A5 GIBBET HILL AND CROSS IN HAND ROUNDABOUT, POST EXAMINATION TECHNICAL NOTE

Hinckley National Rail Freight Interchange

PROJECT NAME	**Hinckley National Rail Freight Interchange**		
DOCUMENT NUMBER	HNRFI-BWB-GEN-XX-RP-TR-0046	**BWB REF**	NTT2814
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APPROVED	Shirley Dumigan	**DATE**	06/12/2024

1. During Examination

1.1 Models of both the Cross-in-Hands and Gibbet Hill roundabouts were undertaken as part of the modelling process for the HNRFI. Upon review of these models and proposals, concerns were raised by National Highways (NH) with regards to the distribution of the forecast background traffic at the Gibbet Roundabout, as there was a high proportion of additional traffic turning from the A5 South to the A426 South, once the furnessing process had been undertaken.

1.2 Similarly, Warwickshire County Council (WCC) also raised concern with the background turning movements predicted in the furnessed background traffic flows at the Gibbet Roundabout as they suggested a high proportion of traffic using Gibbet Lane. In addition, there were also queries raised about the furnessed background traffic flows at Cross in Hands with similar increases shown on the minor arms (Coal Pit Lane & B4027) of the junction.

1.3 In February 2024 a Technical Note (REP 7-076) was produced which provided an update on the position of both the Cross-in-Hands and Gibbet Hill Roundabout with regards to the concerns with the flows listed above.

2. Post Examination

2.1 As set out in the ExA responses below, National Highways, raised concerns with regards to the geometries at both roundabouts and the lane usage, storage and physical operation of the roundabout at Gibbet Hill.

2.2 ExA response on **Cross- in Hand** Paragraph 3.3.290: "*NH is concerned at the use of the Junctions 10 assessment tool. This is partially due to what is said to be "missing geometric design information", and some of those submitted are incorrect and required amendment. While NH considers that these would be likely to have minimal effect on the junction performance the modelling fails to account for HGV demands, which, given the high HGV use, could significantly adversely affect junction operation. NH's position is that the modelling outputs cannot be relied upon, and should the necessary corrections be made, the operation arising from the Proposed Development would be worse affecting the operation of the SR*"

2.3 ExA response on **Gibbet Hill**: paragraph 3.3.295 "*NH is of the view that the use of the Junctions 10 model was inappropriate because it did not take account of the highly imbalanced lane use at the Rugby Road approach to the junction. The vast majority of*

vehicles use the nearside lane only, as the offside lane has only been assigned to A5 north movements. As this effectively results in the link operating as a single lane it is likely to overestimate likely congestion on that arm. This, in turn, according to NH, underestimates the opposing flows interacting with vehicles entering the A5 northbound arm. This means, overall, the Junctions 10 model would underestimate the performance issues at this A5 approach."

2.4 **Cross-in-Hands Roundabout**

2.5 National Highways raised concerns with some of the geometries that had been input into the junctions 10 model and as a result the geometries in line with the requests from NH these were as follows:

- A5 North - The half width was increased from 4.76m to 4.77m, Entry width increased from 7.35m to 7.36m, Flare length increased from 42.5 metres to 42.6 metres. The conflict angle was also revisited and amended from 30 degrees to 27 degrees.

- A4303 East – The entry width was increased from 8.52m to 8.53m and the flare length was increased from 22.3m to 22.4m. In addition the entry radius was also amended from 67m to 41.4m. The conflict angle was also revisited but remained the same at 33 degrees.

- A5 South – The entry width was increased from 6.96m to 6.97m and the entry radius was amended from 53m to 43.8m. In addition, the conflict angle was also amended from 31 degrees to 29 degrees.

- B4027 South – The entry width was amended from 3.38m to 3.37m, the entry radius was amended from 42.9m to 42.8 metres and the conflict angle was reduced from 39 degrees to 34 degrees.

- Coalpit Lane – The Entry width was amended from 6.70m to 6.69m and the conflict angle was reduced from 60 degrees to 54 degrees.

- In addition to the above geometry amendments, the HGV percentages were also added to the movements for completeness.

2.6 The above geometry changes and HGV percentages were run through the model and had minimal impact on the results of the junction model. Which showed all arms working within capacity apart from the A5 northern arm which was operating at 91% capacity both with and without development flows concluding that there was no impact.

2.7 This model and the above amendments and associated outputs were agreed with AECOM on 17th October 2024 during a meeting on both junctions and National Highways confirmed acceptance on the 05/12/24.

Gibbet Hill

2.8 National Highways also raised concerns about the Junctions 10 (ARCADY) model for Gibbet Hill. However, NH agreed with the geometries used at this junction. However, amendments made to the junction were as follows to address outstanding concerns:

- The storage values input for both the A5 North and Rugby Road were both 9 PCUs, whilst the A5 South arm and the A426 South both had storage values of 3 PCUs, this appeared to be inaccurate. As a result, the model was updated. The A5 Northern arm remained at 9 PCUS, the Rugby Road arm was reduced to 5 PCUs, the A5 south remained at 3 PCUS, and the A426 South increased to 4 PCUs.

- The lane simulation settings for "Traffic considering secondary lanes" was updated from the default of 10%. This was updated inline with the video surveys and observations undertaken at the junction, to ensure that the base model was reflective of what was happening on the ground.

- In addition to the above amendments, the HGV percentages were also added to the movements for completeness.

- There were concerns raised with regards to the results being shown by the lane simulation mode model compared to the previous results shown in the standard mode. However, these were compared with the queue surveys undertaken at the roundabout and matched up with the results up to the point where capacity went over 100%. The queues then increase in an overly expedited way. However, the model was showing that the mitigation scheme was still removing the development impact at the junction.

2.9 The changes and HGV percentages were run through the model and had minimal impact on the results of the junction model. Which showed that the mitigation scheme removed our impact at the junction and was therefore still a suitable scheme.

2.10 This model and the above amendments and associated outputs were agreed with AECOM on 17th October 2024 during a meeting on both junctions. The National Highways response was received on the 05 December 24 this stated the following:

2.11 *We have reviewed the latest traffic modelling work supporting the proposed mitigation scheme at the A5 Gibbet Hill roundabout. As per advice provided since early in the consultation process and reiterated in National Highways' Deadline 8 Position Statement, this junction should have been assessed using VISSIM, for which National Highways provided the model to BWB for use. The reason for this is that we were concerned about the limitations of ARCADY as a modelling tool, one being that it assumes unlimited capacity within the circulatory link. With the close side-by-side HGV tracking around the circulatory enabled by the proposed scheme, using ARCADY therefore raises an uncertainty around whether this could be accommodated. A swept patch analysis has been produced by BWB to support the case that this can be.*

2.12 *As National Highways has a role to ensure the continued safe and effective operation of the highway network, as well as to support the sustainable delivery of economic growth, we have engaged proactively with in review of the ARCADY work, despite maintaining the view that this junction should have been assessed using VISSIM.*

2.13 *The ARCADY modelling shows that this scheme suitably mitigates the traffic impacts of the proposed development on the A5 approaches to the junction, although uncertainty around the performance of the circulatory remains.*

2.14 To address the VISSIM and circulatory carriageway points:

2.15 As reported in previous responses at Deadline 6 (document reference: 18.19, REP6-022) . The proportionate impact of the HNRFI flows is limited to the Gibbet Hill Roundabout and does not affect the remainder of the VISSIM corridor model provided by NH. Significant work to survey and calibrate the model beyond the junction would be required to run the model. It is the Applicant's view that the capacity-based model approach is more than adequate to test what is a 'theoretical' scheme as the NH developed mitigation at Gibbet Hill has not been shared, nor is in the public domain

2.16 Subsequently, post examination, the Junctions 10 model has undergone an audit by AECOM and has been modelled in the advanced mode, which includes for unequal lane usage and vehicle storage, along with dedicated movements from each lane. This model has since been approved by AECOM.

2.17 As there are no capacity constraints along the circulatory carriageway (e.g., signals) and the swept path analysis confirms that HGVs can navigate the junction side by side, the proposed mitigation measures are considered suitable including the widening of the carriageway. This is provided to enable vehicles to travel side by side without overrunning the kerbs as they do currently. It is also worth noting that the proposed mitigation over-mitigates for the impact of the development and therefore there is some reserve capacity, should HGV drivers decide to wait back rather than travel through the junction side by side.

3. Design Points

3.1 On 13th November the Applicant initially put forward drawings to demonstrate that the tracking worked on the originally proposed scheme here, NH provided detailed comments on this on 21st November raising numerous points around signage, overrun of the central island etc.

3.2 Subsequently, on 27th November the Applicant put forward a revised scheme (This is Included in Appendix 14 (Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation GA) of the Applicants response to SoS, showing detailed geometry of the revised entry arms, amendments to address the comments raised and more details around signage, drainage etc.

3.3 In addition, the revised scheme included further widening to the entries and the roundabout circulatory to address the NH concerns about circulatory performance. Vehicle tracking of the revised junction shows clear space between HGVs on the circulatory (Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation Swept Paths). This revised scheme was accompanied by a revised cost plan for the works which fell in the range suggested at para 3.3.299 of the ExA's report and can also be found in Hinckley NRFI Appendix 14 - Revised Gibbet Hill Cost Plan, alongside this note

3.4 Appendix 14 submitted with this note includes the following plans and documents.

Hinckley NRFI Appendix 14 - Gibbet - Cross in Hand Modelling Note
Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation GA
Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation Visibility Drawing
Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation Details of Works Required
Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation Swept Paths
Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation Road Safety Audit Stage 1
Hinckley NRFI Appendix 14 - Gibbet Hill Mitigation Road Safety Audit Stage 1 Response Report
Hinckley NRFI Appendix 14 - Revised Gibbet Hill Cost Plan
Hinckley NRFI Appendix 14 - Gibbet Hill Cost Plan Commentary on Changes

Appendix 1 – Cross in Hand Model outputs – Aecom Audit October 2024

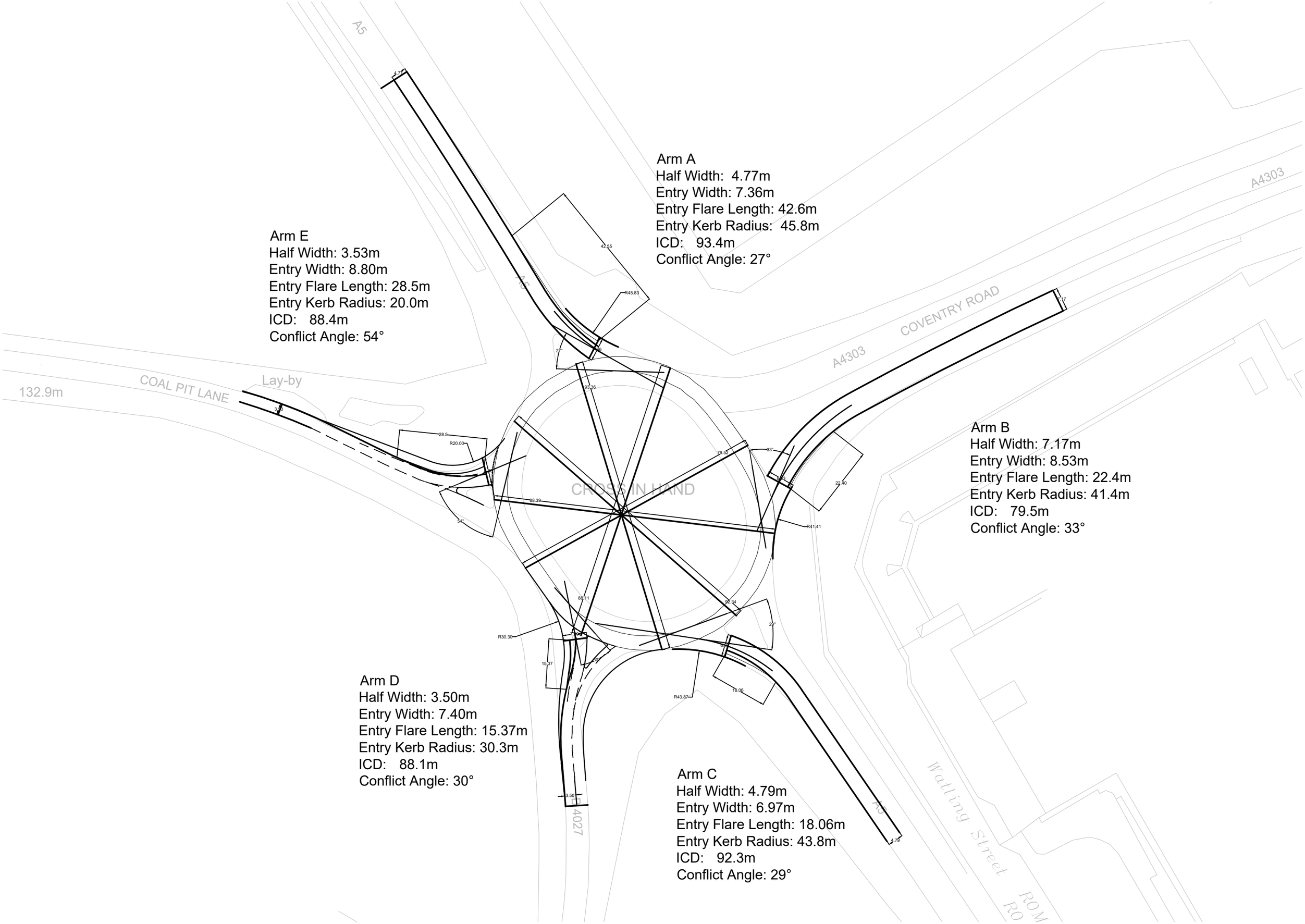
Arm A
Half Width: 4.77m
Entry Width: 7.36m
Entry Flare Length: 42.6m
Entry Kerb Radius: 45.8m
ICD: 93.4m
Conflict Angle: 27°

Arm E
Half Width: 3.23m
Entry Width: 6.70m
Entry Flare Length: 7.40m
Entry Kerb Radius: 20.5m
ICD: 88.4m
Conflict Angle: 60°

Arm B
Half Width: 7.17m
Entry Width: 8.53m
Entry Flare Length: 22.4m
Entry Kerb Radius: 41.4m
ICD: 79.5m
Conflict Angle: 33°

Arm D
Half Width: 3.38m
Entry Width: 6.12m
Entry Flare Length: 16.31m
Entry Kerb Radius: 42.9m
ICD: 88.1m
Conflict Angle: 39°

Arm C
Half Width: 4.79m
Entry Width: 6.97m
Entry Flare Length: 18.06m
Entry Kerb Radius: 43.8m
ICD: 92.3m
Conflict Angle: 29°


A5
A5
A4303
COVENTRY ROAD
A4303
COAL PIT LANE
Lay-by
132.9m
CROSS IN HAND
A4027
Walling Street
42.95
R45.83
27°
93.36
28.5
R20.00
54°
88.39
79.52
33°
22.40
R41.41
88.11
22.34
22°
R30.30
15.37
30°
R43.87
18.06
3.50
3.79
Arm A
Half Width: 4.77m
Entry Width: 7.36m
Entry Flare Length: 42.6m
Entry Kerb Radius: 45.8m
ICD: 93.4m
Conflict Angle: 27°
Arm B
Half Width: 7.17m
Entry Width: 8.53m
Entry Flare Length: 22.4m
Entry Kerb Radius: 41.4m
ICD: 79.5m
Conflict Angle: 33°
Arm C
Half Width: 4.79m
Entry Width: 6.97m
Entry Flare Length: 18.06m
Entry Kerb Radius: 43.8m
ICD: 92.3m
Conflict Angle: 29°
Arm D
Half Width: 3.50m
Entry Width: 7.40m
Entry Flare Length: 15.37m
Entry Kerb Radius: 30.3m
ICD: 88.1m
Conflict Angle: 30°
Arm E
Half Width: 3.53m
Entry Width: 8.80m
Entry Flare Length: 28.5m
Entry Kerb Radius: 20.0m
ICD: 88.4m
Conflict Angle: 54°

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905

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

Filename: J27_241007 A5 A4303 B4027 Coal Pit Ln (Existing) Flow Amends.j10
Path: \\?\UNC\bwbbirfil01\birmingham\Birmingham\NTT\NTT2814_Hinckley Rail Freight Interchange\02. Project Delivery\01. WIP\Design and Calculations\T&I Planning\04 Junction Modelling\J27_JTC 48 - A5 - A4303 - B4027 - Coal Pit Lane
Report generation date: 08/10/2024 12:10:40

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2023											
A - A5 N	D1	1.6	5.47	0.60	A	42 % [A - A5 N]	D2	0.7	3.53	0.38	A	45 % [D - B4027 S]
B - A4303 E		0.9	3.34	0.45	A			0.8	3.08	0.43	A	
C - A5 S		0.7	4.15	0.36	A			1.2	5.08	0.51	A	
D - B4027 S		0.3	4.26	0.21	A			0.7	6.64	0.42	A	
E - Coal Pit Lane W		0.5	6.51	0.33	A			0.3	6.57	0.20	A	
	WoD 2036											
A - A5 N	D3	8.7	22.18	0.90	C	4 % [A - A5 N]	D4	1.3	4.84	0.56	A	5 % [D - B4027 S]
B - A4303 E		2.1	5.96	0.66	A			1.7	4.63	0.63	A	
C - A5 S		1.4	6.37	0.54	A			3.5	11.35	0.77	B	
D - B4027 S		0.5	6.00	0.34	A			3.3	22.46	0.76	C	
E - Coal Pit Lane W		1.3	11.95	0.56	B			0.7	12.74	0.41	B	
	WoDWS 2036											
A - A5 N	D5	8.9	22.40	0.90	C	4 % [A - A5 N]	D6	1.3	4.86	0.57	A	9 % [D - B4027 S]
B - A4303 E		2.2	6.01	0.67	A			1.6	4.33	0.62	A	
C - A5 S		1.4	6.33	0.54	A			3.4	10.96	0.78	B	
D - B4027 S		0.5	5.92	0.33	A			2.2	16.64	0.70	C	
E - Coal Pit Lane W		1.2	11.51	0.54	B			0.6	12.72	0.37	B	
	WD 2036											
A - A5 N	D7	8.8	23.09	0.90	C	3 % [A - A5 N]	D8	1.8	6.06	0.61	A	5 % [D - B4027 S]
B - A4303 E		2.5	6.78	0.70	A			1.8	4.91	0.62	A	
C - A5 S		1.7	7.07	0.59	A			4.9	15.25	0.82	C	
D - B4027 S		0.6	6.52	0.37	A			3.1	21.81	0.76	C	
E - Coal Pit Lane W		2.4	19.32	0.71	C			0.7	13.05	0.40	B	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

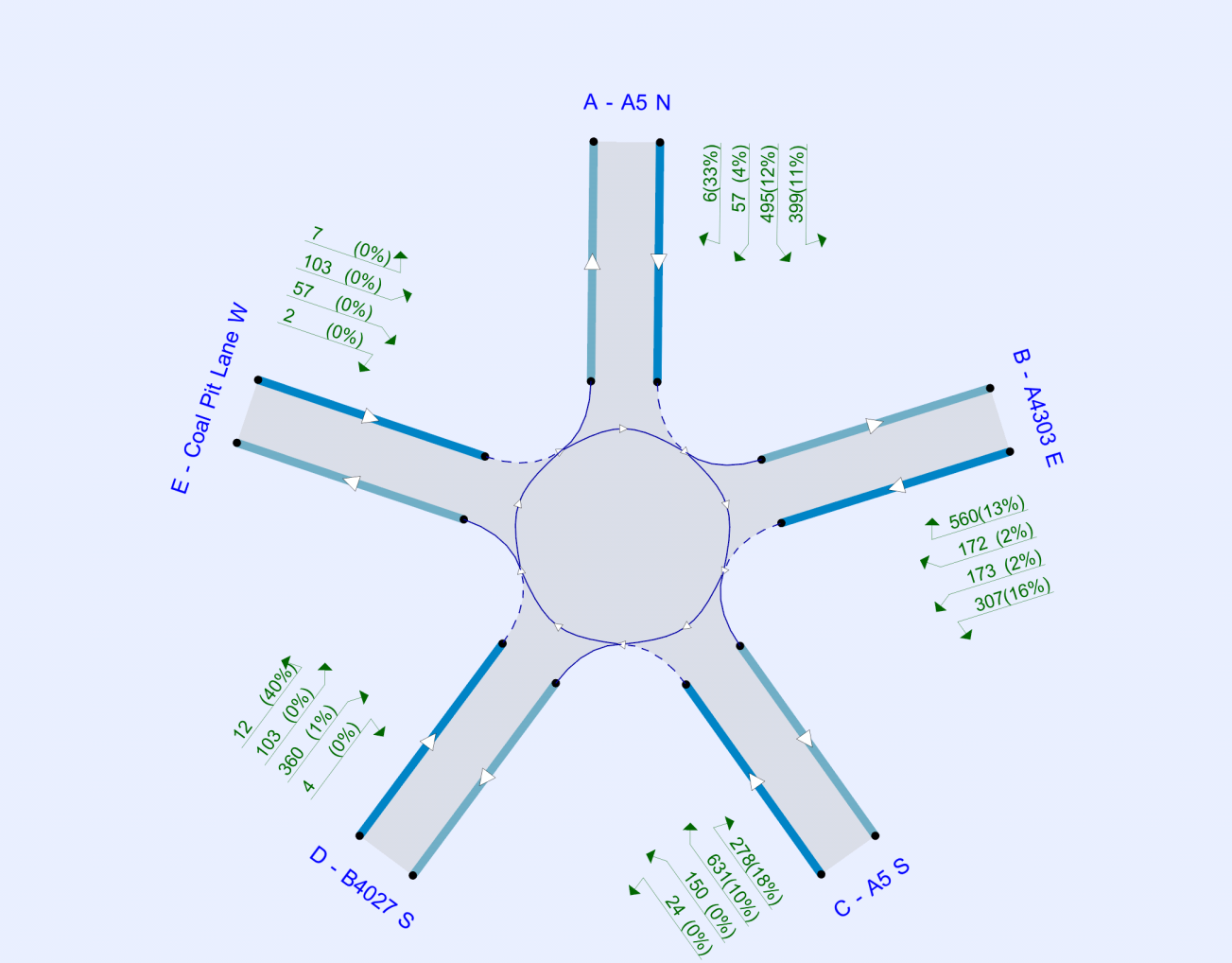
File summary

File Description

Title	J48
Location	A5 / B4027 / Coal Pit lane
Site number	J48
Date	21/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	NTT2814
Enumerator	BWB\petr.jandik
Description	

Units

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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue 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	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	07:15	08:45	15	✓
D2	2023	PM	ONE HOUR	16:15	17:45	15	✓
D3	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D4	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓
D5	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓
D6	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.59	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	42	A - A5 N	4.59	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A5 N		
B	A4303 E		
C	A5 S		
D	B4027 S		
E	Coal Pit Lane W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A5 N	4.77	7.36	42.6	45.8	93.4	27.0		
B - A4303 E	7.17	8.53	22.4	41.4	79.5	33.0		
C - A5 S	4.79	6.96	18.1	43.8	92.3	29.0		
D - B4027 S	3.38	6.12	16.3	42.9	88.1	39.0		
E - Coal Pit Lane W	3.23	6.70	7.4	20.5	88.4	60.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A5 N	0.529	2182
B - A4303 E	0.603	2555
C - A5 S	0.501	1984
D - B4027 S	0.437	1556
E - Coal Pit Lane W	0.372	1255

The slope and intercept shown above include any corrections and adjustments.

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	2023	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	992	100.000
B - A4303 E		ONE HOUR	✓	857	100.000
C - A5 S		ONE HOUR	✓	527	100.000
D - B4027 S		ONE HOUR	✓	214	100.000
E - Coal Pit Lane W		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	437	503	48	4
	B - A4303 E	332	0	226	223	76
	C - A5 S	216	234	2	13	62
	D - B4027 S	40	154	19	0	1
	E - Coal Pit Lane W	20	149	80	6	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.60	5.47	1.6	A	910	1365
B - A4303 E	0.45	3.34	0.9	A	786	1180
C - A5 S	0.36	4.15	0.7	A	484	725
D - B4027 S	0.21	4.26	0.3	A	196	295
E - Coal Pit Lane W	0.33	6.51	0.5	A	234	351

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	483	1926	0.388	744	456	0.0	0.7	3.300	A
B - A4303 E	645	161	496	2256	0.286	643	730	0.0	0.4	2.426	A
C - A5 S	397	99	517	1725	0.230	395	623	0.0	0.4	3.190	A
D - B4027 S	161	40	695	1253	0.129	161	218	0.0	0.2	3.413	A
E - Coal Pit Lane W	192	48	748	976	0.197	191	107	0.0	0.2	4.685	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	578	1876	0.475	891	546	0.7	1.0	3.963	A
B - A4303 E	770	193	594	2197	0.351	770	875	0.4	0.6	2.741	A
C - A5 S	474	118	619	1674	0.283	473	745	0.4	0.5	3.535	A
D - B4027 S	192	48	832	1193	0.161	192	260	0.2	0.2	3.727	A
E - Coal Pit Lane W	229	57	895	921	0.249	229	128	0.2	0.3	5.317	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	708	1807	0.604	1090	669	1.0	1.6	5.428	A
B - A4303 E	944	236	727	2117	0.446	942	1070	0.6	0.9	3.330	A
C - A5 S	580	145	758	1605	0.362	579	912	0.5	0.7	4.134	A
D - B4027 S	236	59	1018	1111	0.212	235	319	0.2	0.3	4.256	A
E - Coal Pit Lane W	281	70	1096	847	0.332	280	157	0.3	0.5	6.493	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	709	1807	0.605	1092	669	1.6	1.6	5.471	A
B - A4303 E	944	236	729	2116	0.446	944	1072	0.9	0.9	3.339	A
C - A5 S	580	145	759	1604	0.362	580	914	0.7	0.7	4.145	A
D - B4027 S	236	59	1020	1111	0.212	236	319	0.3	0.3	4.261	A
E - Coal Pit Lane W	281	70	1098	846	0.332	281	157	0.5	0.5	6.515	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	580	1875	0.476	894	547	1.6	1.0	3.997	A
B - A4303 E	770	193	597	2195	0.351	772	878	0.9	0.6	2.751	A
C - A5 S	474	118	620	1674	0.283	475	748	0.7	0.5	3.545	A
D - B4027 S	192	48	834	1192	0.161	193	261	0.3	0.2	3.735	A
E - Coal Pit Lane W	229	57	898	920	0.249	230	129	0.5	0.3	5.339	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	486	1925	0.388	748	458	1.0	0.7	3.327	A
B - A4303 E	645	161	499	2254	0.286	646	734	0.6	0.4	2.434	A
C - A5 S	397	99	519	1724	0.230	397	626	0.5	0.4	3.202	A
D - B4027 S	161	40	698	1251	0.129	161	219	0.2	0.2	3.421	A
E - Coal Pit Lane W	192	48	751	975	0.197	192	108	0.3	0.3	4.709	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.35	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	45	D - B4027 S	4.35	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	2023	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	629	100.000
B - A4303 E		ONE HOUR	✓	899	100.000
C - A5 S		ONE HOUR	✓	746	100.000
D - B4027 S		ONE HOUR	✓	361	100.000
E - Coal Pit Lane W		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	262	337	26	4
	B - A4303 E	405	0	236	128	130
	C - A5 S	418	203	0	17	108
	D - B4027 S	74	277	3	0	7
	E - Coal Pit Lane W	5	79	43	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	11	12	4	33
	B - A4303 E	13	0	16	2	2
	C - A5 S	10	18	0	0	0
	D - B4027 S	0	1	0	0	40
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.38	3.53	0.7	A	577	866
B - A4303 E	0.43	3.08	0.8	A	825	1237
C - A5 S	0.51	5.08	1.2	A	685	1027
D - B4027 S	0.42	6.64	0.7	A	331	497
E - Coal Pit Lane W	0.20	6.57	0.3	A	117	176

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	454	1942	0.244	472	677	0.0	0.4	2.725	A
B - A4303 E	677	169	311	2368	0.286	675	616	0.0	0.4	2.344	A
C - A5 S	562	140	521	1723	0.326	560	465	0.0	0.5	3.403	A
D - B4027 S	272	68	951	1141	0.238	271	129	0.0	0.3	4.186	A
E - Coal Pit Lane W	96	24	1035	869	0.111	96	187	0.0	0.1	4.651	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	544	1894	0.299	565	810	0.4	0.5	3.016	A
B - A4303 E	808	202	372	2331	0.347	808	737	0.4	0.6	2.607	A
C - A5 S	671	168	623	1672	0.401	670	556	0.5	0.7	3.954	A
D - B4027 S	325	81	1139	1059	0.307	324	155	0.3	0.4	4.961	A
E - Coal Pit Lane W	115	29	1239	793	0.145	115	224	0.1	0.2	5.304	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	666	1830	0.379	692	991	0.5	0.7	3.521	A
B - A4303 E	990	247	455	2281	0.434	989	902	0.6	0.8	3.071	A
C - A5 S	821	205	763	1602	0.513	820	681	0.7	1.1	5.061	A
D - B4027 S	397	99	1394	947	0.420	396	189	0.4	0.7	6.606	A
E - Coal Pit Lane W	141	35	1516	690	0.204	141	274	0.2	0.3	6.546	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	667	1829	0.379	693	993	0.7	0.7	3.526	A
B - A4303 E	990	247	456	2280	0.434	990	904	0.8	0.8	3.077	A
C - A5 S	821	205	764	1602	0.513	821	682	1.1	1.2	5.083	A
D - B4027 S	397	99	1396	946	0.420	397	189	0.7	0.7	6.643	A
E - Coal Pit Lane W	141	35	1519	689	0.205	141	274	0.3	0.3	6.567	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	546	1893	0.299	566	812	0.7	0.5	3.022	A
B - A4303 E	808	202	373	2330	0.347	809	740	0.8	0.6	2.612	A
C - A5 S	671	168	625	1671	0.401	672	557	1.2	0.7	3.977	A
D - B4027 S	325	81	1142	1057	0.307	326	155	0.7	0.5	4.994	A
E - Coal Pit Lane W	115	29	1243	792	0.145	115	224	0.3	0.2	5.324	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	457	1940	0.244	474	680	0.5	0.4	2.734	A
B - A4303 E	677	169	312	2367	0.286	677	619	0.6	0.4	2.351	A
C - A5 S	562	140	523	1722	0.326	562	466	0.7	0.5	3.424	A
D - B4027 S	272	68	956	1139	0.239	272	130	0.5	0.3	4.214	A
E - Coal Pit Lane W	96	24	1040	867	0.111	97	188	0.2	0.1	4.672	A

WoD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	12.23	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	A - A5 N	12.23	B

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	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1362	100.000
B - A4303 E		ONE HOUR	✓	1177	100.000
C - A5 S		ONE HOUR	✓	724	100.000
D - B4027 S		ONE HOUR	✓	294	100.000
E - Coal Pit Lane W		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	600	691	66	5
	B - A4303 E	456	0	311	306	104
	C - A5 S	297	321	3	18	85
	D - B4027 S	55	212	26	0	1
	E - Coal Pit Lane W	27	205	110	8	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.90	22.18	8.7	C	1250	1875
B - A4303 E	0.66	5.96	2.1	A	1080	1620
C - A5 S	0.54	6.37	1.4	A	664	997
D - B4027 S	0.34	6.00	0.5	A	270	405
E - Coal Pit Lane W	0.56	11.95	1.3	B	321	482

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1025	256	663	1831	0.560	1020	626	0.0	1.4	4.788	A
B - A4303 E	886	222	681	2145	0.413	883	1002	0.0	0.8	3.095	A
C - A5 S	545	136	709	1629	0.335	543	855	0.0	0.6	3.899	A
D - B4027 S	221	55	953	1140	0.194	220	298	0.0	0.2	4.052	A
E - Coal Pit Lane W	263	66	1027	872	0.302	262	146	0.0	0.4	6.015	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1224	306	794	1762	0.695	1220	750	1.4	2.4	7.164	A
B - A4303 E	1058	265	814	2064	0.513	1057	1200	0.8	1.1	3.880	A
C - A5 S	651	163	848	1559	0.417	650	1023	0.6	0.8	4.664	A
D - B4027 S	264	66	1141	1058	0.250	264	357	0.2	0.3	4.696	A
E - Coal Pit Lane W	315	79	1230	797	0.395	314	175	0.4	0.7	7.609	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1500	375	971	1668	0.899	1477	917	2.4	8.0	18.640	C
B - A4303 E	1296	324	987	1960	0.661	1292	1460	1.1	2.1	5.829	A
C - A5 S	797	199	1036	1465	0.544	795	1243	0.8	1.4	6.315	A
D - B4027 S	324	81	1395	947	0.342	323	436	0.3	0.5	5.972	A
E - Coal Pit Lane W	385	96	1504	695	0.555	383	214	0.7	1.2	11.731	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1500	375	974	1666	0.900	1497	919	8.0	8.7	22.180	C
B - A4303 E	1296	324	999	1953	0.664	1296	1472	2.1	2.1	5.956	A
C - A5 S	797	199	1040	1463	0.545	797	1255	1.4	1.4	6.373	A
D - B4027 S	324	81	1399	945	0.343	324	438	0.5	0.5	6.002	A
E - Coal Pit Lane W	385	96	1508	693	0.556	385	215	1.2	1.3	11.951	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1224	306	799	1759	0.696	1249	753	8.7	2.6	8.021	A
B - A4303 E	1058	265	832	2054	0.515	1062	1217	2.1	1.2	3.964	A
C - A5 S	651	163	854	1557	0.418	653	1040	1.4	0.9	4.709	A
D - B4027 S	264	66	1147	1055	0.250	265	360	0.5	0.3	4.725	A
E - Coal Pit Lane W	315	79	1236	795	0.396	317	176	1.3	0.7	7.745	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1025	256	668	1828	0.561	1030	630	2.6	1.4	4.923	A
B - A4303 E	886	222	687	2141	0.414	888	1011	1.2	0.8	3.127	A
C - A5 S	545	136	713	1627	0.335	546	862	0.9	0.6	3.931	A
D - B4027 S	221	55	959	1137	0.195	222	300	0.3	0.3	4.074	A
E - Coal Pit Lane W	263	66	1033	870	0.303	264	147	0.7	0.4	6.092	A

