	Old Mill Lane East	U	N/A	N/A	-		-	-	-	637	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Old Mill Lane	**-**	**-**	**0**	**0**	**0**	**3.7**	**2.1**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**3.7**	**2.1**	**0.0**	**5.8**	**-**	**-**	**-**	**-**
1/1	463	463	-	-	-	0.7	0.3	-	1.1	8.2	3.9	0.3	4.2
2/1	228	228	-	-	-	1.3	0.8	-	2.1	33.8	3.4	0.8	4.2
3/1	793	793	0	0	0	1.6	1.0	0.0	2.6	11.9	8.4	1.0	9.3
4/1	847	847	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	637	637	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1	PRC for Signalled Lanes (%):	35.8	Total Delay for Signalled Lanes (pcuHr):	5.83	Cycle Time (s):	60	
	PRC Over All Lanes (%):	35.8	Total Delay Over All Lanes(pcuHr):	5.83			

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.1.1519

Filename: Barnsley - County Way.j10
Path: H:\GoogleDrive\KEI\Projects\023 - Car Park Barnsley
Report generation date: 28/04/2021 21:02:37

»2021, AM
»2021, PM
»2026 Base, AM
»2026 Base, PM
»2026 with Development, AM
»2026 with Development, PM

Summary of junction performance

	AM									PM								
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
	2021																	
Stream B-ACD	D1	0.0	0.5	12.16	0.02	B	0.75	A	82 % [Stream D-BC]	D2	0.0	0.5	8.66	0.02	A	1.05	A	54 % [Stream D-BC]
Stream A-D		0.0	0.5	7.17	0.01	A					0.0	0.5	7.76	0.00	A			
Stream D-AB		0.1	0.5	7.49	0.06	A					0.2	0.5	8.87	0.15	A			
Stream D-BC		0.1	0.5	12.19	0.07	B					0.2	0.5	14.23	0.14	B			
Stream C-B		0.1	0.5	8.37	0.12	A					0.1	0.5	7.21	0.07	A			
	2026 Base																	
Stream B-ACD	D3	0.0	0.5	12.58	0.02	B	0.76	A	75 % [Stream B-ACD]	D4	0.0	0.5	8.84	0.02	A	1.09	A	48 % [Stream D-BC]
Stream A-D		0.0	0.5	7.27	0.01	A					0.0	0.5	7.91	0.00	A			
Stream D-AB		0.1	0.5	7.61	0.06	A					0.2	0.5	9.16	0.16	A			
Stream D-BC		0.1	0.5	12.63	0.08	B					0.2	0.5	14.99	0.15	B			
Stream C-B		0.1	0.5	8.54	0.12	A					0.1	0.5	7.30	0.07	A			
	2026 with Development																	
Stream B-ACD	D5	0.0	0.5	13.12	0.02	B	0.75	A	67 % [Stream B-ACD]	D6	0.0	0.5	8.96	0.02	A	1.08	A	42 % [Stream D-BC]
Stream A-D		0.0	0.5	7.27	0.01	A					0.0	0.5	8.13	0.00	A			
Stream D-AB		0.1	0.5	7.62	0.06	A					0.2	0.5	9.49	0.17	A			
Stream D-BC		0.1	0.5	12.99	0.08	B					0.2	0.5	15.80	0.16	C			
Stream C-B		0.1	0.5	8.80	0.12	A					0.1	0.5	7.30	0.07	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 Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

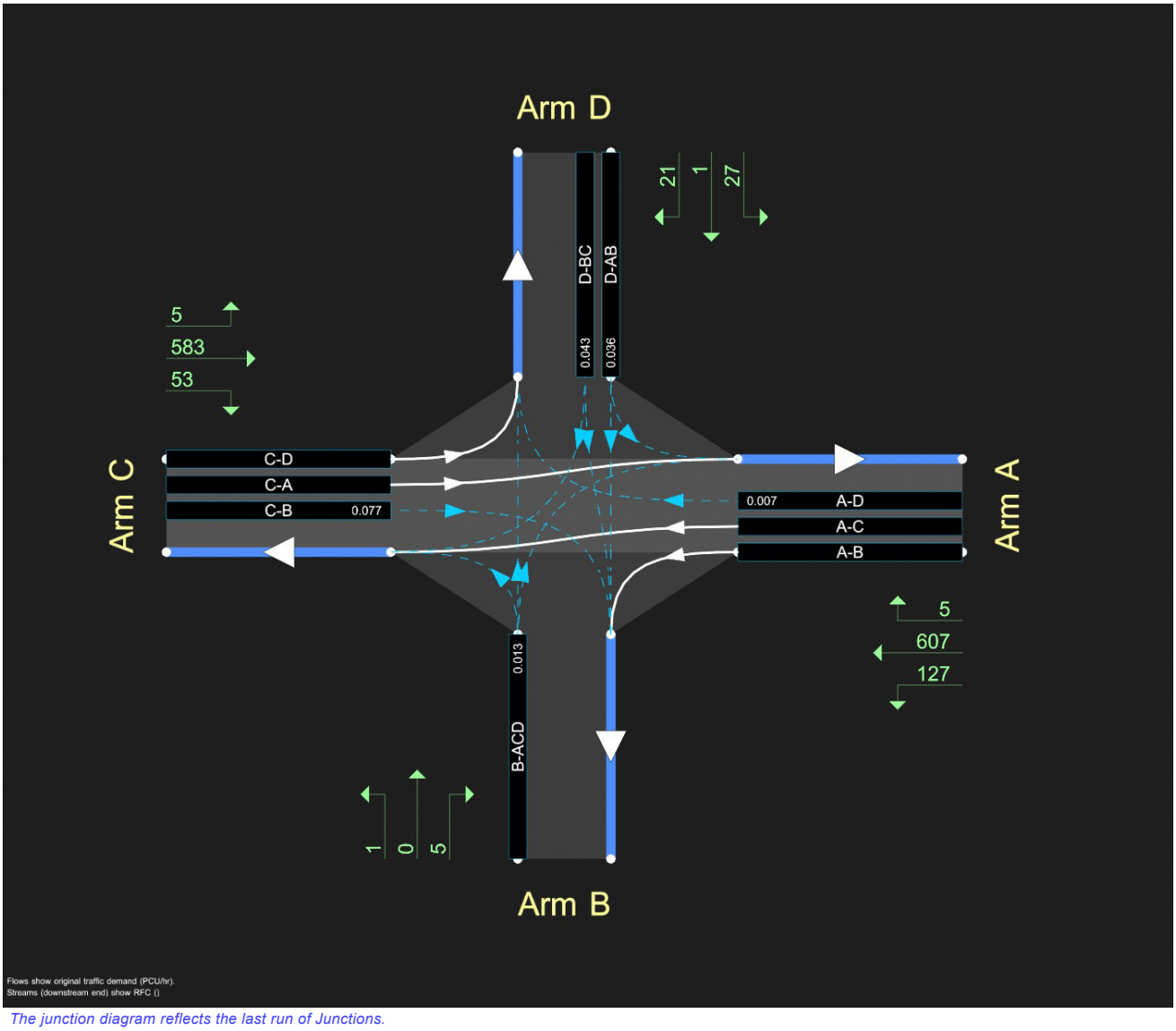
File summary

File Description

Title	
Location	
Site number	
Date	28/04/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	BEAST\user
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓				✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021	AM	ONE HOUR	08:00	09:30	15	✓
D2	2021	PM	ONE HOUR	16:00	17:30	15	✓
D3	2026 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2026 Base	PM	ONE HOUR	16:00	17:30	15	✓
D5	2026 with Development	AM	ONE HOUR	08:00	09:30	15	✓
D6	2026 with Development	PM	ONE HOUR	16:00	17:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2021, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.75	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	82	Stream D-BC	0.75	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major
D	untitled		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	9.93		✓	2.50	103.5		-
C	9.93		✓	2.50	68.0		-

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.04			25	22
D	Two lanes		3.50	3.50	26	41

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	655	-	-	-	-	-	-	0.210	0.300	0.210	-	-	-
B-A	498	0.075	0.190	0.190	-	-	-	0.120	0.272	-	0.190	0.190	0.095
B-C	640	0.081	0.206	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	498	0.075	0.190	0.190	-	-	-	0.120	0.272	0.120	-	-	-
B-D, offside lane	498	0.075	0.190	0.190	-	-	-	0.120	0.272	0.120	-	-	-
C-B	633	0.203	0.203	0.291	-	-	-	-	-	-	-	-	-
D-A	682	-	-	-	-	-	-	0.219	-	0.087	-	-	-
D-B, nearside lane	531	0.128	0.128	0.290	-	-	-	0.203	0.203	0.080	-	-	-
D-B, offside lane	531	0.128	0.128	0.290	-	-	-	0.203	0.203	0.080	-	-	-
D-C	531	-	0.128	0.290	0.101	0.203	0.203	0.203	0.203	0.080	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Run automatically
D1	2021	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	655	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	614	100.000
D		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	122	528	5
	B	5	0	1	0
	C	558	51	0	5
	D	26	1	20	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	3	3	0
	B	0	0	0	0
	C	4	0	0	0
	D	4	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	12.16	0.0	0.5	B	6	8
A-B						112	167
A-C						485	727
A-D	0.01	7.17	0.0	0.5	A	5	7
D-AB	0.06	7.49	0.1	0.5	A	25	37
D-BC	0.07	12.19	0.1	0.5	B	19	28
C-D						5	7
C-A						512	767
C-B	0.12	8.37	0.1	0.5	A	47	70

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	372	0.012	4	0.0	0.0	9.799	A
A-B	92	23			92				
A-C	398	99			398				
A-D	4	0.94	554	0.007	4	0.0	0.0	6.541	A
D-AB	20	5	578	0.035	20	0.0	0.0	6.708	A
D-BC	16	4	386	0.040	15	0.0	0.0	9.720	A
C-D	4	0.94			4				
C-A	420	105			420				
C-B	38	10	533	0.072	38	0.0	0.1	7.272	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	343	0.016	5	0.0	0.0	10.666	B
A-B	109	27			109				
A-C	475	119			475				
A-D	4	1	534	0.008	4	0.0	0.0	6.792	A
D-AB	24	6	557	0.043	24	0.0	0.0	7.015	A
D-BC	19	5	357	0.052	19	0.0	0.1	10.628	B
C-D	4	1			4				
C-A	501	125			501				
C-B	46	11	513	0.089	46	0.1	0.1	7.701	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	303	0.022	7	0.0	0.0	12.160	B
A-B	134	33			134				
A-C	582	145			582				
A-D	6	1	507	0.011	5	0.0	0.0	7.172	A
D-AB	30	7	529	0.056	29	0.0	0.1	7.492	A
D-BC	23	6	318	0.072	23	0.1	0.1	12.183	B
C-D	6	1			6				
C-A	614	153			614				
C-B	56	14	486	0.115	56	0.1	0.1	8.365	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	303	0.022	7	0.0	0.0	12.162	B
A-B	134	33			134				
A-C	582	145			582				
A-D	6	1	507	0.011	6	0.0	0.0	7.172	A
D-AB	30	7	529	0.056	30	0.1	0.1	7.492	A
D-BC	23	6	318	0.072	23	0.1	0.1	12.191	B
C-D	6	1			6				
C-A	614	153			614				
C-B	56	14	486	0.115	56	0.1	0.1	8.370	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	343	0.016	5	0.0	0.0	10.671	B
A-B	109	27			109				
A-C	475	119			475				
A-D	4	1	534	0.008	5	0.0	0.0	6.796	A
D-AB	24	6	557	0.043	24	0.1	0.0	7.017	A
D-BC	19	5	357	0.052	19	0.1	0.1	10.637	B
C-D	4	1			4				
C-A	501	125			501				
C-B	46	11	513	0.089	46	0.1	0.1	7.708	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	372	0.012	5	0.0	0.0	9.806	A
A-B	92	23			92				
A-C	398	99			398				
A-D	4	0.94	554	0.007	4	0.0	0.0	6.545	A
D-AB	20	5	577	0.035	20	0.0	0.0	6.715	A
D-BC	16	4	386	0.040	16	0.1	0.0	9.733	A
C-D	4	0.94			4				
C-A	420	105			420				
C-B	38	10	533	0.072	38	0.1	0.1	7.286	A

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
A-D	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-AB	0.05	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.10	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.06	0.03	0.27	0.48	0.51			N/A	N/A
D-BC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.13	0.03	0.26	0.47	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A
D-BC	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.13	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.10	0.00	0.00	0.10	0.10			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2021, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.05	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	54	Stream D-BC	1.05	A