WoD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	9.20	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	5	D - B4027 S	9.20	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	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	866	100.000
B - A4303 E		ONE HOUR	✓	1237	100.000
C - A5 S		ONE HOUR	✓	1026	100.000
D - B4027 S		ONE HOUR	✓	497	100.000
E - Coal Pit Lane W		ONE HOUR	✓	176	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	360	464	36	6
	B - A4303 E	557	0	325	176	179
	C - A5 S	575	279	0	23	149
	D - B4027 S	102	381	4	0	10
	E - Coal Pit Lane W	7	109	59	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	0	0	0	0
	B - A4303 E	0	0	11	12	4
	C - A5 S	0	13	0	16	2
	D - B4027 S	0	10	18	0	0
	E - Coal Pit Lane W	0	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.56	4.84	1.3	A	795	1192
B - A4303 E	0.63	4.63	1.7	A	1135	1703
C - A5 S	0.77	11.35	3.5	B	941	1412
D - B4027 S	0.76	22.46	3.3	C	456	684
E - Coal Pit Lane W	0.41	12.74	0.7	B	162	242

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	652	163	623	1852	0.352	650	930	0.0	0.5	2.989	A
B - A4303 E	931	233	428	2297	0.405	928	846	0.0	0.7	2.753	A
C - A5 S	772	193	717	1625	0.475	769	639	0.0	0.9	4.348	A
D - B4027 S	374	94	1308	985	0.380	372	177	0.0	0.7	6.293	A
E - Coal Pit Lane W	133	33	1422	725	0.183	132	258	0.0	0.2	6.075	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	779	195	746	1787	0.436	778	1113	0.5	0.8	3.563	A
B - A4303 E	1112	278	512	2247	0.495	1111	1012	0.7	1.0	3.322	A
C - A5 S	922	231	858	1555	0.593	920	765	0.9	1.5	5.869	A
D - B4027 S	447	112	1566	872	0.512	445	212	0.7	1.1	9.028	A
E - Coal Pit Lane W	158	40	1702	621	0.255	158	309	0.2	0.3	7.789	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	953	238	908	1702	0.560	952	1359	0.8	1.3	4.787	A
B - A4303 E	1362	340	626	2178	0.625	1359	1233	1.0	1.7	4.598	A
C - A5 S	1130	282	1049	1459	0.774	1122	936	1.5	3.4	10.866	B
D - B4027 S	547	137	1912	721	0.759	539	259	1.1	3.1	20.475	C
E - Coal Pit Lane W	194	48	2074	482	0.402	193	377	0.3	0.7	12.406	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	953	238	916	1697	0.562	953	1366	1.3	1.3	4.841	A
B - A4303 E	1362	340	628	2177	0.626	1362	1242	1.7	1.7	4.634	A
C - A5 S	1130	282	1051	1458	0.775	1129	938	3.4	3.5	11.349	B
D - B4027 S	547	137	1921	717	0.763	546	260	3.1	3.3	22.462	C
E - Coal Pit Lane W	194	48	2089	477	0.406	194	379	0.7	0.7	12.742	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	779	195	759	1780	0.437	780	1123	1.3	0.8	3.606	A
B - A4303 E	1112	278	514	2245	0.495	1115	1025	1.7	1.0	3.351	A
C - A5 S	922	231	861	1553	0.594	930	768	3.5	1.5	6.072	A
D - B4027 S	447	112	1578	867	0.515	455	213	3.3	1.2	9.595	A
E - Coal Pit Lane W	158	40	1722	613	0.258	160	311	0.7	0.4	7.979	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	652	163	630	1849	0.353	653	937	0.8	0.5	3.014	A
B - A4303 E	931	233	430	2296	0.406	933	853	1.0	0.7	2.774	A
C - A5 S	772	193	720	1624	0.476	775	642	1.5	1.0	4.418	A
D - B4027 S	374	94	1317	981	0.381	376	178	1.2	0.7	6.428	A
E - Coal Pit Lane W	133	33	1433	721	0.184	133	260	0.4	0.2	6.149	A

WoDWS 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	12.30	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	A - A5 N	12.30	B

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	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1368	100.000
B - A4303 E		ONE HOUR	✓	1186	100.000
C - A5 S		ONE HOUR	✓	717	100.000
D - B4027 S		ONE HOUR	✓	284	100.000
E - Coal Pit Lane W		ONE HOUR	✓	339	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	608	691	64	5
	B - A4303 E	466	0	315	300	105
	C - A5 S	294	325	3	17	78
	D - B4027 S	49	210	24	0	1
	E - Coal Pit Lane W	24	200	107	8	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.90	22.40	8.9	C	1255	1883
B - A4303 E	0.67	6.01	2.2	A	1088	1632
C - A5 S	0.54	6.33	1.4	A	658	987
D - B4027 S	0.33	5.92	0.5	A	261	391
E - Coal Pit Lane W	0.54	11.51	1.2	B	311	467

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1030	257	657	1834	0.561	1024	625	0.0	1.4	4.795	A
B - A4303 E	893	223	675	2148	0.416	890	1006	0.0	0.8	3.106	A
C - A5 S	540	135	711	1628	0.332	537	854	0.0	0.6	3.892	A
D - B4027 S	214	53	957	1138	0.188	213	292	0.0	0.2	4.025	A
E - Coal Pit Lane W	255	64	1028	872	0.293	254	142	0.0	0.4	5.939	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1230	307	787	1765	0.697	1226	748	1.4	2.4	7.184	A
B - A4303 E	1066	267	808	2068	0.516	1065	1204	0.8	1.1	3.900	A
C - A5 S	645	161	851	1558	0.414	644	1022	0.6	0.8	4.645	A
D - B4027 S	255	64	1145	1056	0.242	255	349	0.2	0.3	4.653	A
E - Coal Pit Lane W	305	76	1231	797	0.383	304	170	0.4	0.6	7.463	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1506	377	962	1673	0.900	1484	914	2.4	8.1	18.777	C
B - A4303 E	1306	326	980	1965	0.665	1302	1466	1.1	2.1	5.880	A
C - A5 S	789	197	1040	1464	0.539	787	1242	0.8	1.4	6.268	A
D - B4027 S	313	78	1401	944	0.331	312	426	0.3	0.5	5.890	A
E - Coal Pit Lane W	373	93	1505	694	0.538	371	207	0.6	1.2	11.320	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1506	377	965	1671	0.901	1503	917	8.1	8.9	22.402	C
B - A4303 E	1306	326	991	1958	0.667	1306	1477	2.1	2.2	6.009	A
C - A5 S	789	197	1044	1462	0.540	789	1254	1.4	1.4	6.325	A
D - B4027 S	313	78	1405	943	0.332	313	428	0.5	0.5	5.918	A
E - Coal Pit Lane W	373	93	1509	693	0.539	373	208	1.2	1.2	11.515	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1230	307	792	1763	0.698	1255	752	8.9	2.6	8.061	A
B - A4303 E	1066	267	826	2057	0.518	1070	1221	2.2	1.2	3.983	A
C - A5 S	645	161	856	1555	0.414	647	1039	1.4	0.8	4.692	A
D - B4027 S	255	64	1151	1053	0.242	256	352	0.5	0.3	4.681	A
E - Coal Pit Lane W	305	76	1237	794	0.384	307	171	1.2	0.6	7.588	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1030	257	662	1832	0.562	1035	628	2.6	1.4	4.934	A
B - A4303 E	893	223	682	2144	0.416	894	1014	1.2	0.8	3.139	A
C - A5 S	540	135	715	1626	0.332	541	861	0.8	0.6	3.923	A
D - B4027 S	214	53	962	1136	0.188	214	294	0.3	0.2	4.047	A
E - Coal Pit Lane W	255	64	1034	870	0.293	256	143	0.6	0.4	6.010	A

WoDWS 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	8.12	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	9	D - B4027 S	8.12	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	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	884	100.000
B - A4303 E		ONE HOUR	✓	1233	100.000
C - A5 S		ONE HOUR	✓	1038	100.000
D - B4027 S		ONE HOUR	✓	450	100.000
E - Coal Pit Lane W		ONE HOUR	✓	166	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	392	459	28	5
	B - A4303 E	564	0	334	162	173
	C - A5 S	576	294	0	22	146
	D - B4027 S	87	347	4	0	12
	E - Coal Pit Lane W	7	103	55	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	0	0	0	0
	B - A4303 E	0	0	0	0	0
	C - A5 S	0	0	0	0	0
	D - B4027 S	0	0	11	12	4
	E - Coal Pit Lane W	0	13	0	16	2

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.57	4.86	1.3	A	811	1217
B - A4303 E	0.62	4.33	1.6	A	1131	1697
C - A5 S	0.78	10.96	3.4	B	952	1429
D - B4027 S	0.70	16.64	2.2	C	413	619
E - Coal Pit Lane W	0.37	12.72	0.6	B	152	228

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	666	166	602	1863	0.357	663	925	0.0	0.6	2.995	A
B - A4303 E	928	232	414	2305	0.403	926	851	0.0	0.7	2.605	A
C - A5 S	781	195	700	1634	0.478	778	639	0.0	0.9	4.190	A
D - B4027 S	339	85	1318	980	0.346	337	160	0.0	0.5	5.585	A
E - Coal Pit Lane W	125	31	1403	732	0.171	124	252	0.0	0.2	6.370	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	795	199	721	1801	0.441	794	1107	0.6	0.8	3.572	A
B - A4303 E	1108	277	496	2256	0.491	1107	1019	0.7	1.0	3.130	A
C - A5 S	933	233	838	1565	0.596	931	765	0.9	1.5	5.662	A
D - B4027 S	405	101	1578	867	0.466	403	191	0.5	0.9	7.749	A
E - Coal Pit Lane W	149	37	1679	630	0.237	149	302	0.2	0.3	8.064	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	973	243	878	1717	0.567	971	1352	0.8	1.3	4.814	A
B - A4303 E	1358	339	606	2190	0.620	1355	1243	1.0	1.6	4.298	A
C - A5 S	1143	286	1025	1471	0.777	1135	936	1.5	3.3	10.505	B
D - B4027 S	495	124	1927	715	0.693	490	234	0.9	2.1	15.727	C
E - Coal Pit Lane W	183	46	2049	492	0.372	182	368	0.3	0.6	12.456	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	973	243	885	1714	0.568	973	1358	1.3	1.3	4.862	A
B - A4303 E	1358	339	608	2189	0.620	1358	1250	1.6	1.6	4.330	A
C - A5 S	1143	286	1027	1470	0.778	1143	938	3.3	3.4	10.965	B
D - B4027 S	495	124	1935	711	0.697	495	235	2.1	2.2	16.644	C
E - Coal Pit Lane W	183	46	2060	488	0.375	183	370	0.6	0.6	12.724	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	795	199	730	1796	0.443	797	1116	1.3	0.8	3.613	A
B - A4303 E	1108	277	498	2255	0.492	1111	1029	1.6	1.0	3.155	A
C - A5 S	933	233	841	1563	0.597	941	768	3.4	1.5	5.853	A
D - B4027 S	405	101	1589	862	0.469	410	192	2.2	0.9	8.066	A
E - Coal Pit Lane W	149	37	1696	623	0.239	150	304	0.6	0.3	8.224	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	666	166	608	1860	0.358	666	931	0.8	0.6	3.019	A
B - A4303 E	928	232	416	2304	0.403	929	858	1.0	0.7	2.620	A
C - A5 S	781	195	703	1632	0.479	784	642	1.5	0.9	4.256	A
D - B4027 S	339	85	1326	977	0.347	340	161	0.9	0.5	5.680	A
E - Coal Pit Lane W	125	31	1413	729	0.172	125	253	0.3	0.2	6.440	A

WD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	13.45	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	A - A5 N	13.45	B

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
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1325	100.000
B - A4303 E		ONE HOUR	✓	1231	100.000
C - A5 S		ONE HOUR	✓	771	100.000
D - B4027 S		ONE HOUR	✓	303	100.000
E - Coal Pit Lane W		ONE HOUR	✓	419	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	549	714	55	7
	B - A4303 E	495	0	333	305	98
	C - A5 S	345	329	3	17	77
	D - B4027 S	53	221	28	0	1
	E - Coal Pit Lane W	32	255	123	9	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.90	23.09	8.8	C	1216	1824
B - A4303 E	0.70	6.78	2.5	A	1130	1694
C - A5 S	0.59	7.07	1.7	A	707	1061
D - B4027 S	0.37	6.52	0.6	A	278	417
E - Coal Pit Lane W	0.71	19.32	2.4	C	384	577

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	998	249	725	1799	0.555	992	694	0.0	1.3	4.821	A
B - A4303 E	927	232	703	2131	0.435	923	1014	0.0	0.8	3.240	A
C - A5 S	580	145	727	1620	0.358	578	900	0.0	0.7	4.069	A
D - B4027 S	228	57	1015	1113	0.205	227	289	0.0	0.3	4.205	A
E - Coal Pit Lane W	315	79	1105	843	0.374	313	137	0.0	0.6	6.911	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1191	298	868	1723	0.691	1187	830	1.3	2.4	7.250	A
B - A4303 E	1107	277	841	2048	0.540	1105	1214	0.8	1.3	4.152	A
C - A5 S	693	173	870	1549	0.448	692	1076	0.7	0.9	4.954	A
D - B4027 S	272	68	1215	1025	0.266	272	346	0.3	0.4	4.948	A
E - Coal Pit Lane W	377	94	1323	762	0.494	375	164	0.6	1.0	9.465	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1459	365	1059	1621	0.900	1436	1015	2.4	8.0	19.179	C
B - A4303 E	1355	339	1019	1941	0.698	1351	1476	1.3	2.5	6.590	A
C - A5 S	849	212	1062	1452	0.585	846	1307	0.9	1.6	6.981	A
D - B4027 S	334	83	1486	907	0.368	333	423	0.4	0.6	6.471	A
E - Coal Pit Lane W	461	115	1618	652	0.707	456	201	1.0	2.3	18.259	C

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1459	365	1065	1618	0.902	1456	1018	8.0	8.8	23.090	C
B - A4303 E	1355	339	1032	1933	0.701	1355	1489	2.5	2.5	6.780	A
C - A5 S	849	212	1067	1450	0.585	849	1320	1.6	1.7	7.067	A
D - B4027 S	334	83	1491	905	0.369	334	425	0.6	0.6	6.524	A
E - Coal Pit Lane W	461	115	1623	651	0.709	461	201	2.3	2.4	19.324	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1191	298	877	1718	0.693	1216	835	8.8	2.5	8.178	A
B - A4303 E	1107	277	861	2036	0.543	1111	1233	2.5	1.3	4.265	A
C - A5 S	693	173	876	1546	0.448	696	1096	1.7	1.0	5.020	A
D - B4027 S	272	68	1222	1022	0.266	273	349	0.6	0.4	4.986	A
E - Coal Pit Lane W	377	94	1330	759	0.496	382	165	2.4	1.0	9.891	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	998	249	731	1795	0.556	1002	698	2.5	1.4	4.963	A
B - A4303 E	927	232	710	2127	0.436	929	1023	1.3	0.8	3.280	A
C - A5 S	580	145	731	1618	0.359	582	908	1.0	0.7	4.108	A
D - B4027 S	228	57	1021	1110	0.206	229	291	0.4	0.3	4.234	A
E - Coal Pit Lane W	315	79	1112	841	0.375	317	138	1.0	0.6	7.048	A

WD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	10.49	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	5	D - B4027 S	10.49	B

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
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	957	100.000
B - A4303 E		ONE HOUR	✓	1212	100.000
C - A5 S		ONE HOUR	✓	1083	100.000
D - B4027 S		ONE HOUR	✓	479	100.000
E - Coal Pit Lane W		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	399	495	57	6
	B - A4303 E	560	0	307	173	172
	C - A5 S	631	278	0	24	150
	D - B4027 S	103	360	4	0	12
	E - Coal Pit Lane W	7	103	57	2	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	11	12	4	33
	B - A4303 E	13	0	16	2	2
	C - A5 S	10	18	0	0	0
	D - B4027 S	0	1	0	0	40
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.61	6.06	1.8	A	878	1317
B - A4303 E	0.62	4.91	1.8	A	1112	1668
C - A5 S	0.82	15.25	4.9	C	994	1491
D - B4027 S	0.76	21.81	3.1	C	440	659
E - Coal Pit Lane W	0.40	13.05	0.7	B	155	233

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	602	1864	0.387	718	975	0.0	0.7	3.484	A
B - A4303 E	912	228	466	2274	0.401	910	854	0.0	0.7	2.904	A
C - A5 S	815	204	728	1620	0.503	811	647	0.0	1.1	4.877	A
D - B4027 S	361	90	1347	968	0.373	358	192	0.0	0.6	5.969	A
E - Coal Pit Lane W	127	32	1450	715	0.178	126	255	0.0	0.2	6.109	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	860	215	720	1801	0.478	859	1167	0.7	1.0	4.245	A
B - A4303 E	1090	272	557	2219	0.491	1088	1022	0.7	1.1	3.510	A
C - A5 S	974	243	871	1548	0.629	971	775	1.1	1.8	6.833	A
D - B4027 S	431	108	1612	852	0.505	429	230	0.6	1.0	8.596	A
E - Coal Pit Lane W	152	38	1736	608	0.250	151	305	0.2	0.3	7.869	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1054	263	875	1719	0.613	1051	1423	1.0	1.7	5.966	A
B - A4303 E	1334	334	682	2144	0.622	1331	1245	1.1	1.8	4.869	A
C - A5 S	1192	298	1066	1451	0.822	1181	947	1.8	4.7	14.141	B
D - B4027 S	527	132	1966	698	0.756	520	281	1.0	2.9	19.769	C
E - Coal Pit Lane W	186	47	2113	468	0.398	185	372	0.3	0.6	12.662	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1054	263	884	1714	0.615	1054	1432	1.7	1.8	6.059	A
B - A4303 E	1334	334	684	2143	0.623	1334	1254	1.8	1.8	4.912	A
C - A5 S	1192	298	1068	1449	0.823	1192	950	4.7	4.9	15.252	C
D - B4027 S	527	132	1978	692	0.762	527	282	2.9	3.1	21.814	C
E - Coal Pit Lane W	186	47	2130	462	0.403	186	374	0.6	0.7	13.053	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	860	215	733	1794	0.480	863	1180	1.8	1.0	4.313	A
B - A4303 E	1090	272	560	2217	0.491	1092	1036	1.8	1.1	3.542	A
C - A5 S	974	243	874	1546	0.630	985	779	4.9	1.9	7.212	A
D - B4027 S	431	108	1629	845	0.510	439	231	3.1	1.1	9.163	A
E - Coal Pit Lane W	152	38	1760	600	0.253	153	308	0.7	0.3	8.088	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	608	1860	0.387	722	982	1.0	0.7	3.519	A
B - A4303 E	912	228	468	2273	0.401	914	861	1.1	0.7	2.927	A
C - A5 S	815	204	731	1618	0.504	818	651	1.9	1.1	4.980	A
D - B4027 S	361	90	1357	964	0.374	362	193	1.1	0.6	6.094	A
E - Coal Pit Lane W	127	32	1463	710	0.179	128	257	0.3	0.2	6.187	A

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905

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

Filename: J27_241007 A5 A4303 B4027 Coal Pit Ln (Existing) Furnessed Flows.j10
Path: X:\NTT\NTT2814_Hinckley Rail Freight Interchange\02. Project Delivery\01. WIP\Design and Calculations\T&I Planning\04 Junction Modelling\J27_JTC 48 - A5 - A4303 - B4027 - Coal Pit Lane
Report generation date: 08/10/2024 14:07:07

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2023											
A - A5 N	D1	1.6	5.47	0.60	A	42 % [A - A5 N]	D2	0.7	3.53	0.38	A	45 % [D - B4027 S]
B - A4303 E		0.9	3.34	0.45	A			0.8	3.08	0.43	A	
C - A5 S		0.7	4.15	0.36	A			1.2	5.08	0.51	A	
D - B4027 S		0.3	4.26	0.21	A			0.7	6.64	0.42	A	
E - Coal Pit Lane W		0.5	6.51	0.33	A			0.3	6.57	0.20	A	
	WoD 2036											
A - A5 N	D3	2.5	8.73	0.70	A	-4 % [E - Coal Pit Lane W]	D4	1.9	6.15	0.64	A	15 % [D - B4027 S]
B - A4303 E		1.8	4.72	0.62	A			2.9	6.51	0.73	A	
C - A5 S		1.4	6.84	0.55	A			1.9	8.83	0.63	A	
D - B4027 S		3.2	17.99	0.76	C			1.8	12.72	0.64	B	
E - Coal Pit Lane W		5.9	51.72	0.88	F			0.4	8.72	0.29	A	
	WoDWS 2036											
A - A5 N	D5	2.5	8.80	0.70	A	-3 % [E - Coal Pit Lane W]	D6	1.9	6.16	0.64	A	20 % [D - B4027 S]
B - A4303 E		1.8	4.73	0.63	A			2.8	6.35	0.72	A	
C - A5 S		1.4	6.80	0.55	A			1.9	8.84	0.63	A	
D - B4027 S		3.1	17.30	0.75	C			1.4	10.98	0.58	B	
E - Coal Pit Lane W		5.1	45.65	0.85	E			0.4	8.29	0.26	A	
	WD 2036											
A - A5 N	D7	2.5	8.97	0.68	A	-12 % [E - Coal Pit Lane W]	D8	2.5	7.48	0.69	A	15 % [D - B4027 S]
B - A4303 E		2.1	5.18	0.66	A			2.9	6.64	0.73	A	
C - A5 S		1.8	7.96	0.60	A			2.5	10.96	0.68	B	
D - B4027 S		4.2	23.36	0.81	C			1.8	12.97	0.63	B	
E - Coal Pit Lane W		34.2	219.98	1.12	F			0.4	8.89	0.28	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

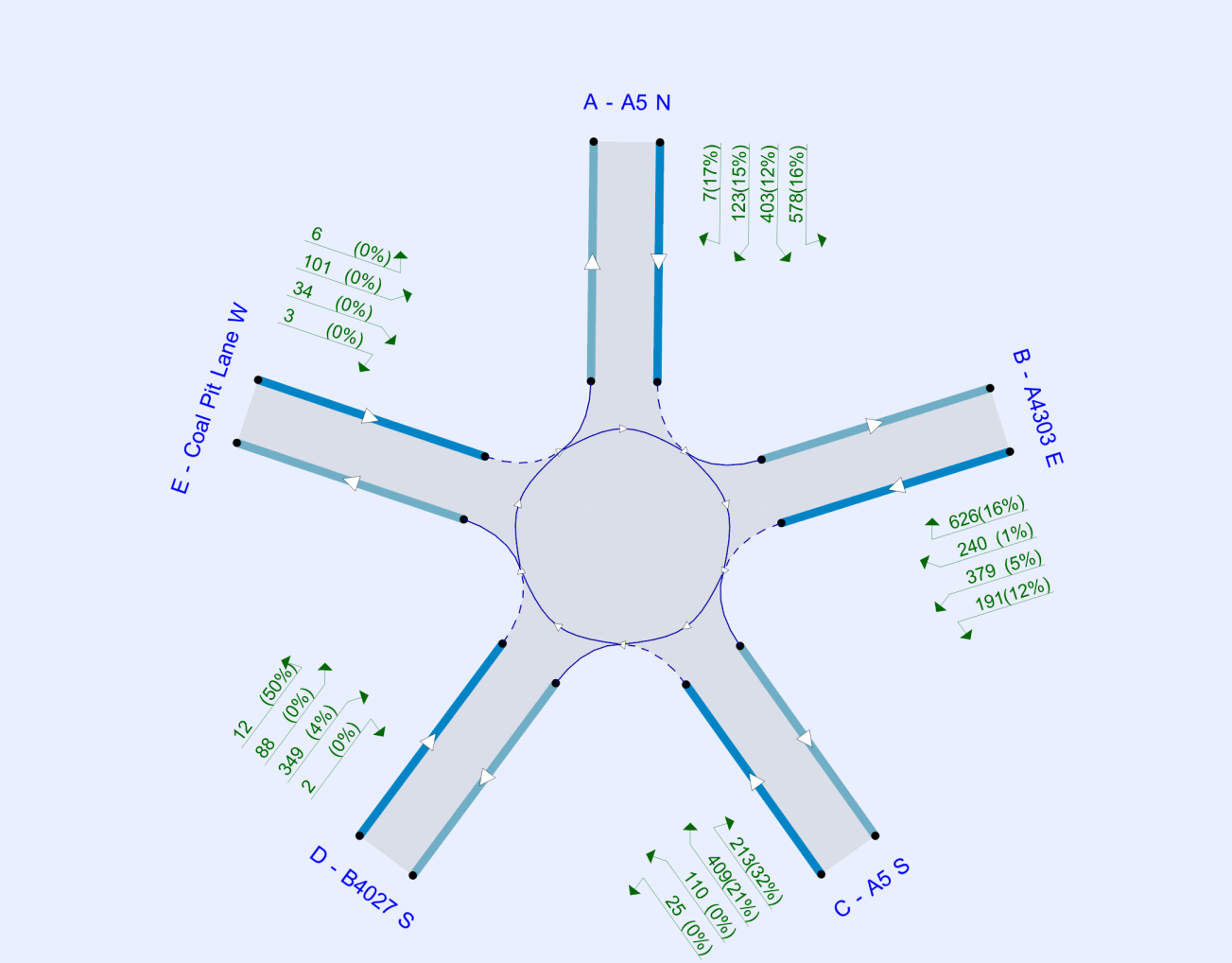
File summary

File Description

Title	J48
Location	A5 / B4027 / Coal Pit lane
Site number	J48
Date	21/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	NTT2814
Enumerator	BWB\petr.jandik
Description	

Units

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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue 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	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	07:15	08:45	15	✓
D2	2023	PM	ONE HOUR	16:15	17:45	15	✓
D3	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D4	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓
D5	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓
D6	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.59	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	42	A - A5 N	4.59	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A5 N		
B	A4303 E		
C	A5 S		
D	B4027 S		
E	Coal Pit Lane W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A5 N	4.77	7.36	42.6	45.8	93.4	27.0		
B - A4303 E	7.17	8.53	22.4	41.4	79.5	33.0		
C - A5 S	4.79	6.96	18.1	43.8	92.3	29.0		
D - B4027 S	3.38	6.12	16.3	42.9	88.1	39.0		
E - Coal Pit Lane W	3.23	6.70	7.4	20.5	88.4	60.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A5 N	0.529	2182
B - A4303 E	0.603	2555
C - A5 S	0.501	1984
D - B4027 S	0.437	1556
E - Coal Pit Lane W	0.372	1255

The slope and intercept shown above include any corrections and adjustments.

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	2023	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	992	100.000
B - A4303 E		ONE HOUR	✓	857	100.000
C - A5 S		ONE HOUR	✓	527	100.000
D - B4027 S		ONE HOUR	✓	214	100.000
E - Coal Pit Lane W		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	437	503	48	4
	B - A4303 E	332	0	226	223	76
	C - A5 S	216	234	2	13	62
	D - B4027 S	40	154	19	0	1
	E - Coal Pit Lane W	20	149	80	6	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.60	5.47	1.6	A	910	1365
B - A4303 E	0.45	3.34	0.9	A	786	1180
C - A5 S	0.36	4.15	0.7	A	484	725
D - B4027 S	0.21	4.26	0.3	A	196	295
E - Coal Pit Lane W	0.33	6.51	0.5	A	234	351

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	483	1926	0.388	744	456	0.0	0.7	3.300	A
B - A4303 E	645	161	496	2256	0.286	643	730	0.0	0.4	2.426	A
C - A5 S	397	99	517	1725	0.230	395	623	0.0	0.4	3.190	A
D - B4027 S	161	40	695	1253	0.129	161	218	0.0	0.2	3.413	A
E - Coal Pit Lane W	192	48	748	976	0.197	191	107	0.0	0.2	4.685	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	578	1876	0.475	891	546	0.7	1.0	3.963	A
B - A4303 E	770	193	594	2197	0.351	770	875	0.4	0.6	2.741	A
C - A5 S	474	118	619	1674	0.283	473	745	0.4	0.5	3.535	A
D - B4027 S	192	48	832	1193	0.161	192	260	0.2	0.2	3.727	A
E - Coal Pit Lane W	229	57	895	921	0.249	229	128	0.2	0.3	5.317	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	708	1807	0.604	1090	669	1.0	1.6	5.428	A
B - A4303 E	944	236	727	2117	0.446	942	1070	0.6	0.9	3.330	A
C - A5 S	580	145	758	1605	0.362	579	912	0.5	0.7	4.134	A
D - B4027 S	236	59	1018	1111	0.212	235	319	0.2	0.3	4.256	A
E - Coal Pit Lane W	281	70	1096	847	0.332	280	157	0.3	0.5	6.493	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	709	1807	0.605	1092	669	1.6	1.6	5.471	A
B - A4303 E	944	236	729	2116	0.446	944	1072	0.9	0.9	3.339	A
C - A5 S	580	145	759	1604	0.362	580	914	0.7	0.7	4.145	A
D - B4027 S	236	59	1020	1111	0.212	236	319	0.3	0.3	4.261	A
E - Coal Pit Lane W	281	70	1098	846	0.332	281	157	0.5	0.5	6.515	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	580	1875	0.476	894	547	1.6	1.0	3.997	A
B - A4303 E	770	193	597	2195	0.351	772	878	0.9	0.6	2.751	A
C - A5 S	474	118	620	1674	0.283	475	748	0.7	0.5	3.545	A
D - B4027 S	192	48	834	1192	0.161	193	261	0.3	0.2	3.735	A
E - Coal Pit Lane W	229	57	898	920	0.249	230	129	0.5	0.3	5.339	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	486	1925	0.388	748	458	1.0	0.7	3.327	A
B - A4303 E	645	161	499	2254	0.286	646	734	0.6	0.4	2.434	A
C - A5 S	397	99	519	1724	0.230	397	626	0.5	0.4	3.202	A
D - B4027 S	161	40	698	1251	0.129	161	219	0.2	0.2	3.421	A
E - Coal Pit Lane W	192	48	751	975	0.197	192	108	0.3	0.3	4.709	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.35	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	45	D - B4027 S	4.35	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	2023	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	629	100.000
B - A4303 E		ONE HOUR	✓	899	100.000
C - A5 S		ONE HOUR	✓	746	100.000
D - B4027 S		ONE HOUR	✓	361	100.000
E - Coal Pit Lane W		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	262	337	26	4
	B - A4303 E	405	0	236	128	130
	C - A5 S	418	203	0	17	108
	D - B4027 S	74	277	3	0	7
	E - Coal Pit Lane W	5	79	43	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	11	12	4	33
	B - A4303 E	13	0	16	2	2
	C - A5 S	10	18	0	0	0
	D - B4027 S	0	1	0	0	40
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.38	3.53	0.7	A	577	866
B - A4303 E	0.43	3.08	0.8	A	825	1237
C - A5 S	0.51	5.08	1.2	A	685	1027
D - B4027 S	0.42	6.64	0.7	A	331	497
E - Coal Pit Lane W	0.20	6.57	0.3	A	117	176

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	454	1942	0.244	472	677	0.0	0.4	2.725	A
B - A4303 E	677	169	311	2368	0.286	675	616	0.0	0.4	2.344	A
C - A5 S	562	140	521	1723	0.326	560	465	0.0	0.5	3.403	A
D - B4027 S	272	68	951	1141	0.238	271	129	0.0	0.3	4.186	A
E - Coal Pit Lane W	96	24	1035	869	0.111	96	187	0.0	0.1	4.651	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	544	1894	0.299	565	810	0.4	0.5	3.016	A
B - A4303 E	808	202	372	2331	0.347	808	737	0.4	0.6	2.607	A
C - A5 S	671	168	623	1672	0.401	670	556	0.5	0.7	3.954	A
D - B4027 S	325	81	1139	1059	0.307	324	155	0.3	0.4	4.961	A
E - Coal Pit Lane W	115	29	1239	793	0.145	115	224	0.1	0.2	5.304	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	666	1830	0.379	692	991	0.5	0.7	3.521	A
B - A4303 E	990	247	455	2281	0.434	989	902	0.6	0.8	3.071	A
C - A5 S	821	205	763	1602	0.513	820	681	0.7	1.1	5.061	A
D - B4027 S	397	99	1394	947	0.420	396	189	0.4	0.7	6.606	A
E - Coal Pit Lane W	141	35	1516	690	0.204	141	274	0.2	0.3	6.546	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	667	1829	0.379	693	993	0.7	0.7	3.526	A
B - A4303 E	990	247	456	2280	0.434	990	904	0.8	0.8	3.077	A
C - A5 S	821	205	764	1602	0.513	821	682	1.1	1.2	5.083	A
D - B4027 S	397	99	1396	946	0.420	397	189	0.7	0.7	6.643	A
E - Coal Pit Lane W	141	35	1519	689	0.205	141	274	0.3	0.3	6.567	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	546	1893	0.299	566	812	0.7	0.5	3.022	A
B - A4303 E	808	202	373	2330	0.347	809	740	0.8	0.6	2.612	A
C - A5 S	671	168	625	1671	0.401	672	557	1.2	0.7	3.977	A
D - B4027 S	325	81	1142	1057	0.307	326	155	0.7	0.5	4.994	A
E - Coal Pit Lane W	115	29	1243	792	0.145	115	224	0.3	0.2	5.324	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	457	1940	0.244	474	680	0.5	0.4	2.734	A
B - A4303 E	677	169	312	2367	0.286	677	619	0.6	0.4	2.351	A
C - A5 S	562	140	523	1722	0.326	562	466	0.7	0.5	3.424	A
D - B4027 S	272	68	956	1139	0.239	272	130	0.5	0.3	4.214	A
E - Coal Pit Lane W	96	24	1040	867	0.111	97	188	0.2	0.1	4.672	A

WoD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	12.94	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-4	E - Coal Pit Lane W	12.94	B

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	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	950	100.000
B - A4303 E		ONE HOUR	✓	1262	100.000
C - A5 S		ONE HOUR	✓	689	100.000
D - B4027 S		ONE HOUR	✓	608	100.000
E - Coal Pit Lane W		ONE HOUR	✓	400	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	573	330	43	4
	B - A4303 E	622	0	217	311	112
	C - A5 S	288	316	2	13	70
	D - B4027 S	122	455	29	0	2
	E - Coal Pit Lane W	37	272	72	19	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	12	12	0	33
	B - A4303 E	10	0	21	3	6
	C - A5 S	14	22	0	0	8
	D - B4027 S	5	4	7	0	0
	E - Coal Pit Lane W	3	1	3	58	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.70	8.73	2.5	A	872	1308
B - A4303 E	0.62	4.72	1.8	A	1158	1737
C - A5 S	0.55	6.84	1.4	A	632	948
D - B4027 S	0.76	17.99	3.2	C	558	837
E - Coal Pit Lane W	0.88	51.72	5.9	F	367	551