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)	Run automatically
D2	2021	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	435	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	804	100.000
D		ONE HOUR	✓	103	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	33	402	1
	B	1	0	4	1
	C	771	33	0	0
	D	66	0	37	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	6	2	0
	B	0	0	0	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	8.66	0.0	0.5	A	6	8
A-B						30	45
A-C						369	553
A-D	0.00	7.76	0.0	0.5	A	0.92	1
D-AB	0.15	8.87	0.2	0.5	A	61	91
D-BC	0.14	14.23	0.2	0.5	B	34	51
C-D						0	0
C-A						707	1061
C-B	0.07	7.21	0.1	0.5	A	30	45

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	478	0.009	4	0.0	0.0	7.603	A
A-B	24	6			24				
A-C	303	76			303				
A-D	0.75	0.19	525	0.001	0.75	0.0	0.0	6.864	A
D-AB	50	12	545	0.092	49	0.0	0.1	7.264	A
D-BC	28	7	369	0.076	28	0.0	0.1	10.537	B
C-D	0	0			0				
C-A	580	145			580				
C-B	25	6	567	0.044	25	0.0	0.0	6.641	A

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	455	0.012	5	0.0	0.0	8.002	A
A-B	29	7			29				
A-C	361	90			361				
A-D	0.90	0.22	500	0.002	0.90	0.0	0.0	7.213	A
D-AB	60	15	517	0.115	59	0.1	0.1	7.863	A
D-BC	33	8	337	0.099	33	0.1	0.1	11.833	B
C-D	0	0			0				
C-A	693	173			693				
C-B	30	7	554	0.054	30	0.0	0.1	6.869	A

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	422	0.016	7	0.0	0.0	8.657	A
A-B	36	9			36				
A-C	443	111			443				
A-D	1	0.28	465	0.002	1	0.0	0.0	7.757	A
D-AB	73	18	479	0.152	73	0.1	0.2	8.860	A
D-BC	41	10	294	0.139	41	0.1	0.2	14.212	B
C-D	0	0			0				
C-A	849	212			849				
C-B	36	9	536	0.068	36	0.1	0.1	7.207	A

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	422	0.016	7	0.0	0.0	8.658	A
A-B	36	9			36				
A-C	443	111			443				
A-D	1	0.28	465	0.002	1	0.0	0.0	7.758	A
D-AB	73	18	479	0.152	73	0.2	0.2	8.871	A
D-BC	41	10	294	0.139	41	0.2	0.2	14.235	B
C-D	0	0			0				
C-A	849	212			849				
C-B	36	9	536	0.068	36	0.1	0.1	7.207	A

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	455	0.012	5	0.0	0.0	8.004	A
A-B	29	7			29				
A-C	361	90			361				
A-D	0.90	0.22	500	0.002	0.90	0.0	0.0	7.214	A
D-AB	60	15	517	0.115	60	0.2	0.1	7.877	A
D-BC	33	8	337	0.099	34	0.2	0.1	11.859	B
C-D	0	0			0				
C-A	693	173			693				
C-B	30	7	554	0.054	30	0.1	0.1	6.873	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	478	0.009	5	0.0	0.0	7.605	A
A-B	24	6			24				
A-C	303	76			303				
A-D	0.75	0.19	525	0.001	0.75	0.0	0.0	6.868	A
D-AB	50	12	544	0.092	50	0.1	0.1	7.285	A
D-BC	28	7	369	0.076	28	0.1	0.1	10.564	B
C-D	0	0			0				
C-A	580	145			580				
C-B	25	6	567	0.044	25	0.1	0.0	6.647	A

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
A-D	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
D-BC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-B	0.06	0.03	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.18	0.03	0.26	0.46	0.49			N/A	N/A
D-BC	0.16	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.07	0.03	0.26	0.47	0.49			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.18	0.03	0.25	0.46	0.48			N/A	N/A
D-BC	0.16	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A
D-BC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-B	0.06	0.00	0.00	0.06	0.06			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-BC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.76	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	75	Stream B-ACD	0.76	A

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)	Run automatically
D3	2026 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	684	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	641	100.000
D		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	127	552	5
	B	5	0	1	0
	C	583	53	0	5
	D	27	1	21	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	3	3	0
	B	0	0	0	0
	C	4	0	0	0
	D	4	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	12.58	0.0	0.5	B	6	8
A-B						117	175
A-C						507	760
A-D	0.01	7.27	0.0	0.5	A	5	7
D-AB	0.06	7.61	0.1	0.5	A	25	38
D-BC	0.08	12.63	0.1	0.5	B	20	30
C-D						5	7
C-A						535	802
C-B	0.12	8.54	0.1	0.5	A	49	73

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	365	0.012	4	0.0	0.0	9.976	A
A-B	96	24			96				
A-C	416	104			416				
A-D	4	0.94	550	0.007	4	0.0	0.0	6.595	A
D-AB	21	5	573	0.036	21	0.0	0.0	6.769	A
D-BC	16	4	379	0.043	16	0.0	0.0	9.910	A
C-D	4	0.94			4				
C-A	439	110			439				
C-B	40	10	528	0.076	40	0.0	0.1	7.361	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	335	0.016	5	0.0	0.0	10.920	B
A-B	114	29			114				
A-C	496	124			496				
A-D	4	1	529	0.009	4	0.0	0.0	6.862	A
D-AB	25	6	552	0.045	25	0.0	0.0	7.096	A
D-BC	19	5	349	0.055	19	0.0	0.1	10.900	B
C-D	4	1			4				
C-A	524	131			524				
C-B	48	12	508	0.094	48	0.1	0.1	7.821	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	293	0.023	7	0.0	0.0	12.573	B
A-B	140	35			140				
A-C	608	152			608				
A-D	6	1	501	0.011	5	0.0	0.0	7.267	A
D-AB	30	8	522	0.058	30	0.0	0.1	7.608	A
D-BC	24	6	309	0.077	24	0.1	0.1	12.625	B
C-D	6	1			6				
C-A	642	160			642				
C-B	58	15	480	0.122	58	0.1	0.1	8.539	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	293	0.023	7	0.0	0.0	12.575	B
A-B	140	35			140				
A-C	608	152			608				
A-D	6	1	501	0.011	6	0.0	0.0	7.267	A
D-AB	30	8	522	0.058	30	0.1	0.1	7.609	A
D-BC	24	6	309	0.077	24	0.1	0.1	12.634	B
C-D	6	1			6				
C-A	642	160			642				
C-B	58	15	480	0.122	58	0.1	0.1	8.544	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	335	0.016	5	0.0	0.0	10.927	B
A-B	114	29			114				
A-C	496	124			496				
A-D	4	1	529	0.009	5	0.0	0.0	6.863	A
D-AB	25	6	552	0.045	25	0.1	0.0	7.101	A
D-BC	19	5	349	0.055	19	0.1	0.1	10.910	B
C-D	4	1			4				
C-A	524	131			524				
C-B	48	12	508	0.094	48	0.1	0.1	7.826	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	365	0.012	5	0.0	0.0	9.985	A
A-B	96	24			96				
A-C	416	104			416				
A-D	4	0.94	549	0.007	4	0.0	0.0	6.599	A
D-AB	21	5	573	0.036	21	0.0	0.0	6.777	A
D-BC	16	4	379	0.043	16	0.1	0.0	9.925	A
C-D	4	0.94			4				
C-A	439	110			439				
C-B	40	10	528	0.076	40	0.1	0.1	7.373	A

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
A-D	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-AB	0.05	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.06	0.03	0.27	0.48	0.51			N/A	N/A
D-BC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.14	0.03	0.26	0.47	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A
D-BC	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.14	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.10	0.00	0.00	0.10	0.10			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-BC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.09	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	48	Stream D-BC	1.09	A

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)	Run automatically
D4	2026 Base	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	455	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	841	100.000
D		ONE HOUR	✓	108	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	34	420	1
	B	1	0	4	1
	C	806	35	0	0
	D	69	0	39	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	6	2	0
	B	0	0	0	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	8.84	0.0	0.5	A	6	8
A-B						31	47
A-C						385	578
A-D	0.00	7.91	0.0	0.5	A	0.92	1
D-AB	0.16	9.16	0.2	0.5	A	63	95
D-BC	0.15	14.99	0.2	0.5	B	36	54
C-D						0	0
C-A						740	1109
C-B	0.07	7.30	0.1	0.5	A	32	48

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	473	0.010	4	0.0	0.0	7.689	A
A-B	26	6			26				
A-C	316	79			316				
A-D	0.75	0.19	519	0.001	0.75	0.0	0.0	6.944	A
D-AB	52	13	538	0.097	52	0.0	0.1	7.391	A
D-BC	29	7	362	0.081	29	0.0	0.1	10.812	B
C-D	0	0			0				
C-A	607	152			607				
C-B	26	7	564	0.047	26	0.0	0.0	6.697	A

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	449	0.012	5	0.0	0.0	8.120	A
A-B	31	8			31				
A-C	378	94			378				
A-D	0.90	0.22	493	0.002	0.90	0.0	0.0	7.318	A
D-AB	62	16	509	0.122	62	0.1	0.1	8.043	A
D-BC	35	9	329	0.107	35	0.1	0.1	12.252	B
C-D	0	0			0				
C-A	725	181			725				
C-B	31	8	550	0.057	31	0.0	0.1	6.940	A

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	414	0.016	7	0.0	0.0	8.837	A
A-B	37	9			37				
A-C	462	116			462				
A-D	1	0.28	456	0.002	1	0.0	0.0	7.907	A
D-AB	76	19	469	0.162	76	0.1	0.2	9.148	A
D-BC	43	11	283	0.152	43	0.1	0.2	14.962	B
C-D	0	0			0				
C-A	887	222			887				
C-B	39	10	531	0.073	38	0.1	0.1	7.304	A

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	414	0.016	7	0.0	0.0	8.838	A
A-B	37	9			37				
A-C	462	116			462				
A-D	1	0.28	456	0.002	1	0.0	0.0	7.907	A
D-AB	76	19	469	0.162	76	0.2	0.2	9.159	A
D-BC	43	11	283	0.152	43	0.2	0.2	14.993	B
C-D	0	0			0				
C-A	887	222			887				
C-B	39	10	531	0.073	39	0.1	0.1	7.304	A

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	449	0.012	5	0.0	0.0	8.123	A
A-B	31	8			31				
A-C	378	94			378				
A-D	0.90	0.22	493	0.002	0.90	0.0	0.0	7.319	A
D-AB	62	16	509	0.122	62	0.2	0.1	8.057	A
D-BC	35	9	329	0.107	35	0.2	0.1	12.284	B
C-D	0	0			0				
C-A	725	181			725				
C-B	31	8	550	0.057	32	0.1	0.1	6.945	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	473	0.010	5	0.0	0.0	7.691	A
A-B	26	6			26				
A-C	316	79			316				
A-D	0.75	0.19	519	0.001	0.75	0.0	0.0	6.948	A
D-AB	52	13	538	0.097	52	0.1	0.1	7.413	A
D-BC	29	7	362	0.081	29	0.1	0.1	10.845	B
C-D	0	0			0				
C-A	607	152			607				
C-B	26	7	564	0.047	26	0.1	0.0	6.701	A

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-BC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
A-D	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A
D-BC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.06	0.03	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.19	0.03	0.26	0.46	0.49			N/A	N/A
D-BC	0.18	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.08	0.03	0.26	0.47	0.49			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.19	0.03	0.26	0.47	0.49			N/A	N/A
D-BC	0.18	0.03	0.26	0.46	0.49			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A
D-BC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.06	0.00	0.00	0.06	0.06			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-BC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2026 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.75	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	67	Stream B-ACD	0.75	A

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)	Run automatically
D5	2026 with Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	739	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	641	100.000
D		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	127	607	5
	B	5	0	1	0
	C	583	53	0	5
	D	27	1	21	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	3	3	0
	B	0	0	0	0
	C	4	0	0	0
	D	4	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	13.12	0.0	0.5	B	6	8
A-B						117	175
A-C						557	835
A-D	0.01	7.27	0.0	0.5	A	5	7
D-AB	0.06	7.62	0.1	0.5	A	25	38
D-BC	0.08	12.99	0.1	0.5	B	20	30
C-D						5	7
C-A						535	802
C-B	0.12	8.80	0.1	0.5	A	49	73

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	357	0.013	4	0.0	0.0	10.205	B
A-B	96	24			96				
A-C	457	114			457				
A-D	4	0.94	550	0.007	4	0.0	0.0	6.595	A
D-AB	21	5	573	0.036	21	0.0	0.0	6.773	A
D-BC	16	4	374	0.043	16	0.0	0.0	10.054	B
C-D	4	0.94			4				
C-A	439	110			439				
C-B	40	10	520	0.077	40	0.0	0.1	7.490	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	325	0.017	5	0.0	0.0	11.252	B
A-B	114	29			114				
A-C	546	136			546				
A-D	4	1	529	0.009	4	0.0	0.0	6.862	A
D-AB	25	6	551	0.045	25	0.0	0.0	7.103	A
D-BC	19	5	343	0.056	19	0.0	0.1	11.112	B
C-D	4	1			4				
C-A	524	131			524				
C-B	48	12	498	0.096	48	0.1	0.1	7.992	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	281	0.024	7	0.0	0.0	13.119	B
A-B	140	35			140				
A-C	668	167			668				
A-D	6	1	501	0.011	5	0.0	0.0	7.267	A
D-AB	30	8	521	0.058	30	0.0	0.1	7.620	A
D-BC	24	6	301	0.079	24	0.1	0.1	12.977	B
C-D	6	1			6				
C-A	642	160			642				
C-B	58	15	467	0.125	58	0.1	0.1	8.796	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	281	0.024	7	0.0	0.0	13.125	B
A-B	140	35			140				
A-C	668	167			668				
A-D	6	1	501	0.011	6	0.0	0.0	7.267	A
D-AB	30	8	521	0.058	30	0.1	0.1	7.621	A
D-BC	24	6	301	0.079	24	0.1	0.1	12.987	B
C-D	6	1			6				
C-A	642	160			642				
C-B	58	15	467	0.125	58	0.1	0.1	8.801	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	325	0.017	5	0.0	0.0	11.257	B
A-B	114	29			114				
A-C	546	136			546				
A-D	4	1	529	0.009	5	0.0	0.0	6.863	A
D-AB	25	6	551	0.045	25	0.1	0.0	7.105	A
D-BC	19	5	343	0.056	19	0.1	0.1	11.125	B
C-D	4	1			4				
C-A	524	131			524				
C-B	48	12	498	0.096	48	0.1	0.1	8.003	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	357	0.013	5	0.0	0.0	10.213	B
A-B	96	24			96				
A-C	457	114			457				
A-D	4	0.94	549	0.007	4	0.0	0.0	6.597	A
D-AB	21	5	573	0.036	21	0.0	0.0	6.778	A
D-BC	16	4	374	0.043	16	0.1	0.0	10.072	B
C-D	4	0.94			4				
C-A	439	110			439				
C-B	40	10	520	0.077	40	0.1	0.1	7.502	A

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-BC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.02	0.25	0.45	0.48			N/A	N/A
A-D	0.01	0.01	0.25	0.45	0.48			N/A	N/A
D-AB	0.05	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.06	0.03	0.27	0.48	0.51			N/A	N/A
D-BC	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.14	0.03	0.26	0.47	0.49			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A
D-BC	0.08	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.14	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.11	0.00	0.00	0.11	0.11			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.01	0.00	0.00	0.01	0.01			N/A	N/A
D-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-BC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2026 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		1.08	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	42	Stream D-BC	1.08	A

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)	Run automatically
D6	2026 with Development	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	455	100.000
B		ONE HOUR	✓	6	100.000
C		ONE HOUR	✓	896	100.000
D		ONE HOUR	✓	108	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	34	420	1
	B	1	0	4	1
	C	861	35	0	0
	D	69	0	39	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	6	2	0
	B	0	0	0	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	8.96	0.0	0.5	A	6	8
A-B						31	47
A-C						385	578
A-D	0.00	8.13	0.0	0.5	A	0.92	1
D-AB	0.17	9.49	0.2	0.5	A	63	95
D-BC	0.16	15.80	0.2	0.5	C	36	54
C-D						0	0
C-A						790	1185
C-B	0.07	7.30	0.1	0.5	A	32	48

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	470	0.010	4	0.0	0.0	7.739	A
A-B	26	6			26				
A-C	316	79			316				
A-D	0.75	0.19	510	0.001	0.75	0.0	0.0	7.062	A
D-AB	52	13	529	0.098	52	0.0	0.1	7.533	A
D-BC	29	7	353	0.083	29	0.0	0.1	11.090	B
C-D	0	0			0				
C-A	648	162			648				
C-B	26	7	564	0.047	26	0.0	0.0	6.697	A

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	445	0.012	5	0.0	0.0	8.192	A
A-B	31	8			31				
A-C	378	94			378				
A-D	0.90	0.22	482	0.002	0.90	0.0	0.0	7.476	A
D-AB	62	16	498	0.124	62	0.1	0.1	8.244	A
D-BC	35	9	319	0.110	35	0.1	0.1	12.685	B
C-D	0	0			0				
C-A	774	194			774				
C-B	31	8	550	0.057	31	0.0	0.1	6.940	A

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	409	0.016	7	0.0	0.0	8.954	A
A-B	37	9			37				
A-C	462	116			462				
A-D	1	0.28	444	0.002	1	0.0	0.0	8.134	A
D-AB	76	19	455	0.167	76	0.1	0.2	9.474	A
D-BC	43	11	271	0.159	43	0.1	0.2	15.767	C
C-D	0	0			0				
C-A	948	237			948				
C-B	39	10	531	0.073	38	0.1	0.1	7.304	A

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	2	409	0.016	7	0.0	0.0	8.955	A
A-B	37	9			37				
A-C	462	116			462				
A-D	1	0.28	444	0.002	1	0.0	0.0	8.135	A
D-AB	76	19	455	0.167	76	0.2	0.2	9.487	A
D-BC	43	11	271	0.159	43	0.2	0.2	15.801	C
C-D	0	0			0				
C-A	948	237			948				
C-B	39	10	531	0.073	39	0.1	0.1	7.304	A

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	445	0.012	5	0.0	0.0	8.194	A
A-B	31	8			31				
A-C	378	94			378				
A-D	0.90	0.22	482	0.002	0.90	0.0	0.0	7.480	A
D-AB	62	16	498	0.125	62	0.2	0.1	8.262	A
D-BC	35	9	319	0.110	35	0.2	0.1	12.719	B
C-D	0	0			0				
C-A	774	194			774				
C-B	31	8	550	0.057	32	0.1	0.1	6.945	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	470	0.010	5	0.0	0.0	7.741	A
A-B	26	6			26				
A-C	316	79			316				
A-D	0.75	0.19	510	0.001	0.75	0.0	0.0	7.064	A
D-AB	52	13	529	0.098	52	0.1	0.1	7.555	A
D-BC	29	7	353	0.083	29	0.1	0.1	11.128	B
C-D	0	0			0				
C-A	648	162			648				
C-B	26	7	564	0.047	26	0.1	0.0	6.703	A

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-BC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
A-D	0.00	0.00	0.25	0.45	0.48			N/A	N/A
D-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A
D-BC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-B	0.06	0.03	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.20	0.03	0.26	0.46	0.49			N/A	N/A
D-BC	0.18	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.08	0.03	0.26	0.47	0.49			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.20	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.19	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A
D-BC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-B	0.06	0.00	0.00	0.06	0.06			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-D	0.00	0.00	0.00	0.00	0.00			N/A	N/A
D-AB	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-BC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.05	0.00	0.00	0.05	0.05			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.1.1519

For sales and distribution information, program advice and maintenance, contact TRL Software:
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

Filename: Barnsley - Bridge Street.j10
Path: H:\GoogleDrive\KEI\Projects\023 - Car Park Barnsley
Report generation date: 28/04/2021 20:02:55

»2021, AM
»2021, PM
»2026 Base, AM
»2026 Base, PM
»2026 With Development, AM
»2026 With Development, PM

Summary of junction performance

	AM									PM								
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
	2021																	
Stream B-ACD	D1	0.0	0.6	13.70	0.04	B	0.72	A	67 % [Stream B-ACD]	D2	0.0	0.5	8.28	0.02	A	0.60	A	67 % [Stream C-ABD]
Stream A-BCD		0.1	0.5	4.49	0.05	A					0.0	0.5	4.94	0.03	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.5	1.6	4.97	0.17	A					0.6	1.9	4.17	0.18	A			
	2026 Base																	
Stream B-ACD	D3	0.1	0.6	14.23	0.04	B	0.75	A	60 % [Stream B-ACD]	D4	0.0	0.5	8.46	0.02	A	0.62	A	60 % [Stream C-ABD]
Stream A-BCD		0.1	0.5	4.41	0.05	A					0.0	0.5	4.90	0.03	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.5	1.7	4.95	0.18	A					0.7	2.2	4.14	0.19	A			
	2026 With Development																	
Stream B-ACD	D5	0.1	0.6	15.49	0.05	C	0.76	A	46 % [Stream B-ACD]	D6	0.0	0.5	9.48	0.02	A	0.60	A	55 % [Stream C-ABD]
Stream A-BCD		0.1	0.5	4.51	0.06	A					0.0	0.5	4.36	0.03	A			
Stream D-ABC		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			
Stream C-ABD		0.8	2.5	4.49	0.21	A					0.8	2.7	4.25	0.21	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 Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	
Location	
Site number	
Date	28/04/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	BEAST\user
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓				✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021	AM	ONE HOUR	08:00	09:30	15	✓
D2	2021	PM	ONE HOUR	16:00	17:30	15	✓
D3	2026 Base	AM	ONE HOUR	08:00	09:30	15	✓
D4	2026 Base	PM	ONE HOUR	16:00	17:30	15	✓
D5	2026 With Development	AM	ONE HOUR	08:00	09:30	15	✓
D6	2026 With Development	PM	ONE HOUR	16:00	17:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2021, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.72	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	67	Stream B-ACD	0.72	A

Arms

Arms

Arm	Name	Description	Arm type
A	untitled		Major
B	untitled		Minor
C	untitled		Major
D	untitled		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	9.01			131.0	✓	0.00
C	9.01			114.0	✓	0.00

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	3.45	19	19
D	One lane	3.24	19	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	650	-	-	-	-	-	-	0.219	0.313	0.219	-	-	-
B-A	515	0.082	0.206	0.206	-	-	-	0.130	0.295	-	0.206	0.206	0.103
B-C	665	0.089	0.224	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	515	0.082	0.206	0.206	-	-	-	0.130	0.295	0.130	-	-	-
B-D, offside lane	515	0.082	0.206	0.206	-	-	-	0.130	0.295	0.130	-	-	-
C-B	640	0.215	0.215	0.308	-	-	-	-	-	-	-	-	-
D-A	650	-	-	-	-	-	-	0.219	-	0.087	-	-	-
D-B, nearside lane	504	0.127	0.127	0.288	-	-	-	0.202	0.202	0.080	-	-	-
D-B, offside lane	504	0.127	0.127	0.288	-	-	-	0.202	0.202	0.080	-	-	-
D-C	504	-	0.127	0.288	0.101	0.202	0.202	0.202	0.202	0.080	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Run automatically
D1	2021	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	674	100.000
B		ONE HOUR	✓	12	100.000
C		ONE HOUR	✓	581	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	659	13
	B	2	0	4	6
	C	531	48	0	2
	D	0	0	0	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	17
	B	0	0	0	40
	C	4	0	0	0
	D	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.04	13.70	0.0	0.6	B	11	17
A-BCD	0.05	4.49	0.1	0.5	A	34	51
A-B						2	3
A-C						582	874
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.17	4.97	0.5	1.6	A	107	160
C-D						2	2
C-A						424	637