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	715	179	871	1721	0.416	712	802	0.0	0.8	3.966	A
B - A4303 E	950	238	374	2330	0.408	947	1210	0.0	0.8	2.845	A
C - A5 S	519	130	834	1567	0.331	516	487	0.0	0.6	3.983	A
D - B4027 S	458	114	1061	1093	0.419	455	290	0.0	0.7	5.858	A
E - Coal Pit Lane W	301	75	1374	743	0.405	298	141	0.0	0.7	8.314	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	854	214	1043	1630	0.524	852	959	0.8	1.2	5.149	A
B - A4303 E	1135	284	447	2285	0.496	1133	1448	0.8	1.1	3.419	A
C - A5 S	619	155	998	1485	0.417	618	583	0.6	0.8	4.834	A
D - B4027 S	547	137	1269	1002	0.546	545	346	0.7	1.2	8.181	A
E - Coal Pit Lane W	360	90	1645	642	0.560	357	169	0.7	1.3	12.948	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1046	261	1262	1514	0.691	1041	1172	1.2	2.4	8.400	A
B - A4303 E	1389	347	544	2227	0.624	1387	1759	1.1	1.8	4.673	A
C - A5 S	759	190	1220	1373	0.552	756	710	0.8	1.4	6.769	A
D - B4027 S	669	167	1553	878	0.762	662	423	1.2	3.1	16.852	C
E - Coal Pit Lane W	440	110	2008	507	0.869	425	206	1.3	5.0	39.940	E

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1046	261	1279	1505	0.695	1046	1177	2.4	2.5	8.727	A
B - A4303 E	1389	347	549	2224	0.625	1389	1776	1.8	1.8	4.721	A
C - A5 S	759	190	1223	1372	0.553	759	715	1.4	1.4	6.837	A
D - B4027 S	669	167	1557	876	0.764	669	425	3.1	3.2	17.993	C
E - Coal Pit Lane W	440	110	2019	503	0.875	437	207	5.0	5.9	51.724	F

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	854	214	1071	1615	0.529	859	967	2.5	1.3	5.339	A
B - A4303 E	1135	284	455	2281	0.497	1137	1475	1.8	1.1	3.455	A
C - A5 S	619	155	1002	1482	0.418	622	590	1.4	0.8	4.887	A
D - B4027 S	547	137	1275	999	0.547	554	349	3.2	1.3	8.585	A
E - Coal Pit Lane W	360	90	1660	637	0.565	378	170	5.9	1.4	15.283	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	715	179	882	1715	0.417	717	807	1.3	0.8	4.026	A
B - A4303 E	950	238	377	2328	0.408	951	1222	1.1	0.8	2.866	A
C - A5 S	519	130	838	1565	0.332	520	491	0.8	0.6	4.016	A
D - B4027 S	458	114	1066	1090	0.420	460	291	1.3	0.8	5.976	A
E - Coal Pit Lane W	301	75	1384	739	0.407	304	142	1.4	0.7	8.593	A

WoD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.69	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	15	D - B4027 S	7.69	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	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1020	100.000
B - A4303 E		ONE HOUR	✓	1461	100.000
C - A5 S		ONE HOUR	✓	700	100.000
D - B4027 S		ONE HOUR	✓	469	100.000
E - Coal Pit Lane W		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	539	372	102	7
	B - A4303 E	623	0	209	382	247
	C - A5 S	353	214	0	24	109
	D - B4027 S	87	370	2	0	10
	E - Coal Pit Lane W	6	107	36	2	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	10	5	11	17
	B - A4303 E	13	0	11	6	1
	C - A5 S	12	27	0	0	0
	D - B4027 S	0	4	0	0	43
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.64	6.15	1.9	A	936	1404
B - A4303 E	0.73	6.51	2.9	A	1341	2011
C - A5 S	0.63	8.83	1.9	A	642	963
D - B4027 S	0.64	12.72	1.8	B	430	646
E - Coal Pit Lane W	0.29	8.72	0.4	A	139	208

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	768	192	547	1892	0.406	765	801	0.0	0.7	3.449	A
B - A4303 E	1100	275	391	2320	0.474	1096	922	0.0	1.0	3.186	A
C - A5 S	527	132	1022	1472	0.358	524	464	0.0	0.6	4.300	A
D - B4027 S	353	88	1164	1048	0.337	351	383	0.0	0.5	5.349	A
E - Coal Pit Lane W	114	28	1236	795	0.143	113	280	0.0	0.2	5.277	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	917	229	656	1835	0.500	916	959	0.7	1.1	4.233	A
B - A4303 E	1313	328	468	2273	0.578	1311	1103	1.0	1.5	4.059	A
C - A5 S	629	157	1223	1372	0.459	628	556	0.6	1.0	5.486	A
D - B4027 S	422	105	1394	948	0.445	420	458	0.5	0.8	7.075	A
E - Coal Pit Lane W	136	34	1479	704	0.193	135	335	0.2	0.2	6.330	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1123	281	800	1758	0.639	1120	1172	1.1	1.9	6.073	A
B - A4303 E	1609	402	572	2210	0.728	1603	1348	1.5	2.8	6.385	A
C - A5 S	771	193	1496	1235	0.624	767	679	1.0	1.8	8.664	A
D - B4027 S	516	129	1703	812	0.636	513	560	0.8	1.7	12.320	B
E - Coal Pit Lane W	166	42	1807	582	0.286	166	409	0.2	0.4	8.632	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1123	281	805	1756	0.640	1123	1177	1.9	1.9	6.153	A
B - A4303 E	1609	402	574	2209	0.728	1608	1354	2.8	2.9	6.505	A
C - A5 S	771	193	1501	1233	0.625	771	681	1.8	1.9	8.834	A
D - B4027 S	516	129	1710	810	0.638	516	561	1.7	1.8	12.723	B
E - Coal Pit Lane W	166	42	1815	579	0.287	166	411	0.4	0.4	8.724	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	917	229	662	1832	0.501	920	966	1.9	1.1	4.290	A
B - A4303 E	1313	328	470	2272	0.578	1319	1112	2.9	1.5	4.128	A
C - A5 S	629	157	1230	1368	0.460	633	559	1.9	1.0	5.583	A
D - B4027 S	422	105	1403	944	0.447	425	460	1.8	0.9	7.266	A
E - Coal Pit Lane W	136	34	1491	699	0.194	136	337	0.4	0.2	6.399	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	768	192	552	1890	0.406	769	807	1.1	0.7	3.481	A
B - A4303 E	1100	275	393	2318	0.474	1102	928	1.5	1.0	3.221	A
C - A5 S	527	132	1028	1469	0.359	528	467	1.0	0.6	4.349	A
D - B4027 S	353	88	1172	1044	0.338	354	385	0.9	0.5	5.425	A
E - Coal Pit Lane W	114	28	1245	791	0.144	114	281	0.2	0.2	5.318	A

WoDWS 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	12.11	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-3	E - Coal Pit Lane W	12.11	B

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	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	956	100.000
B - A4303 E		ONE HOUR	✓	1271	100.000
C - A5 S		ONE HOUR	✓	682	100.000
D - B4027 S		ONE HOUR	✓	598	100.000
E - Coal Pit Lane W		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	581	330	41	4
	B - A4303 E	632	0	221	305	113
	C - A5 S	285	320	2	12	63
	D - B4027 S	116	453	27	0	2
	E - Coal Pit Lane W	34	267	69	19	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	12	13	0	33
	B - A4303 E	9	0	20	3	7
	C - A5 S	15	22	0	0	7
	D - B4027 S	5	4	8	0	0
	E - Coal Pit Lane W	3	1	3	58	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.70	8.80	2.5	A	877	1316
B - A4303 E	0.63	4.73	1.8	A	1166	1749
C - A5 S	0.55	6.80	1.4	A	626	939
D - B4027 S	0.75	17.30	3.1	C	549	823
E - Coal Pit Lane W	0.85	45.65	5.1	E	357	535

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	865	1724	0.417	717	800	0.0	0.8	3.996	A
B - A4303 E	957	239	368	2333	0.410	954	1213	0.0	0.8	2.840	A
C - A5 S	513	128	836	1566	0.328	511	486	0.0	0.6	3.986	A
D - B4027 S	450	113	1064	1091	0.413	447	283	0.0	0.7	5.808	A
E - Coal Pit Lane W	293	73	1375	743	0.394	290	137	0.0	0.7	8.176	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	859	215	1036	1634	0.526	858	958	0.8	1.2	5.178	A
B - A4303 E	1143	286	441	2289	0.499	1141	1453	0.8	1.1	3.417	A
C - A5 S	613	153	1000	1483	0.413	612	582	0.6	0.8	4.829	A
D - B4027 S	538	134	1274	1000	0.538	536	338	0.7	1.2	8.062	A
E - Coal Pit Lane W	350	87	1646	642	0.545	348	163	0.7	1.2	12.553	B

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1053	263	1255	1518	0.694	1048	1170	1.2	2.5	8.479	A
B - A4303 E	1399	350	537	2232	0.627	1396	1766	1.1	1.8	4.684	A
C - A5 S	751	188	1223	1372	0.547	749	710	0.8	1.4	6.734	A
D - B4027 S	658	165	1558	876	0.752	651	413	1.2	3.0	16.266	C
E - Coal Pit Lane W	428	107	2010	506	0.846	415	200	1.2	4.5	36.661	E

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1053	263	1271	1509	0.697	1052	1174	2.5	2.5	8.802	A
B - A4303 E	1399	350	541	2229	0.628	1399	1783	1.8	1.8	4.731	A
C - A5 S	751	188	1226	1370	0.548	751	714	1.4	1.4	6.799	A
D - B4027 S	658	165	1562	874	0.753	658	415	3.0	3.1	17.302	C
E - Coal Pit Lane W	428	107	2020	503	0.852	426	200	4.5	5.1	45.651	E

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	859	215	1061	1620	0.530	864	964	2.5	1.3	5.359	A
B - A4303 E	1143	286	448	2285	0.500	1146	1477	1.8	1.1	3.455	A
C - A5 S	613	153	1005	1481	0.414	615	589	1.4	0.8	4.878	A
D - B4027 S	538	134	1280	997	0.539	545	341	3.1	1.2	8.433	A
E - Coal Pit Lane W	350	87	1660	637	0.549	365	164	5.1	1.3	14.400	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	875	1719	0.419	722	805	1.3	0.8	4.045	A
B - A4303 E	957	239	372	2331	0.411	958	1225	1.1	0.8	2.863	A
C - A5 S	513	128	840	1564	0.328	514	490	0.8	0.6	4.019	A
D - B4027 S	450	113	1070	1089	0.413	452	284	1.2	0.7	5.921	A
E - Coal Pit Lane W	293	73	1385	739	0.396	295	137	1.3	0.7	8.431	A

WoDWS 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.36	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	20	D - B4027 S	7.36	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	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1038	100.000
B - A4303 E		ONE HOUR	✓	1457	100.000
C - A5 S		ONE HOUR	✓	712	100.000
D - B4027 S		ONE HOUR	✓	422	100.000
E - Coal Pit Lane W		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	571	367	94	6
	B - A4303 E	630	0	218	368	241
	C - A5 S	354	229	0	23	106
	D - B4027 S	72	336	2	0	12
	E - Coal Pit Lane W	6	101	32	2	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	5	12	20
	B - A4303 E	13	0	10	7	1
	C - A5 S	12	25	0	0	0
	D - B4027 S	0	3	0	0	50
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.64	6.16	1.9	A	952	1429
B - A4303 E	0.72	6.35	2.8	A	1337	2005
C - A5 S	0.63	8.84	1.9	A	653	980
D - B4027 S	0.58	10.98	1.4	B	387	581
E - Coal Pit Lane W	0.26	8.29	0.4	A	129	194

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	781	195	526	1904	0.410	778	796	0.0	0.7	3.442	A
B - A4303 E	1097	274	377	2328	0.471	1093	927	0.0	1.0	3.166	A
C - A5 S	536	134	1006	1480	0.362	533	464	0.0	0.6	4.297	A
D - B4027 S	318	79	1174	1043	0.305	316	365	0.0	0.4	5.104	A
E - Coal Pit Lane W	106	27	1216	802	0.132	106	274	0.0	0.2	5.166	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	933	233	630	1849	0.505	932	953	0.7	1.1	4.229	A
B - A4303 E	1310	327	452	2283	0.574	1308	1110	1.0	1.5	4.011	A
C - A5 S	640	160	1204	1381	0.463	639	556	0.6	1.0	5.482	A
D - B4027 S	379	95	1405	942	0.403	378	437	0.4	0.7	6.588	A
E - Coal Pit Lane W	127	32	1456	713	0.178	127	328	0.2	0.2	6.139	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1143	286	769	1775	0.644	1140	1165	1.1	1.9	6.080	A
B - A4303 E	1604	401	552	2222	0.722	1599	1356	1.5	2.8	6.236	A
C - A5 S	784	196	1472	1247	0.628	780	679	1.0	1.9	8.669	A
D - B4027 S	465	116	1718	806	0.576	462	534	0.7	1.4	10.728	B
E - Coal Pit Lane W	155	39	1779	592	0.262	155	400	0.2	0.4	8.216	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1143	286	773	1773	0.645	1143	1169	1.9	1.9	6.159	A
B - A4303 E	1604	401	554	2221	0.722	1604	1362	2.8	2.8	6.345	A
C - A5 S	784	196	1476	1245	0.630	784	681	1.9	1.9	8.840	A
D - B4027 S	465	116	1724	803	0.578	465	536	1.4	1.4	10.978	B
E - Coal Pit Lane W	155	39	1787	590	0.263	155	402	0.4	0.4	8.289	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	933	233	635	1846	0.506	936	959	1.9	1.1	4.284	A
B - A4303 E	1310	327	454	2282	0.574	1315	1118	2.8	1.5	4.076	A
C - A5 S	640	160	1210	1378	0.464	644	559	1.9	1.0	5.582	A
D - B4027 S	379	95	1414	938	0.404	382	440	1.4	0.7	6.723	A
E - Coal Pit Lane W	127	32	1467	709	0.179	127	330	0.4	0.2	6.198	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	781	195	530	1901	0.411	783	801	1.1	0.8	3.477	A
B - A4303 E	1097	274	379	2326	0.472	1099	933	1.5	1.0	3.197	A
C - A5 S	536	134	1011	1478	0.363	537	467	1.0	0.6	4.346	A
D - B4027 S	318	79	1182	1040	0.305	319	367	0.7	0.5	5.165	A
E - Coal Pit Lane W	106	27	1225	799	0.133	106	275	0.2	0.2	5.203	A

WD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	34.18	D

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-12	E - Coal Pit Lane W	34.18	D

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
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	913	100.000
B - A4303 E		ONE HOUR	✓	1316	100.000
C - A5 S		ONE HOUR	✓	736	100.000
D - B4027 S		ONE HOUR	✓	617	100.000
E - Coal Pit Lane W		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	522	353	32	6
	B - A4303 E	661	0	239	310	106
	C - A5 S	336	324	2	12	62
	D - B4027 S	120	464	31	0	2
	E - Coal Pit Lane W	42	322	85	20	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

From \ To	A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
A - A5 N	0	17	25	0	50
B - A4303 E	11	0	20	3	5
C - A5 S	25	22	0	0	9
D - B4027 S	7	3	11	0	0
E - Coal Pit Lane W	5	1	2	54	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.68	8.97	2.5	A	838	1257
B - A4303 E	0.66	5.18	2.1	A	1208	1811
C - A5 S	0.60	7.96	1.8	A	675	1013
D - B4027 S	0.81	23.36	4.2	C	566	849
E - Coal Pit Lane W	1.12	219.98	34.2	F	430	646

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	687	172	932	1689	0.407	684	869	0.0	0.8	4.266	A
B - A4303 E	991	248	396	2316	0.428	987	1221	0.0	0.8	2.971	A
C - A5 S	554	139	852	1558	0.356	551	532	0.0	0.7	4.338	A
D - B4027 S	465	116	1122	1066	0.436	461	280	0.0	0.8	6.168	A
E - Coal Pit Lane W	353	88	1452	714	0.494	349	132	0.0	1.0	10.058	B

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	821	205	1115	1592	0.516	819	1040	0.8	1.3	5.551	A
B - A4303 E	1183	296	474	2270	0.521	1182	1461	0.8	1.2	3.634	A
C - A5 S	662	165	1019	1474	0.449	660	636	0.7	1.0	5.380	A
D - B4027 S	555	139	1344	969	0.572	552	336	0.8	1.4	8.941	A
E - Coal Pit Lane W	422	105	1738	608	0.694	417	158	1.0	2.2	18.978	C

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1005	251	1302	1493	0.673	1001	1265	1.3	2.4	8.655	A
B - A4303 E	1449	362	565	2215	0.654	1446	1738	1.2	2.0	5.125	A
C - A5 S	810	203	1244	1361	0.595	807	766	1.0	1.8	7.856	A
D - B4027 S	679	170	1643	839	0.810	669	408	1.4	4.0	20.933	C
E - Coal Pit Lane W	516	129	2119	466	1.109	448	193	2.2	19.3	107.322	F

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1005	251	1319	1484	0.677	1005	1270	2.4	2.5	8.967	A
B - A4303 E	1449	362	569	2212	0.655	1449	1755	2.0	2.1	5.185	A
C - A5 S	810	203	1247	1360	0.596	810	771	1.8	1.8	7.962	A
D - B4027 S	679	170	1648	836	0.812	678	409	4.0	4.2	23.355	C
E - Coal Pit Lane W	516	129	2133	461	1.121	457	194	19.3	34.2	219.979	F

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	821	205	1246	1522	0.539	825	1058	2.5	1.4	6.202	A
B - A4303 E	1183	296	506	2250	0.526	1186	1565	2.1	1.2	3.732	A
C - A5 S	662	165	1029	1469	0.450	665	664	1.8	1.0	5.461	A
D - B4027 S	555	139	1351	966	0.574	566	343	4.2	1.4	9.608	A
E - Coal Pit Lane W	422	105	1758	600	0.702	547	159	34.2	2.9	104.187	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	687	172	949	1680	0.409	690	875	1.4	0.8	4.353	A
B - A4303 E	991	248	401	2313	0.428	992	1238	1.2	0.8	3.002	A
C - A5 S	554	139	856	1555	0.356	555	537	1.0	0.7	4.384	A
D - B4027 S	465	116	1129	1063	0.437	467	282	1.4	0.8	6.314	A
E - Coal Pit Lane W	353	88	1463	710	0.497	361	133	2.9	1.0	10.836	B

WD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	8.53	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	15	D - B4027 S	8.53	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
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1111	100.000
B - A4303 E		ONE HOUR	✓	1436	100.000
C - A5 S		ONE HOUR	✓	757	100.000
D - B4027 S		ONE HOUR	✓	451	100.000
E - Coal Pit Lane W		ONE HOUR	✓	144	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	578	403	123	7
	B - A4303 E	626	0	191	379	240
	C - A5 S	409	213	0	25	110
	D - B4027 S	88	349	2	0	12
	E - Coal Pit Lane W	6	101	34	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	16	12	15	17
	B - A4303 E	16	0	12	5	1
	C - A5 S	21	32	0	0	0
	D - B4027 S	0	4	0	0	50
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.69	7.48	2.5	A	1019	1529
B - A4303 E	0.73	6.64	2.9	A	1318	1977
C - A5 S	0.68	10.96	2.5	B	695	1042
D - B4027 S	0.63	12.97	1.8	B	414	621
E - Coal Pit Lane W	0.28	8.89	0.4	A	132	198

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	836	209	525	1904	0.439	833	846	0.0	0.9	3.834	A
B - A4303 E	1081	270	429	2297	0.471	1077	930	0.0	1.0	3.228	A
C - A5 S	570	142	1034	1467	0.389	567	472	0.0	0.8	4.760	A
D - B4027 S	340	85	1203	1031	0.329	338	397	0.0	0.5	5.387	A
E - Coal Pit Lane W	108	27	1264	784	0.138	108	277	0.0	0.2	5.318	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	999	250	629	1849	0.540	997	1013	0.9	1.3	4.825	A
B - A4303 E	1291	323	513	2246	0.575	1289	1113	1.0	1.5	4.120	A
C - A5 S	681	170	1237	1365	0.499	679	565	0.8	1.2	6.246	A
D - B4027 S	405	101	1440	927	0.437	404	476	0.5	0.8	7.144	A
E - Coal Pit Lane W	129	32	1513	691	0.187	129	331	0.2	0.2	6.401	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1223	306	768	1775	0.689	1219	1237	1.3	2.5	7.338	A
B - A4303 E	1581	395	627	2177	0.726	1576	1359	1.5	2.8	6.509	A
C - A5 S	833	208	1512	1227	0.679	828	691	1.2	2.4	10.501	B
D - B4027 S	497	124	1759	788	0.630	493	581	0.8	1.7	12.535	B
E - Coal Pit Lane W	159	40	1847	567	0.280	158	404	0.2	0.4	8.789	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1223	306	773	1773	0.690	1223	1243	2.5	2.5	7.485	A
B - A4303 E	1581	395	630	2176	0.727	1581	1366	2.8	2.9	6.638	A
C - A5 S	833	208	1517	1225	0.681	833	694	2.4	2.5	10.960	B
D - B4027 S	497	124	1767	785	0.633	496	583	1.7	1.8	12.973	B
E - Coal Pit Lane W	159	40	1857	563	0.281	159	406	0.4	0.4	8.893	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	999	250	636	1845	0.541	1003	1021	2.5	1.4	4.917	A
B - A4303 E	1291	323	517	2244	0.575	1296	1123	2.9	1.5	4.193	A
C - A5 S	681	170	1244	1361	0.500	686	569	2.5	1.2	6.407	A
D - B4027 S	405	101	1451	922	0.440	409	479	1.8	0.8	7.349	A
E - Coal Pit Lane W	129	32	1527	686	0.189	130	334	0.4	0.2	6.478	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	836	209	530	1901	0.440	838	852	1.4	0.9	3.880	A
B - A4303 E	1081	270	432	2295	0.471	1083	937	1.5	1.0	3.264	A
C - A5 S	570	142	1039	1464	0.389	572	475	1.2	0.8	4.824	A
D - B4027 S	340	85	1211	1027	0.331	341	400	0.8	0.5	5.467	A
E - Coal Pit Lane W	108	27	1274	781	0.139	109	278	0.2	0.2	5.362	A

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905

Filename: J27_241007 A5 A4303 B4027 Coal Pit Ln (Mitigation) Flow Amends.j10
Path: X:\NTT\NTT2814_Hinckley Rail Freight Interchange\02. Project Delivery\01. WIP\Design and Calculations\T&I Planning\04 Junction Modelling\J27_JTC 48 - A5 - A4303 - B4027 - Coal Pit Lane
Report generation date: 08/10/2024 12:35:42

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2023											
A - A5 N	D1	1.6	5.47	0.60	A	42 % [A - A5 N]	D2	0.7	3.53	0.38	A	57 % [C - A5 S]
B - A4303 E		0.9	3.34	0.45	A			0.8	3.08	0.43	A	
C - A5 S		0.7	4.15	0.36	A			1.2	5.08	0.51	A	
D - B4027 S		0.2	3.63	0.19	A			0.6	5.28	0.37	A	
E - Coal Pit Lane W		0.3	3.33	0.20	A			0.1	3.44	0.12	A	
	WoD 2036											
A - A5 N	D3	8.7	22.21	0.90	C	4 % [A - A5 N]	D4	1.3	4.84	0.56	A	13 % [D - B4027 S]
B - A4303 E		2.1	5.96	0.66	A			1.7	4.63	0.63	A	
C - A5 S		1.4	6.37	0.54	A			3.5	11.35	0.77	B	
D - B4027 S		0.4	4.89	0.30	A			1.9	13.09	0.65	B	
E - Coal Pit Lane W		0.5	4.56	0.32	A			0.3	4.96	0.21	A	
	WoDWS 2036											
A - A5 N	D5	8.9	22.42	0.90	C	3 % [A - A5 N]	D6	1.3	4.86	0.57	A	14 % [C - A5 S]
B - A4303 E		2.2	6.01	0.67	A			1.6	4.33	0.62	A	
C - A5 S		1.4	6.33	0.54	A			3.4	10.96	0.78	B	
D - B4027 S		0.4	4.84	0.29	A			1.4	10.59	0.59	B	
E - Coal Pit Lane W		0.5	4.49	0.31	A			0.3	5.16	0.20	A	
	WD 2036											
A - A5 N	D7	8.9	23.16	0.90	C	3 % [A - A5 N]	D8	1.8	6.06	0.61	A	9 % [C - A5 S]
B - A4303 E		2.5	6.78	0.70	A			1.8	4.91	0.62	A	
C - A5 S		1.7	7.07	0.59	A			4.9	15.25	0.82	C	
D - B4027 S		0.5	5.25	0.32	A			1.8	12.63	0.65	B	
E - Coal Pit Lane W		0.7	5.42	0.40	A			0.3	5.03	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 average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

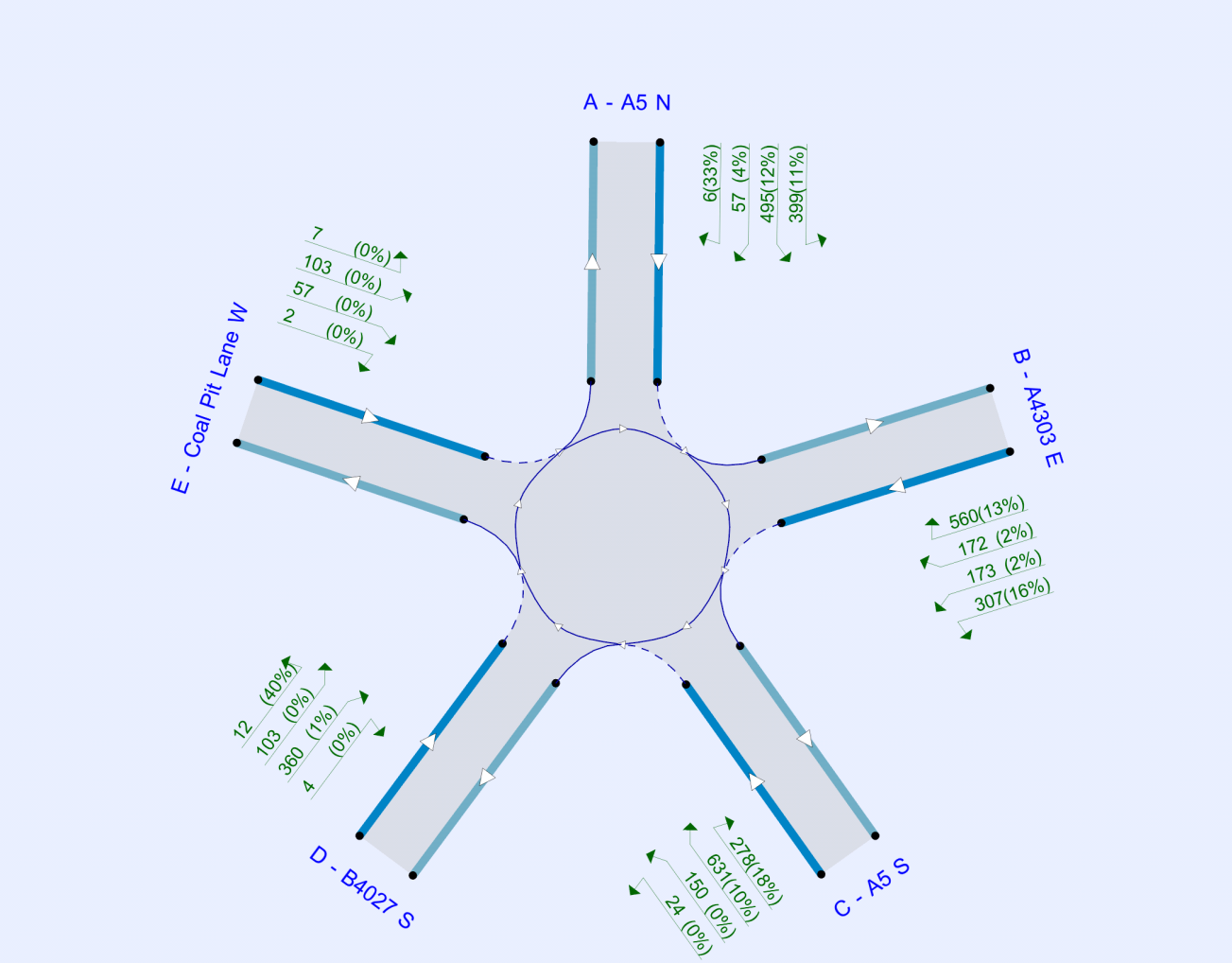
File summary

File Description

Title	J48
Location	A5 / B4027 / Coal Pit lane
Site number	J48
Date	21/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	NTT2814
Enumerator	BWB\petr.jandik
Description	

Units

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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue 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	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	07:15	08:45	15	✓
D2	2023	PM	ONE HOUR	16:15	17:45	15	✓
D3	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D4	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓
D5	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓
D6	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.25	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	42	A - A5 N	4.25	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A5 N		
B	A4303 E		
C	A5 S		
D	B4027 S		
E	Coal Pit Lane W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A5 N	4.77	7.36	42.6	45.8	93.4	27.0		
B - A4303 E	7.17	8.53	22.4	41.4	79.5	33.0		
C - A5 S	4.79	6.96	18.1	43.8	92.3	29.0		
D - B4027 S	3.50	7.40	15.4	30.0	88.1	30.0		
E - Coal Pit Lane W	3.53	8.80	28.5	20.0	88.4	54.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A5 N	0.529	2182
B - A4303 E	0.603	2555
C - A5 S	0.501	1984
D - B4027 S	0.468	1741
E - Coal Pit Lane W	0.469	1900

The slope and intercept shown above include any corrections and adjustments.

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	2023	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	992	100.000
B - A4303 E		ONE HOUR	✓	857	100.000
C - A5 S		ONE HOUR	✓	527	100.000
D - B4027 S		ONE HOUR	✓	214	100.000
E - Coal Pit Lane W		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	437	503	48	4
	B - A4303 E	332	0	226	223	76
	C - A5 S	216	234	2	13	62
	D - B4027 S	40	154	19	0	1
	E - Coal Pit Lane W	20	149	80	6	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.60	5.47	1.6	A	910	1365
B - A4303 E	0.45	3.34	0.9	A	786	1180
C - A5 S	0.36	4.15	0.7	A	484	725
D - B4027 S	0.19	3.63	0.2	A	196	295
E - Coal Pit Lane W	0.20	3.33	0.3	A	234	351

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	483	1926	0.388	744	456	0.0	0.7	3.301	A
B - A4303 E	645	161	497	2256	0.286	643	731	0.0	0.4	2.426	A
C - A5 S	397	99	517	1725	0.230	395	623	0.0	0.4	3.190	A
D - B4027 S	161	40	695	1416	0.114	161	218	0.0	0.1	2.970	A
E - Coal Pit Lane W	192	48	748	1550	0.124	191	107	0.0	0.1	2.710	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	578	1876	0.475	891	546	0.7	1.0	3.963	A
B - A4303 E	770	193	594	2197	0.351	770	875	0.4	0.6	2.742	A
C - A5 S	474	118	619	1674	0.283	473	745	0.4	0.5	3.536	A
D - B4027 S	192	48	832	1352	0.142	192	260	0.1	0.2	3.216	A
E - Coal Pit Lane W	229	57	896	1481	0.155	229	128	0.1	0.2	2.942	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	708	1807	0.604	1090	669	1.0	1.6	5.429	A
B - A4303 E	944	236	727	2117	0.446	942	1071	0.6	0.9	3.331	A
C - A5 S	580	145	758	1605	0.362	579	912	0.5	0.7	4.134	A
D - B4027 S	236	59	1018	1264	0.186	235	319	0.2	0.2	3.624	A
E - Coal Pit Lane W	281	70	1096	1387	0.202	280	157	0.2	0.3	3.330	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	709	1807	0.605	1092	669	1.6	1.6	5.471	A
B - A4303 E	944	236	729	2116	0.446	944	1072	0.9	0.9	3.339	A
C - A5 S	580	145	759	1604	0.362	580	914	0.7	0.7	4.145	A
D - B4027 S	236	59	1020	1264	0.186	236	319	0.2	0.2	3.626	A
E - Coal Pit Lane W	281	70	1098	1386	0.203	281	157	0.3	0.3	3.331	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	580	1875	0.476	894	547	1.6	1.0	3.996	A
B - A4303 E	770	193	597	2195	0.351	772	877	0.9	0.6	2.751	A
C - A5 S	474	118	620	1674	0.283	475	748	0.7	0.5	3.542	A
D - B4027 S	192	48	834	1351	0.142	193	261	0.2	0.2	3.220	A
E - Coal Pit Lane W	229	57	898	1480	0.155	230	129	0.3	0.2	2.946	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	485	1925	0.388	748	458	1.0	0.7	3.324	A
B - A4303 E	645	161	499	2254	0.286	646	734	0.6	0.4	2.434	A
C - A5 S	397	99	519	1724	0.230	397	626	0.5	0.4	3.202	A
D - B4027 S	161	40	698	1414	0.114	161	219	0.2	0.1	2.979	A
E - Coal Pit Lane W	192	48	751	1548	0.124	192	108	0.2	0.1	2.715	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.03	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	57	C - A5 S	4.03	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	2023	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	629	100.000
B - A4303 E		ONE HOUR	✓	899	100.000
C - A5 S		ONE HOUR	✓	746	100.000
D - B4027 S		ONE HOUR	✓	361	100.000
E - Coal Pit Lane W		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	262	337	26	4
	B - A4303 E	405	0	236	128	130
	C - A5 S	418	203	0	17	108
	D - B4027 S	74	277	3	0	7
	E - Coal Pit Lane W	5	79	43	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	11	12	4	33
	B - A4303 E	13	0	16	2	2
	C - A5 S	10	18	0	0	0
	D - B4027 S	0	1	0	0	40
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.38	3.53	0.7	A	577	866
B - A4303 E	0.43	3.08	0.8	A	825	1237
C - A5 S	0.51	5.08	1.2	A	685	1027
D - B4027 S	0.37	5.28	0.6	A	331	497
E - Coal Pit Lane W	0.12	3.44	0.1	A	117	176