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	2	397	0.023	9	0.0	0.0	10.807	B
A-BCD	22	6	896	0.025	22	0.0	0.0	4.487	A
A-B	1	0.37			1				
A-C	484	121			484				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-ABD	71	18	813	0.088	71	0.0	0.2	4.948	A
C-D	1	0.34			1				
C-A	365	91			365				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	3	365	0.030	11	0.0	0.0	11.848	B
A-BCD	31	8	950	0.033	31	0.0	0.0	4.247	A
A-B	2	0.43			2				
A-C	573	143			573				
D-ABC	0	0	356	0.000	0	0.0	0.0	0.000	A
C-ABD	99	25	852	0.116	99	0.2	0.3	4.886	A
C-D	2	0.40			2				
C-A	422	105			422				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	320	0.041	13	0.0	0.0	13.688	B
A-BCD	49	12	1028	0.048	49	0.0	0.1	3.947	A
A-B	2	0.52			2				
A-C	691	173			691				
D-ABC	0	0	315	0.000	0	0.0	0.0	0.000	A
C-ABD	150	37	910	0.165	149	0.3	0.5	4.858	A
C-D	2	0.46			2				
C-A	488	122			488				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	320	0.041	13	0.0	0.0	13.696	B
A-BCD	49	12	1028	0.048	49	0.1	0.1	3.933	A
A-B	2	0.52			2				
A-C	691	173			691				
D-ABC	0	0	314	0.000	0	0.0	0.0	0.000	A
C-ABD	150	38	910	0.165	150	0.5	0.5	4.876	A
C-D	2	0.46			2				
C-A	487	122			487				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	3	365	0.030	11	0.0	0.0	11.859	B
A-BCD	31	8	950	0.033	31	0.1	0.0	4.208	A
A-B	2	0.43			2				
A-C	573	143			573				
D-ABC	0	0	356	0.000	0	0.0	0.0	0.000	A
C-ABD	99	25	853	0.117	100	0.5	0.3	4.919	A
C-D	2	0.40			2				
C-A	421	105			421				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	2	397	0.023	9	0.0	0.0	10.822	B
A-BCD	22	6	896	0.025	22	0.0	0.0	4.465	A
A-B	1	0.37			1				
A-C	484	121			484				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-ABD	72	18	813	0.088	72	0.3	0.2	4.974	A
C-D	1	0.34			1				
C-A	364	91			364				

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.03	0.29	0.53	0.56			N/A	N/A
A-BCD	0.05	0.03	0.27	0.49	0.52			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.27	0.00	0.00	0.27	0.27			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.03	0.30	0.53	0.56			N/A	N/A
A-BCD	0.08	0.03	0.27	0.49	0.52			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.47	0.03	0.28	0.51	1.61			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BCD	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.48	0.04	0.39	1.23	1.39			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.28	0.00	0.00	0.28	0.28			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2021, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.60	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	67	Stream C-ABD	0.60	A

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)	Run automatically
D2	2021	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	447	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	808	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	9	430	8
	B	1	0	5	1
	C	757	45	0	6
	D	0	0	0	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	0
	B	0	0	0	0
	C	2	0	0	0
	D	0	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	8.28	0.0	0.5	A	6	10
A-BCD	0.03	4.94	0.0	0.5	A	16	24
A-B						8	12
A-C						387	580
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.18	4.17	0.6	1.9	A	135	202
C-D						5	7
C-A						602	903

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	501	0.011	5	0.0	0.0	7.259	A
A-BCD	11	3	750	0.014	11	0.0	0.0	4.932	A
A-B	7	2			7				
A-C	319	80			319				
D-ABC	0	0	371	0.000	0	0.0	0.0	0.000	A
C-ABD	84	21	960	0.088	84	0.0	0.2	4.153	A
C-D	4	1			4				
C-A	520	130			520				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	477	0.013	6	0.0	0.0	7.645	A
A-BCD	15	4	775	0.019	15	0.0	0.0	4.801	A
A-B	8	2			8				
A-C	380	95			380				
D-ABC	0	0	339	0.000	0	0.0	0.0	0.000	A
C-ABD	122	31	1028	0.119	122	0.2	0.3	4.025	A
C-D	5	1			5				
C-A	600	150			600				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	442	0.017	8	0.0	0.0	8.281	A
A-BCD	22	5	813	0.027	22	0.0	0.0	4.624	A
A-B	10	2			10				
A-C	461	115			461				
D-ABC	0	0	293	0.000	0	0.0	0.0	0.000	A
C-ABD	197	49	1125	0.175	196	0.3	0.5	3.936	A
C-D	5	1			5				
C-A	687	172			687				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	442	0.017	8	0.0	0.0	8.283	A
A-BCD	22	5	813	0.027	22	0.0	0.0	4.632	A
A-B	10	2			10				
A-C	461	115			461				
D-ABC	0	0	293	0.000	0	0.0	0.0	0.000	A
C-ABD	198	49	1126	0.176	198	0.5	0.6	3.948	A
C-D	5	1			5				
C-A	686	172			686				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	477	0.013	6	0.0	0.0	7.648	A
A-BCD	15	4	775	0.019	15	0.0	0.0	4.817	A
A-B	8	2			8				
A-C	380	95			380				
D-ABC	0	0	338	0.000	0	0.0	0.0	0.000	A
C-ABD	123	31	1029	0.119	124	0.6	0.3	4.043	A
C-D	5	1			5				
C-A	599	150			599				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	501	0.011	5	0.0	0.0	7.264	A
A-BCD	11	3	750	0.014	11	0.0	0.0	4.941	A
A-B	7	2			7				
A-C	319	80			319				
D-ABC	0	0	371	0.000	0	0.0	0.0	0.000	A
C-ABD	85	21	961	0.088	85	0.3	0.2	4.168	A
C-D	4	1			4				
C-A	519	130			519				

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.17	0.00	0.00	0.17	0.17			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
A-BCD	0.02	0.02	0.25	0.46	0.48			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.28	0.00	0.00	0.28	0.28			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.54	0.03	0.28	0.54	1.85			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.55	0.55	1.01	1.42	1.47			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.29	0.00	0.00	0.29	0.29			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2026 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.75	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	60	Stream B-ACD	0.75	A

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)	Run automatically
D3	2026 Base	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	705	100.000
B		ONE HOUR	✓	12	100.000
C		ONE HOUR	✓	607	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	689	14
	B	2	0	4	6
	C	555	50	0	2
	D	0	0	0	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	17
	B	0	0	0	40
	C	4	0	0	0
	D	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.04	14.23	0.1	0.6	B	11	17
A-BCD	0.05	4.41	0.1	0.5	A	39	58
A-B						2	3
A-C						606	909
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.18	4.95	0.5	1.7	A	117	175
C-D						2	2
C-A						439	658

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	2	390	0.023	9	0.0	0.0	11.020	B
A-BCD	25	6	909	0.027	25	0.0	0.0	4.410	A
A-B	1	0.37			1				
A-C	505	126			505				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	77	19	822	0.094	76	0.0	0.2	4.927	A
C-D	1	0.34			1				
C-A	379	95			379				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	3	356	0.030	11	0.0	0.0	12.159	B
A-BCD	35	9	966	0.037	35	0.0	0.1	4.169	A
A-B	2	0.43			2				
A-C	597	149			597				
D-ABC	0	0	348	0.000	0	0.0	0.0	0.000	A
C-ABD	108	27	864	0.125	107	0.2	0.3	4.870	A
C-D	2	0.39			2				
C-A	437	109			437				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	309	0.043	13	0.0	0.1	14.216	B
A-BCD	56	14	1048	0.054	56	0.1	0.1	3.871	A
A-B	2	0.52			2				
A-C	718	179			718				
D-ABC	0	0	304	0.000	0	0.0	0.0	0.000	A
C-ABD	165	41	924	0.178	164	0.3	0.5	4.863	A
C-D	2	0.45			2				
C-A	502	125			502				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	308	0.043	13	0.1	0.1	14.230	B
A-BCD	56	14	1048	0.054	56	0.1	0.1	3.856	A
A-B	2	0.52			2				
A-C	718	179			718				
D-ABC	0	0	304	0.000	0	0.0	0.0	0.000	A
C-ABD	165	41	925	0.179	165	0.5	0.5	4.880	A
C-D	2	0.45			2				
C-A	501	125			501				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	3	356	0.030	11	0.1	0.0	12.174	B
A-BCD	35	9	966	0.037	36	0.1	0.1	4.128	A
A-B	2	0.43			2				
A-C	597	149			597				
D-ABC	0	0	347	0.000	0	0.0	0.0	0.000	A
C-ABD	108	27	864	0.125	109	0.5	0.3	4.905	A
C-D	2	0.39			2				
C-A	436	109			436				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	2	390	0.023	9	0.0	0.0	11.037	B
A-BCD	25	6	909	0.027	25	0.1	0.0	4.389	A
A-B	1	0.37			1				
A-C	505	126			505				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	77	19	822	0.094	78	0.3	0.2	4.954	A
C-D	1	0.34			1				
C-A	378	95			378				

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.19	0.00	0.00	0.19	0.19			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.03	0.29	0.53	0.56			N/A	N/A
A-BCD	0.05	0.03	0.27	0.49	0.51			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.30	0.00	0.00	0.30	0.30			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.03	0.30	0.53	0.56			N/A	N/A
A-BCD	0.09	0.03	0.28	0.50	0.52			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.53	0.03	0.28	0.53	1.71			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
A-BCD	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.54	0.06	0.61	1.36	1.45			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.05	0.00	0.00	0.05	0.05			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.32	0.00	0.00	0.32	0.32			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.20	0.00	0.00	0.20	0.20			N/A	N/A

2026 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.62	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	60	Stream C-ABD	0.62	A

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)	Run automatically
D4	2026 Base	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	467	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	845	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	9	450	8
	B	1	0	5	1
	C	792	47	0	6
	D	0	0	0	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	0
	B	0	0	0	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	8.46	0.0	0.5	A	6	10
A-BCD	0.03	4.90	0.0	0.5	A	16	25
A-B						8	12
A-C						404	606
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.19	4.14	0.7	2.2	A	150	225
C-D						5	7
C-A						621	931

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	496	0.011	5	0.0	0.0	7.340	A
A-BCD	11	3	755	0.015	11	0.0	0.0	4.891	A
A-B	7	2			7				
A-C	334	83			334				
D-ABC	0	0	364	0.000	0	0.0	0.0	0.000	A
C-ABD	92	23	976	0.094	91	0.0	0.2	4.126	A
C-D	4	1			4				
C-A	540	135			540				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	470	0.013	6	0.0	0.0	7.758	A
A-BCD	15	4	782	0.020	15	0.0	0.0	4.752	A
A-B	8	2			8				
A-C	397	99			397				
D-ABC	0	0	330	0.000	0	0.0	0.0	0.000	A
C-ABD	135	34	1048	0.129	134	0.2	0.3	4.006	A
C-D	5	1			5				
C-A	620	155			620				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	434	0.018	8	0.0	0.0	8.454	A
A-BCD	23	6	823	0.028	23	0.0	0.0	4.567	A
A-B	10	2			10				
A-C	482	120			482				
D-ABC	0	0	282	0.000	0	0.0	0.0	0.000	A
C-ABD	221	55	1150	0.193	220	0.3	0.6	3.948	A
C-D	5	1			5				
C-A	704	176			704				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	433	0.018	8	0.0	0.0	8.457	A
A-BCD	23	6	822	0.028	23	0.0	0.0	4.572	A
A-B	10	2			10				
A-C	482	120			482				
D-ABC	0	0	282	0.000	0	0.0	0.0	0.000	A
C-ABD	222	56	1150	0.193	222	0.6	0.7	3.963	A
C-D	5	1			5				
C-A	703	176			703				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	470	0.013	6	0.0	0.0	7.761	A
A-BCD	15	4	782	0.020	15	0.0	0.0	4.765	A
A-B	8	2			8				
A-C	397	99			397				
D-ABC	0	0	329	0.000	0	0.0	0.0	0.000	A
C-ABD	136	34	1049	0.129	137	0.7	0.3	4.029	A
C-D	5	1			5				
C-A	619	155			619				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	495	0.011	5	0.0	0.0	7.343	A
A-BCD	11	3	755	0.015	11	0.0	0.0	4.899	A
A-B	7	2			7				
A-C	334	83			334				
D-ABC	0	0	363	0.000	0	0.0	0.0	0.000	A
C-ABD	93	23	977	0.095	93	0.3	0.2	4.145	A
C-D	4	1			4				
C-A	539	135			539				

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.19	0.00	0.00	0.19	0.19			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
A-BCD	0.02	0.02	0.25	0.46	0.48			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.32	0.00	0.00	0.32	0.32			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.65	0.03	0.28	0.65	2.19			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.66	0.23	0.96	1.41	1.47			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.33	0.00	0.00	0.33	0.33			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.20	0.00	0.00	0.20	0.20			N/A	N/A

2026 With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.76	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	46	Stream B-ACD	0.76	A

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)	Run automatically
D5	2026 With Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	705	100.000
B		ONE HOUR	✓	12	100.000
C		ONE HOUR	✓	781	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	689	14
	B	2	0	4	6
	C	729	50	0	2
	D	0	0	0	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	17
	B	0	0	0	40
	C	3	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.05	15.49	0.1	0.6	C	11	17
A-BCD	0.06	4.51	0.1	0.5	A	41	61
A-B						2	3
A-C						604	906
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.21	4.49	0.8	2.5	A	154	231
C-D						2	2
C-A						561	842

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	2	375	0.024	9	0.0	0.0	11.471	B
A-BCD	25	6	888	0.029	25	0.0	0.0	4.510	A
A-B	1	0.37			1				
A-C	504	126			504				
D-ABC	0	0	351	0.000	0	0.0	0.0	0.000	A
C-ABD	95	24	915	0.103	94	0.0	0.2	4.466	A
C-D	1	0.34			1				
C-A	492	123			492				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	3	338	0.032	11	0.0	0.0	12.849	B
A-BCD	37	9	943	0.039	37	0.0	0.1	4.271	A
A-B	2	0.43			2				
A-C	595	149			595				
D-ABC	0	0	315	0.000	0	0.0	0.0	0.000	A
C-ABD	138	35	976	0.142	138	0.2	0.4	4.380	A
C-D	2	0.39			2				
C-A	562	141			562				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	285	0.046	13	0.0	0.1	15.468	C
A-BCD	60	15	1024	0.059	60	0.1	0.1	3.975	A
A-B	2	0.52			2				
A-C	714	178			714				
D-ABC	0	0	263	0.000	0	0.0	0.0	0.000	A
C-ABD	227	57	1066	0.213	225	0.4	0.8	4.386	A
C-D	2	0.43			2				
C-A	631	158			631				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	3	284	0.046	13	0.1	0.1	15.491	C
A-BCD	60	15	1024	0.059	60	0.1	0.1	3.960	A
A-B	2	0.52			2				
A-C	714	178			714				
D-ABC	0	0	262	0.000	0	0.0	0.0	0.000	A
C-ABD	228	57	1067	0.213	228	0.8	0.8	4.409	A
C-D	2	0.43			2				
C-A	630	158			630				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	11	3	337	0.032	11	0.1	0.0	12.871	B
A-BCD	37	9	943	0.039	37	0.1	0.1	4.229	A
A-B	2	0.43			2				
A-C	595	149			595				
D-ABC	0	0	314	0.000	0	0.0	0.0	0.000	A
C-ABD	139	35	978	0.143	141	0.8	0.4	4.416	A
C-D	2	0.38			2				
C-A	561	140			561				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	9	2	375	0.024	9	0.0	0.0	11.492	B
A-BCD	26	6	888	0.029	26	0.1	0.0	4.489	A
A-B	1	0.37			1				
A-C	504	126			504				
D-ABC	0	0	351	0.000	0	0.0	0.0	0.000	A
C-ABD	95	24	915	0.104	96	0.4	0.2	4.490	A
C-D	1	0.34			1				
C-A	491	123			491				

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.03	0.29	0.53	0.56			N/A	N/A
A-BCD	0.06	0.03	0.27	0.48	0.51			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.03	0.30	0.54	0.57			N/A	N/A
A-BCD	0.10	0.03	0.28	0.50	0.53			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.75	0.03	0.28	0.75	2.50			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
A-BCD	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.76	0.28	0.97	1.42	1.48			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
A-BCD	0.06	0.00	0.00	0.06	0.06			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.40	0.00	0.00	0.40	0.40			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.23	0.00	0.00	0.23	0.23			N/A	N/A

2026 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		0.60	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	55	Stream C-ABD	0.60	A

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)	Run automatically
D6	2026 With Development	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	641	100.000
B		ONE HOUR	✓	7	100.000
C		ONE HOUR	✓	845	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	9	624	8
	B	1	0	5	1
	C	792	47	0	6
	D	0	0	0	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	2	0
	B	0	0	0	0
	C	2	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.02	9.48	0.0	0.5	A	6	10
A-BCD	0.03	4.36	0.0	0.5	A	22	33
A-B						8	12
A-C						558	838
D-ABC	0.00	0.00	0.0	~1	A	0	0
C-ABD	0.21	4.25	0.8	2.7	A	158	237
C-D						5	7
C-A						613	920

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	466	0.011	5	0.0	0.0	7.817	A
A-BCD	14	3	850	0.016	14	0.0	0.0	4.350	A
A-B	7	2			7				
A-C	462	116			462				
D-ABC	0	0	348	0.000	0	0.0	0.0	0.000	A
C-ABD	95	24	958	0.099	94	0.0	0.2	4.232	A
C-D	4	1			4				
C-A	537	134			537				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	434	0.015	6	0.0	0.0	8.417	A
A-BCD	20	5	897	0.022	20	0.0	0.0	4.148	A
A-B	8	2			8				
A-C	549	137			549				
D-ABC	0	0	311	0.000	0	0.0	0.0	0.000	A
C-ABD	141	35	1028	0.137	140	0.2	0.4	4.125	A
C-D	5	1			5				
C-A	614	154			614				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	387	0.020	8	0.0	0.0	9.480	A
A-BCD	32	8	967	0.033	32	0.0	0.0	3.895	A
A-B	10	2			10				
A-C	665	166			665				
D-ABC	0	0	259	0.000	0	0.0	0.0	0.000	A
C-ABD	236	59	1129	0.209	234	0.4	0.8	4.106	A
C-D	5	1			5				
C-A	689	172			689				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	8	2	387	0.020	8	0.0	0.0	9.485	A
A-BCD	32	8	967	0.033	32	0.0	0.0	3.901	A
A-B	10	2			10				
A-C	665	166			665				
D-ABC	0	0	258	0.000	0	0.0	0.0	0.000	A
C-ABD	237	59	1130	0.210	237	0.8	0.8	4.126	A
C-D	5	1			5				
C-A	688	172			688				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	6	2	434	0.015	6	0.0	0.0	8.425	A
A-BCD	20	5	897	0.022	20	0.0	0.0	4.159	A
A-B	8	2			8				
A-C	549	137			549				
D-ABC	0	0	311	0.000	0	0.0	0.0	0.000	A
C-ABD	142	35	1029	0.138	143	0.8	0.4	4.153	A
C-D	5	1			5				
C-A	613	153			613				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	1	466	0.011	5	0.0	0.0	7.822	A
A-BCD	14	3	849	0.016	14	0.0	0.0	4.358	A
A-B	7	2			7				
A-C	462	116			462				
D-ABC	0	0	348	0.000	0	0.0	0.0	0.000	A
C-ABD	96	24	958	0.100	96	0.4	0.2	4.251	A
C-D	4	1			4				
C-A	536	134			536				

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.21	0.00	0.00	0.21	0.21			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.01	0.25	0.45	0.48			N/A	N/A
A-BCD	0.03	0.03	0.25	0.46	0.48			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.35	0.00	0.00	0.35	0.35			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.76	0.03	0.28	0.76	2.68			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
A-BCD	0.04	0.00	0.00	0.04	0.04			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.77	0.50	0.99	1.42	1.47			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.03	0.00	0.00	0.03	0.03			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.37	0.00	0.00	0.37	0.37			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.01	0.00	0.00	0.01	0.01			N/A	N/A
A-BCD	0.02	0.00	0.00	0.02	0.02			N/A	N/A
D-ABC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.1.1519

For sales and distribution information, program advice and maintenance, contact TRL Software:
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Filename: Barnsley - Honeywell Street.j10
Path: H:\GoogleDrive\KEI\Projects\023 - Car Park Barnsley
Report generation date: 27/04/2021 22:07:19

»2021, AM
»2021, PM
»2026, AM
»2026, PM
»2026 with DEV, AM
»2026 with DEV, PM

Summary of junction performance

	AM									PM								
	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Set ID	Q (PCU)	Q95 (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
	2021																	
Stream B-ACD	D1	0.7	3.1	15.39	0.39	C	4.86	A	36 % [Stream B-ACD]	D2	0.6	2.8	13.06	0.36	B	3.87	A	47 % [Stream D-BC]
Stream A-BC		0.8	2.0	4.93	0.30	A					0.5	1.4	5.01	0.21	A			
Stream A-D		0.1	0.5	5.72	0.35	A					0.1	0.5	6.42	0.30	A			
Stream D-AB		0.3	1.5	11.03	0.25	B					0.3	1.3	11.40	0.22	B			
Stream D-BC		0.1	0.5	15.66	0.10	C					0.1	0.5	18.02	0.08	C			
Stream C-B		0.0	0.5	7.19	0.03	A					0.0	0.5	6.54	0.02	A			
	2026																	
Stream B-ACD	D3	0.7	3.4	16.43	0.41	C	4.95	A	30 % [Stream B-ACD]	D4	0.6	3.0	13.84	0.39	B	4.04	A	40 % [Stream D-BC]
Stream A-BC		0.8	2.1	4.80	0.30	A					0.5	1.4	5.11	0.22	A			
Stream A-D		0.1	0.5	5.62	0.36	A					0.2	0.5	6.66	0.31	A			
Stream D-AB		0.4	1.2	11.53	0.26	B					0.3	1.4	11.95	0.23	B			
Stream D-BC		0.1	0.5	16.35	0.11	C					0.1	0.5	18.82	0.09	C			
Stream C-B		0.0	0.5	7.31	0.04	A					0.0	0.5	6.60	0.02	A			
	2026 with DEV																	
Stream B-ACD	D5	0.8	3.8	18.14	0.44	C	4.80	A	23 % [Stream B-ACD]	D6	0.8	3.6	16.54	0.43	C	4.46	A	27 % [Stream B-ACD]
Stream A-BC		0.8	2.3	4.95	0.31	A					0.8	2.0	5.15	0.30	A			
Stream A-D		0.1	0.5	5.93	0.37	A					0.2	0.5	6.55	0.37	A			
Stream D-AB		0.4	1.7	13.21	0.29	B					0.3	1.4	12.44	0.24	B			
Stream D-BC		0.1	0.5	19.05	0.13	C					0.1	0.5	20.73	0.10	C			
Stream C-B		0.0	0.5	7.31	0.04	A					0.0	0.5	7.11	0.02	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 Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

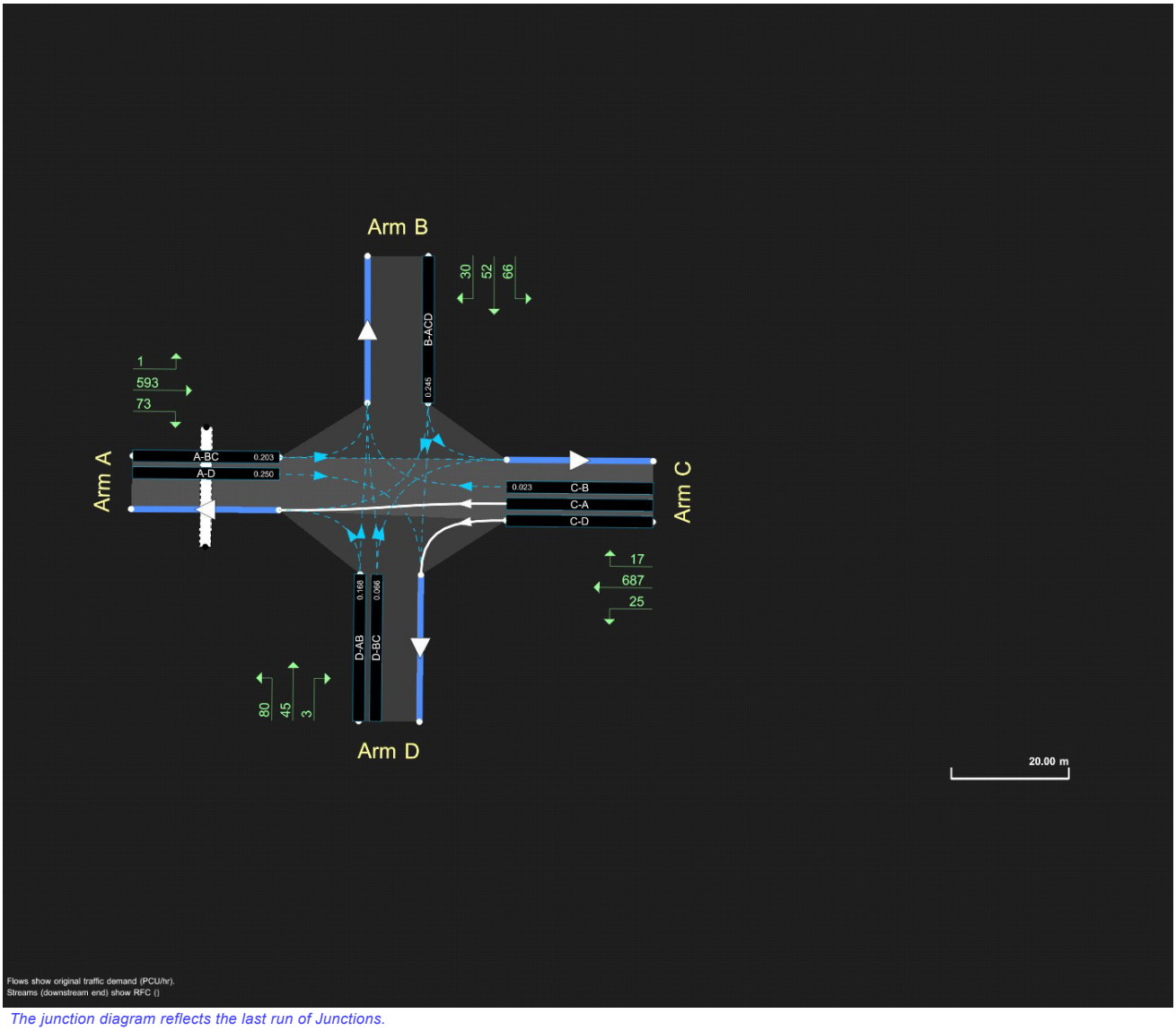
File summary

File Description

Title	
Location	
Site number	
Date	23/04/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	BEAST\user
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75	✓				✓	Delay	0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2021	AM		ONE HOUR	08:00	09:30	15	✓
D2	2021	PM		ONE HOUR	16:00	17:30	15	✓
D3	2026	AM	BASE TRAFFIC	ONE HOUR	08:00	09:30	15	✓
D4	2026	PM	BASE TRAFFIC	ONE HOUR	16:00	17:30	15	✓
D5	2026 with DEV	AM	2026 with Development traffic	ONE HOUR	08:00	09:30	15	✓
D6	2026 with DEV	PM		ONE HOUR	16:00	17:30	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2021, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.86	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	36	Stream B-ACD	4.86	A