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	455	1941	0.244	472	677	0.0	0.4	2.725	A
B - A4303 E	677	169	311	2368	0.286	675	616	0.0	0.4	2.344	A
C - A5 S	562	140	521	1723	0.326	560	465	0.0	0.5	3.403	A
D - B4027 S	272	68	951	1296	0.210	271	129	0.0	0.3	3.556	A
E - Coal Pit Lane W	96	24	1035	1415	0.068	96	187	0.0	0.1	2.729	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	544	1894	0.299	565	810	0.4	0.5	3.016	A
B - A4303 E	808	202	372	2331	0.347	808	737	0.4	0.6	2.608	A
C - A5 S	671	168	623	1672	0.401	670	556	0.5	0.7	3.954	A
D - B4027 S	325	81	1139	1208	0.269	324	155	0.3	0.4	4.125	A
E - Coal Pit Lane W	115	29	1239	1320	0.087	115	224	0.1	0.1	2.988	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	666	1830	0.379	692	992	0.5	0.7	3.521	A
B - A4303 E	990	247	455	2281	0.434	989	902	0.6	0.8	3.071	A
C - A5 S	821	205	763	1602	0.513	820	681	0.7	1.1	5.061	A
D - B4027 S	397	99	1394	1089	0.365	397	189	0.4	0.6	5.263	A
E - Coal Pit Lane W	141	35	1517	1190	0.118	141	274	0.1	0.1	3.432	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	667	1829	0.379	693	993	0.7	0.7	3.526	A
B - A4303 E	990	247	456	2280	0.434	990	904	0.8	0.8	3.077	A
C - A5 S	821	205	764	1602	0.513	821	682	1.1	1.2	5.083	A
D - B4027 S	397	99	1396	1088	0.365	397	189	0.6	0.6	5.283	A
E - Coal Pit Lane W	141	35	1519	1188	0.119	141	274	0.1	0.1	3.436	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	546	1893	0.299	566	812	0.7	0.5	3.022	A
B - A4303 E	808	202	373	2330	0.347	809	740	0.8	0.6	2.612	A
C - A5 S	671	168	625	1671	0.401	672	557	1.2	0.7	3.977	A
D - B4027 S	325	81	1142	1207	0.269	325	155	0.6	0.4	4.144	A
E - Coal Pit Lane W	115	29	1243	1318	0.087	115	224	0.1	0.1	2.995	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	457	1940	0.244	474	680	0.5	0.4	2.734	A
B - A4303 E	677	169	312	2367	0.286	677	619	0.6	0.4	2.351	A
C - A5 S	562	140	523	1722	0.326	562	466	0.7	0.5	3.424	A
D - B4027 S	272	68	956	1294	0.210	272	130	0.4	0.3	3.574	A
E - Coal Pit Lane W	96	24	1040	1413	0.068	96	188	0.1	0.1	2.736	A

WoD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	11.49	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	4	A - A5 N	11.49	B

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	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1362	100.000
B - A4303 E		ONE HOUR	✓	1177	100.000
C - A5 S		ONE HOUR	✓	724	100.000
D - B4027 S		ONE HOUR	✓	294	100.000
E - Coal Pit Lane W		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	600	691	66	5
	B - A4303 E	456	0	311	306	104
	C - A5 S	297	321	3	18	85
	D - B4027 S	55	212	26	0	1
	E - Coal Pit Lane W	27	205	110	8	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.90	22.21	8.7	C	1250	1875
B - A4303 E	0.66	5.96	2.1	A	1080	1620
C - A5 S	0.54	6.37	1.4	A	664	997
D - B4027 S	0.30	4.89	0.4	A	270	405
E - Coal Pit Lane W	0.32	4.56	0.5	A	321	482

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1025	256	664	1831	0.560	1020	626	0.0	1.4	4.791	A
B - A4303 E	886	222	681	2145	0.413	883	1003	0.0	0.8	3.095	A
C - A5 S	545	136	709	1629	0.335	543	855	0.0	0.6	3.899	A
D - B4027 S	221	55	953	1295	0.171	220	298	0.0	0.2	3.466	A
E - Coal Pit Lane W	263	66	1027	1419	0.186	263	146	0.0	0.2	3.181	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1224	306	795	1761	0.695	1220	750	1.4	2.4	7.168	A
B - A4303 E	1058	265	815	2064	0.513	1057	1200	0.8	1.1	3.881	A
C - A5 S	651	163	848	1559	0.417	650	1023	0.6	0.8	4.664	A
D - B4027 S	264	66	1141	1207	0.219	264	357	0.2	0.3	3.954	A
E - Coal Pit Lane W	315	79	1230	1324	0.238	314	175	0.2	0.3	3.647	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1500	375	972	1667	0.899	1477	917	2.4	8.0	18.704	C
B - A4303 E	1296	324	988	1960	0.661	1292	1462	1.1	2.1	5.831	A
C - A5 S	797	199	1036	1465	0.544	795	1244	0.8	1.4	6.315	A
D - B4027 S	324	81	1395	1088	0.297	323	436	0.3	0.4	4.873	A
E - Coal Pit Lane W	385	96	1504	1195	0.322	385	214	0.3	0.5	4.539	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1500	375	974	1666	0.900	1497	919	8.0	8.7	22.206	C
B - A4303 E	1296	324	999	1953	0.664	1296	1472	2.1	2.1	5.956	A
C - A5 S	797	199	1040	1463	0.545	797	1255	1.4	1.4	6.373	A
D - B4027 S	324	81	1399	1086	0.298	324	438	0.4	0.4	4.891	A
E - Coal Pit Lane W	385	96	1508	1194	0.323	385	215	0.5	0.5	4.556	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1224	306	798	1760	0.696	1249	753	8.7	2.5	8.009	A
B - A4303 E	1058	265	831	2054	0.515	1062	1216	2.1	1.2	3.961	A
C - A5 S	651	163	854	1557	0.418	653	1040	1.4	0.9	4.709	A
D - B4027 S	264	66	1147	1204	0.219	265	360	0.4	0.3	3.974	A
E - Coal Pit Lane W	315	79	1236	1321	0.238	315	176	0.5	0.3	3.664	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1025	256	667	1829	0.561	1030	630	2.5	1.4	4.923	A
B - A4303 E	886	222	687	2141	0.414	888	1010	1.2	0.8	3.127	A
C - A5 S	545	136	713	1627	0.335	546	862	0.9	0.6	3.931	A
D - B4027 S	221	55	959	1292	0.171	222	300	0.3	0.2	3.486	A
E - Coal Pit Lane W	263	66	1033	1416	0.186	264	147	0.3	0.2	3.198	A

WoD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.61	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	D - B4027 S	7.61	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	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	866	100.000
B - A4303 E		ONE HOUR	✓	1237	100.000
C - A5 S		ONE HOUR	✓	1026	100.000
D - B4027 S		ONE HOUR	✓	497	100.000
E - Coal Pit Lane W		ONE HOUR	✓	176	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	360	464	36	6
	B - A4303 E	557	0	325	176	179
	C - A5 S	575	279	0	23	149
	D - B4027 S	102	381	4	0	10
	E - Coal Pit Lane W	7	109	59	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	0	0	0	0
	B - A4303 E	0	0	11	12	4
	C - A5 S	0	13	0	16	2
	D - B4027 S	0	10	18	0	0
	E - Coal Pit Lane W	0	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.56	4.84	1.3	A	795	1192
B - A4303 E	0.63	4.63	1.7	A	1135	1703
C - A5 S	0.77	11.35	3.5	B	941	1412
D - B4027 S	0.65	13.09	1.9	B	456	684
E - Coal Pit Lane W	0.21	4.96	0.3	A	162	242

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	652	163	624	1852	0.352	650	930	0.0	0.5	2.990	A
B - A4303 E	931	233	428	2297	0.405	928	846	0.0	0.7	2.753	A
C - A5 S	772	193	717	1625	0.475	769	639	0.0	0.9	4.348	A
D - B4027 S	374	94	1308	1129	0.331	372	177	0.0	0.5	5.106	A
E - Coal Pit Lane W	133	33	1422	1234	0.107	132	258	0.0	0.1	3.276	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	779	195	747	1787	0.436	778	1114	0.5	0.8	3.564	A
B - A4303 E	1112	278	512	2247	0.495	1111	1013	0.7	1.0	3.323	A
C - A5 S	922	231	858	1555	0.593	920	765	0.9	1.5	5.869	A
D - B4027 S	447	112	1566	1008	0.443	446	212	0.5	0.8	6.868	A
E - Coal Pit Lane W	158	40	1703	1102	0.144	158	309	0.1	0.2	3.824	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	953	238	911	1700	0.561	952	1360	0.8	1.3	4.800	A
B - A4303 E	1362	340	626	2178	0.625	1359	1237	1.0	1.7	4.599	A
C - A5 S	1130	282	1049	1459	0.774	1122	936	1.5	3.4	10.866	B
D - B4027 S	547	137	1912	846	0.646	543	259	0.8	1.9	12.598	B
E - Coal Pit Lane W	194	48	2078	927	0.209	193	377	0.2	0.3	4.924	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	953	238	917	1697	0.562	953	1366	1.3	1.3	4.843	A
B - A4303 E	1362	340	628	2177	0.626	1362	1243	1.7	1.7	4.634	A
C - A5 S	1130	282	1051	1458	0.775	1129	938	3.4	3.5	11.349	B
D - B4027 S	547	137	1921	842	0.650	547	260	1.9	1.9	13.095	B
E - Coal Pit Lane W	194	48	2089	921	0.210	194	379	0.3	0.3	4.963	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	779	195	755	1783	0.437	780	1122	1.3	0.8	3.598	A
B - A4303 E	1112	278	514	2245	0.495	1115	1021	1.7	1.0	3.348	A
C - A5 S	922	231	861	1553	0.594	930	768	3.5	1.5	6.072	A
D - B4027 S	447	112	1578	1003	0.446	451	213	1.9	0.9	7.076	A
E - Coal Pit Lane W	158	40	1718	1095	0.144	159	311	0.3	0.2	3.857	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	652	163	629	1849	0.353	653	936	0.8	0.5	3.011	A
B - A4303 E	931	233	430	2296	0.406	933	852	1.0	0.7	2.772	A
C - A5 S	772	193	720	1624	0.476	775	642	1.5	1.0	4.416	A
D - B4027 S	374	94	1317	1125	0.333	376	178	0.9	0.5	5.179	A
E - Coal Pit Lane W	133	33	1433	1229	0.108	133	260	0.2	0.1	3.294	A

WoDWS 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	11.62	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	A - A5 N	11.62	B

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	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1368	100.000
B - A4303 E		ONE HOUR	✓	1186	100.000
C - A5 S		ONE HOUR	✓	717	100.000
D - B4027 S		ONE HOUR	✓	284	100.000
E - Coal Pit Lane W		ONE HOUR	✓	339	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	608	691	64	5
	B - A4303 E	466	0	315	300	105
	C - A5 S	294	325	3	17	78
	D - B4027 S	49	210	24	0	1
	E - Coal Pit Lane W	24	200	107	8	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.90	22.42	8.9	C	1255	1883
B - A4303 E	0.67	6.01	2.2	A	1088	1632
C - A5 S	0.54	6.33	1.4	A	658	987
D - B4027 S	0.29	4.84	0.4	A	261	391
E - Coal Pit Lane W	0.31	4.49	0.5	A	311	467

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1030	257	658	1834	0.562	1024	625	0.0	1.4	4.798	A
B - A4303 E	893	223	676	2148	0.416	890	1006	0.0	0.8	3.106	A
C - A5 S	540	135	711	1628	0.332	537	854	0.0	0.6	3.892	A
D - B4027 S	214	53	957	1293	0.165	213	292	0.0	0.2	3.451	A
E - Coal Pit Lane W	255	64	1028	1418	0.180	254	142	0.0	0.2	3.162	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1230	307	787	1765	0.697	1226	748	1.4	2.4	7.187	A
B - A4303 E	1066	267	808	2068	0.516	1065	1205	0.8	1.1	3.900	A
C - A5 S	645	161	851	1558	0.414	644	1022	0.6	0.8	4.645	A
D - B4027 S	255	64	1145	1205	0.212	255	349	0.2	0.3	3.924	A
E - Coal Pit Lane W	305	76	1231	1324	0.230	304	170	0.2	0.3	3.613	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1506	377	964	1672	0.901	1483	915	2.4	8.1	18.834	C
B - A4303 E	1306	326	980	1964	0.665	1302	1467	1.1	2.1	5.882	A
C - A5 S	789	197	1040	1464	0.539	787	1242	0.8	1.4	6.268	A
D - B4027 S	313	78	1401	1086	0.288	312	426	0.3	0.4	4.818	A
E - Coal Pit Lane W	373	93	1506	1195	0.312	373	207	0.3	0.5	4.476	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1506	377	966	1671	0.901	1503	917	8.1	8.9	22.425	C
B - A4303 E	1306	326	991	1958	0.667	1306	1477	2.1	2.2	6.009	A
C - A5 S	789	197	1044	1462	0.540	789	1254	1.4	1.4	6.325	A
D - B4027 S	313	78	1405	1084	0.289	313	428	0.4	0.4	4.835	A
E - Coal Pit Lane W	373	93	1509	1193	0.313	373	208	0.5	0.5	4.491	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1230	307	790	1764	0.697	1255	751	8.9	2.6	8.048	A
B - A4303 E	1066	267	825	2058	0.518	1070	1220	2.2	1.2	3.982	A
C - A5 S	645	161	856	1555	0.414	647	1039	1.4	0.8	4.690	A
D - B4027 S	255	64	1151	1202	0.212	256	352	0.4	0.3	3.941	A
E - Coal Pit Lane W	305	76	1236	1321	0.231	305	171	0.5	0.3	3.630	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1030	257	661	1832	0.562	1035	628	2.6	1.4	4.932	A
B - A4303 E	893	223	682	2144	0.416	894	1014	1.2	0.8	3.141	A
C - A5 S	540	135	715	1626	0.332	541	861	0.8	0.6	3.923	A
D - B4027 S	214	53	962	1291	0.166	214	294	0.3	0.2	3.466	A
E - Coal Pit Lane W	255	64	1034	1416	0.180	256	143	0.3	0.2	3.173	A

WoDWS 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.06	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	14	C - A5 S	7.06	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	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	884	100.000
B - A4303 E		ONE HOUR	✓	1233	100.000
C - A5 S		ONE HOUR	✓	1038	100.000
D - B4027 S		ONE HOUR	✓	450	100.000
E - Coal Pit Lane W		ONE HOUR	✓	166	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	392	459	28	5
	B - A4303 E	564	0	334	162	173
	C - A5 S	576	294	0	22	146
	D - B4027 S	87	347	4	0	12
	E - Coal Pit Lane W	7	103	55	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	0	0	0	0
	B - A4303 E	0	0	0	0	0
	C - A5 S	0	0	0	0	0
	D - B4027 S	0	0	11	12	4
	E - Coal Pit Lane W	0	13	0	16	2

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.57	4.86	1.3	A	811	1217
B - A4303 E	0.62	4.33	1.6	A	1131	1697
C - A5 S	0.78	10.96	3.4	B	952	1429
D - B4027 S	0.59	10.59	1.4	B	413	619
E - Coal Pit Lane W	0.20	5.16	0.3	A	152	228

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	666	166	602	1863	0.357	663	925	0.0	0.6	2.995	A
B - A4303 E	928	232	414	2305	0.403	926	852	0.0	0.7	2.605	A
C - A5 S	781	195	700	1634	0.478	778	639	0.0	0.9	4.190	A
D - B4027 S	339	85	1318	1124	0.301	337	160	0.0	0.4	4.572	A
E - Coal Pit Lane W	125	31	1403	1243	0.101	124	252	0.0	0.1	3.468	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	795	199	721	1800	0.441	794	1107	0.6	0.8	3.573	A
B - A4303 E	1108	277	496	2256	0.491	1107	1019	0.7	1.0	3.130	A
C - A5 S	933	233	838	1565	0.596	931	765	0.9	1.5	5.662	A
D - B4027 S	405	101	1578	1003	0.403	404	191	0.4	0.7	6.008	A
E - Coal Pit Lane W	149	37	1680	1113	0.134	149	302	0.1	0.2	4.024	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	973	243	880	1716	0.567	971	1353	0.8	1.3	4.820	A
B - A4303 E	1358	339	606	2190	0.620	1355	1245	1.0	1.6	4.299	A
C - A5 S	1143	286	1025	1471	0.777	1135	936	1.5	3.3	10.506	B
D - B4027 S	495	124	1927	840	0.590	493	234	0.7	1.4	10.304	B
E - Coal Pit Lane W	183	46	2051	939	0.195	182	368	0.2	0.3	5.124	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	973	243	885	1714	0.568	973	1358	1.3	1.3	4.862	A
B - A4303 E	1358	339	608	2189	0.620	1358	1251	1.6	1.6	4.330	A
C - A5 S	1143	286	1027	1470	0.778	1143	938	3.3	3.4	10.965	B
D - B4027 S	495	124	1935	836	0.593	495	235	1.4	1.4	10.588	B
E - Coal Pit Lane W	183	46	2061	935	0.196	183	370	0.3	0.3	5.159	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	795	199	728	1797	0.442	797	1115	1.3	0.8	3.605	A
B - A4303 E	1108	277	498	2255	0.492	1111	1027	1.6	1.0	3.152	A
C - A5 S	933	233	841	1563	0.597	941	768	3.4	1.5	5.850	A
D - B4027 S	405	101	1589	997	0.406	408	192	1.4	0.7	6.144	A
E - Coal Pit Lane W	149	37	1693	1107	0.135	150	304	0.3	0.2	4.054	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	666	166	607	1861	0.358	666	931	0.8	0.6	3.016	A
B - A4303 E	928	232	416	2304	0.403	929	857	1.0	0.7	2.620	A
C - A5 S	781	195	703	1632	0.479	784	642	1.5	0.9	4.255	A
D - B4027 S	339	85	1326	1120	0.302	340	161	0.7	0.4	4.626	A
E - Coal Pit Lane W	125	31	1413	1238	0.101	125	253	0.2	0.1	3.485	A

WD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	11.94	B

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	3	A - A5 N	11.94	B

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
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1325	100.000
B - A4303 E		ONE HOUR	✓	1231	100.000
C - A5 S		ONE HOUR	✓	771	100.000
D - B4027 S		ONE HOUR	✓	303	100.000
E - Coal Pit Lane W		ONE HOUR	✓	419	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	549	714	55	7
	B - A4303 E	495	0	333	305	98
	C - A5 S	345	329	3	17	77
	D - B4027 S	53	221	28	0	1
	E - Coal Pit Lane W	32	255	123	9	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.90	23.16	8.9	C	1216	1824
B - A4303 E	0.70	6.78	2.5	A	1130	1694
C - A5 S	0.59	7.07	1.7	A	707	1061
D - B4027 S	0.32	5.25	0.5	A	278	417
E - Coal Pit Lane W	0.40	5.42	0.7	A	384	577

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	998	249	726	1798	0.555	992	694	0.0	1.3	4.825	A
B - A4303 E	927	232	703	2131	0.435	923	1015	0.0	0.8	3.238	A
C - A5 S	580	145	727	1620	0.358	578	900	0.0	0.7	4.069	A
D - B4027 S	228	57	1015	1266	0.180	227	289	0.0	0.2	3.587	A
E - Coal Pit Lane W	315	79	1105	1382	0.228	314	137	0.0	0.3	3.443	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1191	298	869	1722	0.692	1187	830	1.3	2.4	7.257	A
B - A4303 E	1107	277	842	2048	0.540	1105	1214	0.8	1.3	4.152	A
C - A5 S	693	173	870	1549	0.448	692	1077	0.7	0.9	4.954	A
D - B4027 S	272	68	1215	1172	0.232	272	346	0.2	0.3	4.142	A
E - Coal Pit Lane W	377	94	1323	1280	0.294	376	164	0.3	0.4	4.069	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1459	365	1063	1619	0.901	1436	1015	2.4	8.1	19.342	C
B - A4303 E	1355	339	1020	1940	0.699	1351	1479	1.3	2.5	6.598	A
C - A5 S	849	212	1062	1452	0.585	846	1308	0.9	1.6	6.981	A
D - B4027 S	334	83	1486	1046	0.319	333	423	0.3	0.5	5.227	A
E - Coal Pit Lane W	461	115	1618	1142	0.404	460	201	0.4	0.7	5.389	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1459	365	1066	1618	0.902	1456	1018	8.1	8.9	23.162	C
B - A4303 E	1355	339	1032	1933	0.701	1355	1489	2.5	2.5	6.781	A
C - A5 S	849	212	1067	1450	0.585	849	1321	1.6	1.7	7.067	A
D - B4027 S	334	83	1491	1044	0.320	334	425	0.5	0.5	5.252	A
E - Coal Pit Lane W	461	115	1623	1140	0.405	461	201	0.7	0.7	5.422	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1191	298	873	1720	0.693	1217	835	8.9	2.5	8.145	A
B - A4303 E	1107	277	859	2037	0.543	1111	1230	2.5	1.3	4.259	A
C - A5 S	693	173	876	1546	0.448	696	1095	1.7	1.0	5.018	A
D - B4027 S	272	68	1222	1169	0.233	273	349	0.5	0.3	4.165	A
E - Coal Pit Lane W	377	94	1330	1277	0.295	378	165	0.7	0.4	4.098	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	998	249	730	1796	0.556	1002	698	2.5	1.4	4.960	A
B - A4303 E	927	232	710	2127	0.436	929	1022	1.3	0.8	3.279	A
C - A5 S	580	145	731	1618	0.359	582	907	1.0	0.7	4.106	A
D - B4027 S	228	57	1021	1263	0.181	228	291	0.3	0.2	3.608	A
E - Coal Pit Lane W	315	79	1112	1379	0.229	316	138	0.4	0.3	3.464	A

WD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	9.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	9	C - A5 S	9.02	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
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	957	100.000
B - A4303 E		ONE HOUR	✓	1212	100.000
C - A5 S		ONE HOUR	✓	1083	100.000
D - B4027 S		ONE HOUR	✓	479	100.000
E - Coal Pit Lane W		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	399	495	57	6
	B - A4303 E	560	0	307	173	172
	C - A5 S	631	278	0	24	150
	D - B4027 S	103	360	4	0	12
	E - Coal Pit Lane W	7	103	57	2	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	11	12	4	33
	B - A4303 E	13	0	16	2	2
	C - A5 S	10	18	0	0	0
	D - B4027 S	0	1	0	0	40
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.61	6.06	1.8	A	878	1317
B - A4303 E	0.62	4.91	1.8	A	1112	1668
C - A5 S	0.82	15.25	4.9	C	994	1491
D - B4027 S	0.65	12.63	1.8	B	440	659
E - Coal Pit Lane W	0.21	5.03	0.3	A	155	233

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	602	1863	0.387	718	975	0.0	0.7	3.485	A
B - A4303 E	912	228	466	2274	0.401	910	854	0.0	0.7	2.904	A
C - A5 S	815	204	728	1620	0.503	811	647	0.0	1.1	4.877	A
D - B4027 S	361	90	1347	1111	0.325	359	192	0.0	0.5	4.844	A
E - Coal Pit Lane W	127	32	1451	1221	0.104	127	255	0.0	0.1	3.289	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	860	215	721	1800	0.478	859	1167	0.7	1.0	4.247	A
B - A4303 E	1090	272	557	2219	0.491	1088	1023	0.7	1.1	3.510	A
C - A5 S	974	243	871	1548	0.629	971	775	1.1	1.8	6.833	A
D - B4027 S	431	108	1612	987	0.436	429	230	0.5	0.8	6.540	A
E - Coal Pit Lane W	152	38	1736	1087	0.140	152	305	0.1	0.2	3.849	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1054	263	879	1717	0.614	1051	1424	1.0	1.7	5.983	A
B - A4303 E	1334	334	682	2144	0.622	1331	1248	1.1	1.8	4.871	A
C - A5 S	1192	298	1066	1451	0.822	1181	948	1.8	4.7	14.141	B
D - B4027 S	527	132	1966	821	0.642	523	281	0.8	1.8	12.103	B
E - Coal Pit Lane W	186	47	2117	908	0.205	186	372	0.2	0.3	4.979	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1054	263	885	1714	0.615	1054	1432	1.7	1.8	6.061	A
B - A4303 E	1334	334	684	2143	0.623	1334	1255	1.8	1.8	4.912	A
C - A5 S	1192	298	1068	1449	0.823	1192	950	4.7	4.9	15.252	C
D - B4027 S	527	132	1978	816	0.646	527	282	1.8	1.8	12.633	B
E - Coal Pit Lane W	186	47	2131	902	0.206	186	374	0.3	0.3	5.028	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	860	215	729	1796	0.479	863	1179	1.8	1.0	4.305	A
B - A4303 E	1090	272	560	2217	0.491	1092	1032	1.8	1.1	3.541	A
C - A5 S	974	243	874	1546	0.630	985	778	4.9	1.9	7.212	A
D - B4027 S	431	108	1629	979	0.440	435	231	1.8	0.8	6.762	A
E - Coal Pit Lane W	152	38	1756	1078	0.141	152	308	0.3	0.2	3.893	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	607	1861	0.387	722	982	1.0	0.7	3.517	A
B - A4303 E	912	228	468	2273	0.401	914	861	1.1	0.7	2.927	A
C - A5 S	815	204	731	1618	0.504	818	651	1.9	1.1	4.978	A
D - B4027 S	361	90	1357	1106	0.326	362	193	0.8	0.5	4.917	A
E - Coal Pit Lane W	127	32	1462	1215	0.105	127	257	0.2	0.1	3.311	A

Junctions 10

ARCADY 10 - Roundabout Module

Filename: J27_241007 A5 A4303 B4027 Coal Pit Ln (Mitigation) Furnessed Flows.j10
Path: X:\NTT\NTT2814_Hinckley Rail Freight Interchange\02. Project Delivery\01. WIP\Design and Calculations\T&I Planning\04 Junction Modelling\J27_JTC 48 - A5 - A4303 - B4027 - Coal Pit Lane
Report generation date: 08/10/2024 14:11:51

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2023											
A - A5 N	D1	1.6	5.47	0.60	A	42 % [A - A5 N]	D2	0.7	3.53	0.38	A	57 % [C - A5 S]
B - A4303 E		0.9	3.34	0.45	A			0.8	3.08	0.43	A	
C - A5 S		0.7	4.15	0.36	A			1.2	5.08	0.51	A	
D - B4027 S		0.2	3.62	0.19	A			0.6	5.28	0.37	A	
E - Coal Pit Lane W		0.3	3.33	0.20	A			0.1	3.44	0.12	A	
	WoD 2036											
A - A5 N	D3	2.5	8.76	0.70	A	17 % [D - B4027 S]	D4	1.9	6.15	0.64	A	24 % [C - A5 S]
B - A4303 E		1.8	4.72	0.62	A			2.9	6.51	0.73	A	
C - A5 S		1.4	6.84	0.55	A			1.9	8.83	0.63	A	
D - B4027 S		2.0	10.91	0.66	B			1.2	8.79	0.55	A	
E - Coal Pit Lane W		0.9	7.24	0.46	A			0.2	4.07	0.16	A	
	WoDWS 2036											
A - A5 N	D5	2.5	8.83	0.70	A	18 % [D - B4027 S]	D6	1.9	6.16	0.64	A	23 % [C - A5 S]
B - A4303 E		1.8	4.73	0.63	A			2.8	6.35	0.72	A	
C - A5 S		1.4	6.80	0.55	A			1.9	8.84	0.63	A	
D - B4027 S		1.9	10.66	0.65	B			1.0	7.91	0.50	A	
E - Coal Pit Lane W		0.8	7.08	0.45	A			0.2	3.96	0.15	A	
	WD 2036											
A - A5 N	D7	2.6	9.54	0.69	A	13 % [D - B4027 S]	D8	2.5	7.49	0.69	A	18 % [C - A5 S]
B - A4303 E		2.1	5.24	0.66	A			2.9	6.64	0.73	A	
C - A5 S		1.8	7.98	0.60	A			2.5	10.96	0.68	B	
D - B4027 S		2.4	12.85	0.70	B			1.2	8.95	0.54	A	
E - Coal Pit Lane W		1.4	9.64	0.57	A			0.2	4.13	0.15	A	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

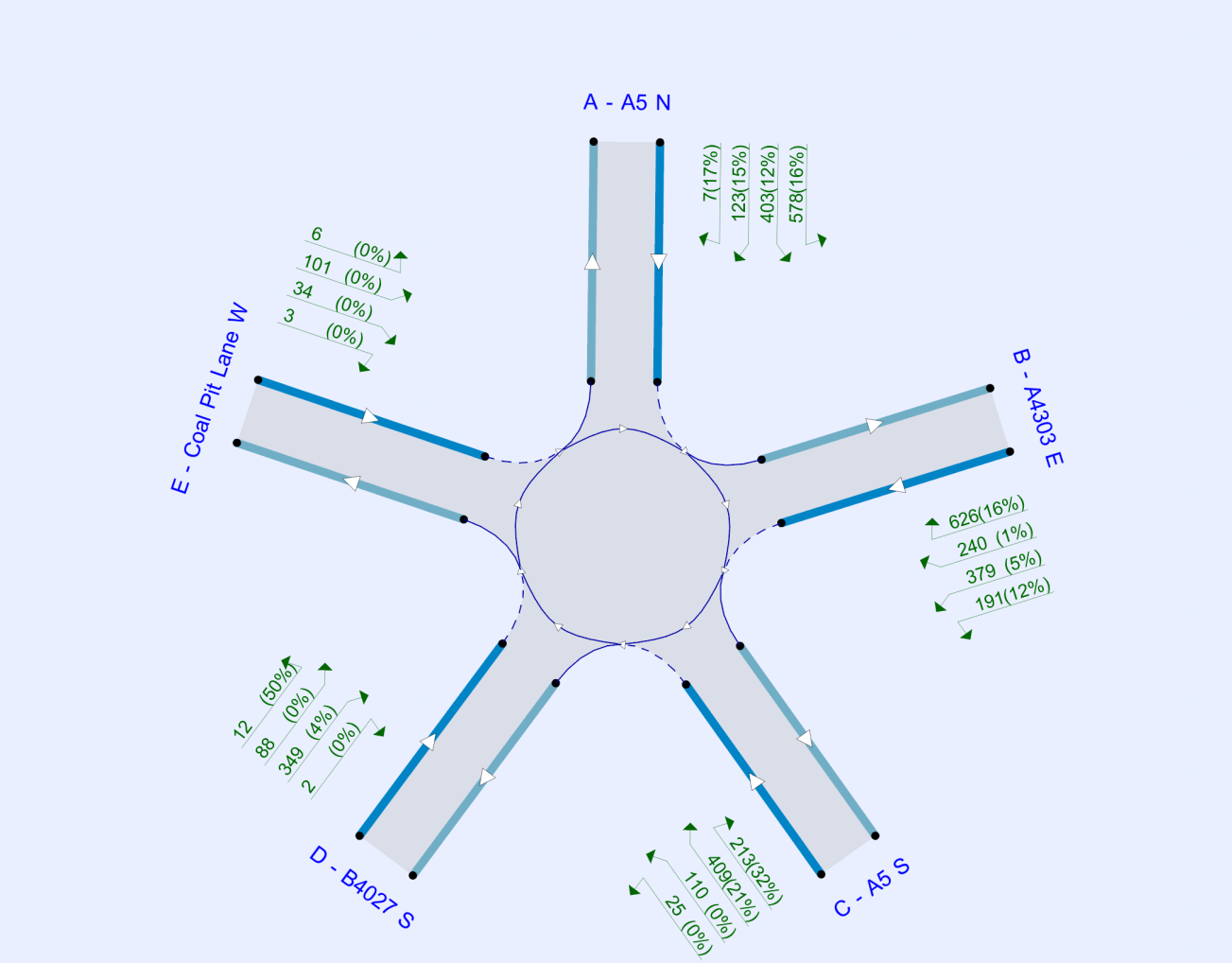
File summary

File Description

Title	J48
Location	A5 / B4027 / Coal Pit lane
Site number	J48
Date	21/12/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	NTT2814
Enumerator	BWB\petr.jandik
Description	

Units

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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue 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	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	07:15	08:45	15	✓
D2	2023	PM	ONE HOUR	16:15	17:45	15	✓
D3	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D4	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓
D5	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓
D6	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.25	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	42	A - A5 N	4.25	A

Arms

Arms

Arm	Name	Description	No give-way line
A	A5 N		
B	A4303 E		
C	A5 S		
D	B4027 S		
E	Coal Pit Lane W		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A5 N	4.77	7.36	42.6	45.8	93.4	27.0		
B - A4303 E	7.17	8.53	22.4	41.4	79.5	33.0		
C - A5 S	4.79	6.96	18.1	43.8	92.3	29.0		
D - B4027 S	3.50	7.40	15.4	30.3	88.1	30.0		
E - Coal Pit Lane W	3.53	8.80	28.5	20.0	88.4	54.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A5 N	0.529	2182
B - A4303 E	0.603	2555
C - A5 S	0.501	1984
D - B4027 S	0.468	1741
E - Coal Pit Lane W	0.469	1900

The slope and intercept shown above include any corrections and adjustments.

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	2023	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	992	100.000
B - A4303 E		ONE HOUR	✓	857	100.000
C - A5 S		ONE HOUR	✓	527	100.000
D - B4027 S		ONE HOUR	✓	214	100.000
E - Coal Pit Lane W		ONE HOUR	✓	255	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	437	503	48	4
	B - A4303 E	332	0	226	223	76
	C - A5 S	216	234	2	13	62
	D - B4027 S	40	154	19	0	1
	E - Coal Pit Lane W	20	149	80	6	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	9	0	33
	B - A4303 E	10	0	18	0	6
	C - A5 S	17	23	100	0	7
	D - B4027 S	5	3	6	0	0
	E - Coal Pit Lane W	5	1	3	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.60	5.47	1.6	A	910	1365
B - A4303 E	0.45	3.34	0.9	A	786	1180
C - A5 S	0.36	4.15	0.7	A	484	725
D - B4027 S	0.19	3.62	0.2	A	196	295
E - Coal Pit Lane W	0.20	3.33	0.3	A	234	351

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	483	1926	0.388	744	456	0.0	0.7	3.301	A
B - A4303 E	645	161	497	2256	0.286	643	731	0.0	0.4	2.426	A
C - A5 S	397	99	517	1725	0.230	395	623	0.0	0.4	3.190	A
D - B4027 S	161	40	695	1416	0.114	161	218	0.0	0.1	2.969	A
E - Coal Pit Lane W	192	48	748	1550	0.124	191	107	0.0	0.1	2.710	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	578	1876	0.475	891	546	0.7	1.0	3.963	A
B - A4303 E	770	193	594	2197	0.351	770	875	0.4	0.6	2.742	A
C - A5 S	474	118	619	1674	0.283	473	745	0.4	0.5	3.536	A
D - B4027 S	192	48	832	1352	0.142	192	260	0.1	0.2	3.215	A
E - Coal Pit Lane W	229	57	896	1481	0.155	229	128	0.1	0.2	2.942	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	708	1807	0.604	1090	669	1.0	1.6	5.429	A
B - A4303 E	944	236	727	2117	0.446	942	1071	0.6	0.9	3.331	A
C - A5 S	580	145	758	1605	0.362	579	912	0.5	0.7	4.134	A
D - B4027 S	236	59	1018	1265	0.186	235	319	0.2	0.2	3.623	A
E - Coal Pit Lane W	281	70	1096	1387	0.202	280	157	0.2	0.3	3.330	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1092	273	709	1807	0.605	1092	669	1.6	1.6	5.471	A
B - A4303 E	944	236	729	2116	0.446	944	1072	0.9	0.9	3.339	A
C - A5 S	580	145	759	1604	0.362	580	914	0.7	0.7	4.145	A
D - B4027 S	236	59	1020	1264	0.186	236	319	0.2	0.2	3.625	A
E - Coal Pit Lane W	281	70	1098	1386	0.203	281	157	0.3	0.3	3.331	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	892	223	580	1875	0.476	894	547	1.6	1.0	3.998	A
B - A4303 E	770	193	597	2195	0.351	772	877	0.9	0.6	2.751	A
C - A5 S	474	118	620	1674	0.283	475	748	0.7	0.5	3.545	A
D - B4027 S	192	48	834	1351	0.142	193	261	0.2	0.2	3.219	A
E - Coal Pit Lane W	229	57	898	1480	0.155	230	129	0.3	0.2	2.948	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	747	187	485	1925	0.388	748	458	1.0	0.7	3.324	A
B - A4303 E	645	161	499	2254	0.286	646	734	0.6	0.4	2.436	A
C - A5 S	397	99	519	1724	0.230	397	626	0.5	0.4	3.202	A
D - B4027 S	161	40	698	1415	0.114	161	219	0.2	0.1	2.975	A
E - Coal Pit Lane W	192	48	751	1548	0.124	192	108	0.2	0.1	2.715	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	4.03	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	57	C - A5 S	4.03	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	2023	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	629	100.000
B - A4303 E		ONE HOUR	✓	899	100.000
C - A5 S		ONE HOUR	✓	746	100.000
D - B4027 S		ONE HOUR	✓	361	100.000
E - Coal Pit Lane W		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	262	337	26	4
	B - A4303 E	405	0	236	128	130
	C - A5 S	418	203	0	17	108
	D - B4027 S	74	277	3	0	7
	E - Coal Pit Lane W	5	79	43	1	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	11	12	4	33
	B - A4303 E	13	0	16	2	2
	C - A5 S	10	18	0	0	0
	D - B4027 S	0	1	0	0	40
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.38	3.53	0.7	A	577	866
B - A4303 E	0.43	3.08	0.8	A	825	1237
C - A5 S	0.51	5.08	1.2	A	685	1027
D - B4027 S	0.37	5.28	0.6	A	331	497
E - Coal Pit Lane W	0.12	3.44	0.1	A	117	176

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	455	1941	0.244	472	677	0.0	0.4	2.725	A
B - A4303 E	677	169	311	2368	0.286	675	616	0.0	0.4	2.344	A
C - A5 S	562	140	521	1723	0.326	560	465	0.0	0.5	3.403	A
D - B4027 S	272	68	951	1296	0.210	271	129	0.0	0.3	3.554	A
E - Coal Pit Lane W	96	24	1035	1415	0.068	96	187	0.0	0.1	2.729	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	544	1894	0.299	565	810	0.4	0.5	3.016	A
B - A4303 E	808	202	372	2331	0.347	808	737	0.4	0.6	2.608	A
C - A5 S	671	168	623	1672	0.401	670	556	0.5	0.7	3.954	A
D - B4027 S	325	81	1139	1208	0.269	324	155	0.3	0.4	4.123	A
E - Coal Pit Lane W	115	29	1239	1320	0.087	115	224	0.1	0.1	2.988	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	666	1830	0.379	692	992	0.5	0.7	3.521	A
B - A4303 E	990	247	455	2281	0.434	989	902	0.6	0.8	3.071	A
C - A5 S	821	205	763	1602	0.513	820	681	0.7	1.1	5.061	A
D - B4027 S	397	99	1394	1089	0.365	397	189	0.4	0.6	5.260	A
E - Coal Pit Lane W	141	35	1517	1190	0.118	141	274	0.1	0.1	3.432	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	693	173	667	1829	0.379	693	993	0.7	0.7	3.526	A
B - A4303 E	990	247	456	2280	0.434	990	904	0.8	0.8	3.077	A
C - A5 S	821	205	764	1602	0.513	821	682	1.1	1.2	5.083	A
D - B4027 S	397	99	1396	1088	0.365	397	189	0.6	0.6	5.281	A
E - Coal Pit Lane W	141	35	1519	1188	0.119	141	274	0.1	0.1	3.436	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	565	141	546	1893	0.299	566	812	0.7	0.5	3.024	A
B - A4303 E	808	202	373	2330	0.347	809	740	0.8	0.6	2.612	A
C - A5 S	671	168	625	1671	0.401	672	557	1.2	0.7	3.976	A
D - B4027 S	325	81	1142	1207	0.269	325	155	0.6	0.4	4.143	A
E - Coal Pit Lane W	115	29	1243	1318	0.087	115	224	0.1	0.1	2.995	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	474	118	457	1940	0.244	474	680	0.5	0.4	2.734	A
B - A4303 E	677	169	312	2367	0.286	677	619	0.6	0.4	2.353	A
C - A5 S	562	140	523	1722	0.326	562	466	0.7	0.5	3.421	A
D - B4027 S	272	68	956	1294	0.210	272	130	0.4	0.3	3.573	A
E - Coal Pit Lane W	96	24	1040	1413	0.068	96	188	0.1	0.1	2.736	A

WoD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.30	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	17	D - B4027 S	7.30	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	WoD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	950	100.000
B - A4303 E		ONE HOUR	✓	1262	100.000
C - A5 S		ONE HOUR	✓	689	100.000
D - B4027 S		ONE HOUR	✓	608	100.000
E - Coal Pit Lane W		ONE HOUR	✓	400	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	573	330	43	4
	B - A4303 E	622	0	217	311	112
	C - A5 S	288	316	2	13	70
	D - B4027 S	122	455	29	0	2
	E - Coal Pit Lane W	37	272	72	19	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	12	12	0	33
	B - A4303 E	10	0	21	3	6
	C - A5 S	14	22	0	0	8
	D - B4027 S	5	4	7	0	0
	E - Coal Pit Lane W	3	1	3	58	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.70	8.76	2.5	A	872	1308
B - A4303 E	0.62	4.72	1.8	A	1158	1737
C - A5 S	0.55	6.84	1.4	A	632	948
D - B4027 S	0.66	10.91	2.0	B	558	837
E - Coal Pit Lane W	0.46	7.24	0.9	A	367	551

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	715	179	873	1720	0.416	712	802	0.0	0.8	3.970	A
B - A4303 E	950	238	374	2330	0.408	947	1211	0.0	0.8	2.846	A
C - A5 S	519	130	834	1567	0.331	516	487	0.0	0.6	3.984	A
D - B4027 S	458	114	1061	1245	0.368	455	290	0.0	0.6	4.741	A
E - Coal Pit Lane W	301	75	1375	1256	0.240	300	141	0.0	0.3	3.885	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	854	214	1045	1629	0.524	852	960	0.8	1.2	5.157	A
B - A4303 E	1135	284	448	2285	0.496	1133	1450	0.8	1.1	3.419	A
C - A5 S	619	155	998	1485	0.417	618	583	0.6	0.8	4.834	A
D - B4027 S	547	137	1269	1147	0.476	545	347	0.6	0.9	6.223	A
E - Coal Pit Lane W	360	90	1646	1129	0.318	359	169	0.3	0.5	4.825	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1046	261	1277	1506	0.695	1041	1174	1.2	2.5	8.537	A
B - A4303 E	1389	347	547	2225	0.624	1387	1771	1.1	1.8	4.684	A
C - A5 S	759	190	1221	1373	0.552	756	713	0.8	1.4	6.773	A
D - B4027 S	669	167	1553	1015	0.660	665	424	0.9	2.0	10.624	B
E - Coal Pit Lane W	440	110	2012	958	0.460	439	206	0.5	0.9	7.147	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1046	261	1282	1503	0.696	1046	1177	2.5	2.5	8.765	A
B - A4303 E	1389	347	549	2224	0.625	1389	1779	1.8	1.8	4.724	A
C - A5 S	759	190	1223	1372	0.553	759	716	1.4	1.4	6.838	A
D - B4027 S	669	167	1557	1013	0.661	669	425	2.0	2.0	10.914	B
E - Coal Pit Lane W	440	110	2019	954	0.462	440	207	0.9	0.9	7.237	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	854	214	1053	1625	0.526	859	964	2.5	1.3	5.277	A
B - A4303 E	1135	284	451	2283	0.497	1137	1461	1.8	1.1	3.448	A
C - A5 S	619	155	1001	1483	0.418	622	587	1.4	0.8	4.885	A
D - B4027 S	547	137	1275	1145	0.477	551	348	2.0	1.0	6.367	A
E - Coal Pit Lane W	360	90	1656	1124	0.320	361	170	0.9	0.5	4.883	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	715	179	879	1717	0.417	717	806	1.3	0.8	4.022	A
B - A4303 E	950	238	377	2328	0.408	951	1220	1.1	0.8	2.865	A
C - A5 S	519	130	838	1565	0.331	520	490	0.8	0.6	4.016	A
D - B4027 S	458	114	1066	1242	0.368	459	291	1.0	0.6	4.805	A
E - Coal Pit Lane W	301	75	1384	1252	0.241	302	142	0.5	0.3	3.917	A

WoD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	24	C - A5 S	7.02	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	WoD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1020	100.000
B - A4303 E		ONE HOUR	✓	1461	100.000
C - A5 S		ONE HOUR	✓	700	100.000
D - B4027 S		ONE HOUR	✓	469	100.000
E - Coal Pit Lane W		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	539	372	102	7
	B - A4303 E	623	0	209	382	247
	C - A5 S	353	214	0	24	109
	D - B4027 S	87	370	2	0	10
	E - Coal Pit Lane W	6	107	36	2	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	10	5	11	17
	B - A4303 E	13	0	11	6	1
	C - A5 S	12	27	0	0	0
	D - B4027 S	0	4	0	0	43
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.64	6.15	1.9	A	936	1404
B - A4303 E	0.73	6.51	2.9	A	1341	2011
C - A5 S	0.63	8.83	1.9	A	642	963
D - B4027 S	0.55	8.79	1.2	A	430	646
E - Coal Pit Lane W	0.16	4.07	0.2	A	139	208

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	768	192	548	1892	0.406	765	802	0.0	0.7	3.449	A
B - A4303 E	1100	275	391	2320	0.474	1096	922	0.0	1.0	3.186	A
C - A5 S	527	132	1022	1472	0.358	524	464	0.0	0.6	4.300	A
D - B4027 S	353	88	1164	1196	0.295	351	383	0.0	0.4	4.413	A
E - Coal Pit Lane W	114	28	1236	1321	0.086	113	280	0.0	0.1	2.980	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	917	229	656	1835	0.500	916	959	0.7	1.1	4.234	A
B - A4303 E	1313	328	468	2273	0.578	1311	1104	1.0	1.5	4.059	A
C - A5 S	629	157	1223	1372	0.459	628	556	0.6	1.0	5.486	A
D - B4027 S	422	105	1394	1089	0.387	421	458	0.4	0.6	5.584	A
E - Coal Pit Lane W	136	34	1480	1207	0.112	136	335	0.1	0.1	3.359	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1123	281	802	1758	0.639	1120	1172	1.1	1.9	6.081	A
B - A4303 E	1609	402	572	2210	0.728	1603	1349	1.5	2.8	6.386	A
C - A5 S	771	193	1496	1235	0.624	767	680	1.0	1.8	8.664	A
D - B4027 S	516	129	1703	944	0.547	514	560	0.6	1.2	8.637	A
E - Coal Pit Lane W	166	42	1808	1053	0.158	166	409	0.1	0.2	4.057	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1123	281	805	1756	0.640	1123	1177	1.9	1.9	6.153	A
B - A4303 E	1609	402	574	2209	0.728	1608	1354	2.8	2.9	6.505	A
C - A5 S	771	193	1501	1233	0.625	771	681	1.8	1.9	8.834	A
D - B4027 S	516	129	1710	941	0.548	516	561	1.2	1.2	8.786	A
E - Coal Pit Lane W	166	42	1815	1050	0.158	166	411	0.2	0.2	4.074	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	917	229	660	1833	0.500	920	966	1.9	1.1	4.286	A
B - A4303 E	1313	328	470	2272	0.578	1319	1111	2.9	1.5	4.129	A
C - A5 S	629	157	1230	1368	0.460	633	558	1.9	1.0	5.583	A
D - B4027 S	422	105	1403	1085	0.389	424	460	1.2	0.7	5.672	A
E - Coal Pit Lane W	136	34	1490	1202	0.113	136	337	0.2	0.1	3.376	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	768	192	552	1890	0.406	769	807	1.1	0.7	3.480	A
B - A4303 E	1100	275	393	2318	0.474	1102	928	1.5	1.0	3.223	A
C - A5 S	527	132	1028	1469	0.359	528	467	1.0	0.6	4.349	A
D - B4027 S	353	88	1172	1193	0.296	354	385	0.7	0.4	4.458	A
E - Coal Pit Lane W	114	28	1244	1317	0.086	114	281	0.1	0.1	2.993	A

WoDWS 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.24	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	18	D - B4027 S	7.24	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	WoDWS 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	956	100.000
B - A4303 E		ONE HOUR	✓	1271	100.000
C - A5 S		ONE HOUR	✓	682	100.000
D - B4027 S		ONE HOUR	✓	598	100.000
E - Coal Pit Lane W		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	581	330	41	4
	B - A4303 E	632	0	221	305	113
	C - A5 S	285	320	2	12	63
	D - B4027 S	116	453	27	0	2
	E - Coal Pit Lane W	34	267	69	19	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	12	13	0	33
	B - A4303 E	9	0	20	3	7
	C - A5 S	15	22	0	0	7
	D - B4027 S	5	4	8	0	0
	E - Coal Pit Lane W	3	1	3	58	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.70	8.83	2.5	A	877	1316
B - A4303 E	0.63	4.73	1.8	A	1166	1749
C - A5 S	0.55	6.80	1.4	A	626	939
D - B4027 S	0.65	10.66	1.9	B	549	823
E - Coal Pit Lane W	0.45	7.08	0.8	A	357	535

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	867	1723	0.418	717	800	0.0	0.8	3.975	A
B - A4303 E	957	239	369	2333	0.410	954	1215	0.0	0.8	2.841	A
C - A5 S	513	128	836	1566	0.328	511	487	0.0	0.6	3.986	A
D - B4027 S	450	113	1064	1243	0.362	448	283	0.0	0.6	4.710	A
E - Coal Pit Lane W	293	73	1376	1256	0.233	292	137	0.0	0.3	3.855	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	859	215	1038	1633	0.526	858	958	0.8	1.2	5.184	A
B - A4303 E	1143	286	441	2289	0.499	1141	1454	0.8	1.1	3.417	A
C - A5 S	613	153	1000	1483	0.413	612	582	0.6	0.8	4.829	A
D - B4027 S	538	134	1274	1145	0.469	536	338	0.6	0.9	6.157	A
E - Coal Pit Lane W	350	87	1647	1129	0.310	349	163	0.3	0.5	4.770	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1053	263	1268	1511	0.697	1048	1171	1.2	2.5	8.600	A
B - A4303 E	1399	350	539	2230	0.628	1396	1777	1.1	1.8	4.691	A
C - A5 S	751	188	1224	1371	0.548	749	712	0.8	1.4	6.737	A
D - B4027 S	658	165	1558	1012	0.650	655	414	0.9	1.9	10.390	B
E - Coal Pit Lane W	428	107	2013	957	0.448	427	200	0.5	0.8	6.997	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1053	263	1274	1508	0.698	1052	1175	2.5	2.5	8.832	A
B - A4303 E	1399	350	542	2229	0.628	1399	1784	1.8	1.8	4.733	A
C - A5 S	751	188	1226	1370	0.548	751	714	1.4	1.4	6.800	A
D - B4027 S	658	165	1562	1010	0.652	658	415	1.9	1.9	10.657	B
E - Coal Pit Lane W	428	107	2020	954	0.449	428	200	0.8	0.8	7.080	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	859	215	1046	1629	0.528	865	963	2.5	1.3	5.306	A
B - A4303 E	1143	286	445	2287	0.500	1146	1465	1.8	1.1	3.446	A
C - A5 S	613	153	1004	1481	0.414	615	586	1.4	0.8	4.877	A
D - B4027 S	538	134	1280	1143	0.471	542	340	1.9	0.9	6.291	A
E - Coal Pit Lane W	350	87	1657	1124	0.311	351	164	0.8	0.5	4.825	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	720	180	873	1720	0.418	722	805	1.3	0.8	4.040	A
B - A4303 E	957	239	371	2331	0.410	958	1223	1.1	0.8	2.863	A
C - A5 S	513	128	840	1564	0.328	514	490	0.8	0.6	4.019	A
D - B4027 S	450	113	1070	1241	0.363	452	284	0.9	0.6	4.768	A
E - Coal Pit Lane W	293	73	1384	1252	0.234	293	137	0.5	0.3	3.885	A

WoDWS 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	6.85	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	23	C - A5 S	6.85	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	WoDWS 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1038	100.000
B - A4303 E		ONE HOUR	✓	1457	100.000
C - A5 S		ONE HOUR	✓	712	100.000
D - B4027 S		ONE HOUR	✓	422	100.000
E - Coal Pit Lane W		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	571	367	94	6
	B - A4303 E	630	0	218	368	241
	C - A5 S	354	229	0	23	106
	D - B4027 S	72	336	2	0	12
	E - Coal Pit Lane W	6	101	32	2	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	9	5	12	20
	B - A4303 E	13	0	10	7	1
	C - A5 S	12	25	0	0	0
	D - B4027 S	0	3	0	0	50
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.64	6.16	1.9	A	952	1429
B - A4303 E	0.72	6.35	2.8	A	1337	2005
C - A5 S	0.63	8.84	1.9	A	653	980
D - B4027 S	0.50	7.91	1.0	A	387	581
E - Coal Pit Lane W	0.15	3.96	0.2	A	129	194

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	781	195	526	1904	0.411	778	796	0.0	0.7	3.443	A
B - A4303 E	1097	274	377	2328	0.471	1093	927	0.0	1.0	3.166	A
C - A5 S	536	134	1006	1480	0.362	533	464	0.0	0.6	4.297	A
D - B4027 S	318	79	1174	1192	0.267	316	365	0.0	0.4	4.243	A
E - Coal Pit Lane W	106	27	1217	1330	0.080	106	274	0.0	0.1	2.940	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	933	233	630	1849	0.505	932	953	0.7	1.1	4.230	A
B - A4303 E	1310	327	452	2283	0.574	1308	1110	1.0	1.5	4.011	A
C - A5 S	640	160	1204	1381	0.463	639	556	0.6	1.0	5.482	A
D - B4027 S	379	95	1405	1084	0.350	379	437	0.4	0.6	5.272	A
E - Coal Pit Lane W	127	32	1456	1218	0.104	127	328	0.1	0.1	3.298	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1143	286	770	1774	0.644	1140	1165	1.1	1.9	6.085	A
B - A4303 E	1604	401	552	2222	0.722	1599	1357	1.5	2.8	6.237	A
C - A5 S	784	196	1472	1247	0.628	780	680	1.0	1.9	8.669	A
D - B4027 S	465	116	1718	938	0.495	463	534	0.6	1.0	7.807	A
E - Coal Pit Lane W	155	39	1780	1066	0.146	155	400	0.1	0.2	3.949	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1143	286	773	1773	0.645	1143	1169	1.9	1.9	6.159	A
B - A4303 E	1604	401	554	2221	0.722	1604	1362	2.8	2.8	6.345	A
C - A5 S	784	196	1476	1245	0.630	784	681	1.9	1.9	8.840	A
D - B4027 S	465	116	1724	935	0.497	465	536	1.0	1.0	7.915	A
E - Coal Pit Lane W	155	39	1787	1063	0.146	155	402	0.2	0.2	3.965	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	933	233	634	1846	0.505	936	959	1.9	1.1	4.281	A
B - A4303 E	1310	327	454	2282	0.574	1315	1117	2.8	1.5	4.078	A
C - A5 S	640	160	1210	1378	0.464	644	558	1.9	1.0	5.580	A
D - B4027 S	379	95	1414	1080	0.351	381	440	1.0	0.6	5.343	A
E - Coal Pit Lane W	127	32	1466	1213	0.104	127	330	0.2	0.1	3.313	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	781	195	530	1902	0.411	783	801	1.1	0.8	3.474	A
B - A4303 E	1097	274	379	2326	0.472	1099	933	1.5	1.0	3.197	A
C - A5 S	536	134	1011	1478	0.363	537	467	1.0	0.6	4.344	A
D - B4027 S	318	79	1182	1188	0.267	318	367	0.6	0.4	4.282	A
E - Coal Pit Lane W	106	27	1225	1326	0.080	106	275	0.1	0.1	2.952	A

WD 2036, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	8.38	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	13	D - B4027 S	8.38	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
D7	WD 2036	AM	ONE HOUR	07:15	08:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	913	100.000
B - A4303 E		ONE HOUR	✓	1316	100.000
C - A5 S		ONE HOUR	✓	736	100.000
D - B4027 S		ONE HOUR	✓	617	100.000
E - Coal Pit Lane W		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	522	353	32	6
	B - A4303 E	661	0	239	310	106
	C - A5 S	336	324	2	12	62
	D - B4027 S	120	464	31	0	2
	E - Coal Pit Lane W	42	322	85	20	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	17	25	0	50
	B - A4303 E	11	0	20	3	5
	C - A5 S	25	22	0	0	9
	D - B4027 S	7	3	11	0	0
	E - Coal Pit Lane W	5	1	2	54	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.69	9.54	2.6	A	838	1257
B - A4303 E	0.66	5.24	2.1	A	1208	1811
C - A5 S	0.60	7.98	1.8	A	675	1013
D - B4027 S	0.70	12.85	2.4	B	566	849
E - Coal Pit Lane W	0.57	9.64	1.4	A	430	646

Main Results for each time segment

07:15 - 07:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	687	172	935	1687	0.407	684	869	0.0	0.8	4.272	A
B - A4303 E	991	248	396	2316	0.428	987	1223	0.0	0.8	2.972	A
C - A5 S	554	139	852	1558	0.356	551	532	0.0	0.7	4.339	A
D - B4027 S	465	116	1122	1216	0.382	462	281	0.0	0.6	4.953	A
E - Coal Pit Lane W	353	88	1452	1220	0.289	351	132	0.0	0.4	4.265	A

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	821	205	1119	1590	0.516	819	1040	0.8	1.3	5.567	A
B - A4303 E	1183	296	475	2269	0.521	1182	1464	0.8	1.2	3.636	A
C - A5 S	662	165	1019	1474	0.449	660	637	0.7	1.0	5.381	A
D - B4027 S	555	139	1344	1113	0.499	553	336	0.6	1.0	6.680	A
E - Coal Pit Lane W	422	105	1739	1086	0.388	421	158	0.4	0.6	5.571	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1005	251	1366	1459	0.689	1000	1272	1.3	2.6	9.264	A
B - A4303 E	1449	362	579	2206	0.657	1445	1787	1.2	2.1	5.183	A
C - A5 S	810	203	1246	1360	0.596	807	778	1.0	1.8	7.873	A
D - B4027 S	679	170	1643	973	0.698	674	411	1.0	2.3	12.351	B
E - Coal Pit Lane W	516	129	2124	905	0.571	514	193	0.6	1.3	9.412	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1005	251	1374	1455	0.691	1005	1276	2.6	2.6	9.544	A
B - A4303 E	1449	362	582	2204	0.657	1449	1796	2.1	2.1	5.240	A
C - A5 S	810	203	1250	1359	0.596	810	782	1.8	1.8	7.980	A
D - B4027 S	679	170	1648	970	0.700	679	412	2.3	2.4	12.846	B
E - Coal Pit Lane W	516	129	2133	901	0.573	516	194	1.3	1.4	9.645	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	821	205	1130	1584	0.518	826	1046	2.6	1.3	5.713	A
B - A4303 E	1183	296	479	2267	0.522	1187	1477	2.1	1.2	3.680	A
C - A5 S	662	165	1024	1472	0.450	665	642	1.8	1.0	5.444	A
D - B4027 S	555	139	1351	1109	0.500	560	337	2.4	1.1	6.886	A
E - Coal Pit Lane W	422	105	1752	1079	0.391	424	159	1.4	0.7	5.687	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	687	172	942	1683	0.408	689	874	1.3	0.8	4.334	A
B - A4303 E	991	248	399	2314	0.428	992	1232	1.2	0.8	2.997	A
C - A5 S	554	139	856	1556	0.356	555	536	1.0	0.7	4.381	A
D - B4027 S	465	116	1129	1213	0.383	466	282	1.1	0.7	5.029	A
E - Coal Pit Lane W	353	88	1463	1215	0.291	354	133	0.7	0.4	4.315	A

WD 2036, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A5 N - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J48	A5 / B4027 / Coal Pit lane	Standard Roundabout		A, B, C, D, E	7.89	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	18	C - A5 S	7.89	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
D8	WD 2036	PM	ONE HOUR	16:15	17:45	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 N		ONE HOUR	✓	1111	100.000
B - A4303 E		ONE HOUR	✓	1436	100.000
C - A5 S		ONE HOUR	✓	757	100.000
D - B4027 S		ONE HOUR	✓	451	100.000
E - Coal Pit Lane W		ONE HOUR	✓	144	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	578	403	123	7
	B - A4303 E	626	0	191	379	240
	C - A5 S	409	213	0	25	110
	D - B4027 S	88	349	2	0	12
	E - Coal Pit Lane W	6	101	34	3	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To				
		A - A5 N	B - A4303 E	C - A5 S	D - B4027 S	E - Coal Pit Lane W
From	A - A5 N	0	16	12	15	17
	B - A4303 E	16	0	12	5	1
	C - A5 S	21	32	0	0	0
	D - B4027 S	0	4	0	0	50
	E - Coal Pit Lane W	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 N	0.69	7.49	2.5	A	1019	1529
B - A4303 E	0.73	6.64	2.9	A	1318	1977
C - A5 S	0.68	10.96	2.5	B	695	1042
D - B4027 S	0.54	8.95	1.2	A	414	621
E - Coal Pit Lane W	0.15	4.13	0.2	A	132	198

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	836	209	526	1904	0.439	833	846	0.0	0.9	3.835	A
B - A4303 E	1081	270	429	2297	0.471	1077	930	0.0	1.0	3.228	A
C - A5 S	570	142	1034	1467	0.389	567	472	0.0	0.8	4.760	A
D - B4027 S	340	85	1203	1178	0.288	338	397	0.0	0.4	4.446	A
E - Coal Pit Lane W	108	27	1264	1308	0.083	108	277	0.0	0.1	3.000	A

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	999	250	630	1849	0.540	997	1013	0.9	1.3	4.827	A
B - A4303 E	1291	323	513	2246	0.575	1289	1114	1.0	1.5	4.120	A
C - A5 S	681	170	1237	1365	0.499	679	565	0.8	1.2	6.246	A
D - B4027 S	405	101	1440	1068	0.380	405	476	0.4	0.6	5.641	A
E - Coal Pit Lane W	129	32	1514	1191	0.109	129	331	0.1	0.1	3.390	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1223	306	769	1775	0.689	1219	1237	1.3	2.5	7.348	A
B - A4303 E	1581	395	628	2177	0.726	1576	1361	1.5	2.8	6.510	A
C - A5 S	833	208	1512	1227	0.679	828	691	1.2	2.4	10.501	B
D - B4027 S	497	124	1759	918	0.541	494	581	0.6	1.2	8.782	A
E - Coal Pit Lane W	159	40	1849	1034	0.153	158	405	0.1	0.2	4.109	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	1223	306	773	1773	0.690	1223	1243	2.5	2.5	7.485	A
B - A4303 E	1581	395	630	2176	0.727	1581	1366	2.8	2.9	6.638	A
C - A5 S	833	208	1517	1225	0.681	833	694	2.4	2.5	10.960	B
D - B4027 S	497	124	1767	915	0.543	496	583	1.2	1.2	8.949	A
E - Coal Pit Lane W	159	40	1857	1030	0.154	159	406	0.2	0.2	4.130	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	999	250	635	1846	0.541	1003	1021	2.5	1.4	4.914	A
B - A4303 E	1291	323	516	2244	0.575	1296	1121	2.9	1.5	4.193	A
C - A5 S	681	170	1244	1361	0.500	686	569	2.5	1.2	6.407	A
D - B4027 S	405	101	1451	1062	0.382	408	479	1.2	0.6	5.739	A
E - Coal Pit Lane W	129	32	1525	1186	0.109	130	333	0.2	0.1	3.409	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 N	836	209	530	1902	0.440	838	852	1.4	0.9	3.881	A
B - A4303 E	1081	270	432	2295	0.471	1083	937	1.5	1.0	3.267	A
C - A5 S	570	142	1039	1464	0.389	572	475	1.2	0.8	4.826	A
D - B4027 S	340	85	1211	1175	0.289	340	400	0.6	0.4	4.495	A
E - Coal Pit Lane W	108	27	1273	1304	0.083	109	278	0.1	0.1	3.014	A

CROSS-IN-HANDS ROUNDABOUT

AM Peak

	Junction Arm
A	A5 N
B	A4303 E
C	A5 S
D	B4027 S
E	Coal Pit Lane W

FURNESSED FLOWS

2023 Observed Flows

	A	B	C	D	E	TOTAL
A	0	437	503	48	4	992
B	332	0	226	223	76	857
C	216	234	2	13	62	527
D	40	154	19	0	1	214
E	20	149	80	6	0	255
TOTAL	608	974	830	290	143	**2845**

WoD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	573	330	43	4	950
B	622	0	217	311	112	1262
C	288	316	2	13	70	689
D	122	455	29	0	2	608
E	37	272	72	19	0	400
TOTAL	1069	1616	650	386	188	**3909**

WoDWS 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	581	330	41	4	956
B	632	0	221	305	113	1271
C	285	320	2	12	63	682
D	116	453	27	0	2	598
E	34	267	69	19	0	389
TOTAL	1067	1621	649	377	182	**3896**

WD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	522	353	32	6	913
B	661	0	239	310	106	1316
C	336	324	2	12	62	736
D	120	464	31	0	2	617
E	42	322	85	20	0	469
TOTAL	1159	1632	710	374	176	**4051**

DEVELOPMENT FLOWS FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	-51	23	-11	2	-37
B	39	0	22	-1	-6	54
C	48	8	0	-1	-8	47
D	-2	9	2	0	0	9
E	5	50	13	1	0	69
TOTAL	90	16	60	-12	-12	**142**

RE-FURNESSED FLOWS

		A	B	C	D	E	TOTAL
A	A5 N	A	0	437	503	48	4	992
B	A4303 E	B	332	0	226	223	76	857
C	A5 S	C	216	234	2	13	62	527
D	B4027 S	D	40	154	19	0	1	214
E	Coal Pit Lane W	E	20	149	80	6	0	255
		TOTAL	608	974	830	290	143	**2845**

37.39% Increase (Growth)

	A	B	C	D	E	TOTAL
A	0	600	691	66	5	1363
B	456	0	311	306	104	1177
C	297	321	3	18	85	724
D	55	212	26	0	1	294
E	27	205	110	8	0	350
TOTAL	835	1338	1140	398	196	**3909**

	A	B	C	D	E	TOTAL
A	0	608	691	64	5	1369
B	466	0	315	300	105	1186
C	294	325	3	17	78	717
D	49	210	24	0	1	284
E	24	200	107	8	0	339
TOTAL	833	1343	1139	389	190	**3896**

	A	B	C	D	E	TOTAL
A	0	549	714	55	7	1326
B	495	0	333	305	98	1231
C	345	329	3	17	77	771
D	53	221	28	0	1	303
E	32	255	123	9	0	419
TOTAL	925	1354	1200	386	184	**4051**

	A	B	C	D	E	TOTAL
A	0	-51	23	-11	2	-37
B	39	0	22	-1	-6	54
C	48	8	0	-1	-8	47
D	-2	9	2	0	0	9
E	5	50	13	1	0	69
TOTAL	90	16	60	-12	-12	**142**

FLOW DIFFERENCE

		A	B	C	D	E	TOTAL
A	A5 N	A	0	27	361	23	1	413
B	A4303 E	B	-166	0	94	-5	-8	-85
C	A5 S	C	9	5	1	5	15	35
D	B4027 S	D	-67	-243	-3	0	-1	-314
E	Coal Pit Lane W	E	-10	-67	38	-11	0	-50
		TOTAL	-234	-278	490	12	8	**0**

	A	B	C	D	E	TOTAL
A	0	27	361	23	1	413
B	-166	0	94	-5	-8	-85
C	9	5	1	5	15	35
D	-67	-243	-3	0	-1	-314
E	-10	-67	38	-11	0	-50
TOTAL	-234	-278	490	12	8	**0**

	A	B	C	D	E	TOTAL
A	0	27	361	23	1	413
B	-166	0	94	-5	-8	-85
C	9	5	1	5	15	35
D	-67	-243	-3	0	-1	-314
E	-10	-67	38	-11	0	-50
TOTAL	-234	-278	490	12	8	**0**

PM Peak

	Junction Arm
A	A5 N
B	A4303 E
C	A5 S
D	B4027 S
E	Coal Pit Lane W

FURNESSED FLOWS

2023 Observed Flows

	A	B	C	D	E	TOTAL
A	0	262	337	26	4	629
B	405	0	236	128	130	899
C	418	203	0	17	108	746
D	74	277	3	0	7	361
E	5	79	43	1	0	128
TOTAL	902	821	619	172	249	**2763**

WoD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	539	372	102	7	1020
B	623	0	209	382	247	1461
C	353	214	0	24	109	700
D	87	370	2	0	10	469
E	6	107	36	2	0	151
TOTAL	1069	1230	619	510	373	**3801**

WoDWS 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	571	367	94	6	1038
B	630	0	218	368	241	1457
C	354	229	0	23	106	712
D	72	336	2	0	12	422
E	6	101	32	2	0	141
TOTAL	1062	1237	619	487	365	**3770**

WD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	578	403	123	7	1111
B	626	0	191	379	240	1436
C	409	213	0	25	110	757
D	88	349	2	0	12	451
E	6	101	34	3	0	144
TOTAL	1129	1241	630	530	369	**3899**

DEVELOPMENT FLOWS FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	39	31	21	0	91
B	3	0	-18	-3	-7	-25
C	56	-1	0	1	1	57
D	1	-21	0	0	2	-18
E	0	-6	-2	1	0	-7
TOTAL	60	11	11	20	-4	**98**