Arms

Arms

Arm	Name	Description	Arm type
A	OLD MILL LANE		Major
B	HONEYWELL ST SOUTH		Minor
C	OLDMILL LANE		Major
D	HONEYWELL ST NORTH		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	10.70		✓	2.20	73.0		-
C	10.70		✓	2.20	168.0		-

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)	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	4.25								22	18
D	One lane plus flare		4.70	4.20	2.20	2.20	2.20	✓	1.00	22	21

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
A	2.50	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	616	-	-	-	-	-	-	0.190	0.271	0.190	-	-	-
B-A	555	0.080	0.203	0.203	-	-	-	0.128	0.291	-	0.203	0.203	0.102
B-C	715	0.087	0.220	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	555	0.080	0.203	0.203	-	-	-	0.128	0.291	0.128	-	-	-
B-D, offside lane	555	0.080	0.203	0.203	-	-	-	0.128	0.291	0.128	-	-	-
C-B	671	0.207	0.207	0.296	-	-	-	-	-	-	-	-	-
D-A	633	-	-	-	-	-	-	0.195	-	0.077	-	-	-
D-B, nearside lane	492	0.113	0.113	0.257	-	-	-	0.180	0.180	0.071	-	-	-
D-B, offside lane	434	0.100	0.100	0.227	-	-	-	0.159	0.159	0.063	-	-	-
D-C	434	-	0.100	0.227	0.079	0.159	0.159	0.159	0.159	0.063	-	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Run automatically
D1	2021	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	637	100.000
B		ONE HOUR	✓	143	100.000
C		ONE HOUR	✓	531	100.000
D		ONE HOUR	✓	122	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
A	[ONEHOUR]	20.00
B		
C		
D		

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	567	69
	B	29	0	63	50
	C	491	16	0	24
	D	77	43	3	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	0
	B	7	0	2	9
	C	4	0	0	4
	D	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.39	15.39	0.7	3.1	C	131	196
A-BC	0.30	4.93	0.8	2.0	A	521	782
A-D	0.35	5.72	0.1	0.5	A	64	96
D-AB	0.25	11.03	0.3	1.5	B	90	135
D-BC	0.10	15.66	0.1	0.5	C	22	33
C-D						22	33
C-A						451	676
C-B	0.03	7.19	0.0	0.5	A	15	22

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	107	27		474	0.226	106	0.0	0.3	10.278	B
A-BC	427	107	15.06	2166	0.197	426	0.0	0.5	4.224	A
A-D	52	13	15.06	217	0.241	52	0.0	0.1	4.641	A
D-AB	74	18		491	0.150	73	0.0	0.2	8.661	A
D-BC	18	5		314	0.058	18	0.0	0.1	12.135	B
C-D	18	4				18				
C-A	370	92				370				
C-B	12	3		567	0.021	12	0.0	0.0	6.481	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	128	32		445	0.288	128	0.3	0.4	11.953	B
A-BC	510	128	17.98	2138	0.239	510	0.5	0.6	4.499	A
A-D	62	16	17.98	217	0.287	62	0.1	0.1	5.051	A
D-AB	88	22		469	0.188	88	0.2	0.2	9.517	A
D-BC	22	5		290	0.075	22	0.1	0.1	13.395	B
C-D	21	5				21				
C-A	441	110				441				
C-B	14	4		547	0.026	14	0.0	0.0	6.761	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	157	39		403	0.389	156	0.4	0.7	15.269	C
A-BC	625	156	22.02	2099	0.298	624	0.6	0.8	4.934	A
A-D	76	19	22.02	217	0.352	76	0.1	0.1	5.717	A
D-AB	108	27		437	0.247	108	0.2	0.3	11.000	B
D-BC	27	7		257	0.104	26	0.1	0.1	15.628	C
C-D	26	7				26				
C-A	541	135				541				
C-B	18	4		519	0.034	18	0.0	0.0	7.183	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	157	39		403	0.389	157	0.7	0.7	15.394	C
A-BC	625	156	22.02	2099	0.298	625	0.8	0.8	4.934	A
A-D	76	19	22.02	218	0.351	76	0.1	0.1	5.714	A
D-AB	108	27		437	0.248	108	0.3	0.3	11.032	B
D-BC	27	7		257	0.104	27	0.1	0.1	15.656	C
C-D	26	7				26				
C-A	541	135				541				
C-B	18	4		519	0.034	18	0.0	0.0	7.186	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	128	32		444	0.288	129	0.7	0.4	12.072	B
A-BC	510	128	17.98	2139	0.239	511	0.8	0.6	4.500	A
A-D	62	16	17.98	218	0.287	63	0.1	0.1	5.053	A
D-AB	88	22		469	0.188	89	0.3	0.2	9.553	A
D-BC	22	5		290	0.075	22	0.1	0.1	13.426	B
C-D	21	5				21				
C-A	441	110				441				
C-B	14	4		546	0.026	14	0.0	0.0	6.766	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	107	27		473	0.227	108	0.4	0.3	10.392	B
A-BC	427	107	15.06	2167	0.197	428	0.6	0.5	4.228	A
A-D	52	13	15.06	218	0.240	52	0.1	0.1	4.648	A
D-AB	74	18		491	0.150	74	0.2	0.2	8.710	A
D-BC	18	5		314	0.058	18	0.1	0.1	12.173	B
C-D	18	4				18				
C-A	370	92				370				
C-B	12	3		567	0.021	12	0.0	0.0	6.489	A

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.30	0.00	0.00	0.30	0.30			N/A	N/A
A-BC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
A-D	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.42	0.00	0.00	0.42	0.42			N/A	N/A
A-BC	0.59	0.57	1.03	1.44	1.49			N/A	N/A
A-D	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A
D-BC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.65	0.03	0.27	0.65	0.65			N/A	N/A
A-BC	0.80	0.03	0.26	0.80	0.80			N/A	N/A
A-D	0.12	0.03	0.25	0.45	0.48			N/A	N/A
D-AB	0.33	0.03	0.26	0.47	0.49			N/A	N/A
D-BC	0.11	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.66	0.03	0.31	1.48	3.11			N/A	N/A
A-BC	0.80	0.05	0.55	1.53	2.02			N/A	N/A
A-D	0.12	0.03	0.25	0.46	0.48			N/A	N/A
D-AB	0.33	0.03	0.31	1.15	1.48			N/A	N/A
D-BC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.43	0.03	0.32	0.98	1.28			N/A	N/A
A-BC	0.60	0.57	1.03	1.44	1.49			N/A	N/A
A-D	0.09	0.03	0.26	0.46	0.48			N/A	N/A
D-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A
D-BC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.31	0.03	0.27	0.48	0.51			N/A	N/A
A-BC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
A-D	0.07	0.03	0.25	0.45	0.48			N/A	N/A
D-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2021, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Pedestrian Crossing	Arm A - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		3.87	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	47	Stream D-BC	3.87	A

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)	Run automatically
D2	2021	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	446	100.000
B		ONE HOUR	✓	148	100.000
C		ONE HOUR	✓	750	100.000
D		ONE HOUR	✓	99	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
A	[ONEHOUR]	0.00
B		
C		
D		

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	370	76
	B	17	0	77	54
	C	712	10	0	28
	D	64	33	2	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	4
	B	0	0	0	10
	C	3	0	0	0
	D	0	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.36	13.06	0.6	2.8	B	136	204
A-BC	0.21	5.01	0.5	1.4	A	340	510
A-D	0.30	6.42	0.1	0.5	A	69	104
D-AB	0.22	11.40	0.3	1.3	B	74	111
D-BC	0.08	18.02	0.1	0.5	C	17	25
C-D						26	39
C-A						654	980
C-B	0.02	6.54	0.0	0.5	A	9	14

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	111	28		509	0.219	110	0.0	0.3	9.314	A
A-BC	279	70	0.00	2024	0.138	278	0.0	0.3	4.417	A
A-D	57	14	0.00	284	0.200	57	0.0	0.1	5.165	A
D-AB	61	15		475	0.128	60	0.0	0.1	8.829	A
D-BC	14	3		299	0.046	14	0.0	0.1	13.704	B
C-D	21	5				21				
C-A	536	134				536				
C-B	8	2		597	0.013	7	0.0	0.0	6.108	A

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33		484	0.275	133	0.3	0.4	10.587	B
A-BC	333	83	0.00	1998	0.167	333	0.3	0.4	4.647	A
A-D	68	17	0.00	282	0.241	68	0.1	0.1	5.634	A
D-AB	72	18		448	0.162	72	0.1	0.2	9.747	A
D-BC	17	4		274	0.060	16	0.1	0.1	15.232	C
C-D	25	6				25				
C-A	640	160				640				
C-B	9	2		582	0.015	9	0.0	0.0	6.282	A

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	163	41		448	0.364	162	0.4	0.6	12.989	B
A-BC	408	102	0.00	1960	0.208	407	0.4	0.5	5.008	A
A-D	83	21	0.00	277	0.300	83	0.1	0.1	6.413	A
D-AB	89	22		411	0.216	88	0.2	0.3	11.369	B
D-BC	20	5		238	0.085	20	0.1	0.1	17.992	C
C-D	31	8				31				
C-A	784	196				784				
C-B	11	3		562	0.020	11	0.0	0.0	6.534	A

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	163	41		448	0.364	163	0.6	0.6	13.059	B
A-BC	408	102	0.00	1959	0.208	408	0.5	0.5	5.010	A
A-D	83	21	0.00	277	0.300	83	0.1	0.1	6.424	A
D-AB	89	22		411	0.216	89	0.3	0.3	11.397	B
D-BC	20	5		238	0.085	20	0.1	0.1	18.019	C
C-D	31	8				31				
C-A	784	196				784				
C-B	11	3		562	0.020	11	0.0	0.0	6.536	A

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33		484	0.275	134	0.6	0.4	10.670	B
A-BC	333	83	0.00	1997	0.167	333	0.5	0.4	4.653	A
A-D	68	17	0.00	282	0.241	68	0.1	0.1	5.651	A
D-AB	72	18		448	0.162	73	0.3	0.2	9.783	A
D-BC	17	4		273	0.060	17	0.1	0.1	15.258	C
C-D	25	6				25				
C-A	640	160				640				
C-B	9	2		582	0.015	9	0.0	0.0	6.287	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	111	28		509	0.219	112	0.4	0.3	9.398	A
A-BC	279	70	0.00	2023	0.138	279	0.4	0.3	4.424	A
A-D	57	14	0.00	285	0.200	57	0.1	0.1	5.188	A
D-AB	61	15		475	0.128	61	0.2	0.2	8.871	A
D-BC	14	3		299	0.046	14	0.1	0.1	13.740	B
C-D	21	5				21				
C-A	536	134				536				
C-B	8	2		596	0.013	8	0.0	0.0	6.113	A