RE-FURNESSED FLOWS

		A	B	C	D	E	TOTAL
A	A5 N	A	0	262	337	26	4	629
B	A4303 E	B	405	0	236	128	130	899
C	A5 S	C	418	203	0	17	108	746
D	B4027 S	D	74	277	3	0	7	361
E	Coal Pit Lane W	E	5	79	43	1	0	128
		TOTAL	902	821	619	172	249	**2763**

	A	B	C	D	E	TOTAL
A	0	360	464	36	6	865
B	557	0	325	176	179	1237
C	575	279	0	23	149	1026
D	102	381	4	0	10	497
E	7	109	59	1	0	176
TOTAL	1241	1129	851	237	343	**3801**

	A	B	C	D	E	TOTAL
A	0	392	459	28	5	883
B	564	0	334	162	173	1233
C	576	294	0	22	146	1038
D	87	347	4	0	12	450
E	7	103	55	1	0	166
TOTAL	1234	1136	851	214	335	**3770**

	A	B	C	D	E	TOTAL
A	0	399	495	57	6	956
B	560	0	307	173	172	1212
C	631	278	0	24	150	1083
D	103	360	4	0	12	479
E	7	103	57	2	0	169
TOTAL	1301	1140	862	257	339	**3899**

	A	B	C	D	E	TOTAL
A	0	39	31	21	0	91
B	3	0	-18	-3	-7	-25
C	56	-1	0	1	1	57
D	1	-21	0	0	2	-18
E	0	-6	-2	1	0	-7
TOTAL	60	11	11	20	-4	**98**

37.56% Increase (Growth)

FLOW DIFFERENCE

		A	B	C	D	E	TOTAL
A	A5 N	A	0	-179	92	-66	-1	-155
B	A4303 E	B	-66	0	116	-206	-68	-224
C	A5 S	C	222	65	0	-1	40	326
D	B4027 S	D	15	11	2	0	0	28
E	Coal Pit Lane W	E	1	2	23	-1	0	25
		TOTAL	172	-101	232	-273	-30	**0**

	A	B	C	D	E	TOTAL
A	0	-179	92	-66	-1	-155
B	-66	0	116	-206	-68	-224
C	222	65	0	-1	40	326
D	15	11	2	0	0	28
E	1	2	23	-1	0	25
TOTAL	172	-101	232	-273	-30	**0**

	A	B	C	D	E	TOTAL
A	0	-179	92	-66	-1	-155
B	-66	0	116	-206	-68	-224
C	222	65	0	-1	40	326
D	15	11	2	0	0	28
E	1	2	23	-1	0	25
TOTAL	172	-101	232	-273	-30	**0**

SPREADSHEET 3 - REASSIGNMENT OF TRAFFIC AT CROSS-IN-HANDS ROUNDABOUT (FULL JUNCTION REASSIGNMENT)

Appendix 2 – Gibbet Hill Model outputs – Aecom Audit October 2024

Junctions 10

ARCADY 10 - Roundabout Module

Filename: J26 241010 - Gibbet Rundabout (Mitigation Lane Sim) NH sens.j10
Path: \\?\UNC\bwbbirfil01\birmingham\Birmingham\NTT\NTT2814_Hinckley Rail Freight Interchange\02. Project Delivery\01. WIP\Design and Calculations\T&I Planning\04 Junction Modelling\J26_JTC 47 - A5 - A426 - Gibbet Lane
Report generation date: 10/10/2024 18:11:07

»2036 WD, AM
»2036 WD , PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	[Lane Simulation] - 2036 WD											
A - A5 (North)	D1	2.8	11.33	0.57	B	% [ ]	D2	2.3	11.15	0.54	B	% [ ]
B - Rugby Road		13.5	60.46	0.95	F			55.9	208.38	1.11	F	
C - Gibbet Lane		9.1	71.43	0.92	F			1.0	16.16	0.45	C	
D - A5 (South)		119.7	377.16	1.26	F			109.7	354.24	1.18	F	
E - A426		2.2	13.72	0.50	B			27.8	94.53	0.97	F	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

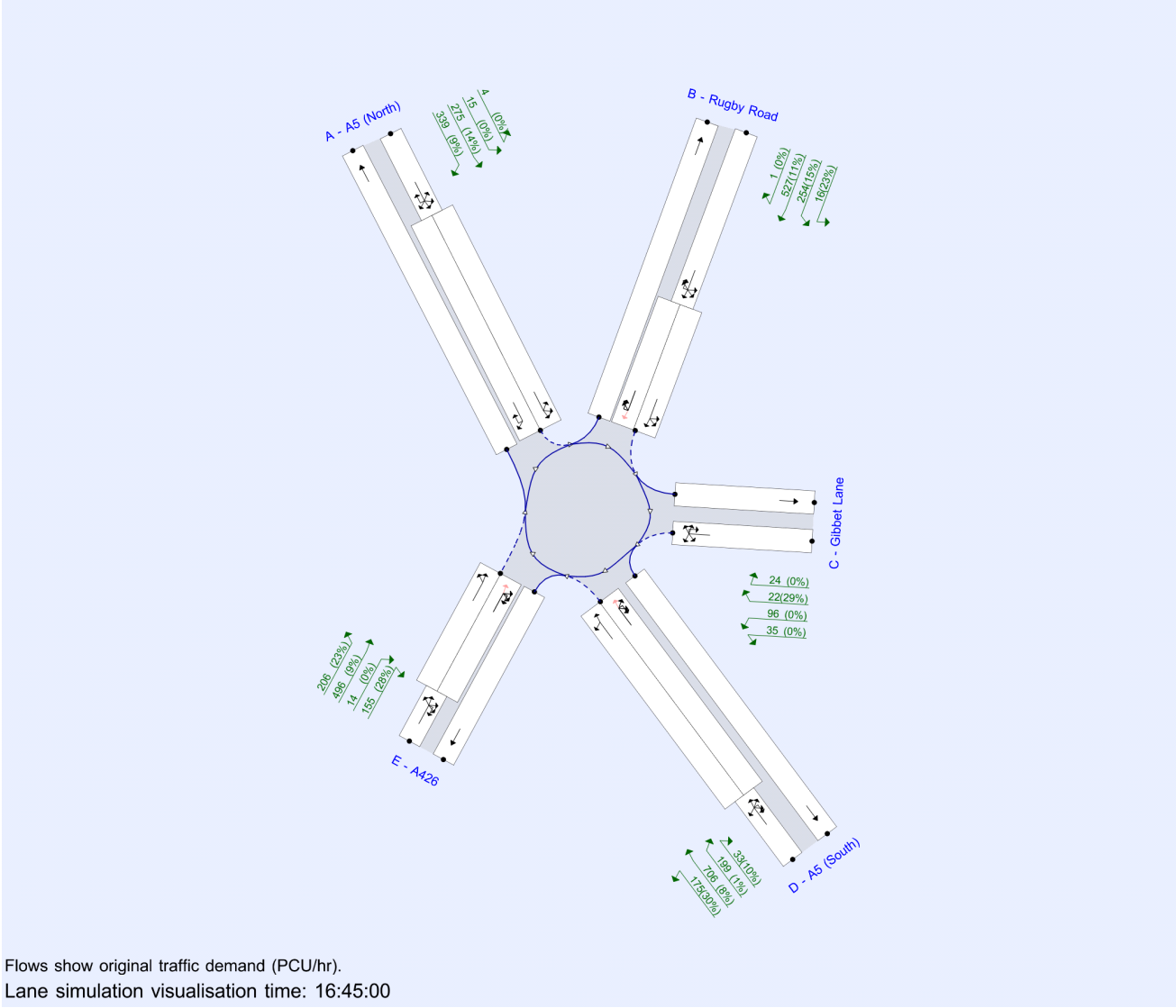
File summary

File Description

Title	J47 - A5/A426/Gibbet Lane
Location	
Site number	J47
Date	18/12/2020
Version	V0.1
Status	Existing
Identifier	
Client	
Jobnumber	NTT2814
Enumerator	BWB
Description	

Units

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



Flows show original traffic demand (PCU/hr).

Lane simulation visualisation time: 16:45:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue 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	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Queue	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			1995299816	276

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	2036 WD	AM	PRTM 2.2 Demand Flows	ONE HOUR	07:45	09:15	15	✓
D2	2036 WD	PM	PRTM 2.2 Demand Flows	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2036 WD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	D - A5 (South)	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	150.72	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	150.72	F

Arms

Arms

Arm	Name	Description	No give-way line
A	A5 (North)		
B	Rugby Road		
C	Gibbet Lane		
D	A5 (South)		
E	A426		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A5 (North)	3.86	8.86	15.8	28.0	70.2	21.5		
B - Rugby Road	3.20	6.69	54.0	45.0	70.9	26.0		
C - Gibbet Lane	2.65	7.05	5.1	7.7	73.1	37.5		
D - A5 (South)	3.95	7.98	20.0	30.2	70.2	20.0		
E - A426	3.42	7.50	22.5	34.7	70.9	27.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A5 (North)	0.563	2007
B - Rugby Road	0.546	1922
C - Gibbet Lane	0.367	1037
D - A5 (South)	0.570	2039
E - A426	0.536	1875

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A - A5 (North)	Evenly split	0.00
B - Rugby Road	Evenly split	15.00
C - Gibbet Lane	Evenly split	0.00
D - A5 (South)	Evenly split	15.00
E - A426	Evenly split	20.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
A - A5 (North)	Entry	1	1	B, C, D	✓	9.00			0	99999	
			2	E, A	✓	9.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					
B - Rugby Road	Entry	1	1	C, D, E	✓	5.00			0	99999	
			2	B, (E), A	✓	5.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					
C - Gibbet Lane	Entry	1	1	A, B, C, D, E		Infinity			0	99999	
	Exit	1	1			Infinity					
D - A5 (South)	Entry	1	1	A, E	✓	9.00			0	99999	
			2	(A), B, C, D	✓	9.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					
E - A426	Entry	1	1	A, B	✓	5.00			0	99999	
			2	(B), C, D, E	✓	5.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A5 (North)	Entry	1	1	0.282	1003
			2	0.282	1003
B - Rugby Road	Entry	1	1	0.273	961
			2	0.273	961
C - Gibbet Lane	Entry	1	1	0.367	1037
D - A5 (South)	Entry	1	1	0.285	1019
			2	0.285	1019
E - A426	Entry	1	1	0.268	938
			2	0.268	938

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm				
			Rugby Road	Gibbet Lane	A5 (South)	A426	A5 (North)
B - Rugby Road	1	1		✓	✓	✓	
		2	✓				✓
	2	1	✓	✓	✓	✓	✓
C - Gibbet Lane	1	1	✓	✓	✓	✓	✓
D - A5 (South)	1	1				✓	✓
		2	✓	✓	✓		
	2	1	✓	✓	✓	✓	✓
E - A426	1	1	✓				✓
		2		✓	✓	✓	
	2	1	✓	✓	✓	✓	✓
A - A5 (North)	1	1	✓	✓	✓		
		2				✓	✓
	2	1	✓	✓	✓	✓	✓

Summary of Entry Lane allowed secondary movements

Arm	Lane Level	Lane	Destination arm				
			Rugby Road	Gibbet Lane	A5 (South)	A426	A5 (North)
B - Rugby Road	1	1					
		2				✓	
	2	1					
C - Gibbet Lane	1	1					
D - A5 (South)	1	1					
		2					✓
	2	1					
E - A426	1	1					
		2	✓				
	2	1					
A - A5 (North)	1	1					
		2					
	2	1					

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
D1	2036 WD	AM	PRTM 2.2 Demand Flows	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	720	100.000
B - Rugby Road		ONE HOUR	✓	646	100.000
C - Gibbet Lane		ONE HOUR	✓	378	100.000
D - A5 (South)		ONE HOUR	✓	1115	100.000
E - A426		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	1	40	287	392
	B - Rugby Road	1	0	31	105	509
	C - Gibbet Lane	53	35	6	12	272
	D - A5 (South)	499	300	44	11	261
	E - A426	199	120	28	122	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	48	28	13
	B - Rugby Road	0	0	48	13	11
	C - Gibbet Lane	23	67	0	50	3
	D - A5 (South)	12	4	3	67	27
	E - A426	38	56	22	30	0

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.57	11.33	2.8	B	661	992
B - Rugby Road	0.95	60.46	13.5	F	591	886
C - Gibbet Lane	0.92	71.43	9.1	F	350	525
D - A5 (South)	1.26	377.16	119.7	F	1024	1536
E - A426	0.50	13.72	2.2	B	428	642

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	536	134	494	1495	0.358	537	537	565	0.0	1.1	7.581	A
B - Rugby Road	476	119	691	881	0.541	477	476	341	0.0	1.6	11.774	B
C - Gibbet Lane	288	72	1060	648	0.445	286	282	108	0.0	1.1	11.403	B
D - A5 (South)	832	208	950	1213	0.686	834	819	397	0.0	3.8	14.842	B
E - A426	347	87	712	1116	0.311	347	347	1071	0.0	1.0	9.113	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	646	161	592	1481	0.436	644	647	660	1.1	1.9	8.616	A
B - Rugby Road	579	145	832	816	0.709	578	572	404	1.6	3.1	17.467	C
C - Gibbet Lane	342	85	1274	576	0.593	338	334	136	1.1	2.0	17.375	C
D - A5 (South)	1000	250	1129	1118	0.894	983	963	483	3.8	12.1	33.253	D
E - A426	416	104	837	1043	0.399	415	418	1275	1.0	1.4	10.487	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	794	199	652	1395	0.569	793	782	734	1.9	2.4	10.895	B
B - Rugby Road	711	178	1010	747	0.952	700	680	435	3.1	10.3	41.514	E
C - Gibbet Lane	423	106	1557	470	0.900	405	396	152	2.0	7.0	43.332	E
D - A5 (South)	1243	311	1375	988	1.259	1002	1020	588	12.1	64.8	133.743	F
E - A426	510	127	878	1068	0.477	508	509	1499	1.4	2.0	12.749	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	799	200	656	1423	0.561	800	796	725	2.4	2.8	11.330	B
B - Rugby Road	713	178	1021	799	0.893	701	701	434	10.3	13.5	60.465	F
C - Gibbet Lane	416	104	1571	455	0.915	414	407	151	7.0	9.1	71.431	F
D - A5 (South)	1232	308	1386	988	1.247	992	1009	599	64.8	119.7	331.083	F
E - A426	519	130	865	1046	0.496	515	517	1513	2.0	2.2	13.723	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	645	161	636	1433	0.450	643	647	719	2.8	1.7	9.001	A
B - Rugby Road	581	145	839	842	0.691	585	619	439	13.5	3.6	33.250	D
C - Gibbet Lane	341	85	1286	554	0.616	346	366	138	9.1	2.2	36.579	E
D - A5 (South)	1001	250	1145	1093	0.916	1101	1073	487	119.7	103.2	377.158	F
E - A426	418	104	935	1048	0.399	419	424	1310	2.2	1.5	11.878	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	548	137	564	1470	0.373	547	542	675	1.7	1.4	7.960	A
B - Rugby Road	482	121	713	881	0.547	482	494	397	3.6	1.6	12.836	B
C - Gibbet Lane	292	73	1077	650	0.449	291	292	119	2.2	1.0	12.651	B
D - A5 (South)	837	209	958	1202	0.696	1049	1100	410	103.2	37.3	199.435	F
E - A426	358	90	882	1021	0.351	357	355	1125	1.5	1.3	10.813	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	243	864	0.282	245	246	0.0	0.5	8.039	A
			2	E, A	292	864	0.338	292	291	0.0	0.6	7.240	A
		2	1	(B, C, D, E, A)	536			536	541	0.0	0.0	0.004	A
	Exit	1	1		565			565	557	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	434	772	0.562	434	433	0.0	1.4	10.979	B
			2	B, (E), A	43	772	0.056	43	44	0.0	0.1	5.283	A
		2	1	(B, C, D, E, A)	476			477	482	0.0	0.2	1.308	A
	Exit	1	1		341			341	336	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	288	648	0.445	286	282	0.0	1.1	11.403	B
	Exit	1	1		108			108	108	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	528	749	0.705	530	518	0.0	2.6	17.021	C
			2	(A), B, C, D	304	749	0.406	303	300	0.0	0.8	8.331	A
		2	1	(B, C, D, E, A)	832			832	832	0.0	0.4	1.156	A
	Exit	1	1		397			397	399	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	223	747	0.299	223	225	0.0	0.7	9.777	A
			2	(B), C, D, E	124	747	0.166	124	122	0.0	0.3	7.575	A
		2	1	(B, C, D, E, A)	347			347	351	0.0	0.0	0.156	A
	Exit	1	1		1071			1071	1061	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	296	837	0.354	296	296	0.5	0.9	8.917	A
			2	E, A	350	837	0.419	348	351	0.6	1.0	8.339	A
		2	1	(B, C, D, E, A)	646			646	651	0.0	0.0	0.032	A
	Exit	1	1		660			660	655	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	521	734	0.710	520	516	1.4	2.3	14.436	B
			2	B, (E), A	58	734	0.080	58	56	0.1	0.1	5.919	A
		2	1	(B, C, D, E, A)	579			579	576	0.2	0.7	3.852	A
	Exit	1	1		404			404	401	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	342	569	0.600	338	334	1.1	2.0	17.375	C
	Exit	1	1		136			136	133	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	616	698	0.884	611	601	2.6	5.7	28.493	D
			2	(A), B, C, D	371	698	0.532	372	363	0.8	1.4	12.116	B
		2	1	(B, C, D, E, A)	1000			988	978	0.4	5.0	11.021	B
	Exit	1	1		483			483	482	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	271	713	0.380	272	273	0.7	0.9	11.097	B
			2	(B), C, D, E	144	713	0.202	143	145	0.3	0.4	8.208	A
		2	1	(B, C, D, E, A)	416			415	419	0.0	0.1	0.446	A
	Exit	1	1		1275			1275	1263	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	364	820	0.444	364	360	0.9	1.1	10.549	B
			2	E, A	430	820	0.525	429	423	1.0	1.3	10.734	B
		2	1	(B, C, D, E, A)	794			794	784	0.0	0.0	0.239	A
	Exit	1	1		734			734	727	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	618	685	0.902	618	604	2.3	3.8	20.566	C
			2	B, (E), A	82	685	0.119	81	76	0.1	0.2	6.748	A
		2	1	(B, C, D, E, A)	711			700	686	0.7	6.4	22.321	C
	Exit	1	1		435			435	448	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	423	465	0.909	405	396	2.0	7.0	43.332	E
	Exit	1	1		152			152	152	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	625	628	0.996	623	629	5.7	8.8	44.874	E
			2	(A), B, C, D	381	628	0.608	380	391	1.4	2.2	19.527	C
		2	1	(B, C, D, E, A)	1243			1006	1035	5.0	53.8	98.527	F
	Exit	1	1		588			588	584	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	329	702	0.469	329	329	0.9	1.4	13.091	B
			2	(B), C, D, E	180	702	0.257	179	180	0.4	0.5	8.909	A
		2	1	(B, C, D, E, A)	510			510	511	0.1	0.2	1.234	A
	Exit	1	1		1499			1499	1476	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	369	819	0.450	369	367	1.1	1.2	10.806	B
			2	E, A	431	819	0.526	431	429	1.3	1.5	11.282	B
		2	1	(B, C, D, E, A)	799			799	798	0.0	0.0	0.249	A
	Exit	1	1		725			725	728	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	615	682	0.901	617	621	3.8	4.0	22.447	C
			2	B, (E), A	84	682	0.123	84	80	0.2	0.2	7.325	A
		2	1	(B, C, D, E, A)	713			699	702	6.4	9.3	39.745	E
	Exit	1	1		434			434	442	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	416	460	0.905	414	407	7.0	9.1	71.431	F
	Exit	1	1		151			151	155	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	615	624	0.985	616	625	8.8	8.8	50.032	F
			2	(A), B, C, D	377	624	0.603	376	385	2.2	2.5	22.258	C
		2	1	(B, C, D, E, A)	1232			991	1010	53.8	108.5	292.690	F
	Exit	1	1		599			599	597	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	333	706	0.472	333	334	1.4	1.3	13.705	B
			2	(B), C, D, E	183	706	0.259	182	182	0.5	0.6	9.538	A
		2	1	(B, C, D, E, A)	519			516	517	0.2	0.3	1.566	A
	Exit	1	1		1513			1513	1509	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	297	824	0.361	296	295	1.2	0.9	9.007	A
			2	E, A	348	824	0.422	347	351	1.5	0.9	8.928	A
		2	1	(B, C, D, E, A)	645			645	643	0.0	0.0	0.042	A
	Exit	1	1		719			719	713	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	529	732	0.723	526	554	4.0	2.5	17.218	C
			2	B, (E), A	60	732	0.081	60	65	0.2	0.1	6.446	A
		2	1	(B, C, D, E, A)	581			589	613	9.3	1.1	17.658	C
	Exit	1	1		439			439	431	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	341	565	0.604	346	366	9.1	2.2	36.579	E
	Exit	1	1		138			138	141	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	679	693	0.980	679	662	8.8	8.8	46.959	E
			2	(A), B, C, D	420	693	0.607	422	411	2.5	2.2	19.851	C
		2	1	(B, C, D, E, A)	1001			1100	1072	108.5	92.2	342.620	F
	Exit	1	1		487			487	491	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	269	687	0.392	270	275	1.3	1.0	12.432	B
			2	(B), C, D, E	149	687	0.217	150	148	0.6	0.4	8.349	A
		2	1	(B, C, D, E, A)	418			418	422	0.3	0.1	1.003	A
	Exit	1	1		1310			1310	1352	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	250	845	0.296	250	248	0.9	0.6	8.155	A
			2	E, A	299	845	0.354	297	295	0.9	0.8	7.783	A
		2	1	(B, C, D, E, A)	548			548	541	0.0	0.0	0.022	A
	Exit	1	1		675			675	687	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	438	766	0.572	438	449	2.5	1.4	11.806	B
			2	B, (E), A	44	766	0.057	44	45	0.1	0.1	5.556	A
		2	1	(B, C, D, E, A)	482			482	490	1.1	0.2	1.723	A
	Exit	1	1		397			397	413	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	292	641	0.455	291	292	2.2	1.0	12.651	B
	Exit	1	1		119			119	123	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	647	746	0.867	659	685	8.8	6.2	38.666	E
			2	(A), B, C, D	386	746	0.518	390	415	2.2	1.6	16.913	C
		2	1	(B, C, D, E, A)	837			1034	1087	92.2	29.6	170.994	F
	Exit	1	1		410			410	411	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	232	701	0.330	231	229	1.0	0.9	11.399	B
			2	(B), C, D, E	126	701	0.180	126	126	0.4	0.4	8.595	A
		2	1	(B, C, D, E, A)	358			358	354	0.1	0.1	0.491	A
	Exit	1	1		1125			1125	1149	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.65	0.16	160	138	0.005	0.65	0.70	0.0	0.0	6.782	A
				C	28	7	996	856	0.033	28	30	0.0	0.0	9.012	A
				D	215	54	1003	864	0.249	216	215	0.0	0.4	7.926	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	292	73	1003	864	0.338	292	291	0.0	0.6	7.240	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.65	0.16	-	-	-	0.65	0.70	0.0	0.0	0.000	A
				C	28	7	-	-	-	28	30	0.0	0.0	0.023	A
				D	215	54	-	-	-	215	217	0.0	0.0	0.006	A
				E	292	73	-	-	-	292	293	0.0	0.0	0.001	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	22	6	954	768	0.029	22	22	0.0	0.1	12.521	B
				D	76	19	961	772	0.099	76	76	0.0	0.3	11.113	B
				E	336	84	961	772	0.435	337	335	0.0	1.0	10.875	B
			2	A	0.78	0.20	185	149	0.005	0.74	0.88	0.0	0.0	5.696	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	42	11	961	772	0.055	42	43	0.0	0.1	5.273	A
		2	1	A	0.78	0.20	-	-	-	0.78	0.90	0.0	0.0	1.869	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	22	6	-	-	-	22	22	0.0	0.0	1.493	A
				D	76	19	-	-	-	76	78	0.0	0.0	1.174	A
				E	377	94	-	-	-	378	382	0.0	0.1	1.326	A
C - Gibbet Lane	Entry	1	1	A	43	11	1034	644	0.066	41	41	0.0	0.2	12.120	B
				B	27	7	1022	638	0.042	28	26	0.0	0.1	14.234	B
				C	4	0.90	665	417	0.009	4	4	0.0	0.0	10.132	B
				D	8	2	804	504	0.017	8	9	0.0	0.0	14.332	B
				E	206	52	1037	648	0.318	205	202	0.0	0.7	10.993	B
D - A5 (South)	Entry	1	1	A	334	84	1019	749	0.446	335	328	0.0	1.6	16.597	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	194	48	1019	749	0.259	195	190	0.0	1.0	17.850	C
			2	A	41	10	1019	750	0.054	41	40	0.0	0.1	7.548	A
				B	224	56	1019	749	0.299	224	221	0.0	0.6	8.379	A
				C	32	8	1019	750	0.043	32	31	0.0	0.1	8.450	A
				D	7	2	705	521	0.013	7	8	0.0	0.0	11.228	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	375	94	-	-	-	375	375	0.0	0.2	1.141	A
				B	224	56	-	-	-	224	223	0.0	0.1	1.119	A
				C	32	8	-	-	-	32	32	0.0	0.0	0.956	A
				D	7	2	-	-	-	7	8	0.0	0.0	1.102	A
				E	194	49	-	-	-	194	194	0.0	0.1	1.282	A
E - A426	Entry	1	1	A	146	36	938	747	0.195	147	146	0.0	0.4	9.570	A
				B	78	19	938	747	0.104	77	78	0.0	0.3	10.218	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	12	3	754	602	0.019	12	10	0.0	0.0	7.704	A
				C	22	6	927	740	0.030	23	21	0.0	0.0	7.366	A

				D	90	23	938	746	0.121	90	90	0.0	0.3	7.613	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	145	36	-	-	-	146	148	0.0	0.0	0.201	A
				B	89	22	-	-	-	89	90	0.0	0.0	0.139	A
				C	22	6	-	-	-	22	21	0.0	0.0	0.125	A
				D	90	23	-	-	-	90	91	0.0	0.0	0.107	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.25	189	159	0.006	1	0.83	0.0	0.0	6.120	A
				C	34	9	1003	837	0.041	34	35	0.0	0.1	9.910	A
				D	260	65	1003	838	0.311	260	260	0.4	0.8	8.811	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	350	88	1003	838	0.418	348	351	0.6	1.0	8.339	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.25	-	-	-	1	0.83	0.0	0.0	0.000	A
				C	34	9	-	-	-	34	35	0.0	0.0	0.060	A
				D	260	65	-	-	-	260	262	0.0	0.0	0.028	A
				E	350	88	-	-	-	350	353	0.0	0.0	0.033	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	954	729	0.038	28	27	0.1	0.1	16.120	C
				D	96	24	961	733	0.131	96	95	0.3	0.4	14.544	B
				E	397	99	961	734	0.541	396	393	1.0	1.8	14.322	B
			2	A	0.96	0.24	198	153	0.006	1	0.96	0.0	0.0	5.777	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	57	14	961	733	0.078	57	55	0.1	0.1	5.921	A
		2	1	A	0.96	0.24	-	-	-	0.96	0.94	0.0	0.0	1.984	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	-	-	-	28	28	0.0	0.0	4.098	A
				D	96	24	-	-	-	96	96	0.0	0.1	3.738	A
				E	454	114	-	-	-	454	452	0.1	0.5	3.869	A
C - Gibbet Lane	Entry	1	1	A	46	12	1037	571	0.081	46	47	0.2	0.3	18.057	C
				B	32	8	1037	570	0.057	32	31	0.1	0.3	22.171	C
				C	5	1	789	442	0.012	6	5	0.0	0.0	17.407	C
				D	11	3	913	507	0.023	11	11	0.0	0.1	19.266	C
				E	246	61	1037	570	0.432	244	240	0.7	1.3	16.816	C
D - A5 (South)	Entry	1	1	A	384	96	1019	698	0.551	380	377	1.6	3.5	27.987	D
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	232	58	1019	698	0.333	231	224	1.0	2.2	29.456	D
			2	A	53	13	1019	699	0.076	54	52	0.1	0.2	11.453	B
				B	266	67	1019	698	0.382	266	262	0.6	1.0	12.187	B
				C	42	10	1019	698	0.060	42	39	0.1	0.2	12.191	B
				D	10	2	757	526	0.018	10	9	0.0	0.0	13.959	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	445	111	-	-	-	438	437	0.2	2.4	11.372	B
				B	269	67	-	-	-	266	264	0.1	1.2	10.353	B

		2	1	C	42	11	-	-	-	42	40	0.0	0.2	10.294	B
				D	10	2	-	-	-	10	9	0.0	0.1	9.939	A
				E	235	59	-	-	-	232	229	0.1	1.2	11.382	B
E - A426	Entry	1	1	A	179	45	938	714	0.251	180	178	0.4	0.6	10.879	B
				B	92	23	938	715	0.128	93	95	0.3	0.3	11.560	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	795	608	0.019	12	13	0.0	0.0	8.467	A
				C	27	7	934	713	0.038	26	26	0.0	0.1	8.189	A
				D	106	26	938	714	0.148	105	106	0.3	0.3	8.188	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	180	45	-	-	-	179	179	0.0	0.1	0.546	A
				B	103	26	-	-	-	103	108	0.0	0.0	0.564	A
				C	27	7	-	-	-	27	27	0.0	0.0	0.179	A
				D	106	26	-	-	-	106	106	0.0	0.0	0.260	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.37	294	241	0.006	1	1	0.0	0.0	9.151	A
				C	42	10	1003	819	0.051	43	42	0.1	0.1	11.252	B
				D	320	80	1003	820	0.391	320	316	0.8	1.0	10.476	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	430	108	1003	820	0.525	429	423	1.0	1.3	10.734	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.37	-	-	-	1	1	0.0	0.0	0.000	A
				C	42	10	-	-	-	42	42	0.0	0.0	0.255	A
				D	320	80	-	-	-	320	317	0.0	0.0	0.232	A
				E	430	108	-	-	-	430	424	0.0	0.0	0.244	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	35	9	961	687	0.050	34	33	0.1	0.3	22.591	C
				D	113	28	961	686	0.165	114	111	0.4	0.7	20.526	C
				E	470	118	961	685	0.686	470	459	1.8	2.8	20.466	C
			2	A	1	0.30	247	179	0.007	1	1	0.0	0.0	6.131	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	80	20	961	687	0.117	80	75	0.1	0.2	6.759	A
		2	1	A	1	0.30	-	-	-	1	1	0.0	0.0	15.037	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	36	9	-	-	-	35	34	0.0	0.4	23.674	C
				D	116	29	-	-	-	113	112	0.1	1.1	22.602	C
				E	558	139	-	-	-	551	539	0.5	4.9	22.217	C
C - Gibbet Lane	Entry	1	1	A	60	15	1037	466	0.129	58	56	0.3	1.0	43.677	E
				B	42	10	1037	470	0.089	38	37	0.3	0.8	48.586	E
				C	7	2	823	386	0.017	6	6	0.0	0.1	44.551	E
				D	12	3	910	424	0.029	11	12	0.1	0.2	49.505	E
				E	302	76	1037	465	0.649	293	285	1.3	4.8	42.640	E
				A	397	99	1019	628	0.632	395	395	3.5	5.5	44.535	E

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	228	57	1019	628	0.363	227	234	2.2	3.3	45.522	E
			2	A	63	16	1019	631	0.100	63	61	0.2	0.3	18.785	C
				B	271	68	1019	628	0.432	269	279	1.0	1.6	19.693	C
				C	38	9	1019	632	0.060	38	40	0.2	0.2	18.943	C
				D	9	2	820	517	0.018	9	11	0.0	0.1	22.409	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	561	140	-	-	-	460	465	2.4	23.9	99.966	F
				B	333	83	-	-	-	271	281	1.2	14.4	96.523	F
				C	49	12	-	-	-	38	40	0.2	2.1	94.677	F
				D	12	3	-	-	-	9	11	0.1	0.6	102.863	F
				E	289	72	-	-	-	228	238	1.2	12.7	98.889	F
E - A426	Entry	1	1	A	217	54	938	702	0.309	217	214	0.6	0.9	12.885	B
				B	112	28	938	704	0.160	112	115	0.3	0.5	13.518	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	15	4	849	634	0.024	15	15	0.0	0.1	8.855	A
				C	30	7	938	706	0.042	30	31	0.1	0.1	8.483	A
				D	135	34	938	702	0.192	134	134	0.3	0.3	9.019	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	217	54	-	-	-	217	215	0.1	0.1	1.430	A
				B	128	32	-	-	-	128	131	0.0	0.0	1.245	A
				C	30	7	-	-	-	30	31	0.0	0.0	0.987	A
				D	135	34	-	-	-	135	134	0.0	0.0	0.991	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.27	251	204	0.005	1	1	0.0	0.0	11.803	B
				C	42	10	1003	819	0.051	41	43	0.1	0.2	11.380	B
				D	326	81	1003	818	0.398	327	323	1.0	1.1	10.735	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	431	108	1003	819	0.526	431	429	1.3	1.5	11.282	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.27	-	-	-	1	1	0.0	0.0	0.333	A
				C	42	10	-	-	-	42	43	0.0	0.0	0.265	A
				D	325	81	-	-	-	326	323	0.0	0.0	0.255	A
				E	431	108	-	-	-	431	431	0.0	0.0	0.243	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	34	8	954	678	0.050	34	33	0.3	0.2	24.786	C
				D	114	28	961	683	0.167	113	115	0.7	0.8	22.662	C
				E	467	117	961	682	0.685	469	473	2.8	3.0	22.272	C
			2	A	1	0.33	244	175	0.007	1	1	0.0	0.0	5.809	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	83	21	961	682	0.121	83	79	0.2	0.1	7.349	A