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.29	0.00	0.00	0.29	0.29			N/A	N/A
A-BC	0.30	0.00	0.00	0.30	0.30			N/A	N/A
A-D	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A
D-BC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.39	0.00	0.00	0.39	0.39			N/A	N/A
A-BC	0.38	0.00	0.00	0.38	0.38			N/A	N/A
A-D	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A
D-BC	0.07	0.03	0.27	0.49	0.52			N/A	N/A
C-B	0.02	0.02	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.58	0.03	0.27	0.58	0.58			N/A	N/A
A-BC	0.51	0.03	0.27	0.51	0.51			N/A	N/A
A-D	0.15	0.03	0.26	0.47	0.50			N/A	N/A
D-AB	0.28	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.10	0.03	0.28	0.51	0.54			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.58	0.03	0.31	1.43	2.75			N/A	N/A
A-BC	0.51	0.05	0.46	1.31	1.43			N/A	N/A
A-D	0.15	0.03	0.27	0.48	0.51			N/A	N/A
D-AB	0.28	0.03	0.31	0.98	1.30			N/A	N/A
D-BC	0.10	0.03	0.27	0.49	0.52			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.40	0.00	0.00	0.40	0.40			N/A	N/A
A-BC	0.39	0.00	0.00	0.39	0.39			N/A	N/A
A-D	0.11	0.03	0.26	0.47	0.49			N/A	N/A
D-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A
D-BC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.29	0.03	0.26	0.47	0.49			N/A	N/A
A-BC	0.31	0.00	0.00	0.31	0.31			N/A	N/A
A-D	0.08	0.03	0.26	0.47	0.49			N/A	N/A
D-AB	0.15	0.00	0.00	0.15	0.15			N/A	N/A
D-BC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2026, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Pedestrian Crossing	Arm A - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.95	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	30	Stream B-ACD	4.95	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2026	AM	BASE TRAFFIC	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	667	100.000
B		ONE HOUR	✓	148	100.000
C		ONE HOUR	✓	555	100.000
D		ONE HOUR	✓	128	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
A	[ONEHOUR]	0.00
B		
C		
D		

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	593	73
	B	30	0	66	52
	C	513	17	0	25
	D	80	45	3	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	0
	B	7	0	2	9
	C	4	0	0	4
	D	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.41	16.43	0.7	3.4	C	136	204
A-BC	0.30	4.80	0.8	2.1	A	545	818
A-D	0.36	5.62	0.1	0.5	A	67	100
D-AB	0.26	11.53	0.4	1.2	B	94	141
D-BC	0.11	16.35	0.1	0.5	C	23	35
C-D						23	34
C-A						471	706
C-B	0.04	7.31	0.0	0.5	A	16	23

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	111	28		467	0.238	110	0.0	0.3	10.545	B
A-BC	447	112	0.00	2222	0.201	445	0.0	0.5	4.140	A
A-D	55	14	0.00	224	0.245	55	0.0	0.1	4.566	A
D-AB	77	19		486	0.159	77	0.0	0.2	8.862	A
D-BC	19	5		309	0.062	19	0.0	0.1	12.397	B
C-D	19	5				19				
C-A	386	97				386				
C-B	13	3		562	0.023	13	0.0	0.0	6.548	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33		437	0.305	133	0.3	0.5	12.417	B
A-BC	534	133	0.00	2202	0.242	533	0.5	0.6	4.396	A
A-D	66	16	0.00	225	0.292	66	0.1	0.1	4.969	A
D-AB	92	23		463	0.200	92	0.2	0.2	9.807	A
D-BC	23	6		284	0.080	23	0.1	0.1	13.787	B
C-D	22	6				22				
C-A	461	115				461				
C-B	15	4		541	0.028	15	0.0	0.0	6.848	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	163	41		393	0.414	162	0.5	0.7	16.264	C
A-BC	654	164	0.00	2173	0.301	653	0.6	0.8	4.795	A
A-D	80	20	0.00	226	0.356	80	0.1	0.1	5.613	A
D-AB	113	28		429	0.264	113	0.2	0.4	11.489	B
D-BC	28	7		248	0.112	28	0.1	0.1	16.311	C
C-D	28	7				28				
C-A	565	141				565				
C-B	19	5		512	0.037	19	0.0	0.0	7.303	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	163	41		393	0.415	163	0.7	0.7	16.426	C
A-BC	654	164	0.00	2173	0.301	654	0.8	0.8	4.800	A
A-D	80	20	0.00	226	0.356	80	0.1	0.1	5.622	A
D-AB	113	28		429	0.264	113	0.4	0.4	11.528	B
D-BC	28	7		248	0.112	28	0.1	0.1	16.346	C
C-D	28	7				28				
C-A	565	141				565				
C-B	19	5		511	0.037	19	0.0	0.0	7.306	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33		436	0.305	134	0.7	0.5	12.562	B
A-BC	534	133	0.00	2202	0.243	535	0.8	0.6	4.403	A
A-D	66	16	0.00	225	0.292	66	0.1	0.1	4.984	A
D-AB	92	23		462	0.200	93	0.4	0.3	9.849	A
D-BC	23	6		283	0.080	23	0.1	0.1	13.821	B
C-D	22	6				22				
C-A	461	115				461				
C-B	15	4		541	0.028	15	0.0	0.0	6.856	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	111	28		467	0.239	112	0.5	0.3	10.673	B
A-BC	447	112	0.00	2221	0.201	448	0.6	0.5	4.151	A
A-D	55	14	0.00	224	0.245	55	0.1	0.1	4.587	A
D-AB	77	19		486	0.159	78	0.3	0.2	8.915	A
D-BC	19	5		309	0.062	19	0.1	0.1	12.443	B
C-D	19	5				19				
C-A	386	97				386				
C-B	13	3		562	0.023	13	0.0	0.0	6.558	A

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.32	0.00	0.00	0.32	0.32			N/A	N/A
A-BC	0.48	0.00	0.00	0.48	0.48			N/A	N/A
A-D	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.45	0.00	0.00	0.45	0.45			N/A	N/A
A-BC	0.61	0.57	1.03	1.45	1.50			N/A	N/A
A-D	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-AB	0.25	0.00	0.00	0.25	0.25			N/A	N/A
D-BC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.72	0.03	0.27	0.72	0.72			N/A	N/A
A-BC	0.82	0.03	0.26	0.82	0.82			N/A	N/A
A-D	0.13	0.03	0.25	0.45	0.48			N/A	N/A
D-AB	0.36	0.03	0.26	0.47	0.49			N/A	N/A
D-BC	0.12	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.73	0.03	0.31	1.47	3.44			N/A	N/A
A-BC	0.82	0.05	0.54	1.59	2.09			N/A	N/A
A-D	0.13	0.03	0.25	0.46	0.48			N/A	N/A
D-AB	0.36	0.03	0.32	1.22	1.24			N/A	N/A
D-BC	0.12	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.47	0.04	0.38	1.24	1.41			N/A	N/A
A-BC	0.62	0.57	1.03	1.45	1.50			N/A	N/A
A-D	0.09	0.03	0.26	0.46	0.49			N/A	N/A
D-AB	0.26	0.00	0.00	0.26	0.26			N/A	N/A
D-BC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.33	0.03	0.28	0.51	0.82			N/A	N/A
A-BC	0.48	0.00	0.00	0.48	0.48			N/A	N/A
A-D	0.07	0.03	0.25	0.45	0.48			N/A	N/A
D-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A
D-BC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2026, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Pedestrian Crossing	Arm A - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.04	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	40	Stream D-BC	4.04	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026	PM	BASE TRAFFIC	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	466	100.000
B		ONE HOUR	✓	155	100.000
C		ONE HOUR	✓	784	100.000
D		ONE HOUR	✓	104	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
A	[ONEHOUR]	0.00
B		
C		
D		

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	387	79
	B	18	0	81	56
	C	745	10	0	29
	D	67	35	2	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	4
	B	0	0	0	10
	C	3	0	0	0
	D	0	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.39	13.84	0.6	3.0	B	142	213
A-BC	0.22	5.11	0.5	1.4	A	355	533
A-D	0.31	6.66	0.2	0.5	A	72	109
D-AB	0.23	11.95	0.3	1.4	B	78	117
D-BC	0.09	18.82	0.1	0.5	C	18	27
C-D						27	40
C-A						684	1025
C-B	0.02	6.60	0.0	0.5	A	9	14

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	117	29		504	0.232	115	0.0	0.3	9.562	A
A-BC	291	73	0.00	2017	0.144	290	0.0	0.3	4.470	A
A-D	59	15	0.00	284	0.210	59	0.0	0.1	5.270	A
D-AB	64	16		468	0.136	63	0.0	0.2	9.045	A
D-BC	15	4		294	0.050	14	0.0	0.1	13.970	B
C-D	22	5				22				
C-A	561	140				561				
C-B	8	2		593	0.013	7	0.0	0.0	6.144	A

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	139	35		477	0.292	139	0.3	0.4	10.991	B
A-BC	348	87	0.00	1990	0.175	348	0.3	0.4	4.719	A
A-D	71	18	0.00	281	0.253	71	0.1	0.1	5.782	A
D-AB	76	19		440	0.173	76	0.2	0.2	10.069	B
D-BC	17	4		267	0.065	17	0.1	0.1	15.665	C
C-D	26	7				26				
C-A	670	167				670				
C-B	9	2		578	0.016	9	0.0	0.0	6.326	A

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	171	43		440	0.388	170	0.4	0.6	13.747	B
A-BC	426	107	0.00	1949	0.219	426	0.4	0.5	5.109	A
A-D	87	22	0.00	276	0.315	87	0.1	0.2	6.644	A
D-AB	93	23		400	0.233	93	0.2	0.3	11.918	B
D-BC	21	5		229	0.093	21	0.1	0.1	18.790	C
C-D	32	8				32				
C-A	820	205				820				
C-B	11	3		557	0.020	11	0.0	0.0	6.593	A

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	171	43		440	0.388	171	0.6	0.6	13.843	B
A-BC	426	107	0.00	1949	0.219	426	0.5	0.5	5.114	A
A-D	87	22	0.00	276	0.315	87	0.2	0.2	6.658	A
D-AB	93	23		400	0.233	93	0.3	0.3	11.953	B
D-BC	21	5		229	0.093	21	0.1	0.1	18.824	C
C-D	32	8				32				
C-A	820	205				820				
C-B	11	3		557	0.020	11	0.0	0.0	6.595	A

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	139	35		477	0.292	140	0.6	0.4	11.087	B
A-BC	348	87	0.00	1989	0.175	348	0.5	0.4	4.724	A
A-D	71	18	0.00	281	0.253	71	0.2	0.1	5.800	A
D-AB	76	19		440	0.173	76	0.3	0.2	10.109	B
D-BC	17	4		267	0.065	18	0.1	0.1	15.700	C
C-D	26	7				26				
C-A	670	167				670				
C-B	9	2		578	0.016	9	0.0	0.0	6.332	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	117	29		503	0.232	117	0.4	0.3	9.656	A
A-BC	291	73	0.00	2016	0.145	292	0.4	0.3	4.479	A
A-D	59	15	0.00	284	0.209	60	0.1	0.1	5.293	A
D-AB	64	16		467	0.136	64	0.2	0.2	9.094	A
D-BC	15	4		294	0.050	15	0.1	0.1	14.021	B
C-D	22	5				22				
C-A	561	140				561				
C-B	8	2		593	0.013	8	0.0	0.0	6.149	A

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.31	0.00	0.00	0.31	0.31			N/A	N/A
A-BC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
A-D	0.09	0.00	0.00	0.09	0.09			N/A	N/A
D-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.42	0.00	0.00	0.42	0.42			N/A	N/A
A-BC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
A-D	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D-BC	0.07	0.03	0.28	0.50	0.52			N/A	N/A
C-B	0.02	0.02	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.64	0.03	0.27	0.64	0.64			N/A	N/A
A-BC	0.54	0.03	0.26	0.54	0.54			N/A	N/A
A-D	0.16	0.03	0.26	0.47	0.50			N/A	N/A
D-AB	0.30	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.11	0.03	0.28	0.51	0.54			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.65	0.03	0.31	1.41	3.02			N/A	N/A
A-BC	0.54	0.05	0.52	1.34	1.44			N/A	N/A
A-D	0.16	0.03	0.27	0.48	0.51			N/A	N/A
D-AB	0.31	0.03	0.32	1.09	1.40			N/A	N/A
D-BC	0.11	0.03	0.27	0.49	0.52			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.43	0.03	0.31	0.97	1.26			N/A	N/A
A-BC	0.41	0.00	0.00	0.41	0.41			N/A	N/A
A-D	0.11	0.03	0.26	0.47	0.49			N/A	N/A
D-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A
D-BC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.32	0.03	0.26	0.47	0.50			N/A	N/A
A-BC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
A-D	0.09	0.03	0.26	0.47	0.49			N/A	N/A
D-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2026 with DEV, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Pedestrian Crossing	Arm A - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.80	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	23	Stream B-ACD	4.80	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 with DEV	AM	2026 with Development traffic	ONE HOUR	08:00	09:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	667	100.000
B		ONE HOUR	✓	148	100.000
C		ONE HOUR	✓	729	100.000
D		ONE HOUR	✓	128	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
A	[ONEHOUR]	0.00
B		
C		
D		