		2	1	A	2	0.40	-	-	-	1	1	0.0	0.0	46.317	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	35	9	-	-	-	34	33	0.4	0.5	40.266	E
				D	116	29	-	-	-	114	115	1.1	1.4	38.937	E
				E	561	140	-	-	-	550	552	4.9	7.4	39.870	E
C - Gibbet Lane	Entry	1	1	A	60	15	1037	464	0.129	59	58	1.0	1.3	73.178	F
				B	40	10	1037	464	0.087	38	37	0.8	0.9	76.819	F
				C	7	2	812	364	0.018	7	6	0.1	0.2	78.708	F
				D	12	3	943	425	0.028	12	13	0.2	0.2	70.391	F
				E	297	74	1037	462	0.644	297	292	4.8	6.5	70.589	F
D - A5 (South)	Entry	1	1	A	384	96	1019	625	0.616	384	389	5.5	5.5	49.535	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	230	58	1019	625	0.368	232	235	3.3	3.3	50.969	F
			2	A	55	14	1019	625	0.088	56	60	0.3	0.3	21.710	C
				B	271	68	1019	625	0.434	270	273	1.6	1.8	22.296	C
				C	41	10	1019	625	0.065	40	42	0.2	0.3	22.335	C
				D	10	2	838	515	0.019	10	10	0.1	0.1	24.897	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	543	136	-	-	-	439	449	23.9	48.2	292.876	F
				B	336	84	-	-	-	271	274	14.4	29.1	291.524	F
				C	48	12	-	-	-	41	42	2.1	4.1	286.460	F
				D	11	3	-	-	-	10	10	0.6	1.0	285.509	F
				E	294	73	-	-	-	230	235	12.7	26.0	295.485	F
E - A426	Entry	1	1	A	225	56	938	706	0.318	224	220	0.9	0.9	13.519	B
				B	108	27	938	707	0.153	109	115	0.5	0.5	14.106	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	16	4	890	665	0.024	16	16	0.1	0.0	9.468	A
				C	30	7	938	704	0.042	29	30	0.1	0.1	8.922	A
				D	138	34	938	706	0.195	137	136	0.3	0.4	9.693	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	226	57	-	-	-	225	219	0.1	0.2	1.714	A
				B	124	31	-	-	-	124	130	0.0	0.0	1.633	A
				C	30	7	-	-	-	30	31	0.0	0.0	1.127	A
				D	138	35	-	-	-	138	137	0.0	0.1	1.394	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.74	0.18	196	160	0.005	0.74	0.87	0.0	0.0	6.002	A
				C	36	9	1003	828	0.044	36	37	0.2	0.1	9.647	A
				D	261	65	1003	824	0.316	259	258	1.1	0.7	8.941	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	348	87	1003	824	0.422	347	351	1.5	0.9	8.928	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.74	0.18	-	-	-	0.74	0.87	0.0	0.0	0.059	A
				C	36	9	-	-	-	36	37	0.0	0.0	0.023	A

				D	261	65	-	-	-	261	256	0.0	0.0	0.034	A
				E	348	87	-	-	-	348	349	0.0	0.0	0.048	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	29	7	954	727	0.040	29	30	0.2	0.2	19.599	C
				D	93	23	961	731	0.128	94	100	0.8	0.4	17.213	C
				E	407	102	961	731	0.556	403	424	3.0	1.9	17.093	C
			2	A	0.65	0.16	226	169	0.004	0.74	1	0.0	0.0	5.491	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	59	15	961	732	0.081	59	64	0.1	0.1	6.464	A
		2	1	A	0.65	0.16	-	-	-	0.65	1	0.0	0.0	11.694	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	29	7	-	-	-	29	30	0.5	0.0	17.305	C
				D	92	23	-	-	-	93	99	1.4	0.2	17.974	C
				E	460	115	-	-	-	466	483	7.4	0.8	17.624	C
C - Gibbet Lane	Entry	1	1	A	49	12	1037	563	0.088	49	51	1.3	0.4	37.942	E
				B	35	9	1034	562	0.062	35	35	0.9	0.3	38.405	E
				C	5	1	797	419	0.013	5	6	0.2	0.0	37.893	E
				D	11	3	887	474	0.024	11	12	0.2	0.1	39.921	E
				E	240	60	1037	564	0.426	245	262	6.5	1.4	36.070	E
D - A5 (South)	Entry	1	1	A	424	106	1019	693	0.612	423	411	5.5	5.5	46.656	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	256	64	1019	694	0.368	256	251	3.3	3.3	47.523	E
			2	A	68	17	1019	692	0.098	69	67	0.3	0.3	19.879	C
				B	298	75	1019	693	0.431	300	290	1.8	1.5	19.793	C
				C	42	11	1019	692	0.061	42	42	0.3	0.3	20.111	C
				D	12	3	820	545	0.021	12	11	0.1	0.1	20.408	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	448	112	-	-	-	492	478	48.2	41.0	342.426	F
				B	274	68	-	-	-	298	289	29.1	25.0	341.008	F
				C	40	10	-	-	-	42	42	4.1	3.6	337.870	F
				D	11	3	-	-	-	12	11	1.0	1.0	343.519	F
				E	228	57	-	-	-	256	251	26.0	21.5	346.340	F
E - A426	Entry	1	1	A	180	45	938	688	0.261	178	183	0.9	0.7	12.394	B
				B	89	22	938	689	0.130	91	93	0.5	0.3	12.516	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	13	3	809	593	0.021	12	13	0.0	0.1	8.706	A
				C	26	7	938	692	0.038	26	26	0.1	0.1	8.123	A
				D	110	28	938	688	0.160	112	110	0.4	0.3	8.371	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	180	45	-	-	-	180	182	0.2	0.0	1.147	A
				B	102	25	-	-	-	102	104	0.0	0.0	1.157	A
				C	26	7	-	-	-	26	25	0.0	0.0	0.626	A
				D	110	28	-	-	-	110	110	0.1	0.0	0.753	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.27	193	161	0.007	1	0.88	0.0	0.0	8.447	A

A - A5 (North)	Entry	1	1	C	30	8	992	832	0.036	30	29	0.1	0.1	9.180	A
				D	219	55	1003	844	0.259	219	217	0.7	0.5	8.034	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	299	75	1003	844	0.354	297	295	0.9	0.8	7.783	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.27	-	-	-	1	0.88	0.0	0.0	0.000	A
				C	30	8	-	-	-	30	29	0.0	0.0	0.000	A
				D	219	55	-	-	-	219	216	0.0	0.0	0.034	A
				E	299	75	-	-	-	299	294	0.0	0.0	0.016	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	23	6	950	760	0.030	23	24	0.2	0.1	13.729	B
				D	80	20	961	766	0.104	80	81	0.4	0.3	11.868	B
				E	336	84	961	767	0.438	335	344	1.9	1.1	11.692	B
			2	A	1	0.27	171	135	0.008	1	0.80	0.0	0.0	5.541	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	43	11	961	769	0.056	43	44	0.1	0.1	5.556	A
		2	1	A	1	0.27	-	-	-	1	0.80	0.0	0.0	0.825	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	23	6	-	-	-	23	24	0.0	0.0	1.744	A
				D	80	20	-	-	-	80	80	0.2	0.0	1.676	A
				E	378	95	-	-	-	379	385	0.8	0.1	1.733	A
C - Gibbet Lane	Entry	1	1	A	44	11	1037	644	0.068	43	42	0.4	0.2	13.081	B
				B	27	7	1022	633	0.043	27	27	0.3	0.1	15.735	C
				C	5	1	752	457	0.010	5	5	0.0	0.0	13.834	B
				D	9	2	853	521	0.018	9	11	0.1	0.0	15.197	C
				E	207	52	1037	643	0.322	206	208	1.4	0.7	12.223	B
D - A5 (South)	Entry	1	1	A	406	101	1019	747	0.543	416	428	5.5	3.6	38.305	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	241	60	1019	747	0.323	243	258	3.3	2.5	39.344	E
			2	A	60	15	1019	748	0.080	61	67	0.3	0.2	17.023	C
				B	277	69	1019	747	0.370	279	294	1.5	1.1	16.843	C
				C	40	10	1019	749	0.054	40	43	0.3	0.2	16.826	C
				D	10	2	801	581	0.016	9	10	0.1	0.1	19.524	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	374	93	-	-	-	466	486	41.0	13.3	172.478	F
				B	224	56	-	-	-	277	293	25.0	7.9	170.112	F
				C	34	8	-	-	-	40	43	3.6	1.2	168.714	F
				D	8	2	-	-	-	10	11	1.0	0.3	183.929	F
				E	197	49	-	-	-	241	254	21.5	6.9	169.093	F
E - A426	Entry	1	1	A	153	38	938	700	0.219	153	150	0.7	0.5	11.056	B
				B	78	20	938	698	0.112	78	79	0.3	0.4	12.136	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	12	3	798	594	0.020	12	12	0.1	0.0	9.063	A
				C	21	5	917	678	0.030	21	21	0.1	0.1	8.370	A
				D	93	23	938	699	0.134	93	92	0.3	0.3	8.602	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

		2	1	A	153	38	-	-	-	153	149	0.0	0.0	0.588	A
				B	90	23	-	-	-	90	91	0.0	0.0	0.425	A
				C	21	5	-	-	-	21	21	0.0	0.0	0.428	A
				D	94	23	-	-	-	93	93	0.0	0.0	0.412	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2036 WD , PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	D - A5 (South)	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	182.22	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	182.22	F

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
D2	2036 WD	PM	PRTM 2.2 Demand Flows	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	633	100.000
B - Rugby Road		ONE HOUR	✓	798	100.000
C - Gibbet Lane		ONE HOUR	✓	177	100.000
D - A5 (South)		ONE HOUR	✓	1126	100.000
E - A426		ONE HOUR	✓	875	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	4	15	275	339
	B - Rugby Road	1	0	16	254	527
	C - Gibbet Lane	22	24	0	35	96
	D - A5 (South)	706	199	33	13	175
	E - A426	206	496	14	155	4

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	14	9
	B - Rugby Road	0	0	23	15	11
	C - Gibbet Lane	29	0	0	0	0
	D - A5 (South)	8	1	10	40	30
	E - A426	23	9	0	28	33

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.54	11.15	2.3	B	581	871
B - Rugby Road	1.11	208.38	55.9	F	733	1099
C - Gibbet Lane	0.45	16.16	1.0	C	163	244
D - A5 (South)	1.18	354.24	109.7	F	1032	1548
E - A426	0.97	94.53	27.8	F	801	1202

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	478	119	705	1399	0.342	477	475	697	0.0	1.0	7.112	A
B - Rugby Road	603	151	638	871	0.693	603	594	544	0.0	2.9	16.081	C
C - Gibbet Lane	132	33	1182	601	0.220	132	133	59	0.0	0.3	7.963	A
D - A5 (South)	841	210	764	1193	0.705	840	832	549	0.0	3.8	15.055	C
E - A426	658	165	746	1045	0.630	657	650	858	0.0	2.6	13.479	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	569	142	833	1365	0.417	569	567	825	1.0	1.4	8.266	A
B - Rugby Road	717	179	761	836	0.857	710	697	641	2.9	7.3	31.247	D
C - Gibbet Lane	157	39	1402	528	0.298	157	158	69	0.3	0.5	10.059	B
D - A5 (South)	1014	254	900	1127	0.900	994	978	659	3.8	12.6	35.332	E
E - A426	780	195	882	1006	0.775	776	772	1012	2.6	5.5	21.153	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	697	174	968	1287	0.542	696	694	894	1.4	2.3	10.838	B
B - Rugby Road	878	219	921	789	1.113	778	772	744	7.3	33.2	98.530	F
C - Gibbet Lane	194	49	1622	447	0.434	195	192	77	0.5	0.8	14.872	B
D - A5 (South)	1241	310	1048	1066	1.164	1045	1044	768	12.6	61.1	130.186	F
E - A426	960	240	936	993	0.967	926	905	1157	5.5	19.7	57.726	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	695	174	964	1278	0.544	696	696	898	2.3	2.2	11.148	B
B - Rugby Road	878	220	918	804	1.092	785	783	742	33.2	55.9	208.380	F
C - Gibbet Lane	199	50	1627	437	0.455	198	195	76	0.8	1.0	16.161	C
D - A5 (South)	1239	310	1056	1046	1.185	1043	1043	770	61.1	109.7	299.026	F
E - A426	960	240	931	991	0.969	932	932	1168	19.7	27.8	94.527	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	567	142	879	1341	0.423	567	572	884	2.2	1.4	9.146	A
B - Rugby Road	721	180	768	851	0.848	789	798	678	55.9	36.0	204.479	F
C - Gibbet Lane	160	40	1484	480	0.334	160	162	73	1.0	0.5	12.197	B
D - A5 (South)	1009	252	956	1086	0.929	1071	1064	688	109.7	97.3	354.243	F
E - A426	789	197	948	972	0.811	816	850	1079	27.8	12.1	71.521	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	479	120	756	1385	0.346	479	479	833	1.4	1.0	7.631	A
B - Rugby Road	599	150	652	884	0.677	669	716	582	36.0	7.9	84.242	F
C - Gibbet Lane	134	33	1256	583	0.229	134	136	66	0.5	0.3	9.303	A
D - A5 (South)	846	211	813	1143	0.740	1049	1067	577	97.3	42.2	211.772	F
E - A426	659	165	920	1009	0.653	668	694	941	12.1	3.4	25.943	D

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	221	805	0.275	221	220	0.0	0.5	7.058	A
			2	E, A	257	805	0.319	256	256	0.0	0.6	7.152	A
		2	1	(B, C, D, E, A)	478			478	479	0.0	0.0	0.002	A
	Exit	1	1		697			697	692	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	552	787	0.702	552	545	0.0	2.1	13.196	B
			2	B, (E), A	51	787	0.064	51	49	0.0	0.1	5.462	A
		2	1	(B, C, D, E, A)	603			603	603	0.0	0.6	3.501	A
	Exit	1	1		544			544	537	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	132	603	0.219	132	133	0.0	0.3	7.963	A
	Exit	1	1		59			59	59	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	594	801	0.742	593	588	0.0	3.0	16.694	C
			2	(A), B, C, D	246	801	0.307	246	244	0.0	0.5	6.720	A
		2	1	(B, C, D, E, A)	841			840	846	0.0	0.4	1.372	A
	Exit	1	1		549			549	546	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	472	738	0.640	472	468	0.0	1.7	12.704	B
			2	(B), C, D, E	185	738	0.251	185	182	0.0	0.5	7.621	A
		2	1	(B, C, D, E, A)	658			657	658	0.0	0.4	2.111	A
	Exit	1	1		858			858	850	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	266	769	0.346	267	265	0.5	0.6	8.095	A
			2	E, A	303	769	0.394	303	303	0.6	0.8	8.370	A
		2	1	(B, C, D, E, A)	569			570	568	0.0	0.0	0.022	A
	Exit	1	1		825			825	813	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	646	753	0.858	645	634	2.1	3.4	17.769	C
			2	B, (E), A	65	753	0.087	65	63	0.1	0.1	6.022	A
		2	1	(B, C, D, E, A)	717			711	702	0.6	3.8	14.437	B
	Exit	1	1		641			641	636	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	157	522	0.301	157	158	0.3	0.5	10.059	B
	Exit	1	1		69			69	68	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	696	763	0.912	691	682	3.0	6.1	27.728	D
			2	(A), B, C, D	302	763	0.395	302	296	0.5	0.7	8.679	A
		2	1	(B, C, D, E, A)	1014			997	992	0.4	5.8	13.339	B
	Exit	1	1		659			659	651	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	554	701	0.790	552	549	1.7	2.8	16.236	C
			2	(B), C, D, E	223	701	0.318	224	222	0.5	0.6	8.956	A
		2	1	(B, C, D, E, A)	780			777	777	0.4	2.1	6.862	A
	Exit	1	1		1012			1012	1003	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	324	731	0.443	324	323	0.6	1.0	10.261	B
			2	E, A	373	731	0.511	373	371	0.8	1.3	11.053	B
		2	1	(B, C, D, E, A)	697			697	697	0.0	0.1	0.142	A
	Exit	1	1		894			894	889	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	702	709	0.989	700	695	3.4	5.0	23.356	C
			2	B, (E), A	78	709	0.110	78	77	0.1	0.1	6.843	A
		2	1	(B, C, D, E, A)	878			780	778	3.8	28.1	76.641	F
	Exit	1	1		744			744	731	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	194	441	0.440	195	192	0.5	0.8	14.872	B
	Exit	1	1		77			77	77	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	720	721	0.999	718	718	6.1	8.9	40.936	E
			2	(A), B, C, D	325	721	0.451	327	326	0.7	1.2	12.157	B
		2	1	(B, C, D, E, A)	1241			1045	1057	5.8	51.0	98.146	F
	Exit	1	1		768			768	759	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	649	687	0.945	649	636	2.8	4.2	22.211	C
			2	(B), C, D, E	279	687	0.406	278	268	0.6	1.0	11.110	B
		2	1	(B, C, D, E, A)	960			928	912	2.1	14.5	38.552	E
	Exit	1	1		1157			1157	1150	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	324	732	0.443	324	323	1.0	1.0	10.345	B
			2	E, A	371	732	0.507	372	373	1.3	1.2	11.480	B
		2	1	(B, C, D, E, A)	695			696	696	0.1	0.0	0.187	A
	Exit	1	1		898			898	898	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	706	710	0.994	705	704	5.0	5.0	25.119	D
			2	B, (E), A	80	710	0.112	79	80	0.1	0.2	6.981	A
		2	1	(B, C, D, E, A)	878			786	784	28.1	50.6	185.172	F
	Exit	1	1		742			742	744	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	199	440	0.452	198	195	0.8	1.0	16.161	C
	Exit	1	1		76			76	77	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	721	718	1.004	721	720	8.9	9.0	44.307	E
			2	(A), B, C, D	323	718	0.449	322	323	1.2	1.2	13.466	B
		2	1	(B, C, D, E, A)	1239			1044	1044	51.0	99.5	264.844	F
	Exit	1	1		770			770	766	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	653	688	0.949	653	653	4.2	4.5	23.600	C
			2	(B), C, D, E	279	688	0.406	279	279	1.0	1.0	11.776	B
		2	1	(B, C, D, E, A)	960			933	933	14.5	22.3	74.248	F
	Exit	1	1		1168			1168	1164	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	262	756	0.347	263	265	1.0	0.6	8.845	A
			2	E, A	304	756	0.403	304	307	1.2	0.8	9.350	A
		2	1	(B, C, D, E, A)	567			567	569	0.0	0.0	0.029	A
	Exit	1	1		884			884	892	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	710	751	0.946	712	719	5.0	4.5	23.491	C
			2	B, (E), A	78	751	0.103	78	79	0.2	0.2	6.622	A
		2	1	(B, C, D, E, A)	721			788	796	50.6	31.3	183.032	F
	Exit	1	1		678			678	696	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	160	492	0.325	160	162	1.0	0.5	12.197	B
	Exit	1	1		73			73	74	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	737	747	0.988	738	735	9.0	8.8	43.119	E
			2	(A), B, C, D	332	747	0.445	332	330	1.2	1.2	12.895	B
		2	1	(B, C, D, E, A)	1009			1070	1064	99.5	87.3	321.456	F
	Exit	1	1		688			688	696	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	578	683	0.846	577	602	4.5	3.5	21.614	C
			2	(B), C, D, E	239	683	0.350	239	249	1.0	0.8	10.977	B
		2	1	(B, C, D, E, A)	789			818	845	22.3	7.9	53.175	F
	Exit	1	1		1079			1079	1090	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	220	791	0.278	221	222	0.6	0.4	7.448	A
			2	E, A	259	791	0.327	258	257	0.8	0.6	7.778	A
		2	1	(B, C, D, E, A)	479			479	477	0.0	0.0	0.004	A
	Exit	1	1		833			833	852	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	603	783	0.770	609	651	4.5	2.6	18.784	C
			2	B, (E), A	60	783	0.076	60	65	0.2	0.1	6.001	A
		2	1	(B, C, D, E, A)	599			663	708	31.3	5.2	67.219	F
	Exit	1	1		582			582	601	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	134	576	0.232	134	136	0.5	0.3	9.303	A
	Exit	1	1		66			66	68	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	718	788	0.912	729	740	8.8	6.7	38.240	E
			2	(A), B, C, D	320	788	0.406	320	327	1.2	1.0	11.345	B
		2	1	(B, C, D, E, A)	846			1038	1058	87.3	34.5	183.480	F
	Exit	1	1		577			577	597	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	476	691	0.689	478	497	3.5	2.0	16.575	C
			2	(B), C, D, E	190	691	0.275	190	197	0.8	0.5	9.280	A
		2	1	(B, C, D, E, A)	659			666	687	7.9	0.8	11.671	B
	Exit	1	1		941			941	974	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.72	522	420	0.007	3	3	0.0	0.0	6.493	A
				C	11	3	952	766	0.014	11	11	0.0	0.0	6.589	A
				D	207	52	1003	804	0.258	207	205	0.0	0.5	7.097	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	257	64	1003	805	0.319	256	256	0.0	0.6	7.152	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.72	-	-	-	3	3	0.0	0.0	0.000	A
				C	11	3	-	-	-	11	11	0.0	0.0	0.000	A
				D	207	52	-	-	-	207	207	0.0	0.0	0.001	A
				E	257	64	-	-	-	257	258	0.0	0.0	0.003	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	883	724	0.017	13	12	0.0	0.0	13.624	B
				D	191	48	961	786	0.243	191	190	0.0	0.8	13.424	B
				E	349	87	961	787	0.443	348	342	0.0	1.3	13.060	B
			2	A	0.66	0.17	146	120	0.006	0.70	0.66	0.0	0.0	4.781	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	50	12	961	786	0.063	50	49	0.0	0.1	5.472	A
		2	1	A	0.65	0.16	-	-	-	0.66	0.66	0.0	0.0	2.011	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	-	-	-	13	13	0.0	0.0	3.280	A
				D	191	48	-	-	-	191	193	0.0	0.2	3.548	A
				E	399	100	-	-	-	398	397	0.0	0.4	3.488	A
C - Gibbet Lane	Entry	1	1	A	17	4	1006	585	0.029	17	17	0.0	0.1	9.709	A
				B	19	5	1027	599	0.031	19	19	0.0	0.0	7.960	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	26	6	1035	600	0.043	26	26	0.0	0.0	7.703	A
				E	71	18	1037	602	0.117	71	72	0.0	0.2	7.738	A
D - A5 (South)	Entry	1	1	A	464	116	1019	801	0.579	463	459	0.0	2.3	16.456	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	130	33	1019	802	0.163	130	129	0.0	0.7	17.717	C
			2	A	62	16	1019	802	0.078	62	62	0.0	0.1	6.499	A
				B	150	37	1019	801	0.187	150	148	0.0	0.3	6.684	A
				C	25	6	1017	801	0.031	25	25	0.0	0.1	6.982	A
				D	9	2	857	676	0.014	9	10	0.0	0.0	8.458	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	527	132	-	-	-	526	530	0.0	0.3	1.415	A
				B	150	37	-	-	-	150	150	0.0	0.1	1.236	A
				C	25	6	-	-	-	25	25	0.0	0.0	1.258	A
				D	9	2	-	-	-	9	10	0.0	0.0	1.243	A
				E	131	33	-	-	-	130	132	0.0	0.1	1.399	A
E - A426	Entry	1	1	A	155	39	938	738	0.210	154	153	0.0	0.6	13.504	B
				B	317	79	938	738	0.430	317	314	0.0	1.1	12.358	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	55	14	938	737	0.075	55	53	0.0	0.1	6.503	A
				C	10	3	873	688	0.015	10	10	0.0	0.0	6.986	A

				D	117	29	938	737	0.158	116	116	0.0	0.3	8.292	A
				E	3	0.75	371	294	0.010	3	3	0.0	0.0	7.977	A
		2	1	A	155	39	-	-	-	155	156	0.0	0.1	2.279	A
				B	373	93	-	-	-	372	372	0.0	0.2	2.136	A
				C	10	3	-	-	-	10	10	0.0	0.0	1.738	A
				D	117	29	-	-	-	117	117	0.0	0.1	1.844	A
				E	3	0.76	-	-	-	3	3	0.0	0.0	1.386	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.86	606	467	0.007	3	4	0.0	0.0	7.822	A
				C	13	3	973	746	0.017	13	13	0.0	0.0	7.287	A
				D	250	62	1003	769	0.325	250	248	0.5	0.6	8.149	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	303	76	1003	769	0.394	303	303	0.6	0.8	8.370	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.86	-	-	-	3	4	0.0	0.0	0.013	A
				C	13	3	-	-	-	13	13	0.0	0.0	0.017	A
				D	250	62	-	-	-	250	248	0.0	0.0	0.022	A
				E	303	76	-	-	-	303	303	0.0	0.0	0.023	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	913	717	0.021	15	14	0.0	0.1	18.109	C
				D	227	57	961	754	0.301	226	222	0.8	1.2	18.045	C
				E	404	101	961	753	0.536	404	397	1.3	2.1	17.608	C
			2	A	0.86	0.21	177	139	0.006	0.86	0.81	0.0	0.0	5.679	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	65	16	961	754	0.086	64	62	0.1	0.1	6.027	A
		2	1	A	0.82	0.21	-	-	-	0.86	0.81	0.0	0.0	13.287	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	-	-	-	15	14	0.0	0.1	14.635	B
				D	229	57	-	-	-	227	224	0.2	1.2	14.591	B
				E	472	118	-	-	-	469	463	0.4	2.4	14.362	B
C - Gibbet Lane	Entry	1	1	A	19	5	1012	512	0.037	19	19	0.1	0.1	11.919	B
				B	21	5	1037	526	0.040	21	21	0.0	0.1	9.877	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	32	8	1037	524	0.061	32	31	0.0	0.1	9.779	A
				E	85	21	1037	521	0.164	85	86	0.2	0.3	9.882	A
D - A5 (South)	Entry	1	1	A	540	135	1019	763	0.709	538	531	2.3	4.6	27.459	D
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	155	39	1019	763	0.204	153	151	0.7	1.4	28.859	D
			2	A	84	21	1019	762	0.111	85	82	0.1	0.2	8.602	A
				B	177	44	1019	763	0.232	177	174	0.3	0.4	8.579	A
				C	29	7	1018	762	0.038	29	28	0.1	0.1	9.034	A
				D	11	3	890	669	0.017	12	11	0.0	0.0	10.440	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	635	159	-	-	-	625	622	0.3	3.7	13.478	B
				B	180	45	-	-	-	177	175	0.1	1.0	12.677	B

		2	1	C	29	7	-	-	-	29	28	0.0	0.2	12.348	B
				D	12	3	-	-	-	11	11	0.0	0.1	12.933	B
				E	159	40	-	-	-	155	155	0.1	1.0	13.872	B
E - A426	Entry	1	1	A	183	46	938	701	0.261	182	181	0.6	1.0	16.955	C
				B	371	93	938	702	0.528	370	369	1.1	1.9	15.922	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	69	17	938	702	0.098	69	69	0.1	0.2	7.962	A
				C	12	3	903	681	0.018	12	12	0.0	0.0	8.394	A
				D	138	34	938	701	0.197	139	139	0.3	0.4	9.563	A
				E	4	0.93	437	331	0.011	4	3	0.0	0.0	10.440	B
		2	1	A	184	46	-	-	-	183	182	0.1	0.5	7.131	A
				B	441	110	-	-	-	440	440	0.2	1.2	6.929	A
				C	12	3	-	-	-	12	12	0.0	0.0	6.378	A
				D	139	35	-	-	-	138	139	0.1	0.4	6.311	A
				E	4	0.92	-	-	-	4	3	0.0	0.0	6.423	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	654	480	0.009	4	4	0.0	0.0	8.767	A
				C	17	4	982	719	0.024	17	16	0.0	0.0	9.687	A
				D	302	76	1003	731	0.414	302	302	0.6	0.9	10.322	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	373	93	1003	731	0.511	373	371	0.8	1.3	11.053	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	-	-	-	4	4	0.0	0.0	0.094	A
				C	17	4	-	-	-	17	17	0.0	0.0	0.150	A
				D	302	76	-	-	-	302	303	0.0	0.0	0.153	A
				E	374	93	-	-	-	373	373	0.0	0.0	0.134	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	927	687	0.022	15	16	0.1	0.1	23.828	C
				D	249	62	961	710	0.351	248	245	1.2	1.8	23.452	C
				E	438	109	961	710	0.617	438	434	2.1	3.1	23.289	C
			2	A	0.95	0.24	207	155	0.006	0.95	1	0.0	0.0	6.212	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	77	19	961	710	0.108	77	76	0.1	0.1	6.853	A
		2	1	A	0.91	0.23	-	-	-	0.95	1	0.0	0.0	68.748	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	17	4	-	-	-	15	15	0.1	0.6	75.947	F
				D	279	70	-	-	-	249	248	1.2	8.9	77.089	F
				E	581	145	-	-	-	515	514	2.4	18.6	76.469	F
C - Gibbet Lane	Entry	1	1	A	24	6	1022	438	0.054	24	23	0.1	0.1	16.879	C
				B	26	7	1037	443	0.059	26	26	0.1	0.1	14.477	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	39	10	1037	441	0.088	39	38	0.1	0.2	14.661	B
				E	105	26	1037	442	0.239	106	105	0.3	0.4	14.698	B
				A	560	140	1019	720	0.778	558	557	4.6	6.9	40.721	E

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	160	40	1019	720	0.222	160	161	1.4	2.0	41.833	E
			2	A	97	24	1019	720	0.134	98	96	0.2	0.4	12.820	B
				B	186	46	1019	721	0.258	187	187	0.4	0.6	11.771	B
				C	31	8	1017	720	0.043	31	31	0.1	0.1	12.126	B
				D	12	3	919	653	0.018	11	12	0.0	0.1	13.697	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	778	194	-	-	-	657	662	3.7	32.0	98.578	F
				B	221	55	-	-	-	186	188	1.0	9.0	96.180	F
				C	36	9	-	-	-	31	31	0.2	1.5	97.797	F
				D	15	4	-	-	-	12	12	0.1	0.6	95.129	F
				E	192	48	-	-	-	160	163	1.0	7.9	99.248	F
E - A426	Entry	1	1	A	213	53	938	687	0.310	213	212	1.0	1.4	22.880	C
				B	436	109	938	687	0.635	435	424	1.9	2.8	21.913	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	91	23	938	686	0.133	91	89	0.2	0.3	10.433	B
				C	15	4	907	665	0.022	15	14	0.0	0.1	10.219	B
				D	168	42	938	687	0.244	167	161	0.4	0.6	11.623	B
				E	5	1	534	392	0.012	5	4	0.0	0.0	12.134	B
		2	1	A	221	55	-	-	-	213	214	0.5	3.4	38.712	E
				B	546	136	-	-	-	527	517	1.2	8.2	38.803	E
				C	16	4	-	-	-	15	14	0.0	0.2	36.613	E
				D	174	43	-	-	-	168	162	0.4	2.5	37.625	E
				E	5	1	-	-	-	5	4	0.0	0.1	37.911	E

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	669	490	0.009	5	4	0.0	0.0	9.655	A
				C	16	4	994	727	0.023	17	17	0.0	0.0	10.014	B
				D	303	76	1003	732	0.414	303	302	0.9	0.9	10.378	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	371	93	1003	732	0.507	372	373	1.3	1.2	11.480	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	-	-	-	5	4	0.0	0.0	0.158	A
				C	16	4	-	-	-	16	17	0.0	0.0	0.127	A
				D	303	76	-	-	-	303	302	0.0	0.0	0.177	A
				E	371	93	-	-	-	371	372	0.0	0.0	0.199	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	921	683	0.022	15	15	0.1	0.1	25.650	D
				D	250	63	961	710	0.352	250	249	1.8	1.8	25.211	D
				E	440	110	961	710	0.620	440	440	3.1	3.1	25.051	D
			2	A	1	0.27	214	158	0.007	1	1	0.0	0.0	6.567	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	79	20	961	709	0.111	78	79	0.1	0.2	6.987	A

		2	1	A	1	0.32	-	-	-	1	1	0.0	0.1	182.088	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	18	4	-	-	-	15	16	0.6	1.0	185.372	F
				D	278	70	-	-	-	250	249	8.9	15.9	185.567	F
				E	581	145	-	-	-	519	519	18.6	33.6	184.991	F
C - Gibbet Lane	Entry	1	1	A	25	6	1032	439	0.058	25	24	0.1	0.2	18.558	C
				B	25	6	1036	442	0.057	25	26	0.1	0.1	15.786	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	40	10	1037	441	0.090	39	38	0.2	0.2	15.817	C
				E	109	27	1037	440	0.247	108	106	0.4	0.5	15.956	C
D - A5 (South)	Entry	1	1	A	558	139	1019	719	0.776	557	558	6.9	6.9	44.097	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	164	41	1019	719	0.228	164	162	2.0	2.1	45.172	E
			2	A	98	24	1019	719	0.136	97	96	0.4	0.4	14.170	B
				B	183	46	1019	719	0.254	183	184	0.6	0.7	13.076	B
				C	30	7	1017	719	0.042	30	30	0.1	0.1	13.410	B
				D	12	3	895	631	0.019	12	12	0.1	0.1	14.613	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	778	195	-	-	-	655	655	32.0	62.5	265.279	F
				B	220	55	-	-	-	183	184	9.0	17.5	263.003	F
				C	36	9	-	-	-	30	30	1.5	2.9	265.058	F
				D	13	3	-	-	-	12	12	0.6	1.1	260.492	F
				E	191	48	-	-	-	164	163	7.9	15.4	265.656	F
E - A426	Entry	1	1	A	218	55	938	688	0.317	218	218	1.4	1.6	24.317	C
				B	435	109	938	688	0.632	435	435	2.8	2.9	23.280	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	93	23	938	688	0.136	94	95	0.3	0.3	11.258	B
				C	15	4	914	672	0.022	15	15	0.1	0.0	10.728	B
				D	167	42	938	687	0.243	166	165	0.6	0.7	12.228	B
				E	4	1	528	387	0.011	4	4	0.0	0.0	12.313	B
		2	1	A	228	57	-	-	-	218	219	3.4	5.5	75.692	F
				B	541	135	-	-	-	528	530	8.2	12.5	74.268	F
				C	15	4	-	-	-	15	15	0.2	0.3	71.603	F
				D	172	43	-	-	-	167	165	2.5	3.9	72.560	F
				E	4	1	-	-	-	4	4	0.1	0.1	70.731	F

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	0.96	619	462	0.008	4	4	0.0	0.0	8.053	A
				C	14	3	967	724	0.019	14	13	0.0	0.0	8.130	A
				D	245	61	1003	756	0.324	246	248	0.9	0.5	8.903	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	304	76	1003	756	0.403	304	307	1.2	0.8	9.350	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	0.96	-	-	-	4	4	0.0	0.0	0.016	A
				C	14	3	-	-	-	14	13	0.0	0.0	0.022	A