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	1	593	73
	B	30	0	66	52
	C	687	17	0	25
	D	80	45	3	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	3	0
	B	7	0	2	9
	C	3	0	0	4
	D	1	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.44	18.14	0.8	3.8	C	136	204
A-BC	0.31	4.95	0.8	2.3	A	545	818
A-D	0.37	5.93	0.1	0.5	A	67	100
D-AB	0.29	13.21	0.4	1.7	B	94	141
D-BC	0.13	19.05	0.1	0.5	C	23	35
C-D						23	34
C-A						630	946
C-B	0.04	7.31	0.0	0.5	A	16	23

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	111	28		454	0.245	110	0.0	0.3	10.951	B
A-BC	447	112	0.00	2204	0.203	445	0.0	0.5	4.205	A
A-D	55	14	0.00	220	0.250	55	0.0	0.1	4.691	A
D-AB	77	19		460	0.168	77	0.0	0.2	9.462	A
D-BC	19	5		288	0.066	19	0.0	0.1	13.359	B
C-D	19	5				19				
C-A	517	129				517				
C-B	13	3		562	0.023	13	0.0	0.0	6.548	A

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33		420	0.317	132	0.3	0.5	13.133	B
A-BC	534	133	0.00	2179	0.245	533	0.5	0.6	4.488	A
A-D	66	16	0.00	220	0.298	66	0.1	0.1	5.154	A
D-AB	92	23		431	0.214	92	0.2	0.3	10.722	B
D-BC	23	6		259	0.088	23	0.1	0.1	15.252	C
C-D	22	6				22				
C-A	618	154				618				
C-B	15	4		541	0.028	15	0.0	0.0	6.848	A

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	163	41		371	0.439	162	0.5	0.8	17.914	C
A-BC	654	164	0.00	2141	0.305	653	0.6	0.8	4.938	A
A-D	80	20	0.00	220	0.366	80	0.1	0.1	5.922	A
D-AB	113	28		389	0.291	113	0.3	0.4	13.149	B
D-BC	28	7		217	0.128	27	0.1	0.1	18.989	C
C-D	28	7				28				
C-A	756	189				756				
C-B	19	5		512	0.037	19	0.0	0.0	7.303	A

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	163	41		371	0.439	163	0.8	0.8	18.141	C
A-BC	654	164	0.00	2141	0.305	654	0.8	0.8	4.945	A
A-D	80	20	0.00	220	0.366	80	0.1	0.1	5.934	A
D-AB	113	28		388	0.292	113	0.4	0.4	13.210	B
D-BC	28	7		217	0.128	28	0.1	0.1	19.046	C
C-D	28	7				28				
C-A	756	189				756				
C-B	19	5		511	0.037	19	0.0	0.0	7.307	A

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33		419	0.317	134	0.8	0.5	13.319	B
A-BC	534	133	0.00	2178	0.245	535	0.8	0.6	4.496	A
A-D	66	16	0.00	220	0.298	66	0.1	0.1	5.171	A
D-AB	92	23		431	0.215	93	0.4	0.3	10.785	B
D-BC	23	6		258	0.088	23	0.1	0.1	15.307	C
C-D	22	6				22				
C-A	618	154				618				
C-B	15	4		541	0.028	15	0.0	0.0	6.856	A

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	111	28		453	0.246	112	0.5	0.3	11.098	B
A-BC	447	112	0.00	2203	0.203	448	0.6	0.5	4.216	A
A-D	55	14	0.00	220	0.249	55	0.1	0.1	4.711	A
D-AB	77	19		460	0.168	78	0.3	0.2	9.529	A
D-BC	19	5		288	0.066	19	0.1	0.1	13.412	B
C-D	19	5				19				
C-A	517	129				517				
C-B	13	3		562	0.023	13	0.0	0.0	6.556	A

Q Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.34	0.00	0.00	0.34	0.34			N/A	N/A
A-BC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
A-D	0.07	0.00	0.00	0.07	0.07			N/A	N/A
D-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A
D-BC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.48	0.00	0.00	0.48	0.48			N/A	N/A
A-BC	0.62	0.57	1.03	1.45	1.50			N/A	N/A
A-D	0.10	0.00	0.00	0.10	0.10			N/A	N/A
D-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A
D-BC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-B	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.79	0.03	0.28	0.79	0.79			N/A	N/A
A-BC	0.84	0.03	0.26	0.84	0.84			N/A	N/A
A-D	0.13	0.03	0.25	0.45	0.48			N/A	N/A
D-AB	0.41	0.03	0.26	0.47	0.49			N/A	N/A
D-BC	0.14	0.03	0.26	0.47	0.50			N/A	N/A
C-B	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.81	0.03	0.31	1.51	3.80			N/A	N/A
A-BC	0.84	0.05	0.53	1.67	2.31			N/A	N/A
A-D	0.14	0.03	0.25	0.46	0.48			N/A	N/A
D-AB	0.41	0.03	0.32	1.32	1.66			N/A	N/A
D-BC	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-B	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.50	0.04	0.43	1.31	1.44			N/A	N/A
A-BC	0.63	0.57	1.03	1.45	1.50			N/A	N/A
A-D	0.10	0.03	0.26	0.46	0.49			N/A	N/A
D-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A
D-BC	0.10	0.00	0.00	0.10	0.10			N/A	N/A
C-B	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.35	0.03	0.30	0.78	1.18			N/A	N/A
A-BC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
A-D	0.07	0.03	0.25	0.46	0.48			N/A	N/A
D-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A
D-BC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2026 with DEV, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm D - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Minor arm visibility to right	Arm D - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Queue variations	Analysis Options	Q Variations cannot be calculated for crossroads.
Warning	Pedestrian Crossing	Arm A - Ped crossing	Ped crossing uses default flow of 0. Is this correct?
Warning	Queue variations	Analysis Options	Q percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	Crossroads	Two-way	Two-way	Two-way	Two-way		4.46	A

Junction Network

Driving side	Lighting	Res Cap (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	27	Stream B-ACD	4.46	A

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)	Run automatically
D6	2026 with DEV	PM	ONE HOUR	16:00	17:30	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	640	100.000
B		ONE HOUR	✓	155	100.000
C		ONE HOUR	✓	784	100.000
D		ONE HOUR	✓	104	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
A	[ONEHOUR]	0.00
B		
C		
D		

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	561	79
	B	18	0	81	56
	C	745	10	0	29
	D	67	35	2	0

Vehicle Mix

HV %s

		To			
		A	B	C	D
From	A	0	0	2	4
	B	0	0	0	10
	C	3	0	0	0
	D	0	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max Q95 (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.43	16.54	0.8	3.6	C	142	213
A-BC	0.30	5.15	0.8	2.0	A	515	772
A-D	0.37	6.55	0.2	0.5	A	72	109
D-AB	0.24	12.44	0.3	1.4	B	78	117
D-BC	0.10	20.73	0.1	0.5	C	18	27
C-D						27	40
C-A						684	1025
C-B	0.02	7.11	0.0	0.5	A	9	14

Main Results for each time segment

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	117	29		475	0.246	115	0.0	0.3	10.321	B
A-BC	422	106	0.00	2147	0.197	420	0.0	0.5	4.368	A
A-D	59	15	0.00	237	0.251	59	0.0	0.1	5.083	A
D-AB	64	16		462	0.138	63	0.0	0.2	9.188	A
D-BC	15	4		281	0.052	14	0.0	0.1	14.660	B
C-D	22	5				22				
C-A	561	140				561				
C-B	8	2		566	0.013	7	0.0	0.0	6.442	A

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	139	35		442	0.315	139	0.3	0.5	12.251	B
A-BC	504	126	0.00	2119	0.238	504	0.5	0.6	4.666	A
A-D	71	18	0.00	237	0.300	71	0.1	0.1	5.620	A
D-AB	76	19		432	0.176	76	0.2	0.2	10.304	B
D-BC	17	4		251	0.069	17	0.1	0.1	16.703	C
C-D	26	7				26				
C-A	670	167				670				
C-B	9	2		545	0.016	9	0.0	0.0	6.710	A

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	171	43		396	0.431	169	0.5	0.8	16.365	C
A-BC	618	154	0.00	2077	0.297	617	0.6	0.8	5.147	A
A-D	87	22	0.00	235	0.370	87	0.1	0.2	6.531	A
D-AB	93	23		388	0.240	93	0.2	0.3	12.395	B
D-BC	21	5		210	0.101	21	0.1	0.1	20.679	C
C-D	32	8				32				
C-A	820	205				820				
C-B	11	3		517	0.021	11	0.0	0.0	7.112	A

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	171	43		396	0.431	171	0.8	0.8	16.544	C
A-BC	618	154	0.00	2077	0.297	618	0.8	0.8	5.154	A
A-D	87	22	0.00	235	0.370	87	0.2	0.2	6.546	A
D-AB	93	23		388	0.240	93	0.3	0.3	12.440	B
D-BC	21	5		210	0.101	21	0.1	0.1	20.727	C
C-D	32	8				32				
C-A	820	205				820				
C-B	11	3		517	0.021	11	0.0	0.0	7.115	A

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	139	35		442	0.315	140	0.8	0.5	12.406	B
A-BC	504	126	0.00	2118	0.238	505	0.8	0.6	4.674	A
A-D	71	18	0.00	237	0.300	71	0.2	0.1	5.639	A
D-AB	76	19		431	0.176	76	0.3	0.2	10.351	B
D-BC	17	4		251	0.069	18	0.1	0.1	16.748	C
C-D	26	7				26				
C-A	670	167				670				
C-B	9	2		545	0.016	9	0.0	0.0	6.717	A

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	117	29		474	0.246	117	0.5	0.3	10.451	B
A-BC	422	106	0.00	2146	0.197	423	0.6	0.5	4.380	A
A-D	59	15	0.00	238	0.250	60	0.1	0.1	5.107	A
D-AB	64	16		461	0.138	64	0.2	0.2	9.242	A
D-BC	15	4		281	0.052	15	0.1	0.1	14.709	B
C-D	22	5				22				
C-A	561	140				561				
C-B	8	2		566	0.013	8	0.0	0.0	6.452	A

Q Variation Results for each time segment

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.33	0.00	0.00	0.33	0.33			N/A	N/A
A-BC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
A-D	0.08	0.00	0.00	0.08	0.08			N/A	N/A
D-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.47	0.00	0.00	0.47	0.47			N/A	N/A
A-BC	0.59	0.56	1.02	1.43	1.48			N/A	N/A
A-D	0.11	0.00	0.00	0.11	0.11			N/A	N/A
D-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A
D-BC	0.08	0.03	0.28	0.51	0.54			N/A	N/A
C-B	0.02	0.02	0.25	0.45	0.48			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.76	0.03	0.27	0.76	0.76			N/A	N/A
A-BC	0.80	0.03	0.26	0.80	0.80			N/A	N/A
A-D	0.15	0.03	0.26	0.47	0.50			N/A	N/A
D-AB	0.32	0.03	0.26	0.47	0.50			N/A	N/A
D-BC	0.12	0.03	0.28	0.51	0.54			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.77	0.03	0.30	1.44	3.60			N/A	N/A
A-BC	0.81	0.05	0.57	1.52	1.99			N/A	N/A
A-D	0.16	0.03	0.26	0.48	0.50			N/A	N/A
D-AB	0.32	0.03	0.32	1.13	1.44			N/A	N/A
D-BC	0.12	0.03	0.27	0.49	0.52			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:00 - 17:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.49	0.04	0.42	1.28	1.42			N/A	N/A
A-BC	0.60	0.56	1.02	1.43	1.48			N/A	N/A
A-D	0.11	0.03	0.27	0.48	0.51			N/A	N/A
D-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A
D-BC	0.08	0.00	0.00	0.08	0.08			N/A	N/A
C-B	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.34	0.03	0.29	0.61	1.08			N/A	N/A
A-BC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
A-D	0.08	0.03	0.26	0.48	0.50			N/A	N/A
D-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A
D-BC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-B	0.01	0.00	0.00	0.01	0.01			N/A	N/A