				D	245	61	-	-	-	245	246	0.0	0.0	0.031	A
				E	304	76	-	-	-	304	305	0.0	0.0	0.028	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	16	4	925	722	0.023	16	16	0.1	0.1	24.261	C
				D	251	63	961	752	0.334	253	254	1.8	1.6	23.627	C
				E	443	111	961	751	0.590	443	449	3.1	2.8	23.392	C
			2	A	0.87	0.22	214	165	0.005	0.90	1	0.0	0.0	6.053	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	77	19	961	751	0.102	77	78	0.2	0.1	6.630	A
		2	1	A	0.71	0.18	-	-	-	0.87	1	0.1	0.0	188.784	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	-	-	-	16	16	1.0	0.6	178.781	F
				D	229	57	-	-	-	251	253	15.9	10.1	184.135	F
				E	477	119	-	-	-	520	525	33.6	20.6	182.621	F
C - Gibbet Lane	Entry	1	1	A	19	5	1016	476	0.041	19	20	0.2	0.1	14.299	B
				B	22	5	1035	488	0.045	22	22	0.1	0.1	11.835	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	32	8	1037	492	0.064	32	32	0.2	0.1	11.957	B
				E	87	22	1037	490	0.178	87	88	0.5	0.3	12.007	B
D - A5 (South)	Entry	1	1	A	572	143	1019	747	0.766	573	570	6.9	6.8	42.914	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	165	41	1019	747	0.221	165	164	2.1	2.0	43.983	E
			2	A	99	25	1019	747	0.132	99	98	0.4	0.4	13.578	B
				B	189	47	1019	747	0.253	189	189	0.7	0.6	12.554	B
				C	31	8	1018	746	0.042	31	31	0.1	0.1	12.818	B
				D	13	3	884	647	0.020	13	12	0.1	0.1	13.400	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	633	158	-	-	-	671	668	62.5	54.8	321.727	F
				B	179	45	-	-	-	189	188	17.5	15.2	318.974	F
				C	30	7	-	-	-	31	31	2.9	2.6	322.530	F
				D	12	3	-	-	-	13	12	1.1	1.0	330.936	F
				E	155	39	-	-	-	165	164	15.4	13.6	322.888	F
E - A426	Entry	1	1	A	191	48	938	684	0.280	192	202	1.6	1.2	22.363	C
				B	387	97	938	683	0.567	385	400	2.9	2.3	21.279	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	79	20	938	684	0.115	78	82	0.3	0.2	10.376	B
				C	12	3	899	657	0.019	12	13	0.0	0.0	10.267	B
				D	145	36	938	684	0.212	145	150	0.7	0.5	11.417	B
				E	4	0.91	485	355	0.010	4	4	0.0	0.0	11.927	B
		2	1	A	185	46	-	-	-	191	200	5.5	1.9	54.102	F
				B	450	112	-	-	-	466	479	12.5	4.5	53.285	F
				C	12	3	-	-	-	12	13	0.3	0.1	51.278	F
				D	139	35	-	-	-	145	149	3.9	1.3	51.603	F
				E	3	0.86	-	-	-	4	4	0.1	0.0	56.687	F

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.76	530	412	0.007	3	3	0.0	0.0	6.921	A

A - A5 (North)	Entry	1	1	C	12	3	944	738	0.016	12	11	0.0	0.0	7.083	A
				D	205	51	1003	791	0.260	206	207	0.5	0.4	7.479	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	259	65	1003	791	0.327	258	257	0.8	0.6	7.778	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.76	-	-	-	3	3	0.0	0.0	0.000	A
				C	12	3	-	-	-	12	11	0.0	0.0	0.002	A
				D	205	51	-	-	-	205	207	0.0	0.0	0.003	A
				E	259	65	-	-	-	259	256	0.0	0.0	0.004	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	911	742	0.017	13	14	0.1	0.1	19.618	C
				D	210	52	961	783	0.268	212	228	1.6	0.9	18.986	C
				E	380	95	961	782	0.486	385	409	2.8	1.6	18.648	C
			2	A	0.93	0.23	196	159	0.006	0.90	0.93	0.0	0.0	5.923	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	59	15	961	782	0.075	59	64	0.1	0.1	6.002	A
		2	1	A	0.89	0.22	-	-	-	0.93	0.93	0.0	0.0	60.939	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	12	3	-	-	-	13	14	0.6	0.1	63.769	F
				D	190	48	-	-	-	210	226	10.1	1.7	67.413	F
				E	396	99	-	-	-	439	468	20.6	3.4	67.237	F
C - Gibbet Lane	Entry	1	1	A	16	4	990	535	0.029	16	17	0.1	0.0	11.274	B
				B	18	5	1030	560	0.032	18	18	0.1	0.0	9.169	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	27	7	1036	569	0.048	27	27	0.1	0.1	9.235	A
				E	73	18	1037	575	0.126	73	74	0.3	0.2	9.016	A
D - A5 (South)	Entry	1	1	A	557	139	1019	787	0.707	566	574	6.8	5.2	38.017	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	161	40	1019	788	0.205	163	167	2.0	1.6	39.161	E
			2	A	93	23	1019	787	0.119	93	96	0.4	0.3	12.016	B
				B	184	46	1019	787	0.234	184	187	0.6	0.5	10.941	B
				C	30	8	1019	784	0.039	30	31	0.1	0.1	11.501	B
				D	12	3	888	678	0.018	12	12	0.1	0.0	12.557	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	528	132	-	-	-	650	663	54.8	21.5	183.440	F
				B	150	38	-	-	-	184	187	15.2	6.1	182.591	F
				C	26	6	-	-	-	30	31	2.6	1.1	181.938	F
				D	9	2	-	-	-	12	12	1.0	0.4	190.436	F
				E	132	33	-	-	-	161	165	13.6	5.5	184.853	F
E - A426	Entry	1	1	A	156	39	938	691	0.226	157	164	1.2	0.7	17.328	C
				B	320	80	938	690	0.463	321	333	2.3	1.3	16.247	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	56	14	938	688	0.081	56	60	0.2	0.1	8.320	A
				C	11	3	879	642	0.017	11	11	0.0	0.0	8.559	A
				D	120	30	938	690	0.174	120	122	0.5	0.3	9.889	A
				E	3	0.75	423	309	0.010	3	3	0.0	0.0	10.534	B

		2	1	A	155	39	-	-	-	156	162	1.9	0.2	12.095	B
				B	372	93	-	-	-	376	389	4.5	0.5	11.773	B
				C	11	3	-	-	-	11	11	0.1	0.0	11.203	B
				D	119	30	-	-	-	120	122	1.3	0.1	10.775	B
				E	3	0.75	-	-	-	3	3	0.0	0.0	11.045	B

Junctions 10

ARCADY 10 - Roundabout Module

Filename: J26 241010 - Gibbet Rundabout (Existing Lane Sim) NH sens.j10
Path: \\?\UNC\bwbbirfil01\birmingham\Birmingham\NTT\NTT2814_Hinckley Rail Freight Interchange\02. Project Delivery\01. WIP\Design and Calculations\T&I Planning\04 Junction Modelling\J26_JTC 47 - A5 - A426 - Gibbet Lane
Report generation date: 10/10/2024 17:35:57

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	[Lane Simulation] - 2023											
A - A5 (North)	D1	3.2	12.04	0.65	B	% [ ]	D2	2.4	9.95	0.53	A	% [ ]
B - Rugby Road		30.7	132.98	1.04	F			6.5	34.05	0.86	D	
C - Gibbet Lane		1.0	26.22	0.37	D			0.5	12.84	0.27	B	
D - A5 (South)		13.1	51.26	0.91	F			8.0	34.71	0.86	D	
E - A426		2.6	14.93	0.61	B			51.1	167.16	1.09	F	
	[Lane Simulation] - 2036 WoD											
A - A5 (North)	D3	2.1	9.87	0.53	A	% [ ]	D4	2.2	10.22	0.55	B	% [ ]
B - Rugby Road		9.7	46.70	0.91	E			49.0	182.38	1.09	F	
C - Gibbet Lane		19.1	158.21	1.01	F			1.4	24.44	0.53	C	
D - A5 (South)		206.0	747.06	1.49	F			174.4	643.72	1.29	F	
E - A426		2.3	14.77	0.55	B			37.4	129.83	1.02	F	
	[Lane Simulation] - 2036 WD											
A - A5 (North)	D5	2.4	10.77	0.55	B	% [ ]	D6	2.3	10.65	0.53	B	% [ ]
B - Rugby Road		12.7	60.23	0.95	F			57.8	216.93	1.11	F	
C - Gibbet Lane		29.8	232.19	1.17	F			1.4	25.82	0.56	D	
D - A5 (South)		223.0	811.75	1.40	F			184.3	659.13	1.34	F	
E - A426		2.4	15.14	0.53	C			51.0	177.19	1.04	F	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

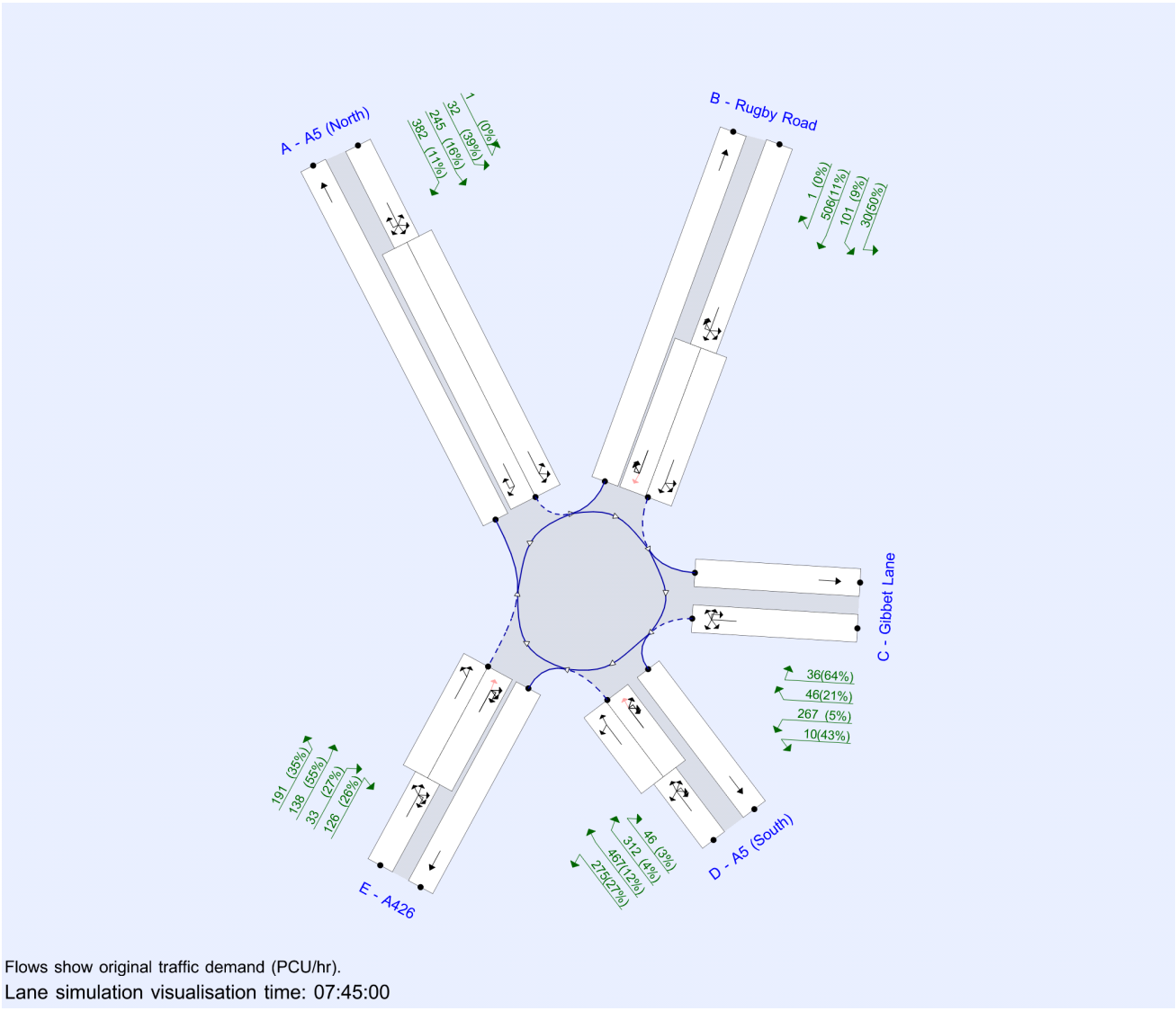
File summary

File Description

Title	J47 - A5/A426/Gibbet Lane
Location	
Site number	J47
Date	18/12/2020
Version	V0.1
Status	Existing
Identifier	
Client	
Jobnumber	NTT2814
Enumerator	BWB
Description	

Units

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



Flows show original traffic demand (PCU/hr).

Lane simulation visualisation time: 07:45:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue 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	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Queue	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			1916837235	290

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	2023	AM	Observed Flows	ONE HOUR	07:45	09:15	15	✓
D2	2023	PM	Observed Flows	ONE HOUR	16:45	18:15	15	✓
D3	2036 WoD	AM	PRTM 2.2 Demand Flows	ONE HOUR	07:45	09:15	15	✓
D4	2036 WoD	PM	PRTM 2.2 Demand Flows	ONE HOUR	16:45	18:15	15	✓
D5	2036 WD	AM	PRTM 2.2 Demand Flows	ONE HOUR	07:45	09:15	15	✓
D6	2036 WD	PM	PRTM 2.2 Demand Flows	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	52.50	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	52.50	F

Arms

Arms

Arm	Name	Description	No give-way line
A	A5 (North)		
B	Rugby Road		
C	Gibbet Lane		
D	A5 (South)		
E	A426		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
A - A5 (North)	3.86	8.86	15.8	28.0	70.2	21.5		
B - Rugby Road	3.20	6.69	54.0	45.0	70.9	26.0		
C - Gibbet Lane	2.65	5.54	3.2	7.7	73.1	39.0		
D - A5 (South)	3.95	7.46	17.0	30.1	70.2	20.5		
E - A426	3.42	6.38	25.8	34.7	70.9	29.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A5 (North)	0.563	2007
B - Rugby Road	0.546	1922
C - Gibbet Lane	0.348	916
D - A5 (South)	0.552	1928
E - A426	0.512	1733

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
A - A5 (North)	Evenly split	0.00
B - Rugby Road	Evenly split	15.00
C - Gibbet Lane	Evenly split	0.00
D - A5 (South)	Evenly split	15.00
E - A426	Evenly split	20.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
A - A5 (North)	Entry	1	1	B, C, D	✓	9.00			0	99999	
			2	E, A	✓	9.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					
B - Rugby Road	Entry	1	1	C, D, E	✓	5.00			0	99999	
			2	B, (E), A	✓	5.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					
C - Gibbet Lane	Entry	1	1	A, B, C, D, E		Infinity			0	99999	
	Exit	1	1			Infinity					
D - A5 (South)	Entry	1	1	A, E	✓	3.00			0	99999	
			2	(A), B, C, D	✓	3.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					
E - A426	Entry	1	1	A, B	✓	4.00			0	99999	
			2	(B), C, D, E	✓	4.00			0	99999	
		2	1	(B, C, D, E, A)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
A - A5 (North)	Entry	1	1	0.282	1003
			2	0.282	1003
B - Rugby Road	Entry	1	1	0.273	961
			2	0.273	961
C - Gibbet Lane	Entry	1	1	0.348	916
D - A5 (South)	Entry	1	1	0.276	964
			2	0.276	964
E - A426	Entry	1	1	0.256	867
			2	0.256	867

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm				
			Rugby Road	Gibbet Lane	A5 (South)	A426	A5 (North)
B - Rugby Road	1	1		✓	✓	✓	
		2	✓				✓
	2	1	✓	✓	✓	✓	✓
C - Gibbet Lane	1	1	✓	✓	✓	✓	✓
D - A5 (South)	1	1				✓	✓
		2	✓	✓	✓		
	2	1	✓	✓	✓	✓	✓
E - A426	1	1	✓				✓
		2		✓	✓	✓	
	2	1	✓	✓	✓	✓	✓
A - A5 (North)	1	1	✓	✓	✓		
		2				✓	✓
	2	1	✓	✓	✓	✓	✓

Summary of Entry Lane allowed secondary movements

Arm	Lane Level	Lane	Destination arm				
			Rugby Road	Gibbet Lane	A5 (South)	A426	A5 (North)
B - Rugby Road	1	1					
		2				✓	
	2	1					
C - Gibbet Lane	1	1					
D - A5 (South)	1	1					
		2					✓
	2	1					
E - A426	1	1					
		2	✓				
	2	1					
A - A5 (North)	1	1					
		2					
	2	1					

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
D1	2023	AM	Observed Flows	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	842	100.000
B - Rugby Road		ONE HOUR	✓	713	100.000
C - Gibbet Lane		ONE HOUR	✓	106	100.000
D - A5 (South)		ONE HOUR	✓	777	100.000
E - A426		ONE HOUR	✓	523	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	5	32	353	452
	B - Rugby Road	2	0	25	139	547
	C - Gibbet Lane	20	23	1	5	57
	D - A5 (South)	328	219	32	5	193
	E - A426	189	215	19	100	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	33	12	9
	B - Rugby Road	0	0	39	6	8
	C - Gibbet Lane	33	44	0	67	14
	D - A5 (South)	12	4	3	67	27
	E - A426	27	15	27	27	0

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.65	12.04	3.2	B	770	1155
B - Rugby Road	1.04	132.98	30.7	F	654	982
C - Gibbet Lane	0.37	26.22	1.0	D	97	146
D - A5 (South)	0.91	51.26	13.1	F	715	1072
E - A426	0.61	14.93	2.6	B	481	722

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	639	160	465	1527	0.419	633	630	400	0.0	1.7	7.354	A
B - Rugby Road	543	136	749	852	0.637	540	533	349	0.0	2.1	13.019	B
C - Gibbet Lane	78	19	1208	505	0.154	78	81	81	0.0	0.3	10.835	B
D - A5 (South)	584	146	830	1095	0.533	583	578	456	0.0	1.8	10.527	B
E - A426	389	97	474	1038	0.375	391	396	940	0.0	0.9	8.922	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	762	191	541	1473	0.517	768	754	488	1.7	1.7	9.008	A
B - Rugby Road	643	161	902	841	0.765	647	632	407	2.1	4.4	22.910	C
C - Gibbet Lane	92	23	1451	419	0.219	90	91	98	0.3	0.4	13.738	B
D - A5 (South)	694	174	996	1017	0.683	695	690	546	1.8	3.5	16.935	C
E - A426	471	118	562	1009	0.467	467	468	1129	0.9	1.8	10.810	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	917	229	672	1414	0.648	922	916	586	1.7	3.2	12.044	B
B - Rugby Road	789	197	1096	755	1.045	721	716	499	4.4	21.4	68.750	F
C - Gibbet Lane	119	30	1696	331	0.360	117	113	120	0.4	0.9	22.688	C
D - A5 (South)	856	214	1160	953	0.898	851	834	654	3.5	10.4	37.043	E
E - A426	573	143	689	943	0.608	569	569	1322	1.8	2.6	13.501	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	915	229	667	1412	0.648	914	916	590	3.2	3.1	11.931	B
B - Rugby Road	774	193	1078	748	1.034	749	744	504	21.4	30.7	132.977	F
C - Gibbet Lane	118	30	1712	322	0.367	117	116	114	0.9	1.0	26.221	D
D - A5 (South)	867	217	1171	950	0.913	851	850	658	10.4	13.1	51.260	F
E - A426	576	144	685	940	0.613	572	574	1336	2.6	2.6	14.934	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	750	187	558	1448	0.518	753	761	489	3.1	1.8	9.335	A
B - Rugby Road	651	163	895	841	0.774	709	721	416	30.7	11.2	93.815	F
C - Gibbet Lane	92	23	1501	386	0.240	92	98	102	1.0	0.5	17.843	C
D - A5 (South)	693	173	1033	972	0.713	699	736	560	13.1	4.2	29.075	D
E - A426	481	120	566	1000	0.481	482	480	1167	2.6	1.4	11.101	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	635	159	469	1521	0.418	633	642	416	1.8	1.5	7.519	A
B - Rugby Road	527	132	752	838	0.629	541	573	350	11.2	2.2	25.417	D
C - Gibbet Lane	83	21	1211	490	0.170	83	82	82	0.5	0.3	12.217	B
D - A5 (South)	595	149	836	1076	0.553	594	599	457	4.2	2.1	12.308	B
E - A426	397	99	487	1039	0.382	399	401	943	1.4	0.9	9.142	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	294	872	0.337	291	294	0.0	0.7	7.166	A
			2	E, A	346	872	0.396	342	336	0.0	1.0	7.441	A
		2	1	(B, C, D, E, A)	639			639	637	0.0	0.0	0.038	A
	Exit	1	1		400			400	401	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	490	756	0.648	489	481	0.0	1.7	11.906	B
			2	B, (E), A	52	756	0.068	51	52	0.0	0.1	5.297	A
		2	1	(B, C, D, E, A)	543			542	540	0.0	0.3	1.732	A
	Exit	1	1		349			349	350	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	78	496	0.157	78	81	0.0	0.3	10.835	B
	Exit	1	1		81			81	81	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	361	735	0.491	361	361	0.0	0.9	9.261	A
			2	(A), B, C, D	222	735	0.303	222	216	0.0	0.5	7.039	A
		2	1	(B, C, D, E, A)	584			583	583	0.0	0.4	2.146	A
	Exit	1	1		456			456	456	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	281	745	0.377	282	286	0.0	0.7	8.856	A
			2	(B), C, D, E	108	745	0.145	109	110	0.0	0.2	7.148	A
		2	1	(B, C, D, E, A)	389			389	400	0.0	0.0	0.525	A
	Exit	1	1		940			940	930	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	355	851	0.417	357	354	0.7	0.8	8.671	A
			2	E, A	407	851	0.478	411	400	1.0	0.9	9.123	A
		2	1	(B, C, D, E, A)	762			762	754	0.0	0.0	0.089	A
	Exit	1	1		488			488	482	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	579	715	0.810	580	568	1.7	2.7	16.323	C
			2	B, (E), A	67	715	0.094	67	64	0.1	0.1	5.915	A
		2	1	(B, C, D, E, A)	643			646	636	0.3	1.5	7.592	A
	Exit	1	1		407			407	408	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	92	411	0.223	90	91	0.3	0.4	13.738	B
	Exit	1	1		98			98	97	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	438	689	0.636	439	435	0.9	1.4	11.186	B
			2	(A), B, C, D	258	689	0.374	256	255	0.5	0.7	8.426	A
		2	1	(B, C, D, E, A)	694			696	693	0.4	1.4	6.807	A
	Exit	1	1		546			546	541	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	341	723	0.471	338	337	0.7	1.2	10.383	B
			2	(B), C, D, E	130	723	0.179	129	131	0.2	0.3	7.481	A
		2	1	(B, C, D, E, A)	471			470	470	0.0	0.2	1.215	A
	Exit	1	1		1129			1129	1106	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	426	814	0.523	427	426	0.8	1.4	10.916	B
			2	E, A	492	814	0.604	496	490	0.9	1.8	12.283	B
		2	1	(B, C, D, E, A)	917			917	922	0.0	0.1	0.374	A
	Exit	1	1		586			586	579	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	642	662	0.970	639	634	2.7	4.6	23.288	C
			2	B, (E), A	82	662	0.124	82	82	0.1	0.2	7.266	A
		2	1	(B, C, D, E, A)	789			724	724	1.5	16.6	46.997	E
	Exit	1	1		499			499	498	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	119	326	0.365	117	113	0.4	0.9	22.688	C
	Exit	1	1		120			120	117	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	532	644	0.826	532	521	1.4	2.1	13.612	B
			2	(A), B, C, D	317	644	0.493	319	312	0.7	0.9	10.553	B
		2	1	(B, C, D, E, A)	856			849	837	1.4	7.3	24.606	C
	Exit	1	1		654			654	645	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	406	690	0.588	403	406	1.2	1.6	12.066	B
			2	(B), C, D, E	167	690	0.242	166	163	0.3	0.5	8.229	A
		2	1	(B, C, D, E, A)	573			573	571	0.2	0.5	2.493	A
	Exit	1	1		1322			1322	1308	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	425	815	0.521	425	424	1.4	1.3	10.618	B
			2	E, A	490	815	0.601	490	493	1.8	1.7	12.388	B
		2	1	(B, C, D, E, A)	915			915	916	0.1	0.1	0.348	A
	Exit	1	1		590			590	592	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	657	667	0.985	658	654	4.6	4.7	25.777	D
			2	B, (E), A	91	667	0.136	91	90	0.2	0.2	7.607	A
		2	1	(B, C, D, E, A)	774			748	744	16.6	25.9	109.451	F
	Exit	1	1		504			504	507	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	118	321	0.368	117	116	0.9	1.0	26.221	D
	Exit	1	1		114			114	117	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	535	641	0.835	533	529	2.1	2.3	14.514	B
			2	(A), B, C, D	317	641	0.494	318	321	0.9	0.9	10.899	B
		2	1	(B, C, D, E, A)	867			852	851	7.3	9.9	38.201	E
	Exit	1	1		658			658	650	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	414	691	0.599	411	412	1.6	1.6	12.651	B
			2	(B), C, D, E	161	691	0.233	161	162	0.5	0.4	8.535	A
		2	1	(B, C, D, E, A)	576			575	574	0.5	0.6	3.406	A
	Exit	1	1		1336			1336	1334	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	352	846	0.416	355	354	1.3	0.7	8.971	A
			2	E, A	398	846	0.471	398	407	1.7	1.1	9.519	A
		2	1	(B, C, D, E, A)	750			750	756	0.1	0.0	0.074	A
	Exit	1	1		489			489	507	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	627	717	0.875	632	641	4.7	3.3	22.049	C
			2	B, (E), A	77	717	0.108	77	80	0.2	0.1	6.752	A
		2	1	(B, C, D, E, A)	651			704	716	25.9	7.8	73.971	F
	Exit	1	1		416			416	428	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	92	394	0.234	92	98	1.0	0.5	17.843	C
	Exit	1	1		102			102	104	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	442	679	0.651	443	464	2.3	1.5	12.530	B
			2	(A), B, C, D	257	679	0.379	256	272	0.9	0.7	9.204	A
		2	1	(B, C, D, E, A)	693			699	732	9.9	2.0	17.999	C
	Exit	1	1		560			560	564	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	343	722	0.476	343	345	1.6	1.0	10.426	B
			2	(B), C, D, E	138	722	0.191	138	136	0.4	0.3	7.633	A
		2	1	(B, C, D, E, A)	481			482	478	0.6	0.1	1.488	A
	Exit	1	1		1167			1167	1194	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	296	871	0.340	294	296	0.7	0.7	7.433	A
			2	E, A	339	871	0.389	338	346	1.1	0.7	7.583	A
		2	1	(B, C, D, E, A)	635			635	641	0.0	0.0	0.005	A
	Exit	1	1		416			416	412	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	487	756	0.645	489	517	3.3	1.8	14.682	B
			2	B, (E), A	51	756	0.068	52	56	0.1	0.1	5.727	A
		2	1	(B, C, D, E, A)	527			539	567	7.8	0.4	12.079	B
	Exit	1	1		350			350	357	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	83	495	0.168	83	82	0.5	0.3	12.217	B
	Exit	1	1		82			82	85	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	380	733	0.518	380	378	1.5	1.0	9.784	A
			2	(A), B, C, D	214	733	0.292	214	220	0.7	0.5	7.479	A
		2	1	(B, C, D, E, A)	595			594	596	2.0	0.5	3.486	A
	Exit	1	1		457			457	464	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	282	742	0.380	284	287	1.0	0.6	9.068	A
			2	(B), C, D, E	115	742	0.155	115	113	0.3	0.3	7.028	A
		2	1	(B, C, D, E, A)	397			397	399	0.1	0.0	0.646	A
	Exit	1	1		943			943	977	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.78	585	508	0.006	3	4	0.0	0.0	7.042	A
				C	24	6	996	866	0.028	23	24	0.0	0.1	8.203	A
				D	267	67	1003	872	0.306	265	266	0.0	0.6	7.089	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	346	86	1003	872	0.396	342	336	0.0	1.0	7.441	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.78	-	-	-	3	4	0.0	0.0	0.000	A
				C	24	6	-	-	-	24	24	0.0	0.0	0.017	A
				D	267	67	-	-	-	267	269	0.0	0.0	0.043	A
				E	346	86	-	-	-	346	340	0.0	0.0	0.036	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	18	5	931	735	0.025	18	19	0.0	0.1	14.081	B
				D	106	27	961	756	0.141	107	105	0.0	0.4	12.041	B
				E	365	91	961	756	0.483	365	357	0.0	1.2	11.776	B
			2	A	1	0.31	298	236	0.005	1	1	0.0	0.0	4.701	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	50	13	961	757	0.066	50	50	0.0	0.1	5.314	A
		2	1	A	1	0.30	-	-	-	1	1	0.0	0.0	2.903	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	18	5	-	-	-	18	19	0.0	0.0	2.241	A
				D	107	27	-	-	-	106	107	0.0	0.1	1.850	A
				E	417	104	-	-	-	416	413	0.0	0.2	1.678	A
C - Gibbet Lane	Entry	1	1	A	13	3	872	476	0.028	13	15	0.0	0.0	11.534	B
				B	17	4	881	483	0.036	17	18	0.0	0.1	12.243	B
				C	0.83	0.21	142	80	0.010	0.83	0.69	0.0	0.0	9.095	A
				D	5	1	426	239	0.020	5	4	0.0	0.0	13.439	B
				E	41	10	916	498	0.083	42	43	0.0	0.1	10.015	B
D - A5 (South)	Entry	1	1	A	219	55	964	735	0.298	219	218	0.0	0.6	8.923	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	142	35	964	736	0.193	142	143	0.0	0.4	9.844	A
			2	A	23	6	960	732	0.032	23	23	0.0	0.1	6.661	A
				B	171	43	964	736	0.232	171	165	0.0	0.3	7.035	A
				C	23	6	964	736	0.032	23	23	0.0	0.1	7.004	A
				D	5	1	459	350	0.014	5	5	0.0	0.0	10.377	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	242	61	-	-	-	242	244	0.0	0.2	2.239	A
				B	171	43	-	-	-	171	167	0.0	0.1	1.890	A
				C	24	6	-	-	-	23	24	0.0	0.0	1.799	A
				D	5	1	-	-	-	5	5	0.0	0.0	1.976	A
				E	142	35	-	-	-	142	144	0.0	0.1	2.402	A
E - A426	Entry	1	1	A	144	36	867	745	0.193	143	143	0.0	0.4	9.316	A
				B	137	34	867	745	0.185	139	143	0.0	0.3	8.439	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	19	5	855	735	0.025	19	20	0.0	0.0	5.891	A
				C	16	4	801	688	0.023	16	14	0.0	0.0	7.550	A

				D	74	19	867	745	0.099	75	76	0.0	0.1	7.434	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	143	36	-	-	-	144	145	0.0	0.0	0.578	A
				B	156	39	-	-	-	156	164	0.0	0.0	0.571	A
				C	16	4	-	-	-	16	14	0.0	0.0	0.220	A
				D	74	19	-	-	-	74	76	0.0	0.0	0.369	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	688	587	0.008	4	5	0.0	0.0	7.460	A
				C	28	7	1003	849	0.033	28	29	0.1	0.1	9.616	A
				D	322	81	1003	851	0.378	324	320	0.6	0.7	8.618	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	407	102	1003	851	0.478	411	400	1.0	0.9	9.123	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	-	-	-	5	5	0.0	0.0	0.055	A
				C	28	7	-	-	-	28	29	0.0	0.0	0.188	A
				D	322	81	-	-	-	322	320	0.0	0.0	0.086	A
				E	407	102	-	-	-	407	400	0.0	0.0	0.086	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	24	6	934	698	0.035	25	23	0.1	0.1	18.005	C
				D	124	31	961	715	0.174	123	122	0.4	0.6	16.323	C
				E	430	108	961	714	0.603	432	423	1.2	2.0	16.253	C
			2	A	1	0.36	345	260	0.006	1	2	0.0	0.0	5.178	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	66	16	961	716	0.092	66	63	0.1	0.1	5.937	A
		2	1	A	1	0.35	-	-	-	1	2	0.0	0.0	7.396	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	24	6	-	-	-	24	23	0.0	0.1	8.314	A
				D	124	31	-	-	-	124	123	0.1	0.3	7.573	A
				E	493	123	-	-	-	497	489	0.2	1.2	7.571	A
C - Gibbet Lane	Entry	1	1	A	17	4	891	415	0.041	17	17	0.0	0.1	15.177	C
				B	19	5	884	408	0.048	20	20	0.1	0.1	15.052	C
				C	1	0.31	190	89	0.014	1	0.91	0.0	0.0	14.055	B
				D	4	1	407	193	0.021	4	4	0.0	0.0	17.607	C
				E	50	13	916	417	0.120	49	50	0.1	0.2	12.690	B
D - A5 (South)	Entry	1	1	A	267	67	964	688	0.387	267	263	0.6	0.8	10.896	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	171	43	964	689	0.249	172	171	0.4	0.6	11.691	B
			2	A	32	8	964	693	0.046	32	30	0.1	0.1	7.889	A
				B	193	48	964	689	0.281	193	193	0.3	0.6	8.487	A
				C	28	7	964	693	0.040	27	28	0.1	0.1	8.268	A
				D	5	1	495	358	0.014	5	4	0.0	0.0	11.129	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	298	74	-	-	-	299	294	0.2	0.6	7.102	A
				B	193	48	-	-	-	193	194	0.1	0.4	6.302	A

		2	1	C	28	7	-	-	-	28	28	0.0	0.0	5.676	A
				D	5	1	-	-	-	5	4	0.0	0.0	7.638	A
				E	171	43	-	-	-	171	172	0.1	0.3	7.139	A
E - A426	Entry	1	1	A	172	43	867	723	0.238	171	170	0.4	0.6	10.950	B
				B	169	42	867	723	0.234	167	167	0.3	0.6	9.863	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	24	6	861	718	0.033	24	24	0.0	0.0	6.395	A
				C	17	4	834	694	0.024	16	17	0.0	0.1	7.973	A
				D	89	22	867	724	0.124	90	90	0.1	0.2	7.713	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	172	43	-	-	-	172	171	0.0	0.1	1.313	A
				B	193	48	-	-	-	192	192	0.0	0.1	1.273	A
				C	17	4	-	-	-	17	17	0.0	0.0	0.785	A
				D	90	22	-	-	-	89	91	0.0	0.0	0.974	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	778	637	0.008	5	6	0.0	0.0	11.122	B
				C	33	8	1003	816	0.041	33	35	0.1	0.1	12.136	B
				D	388	97	1003	814	0.476	388	386	0.7	1.2	10.821	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	492	123	1003	814	0.604	496	490	0.9	1.8	12.283	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	-	-	-	5	6	0.0	0.0	0.225	A
				C	33	8	-	-	-	33	35	0.0	0.0	0.464	A
				D	387	97	-	-	-	388	388	0.0	0.0	0.367	A
				E	492	123	-	-	-	492	494	0.0	0.1	0.375	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	27	7	954	658	0.041	28	26	0.1	0.2	25.438	D
				D	143	36	961	663	0.215	141	139	0.6	1.1	23.080	C
				E	472	118	961	662	0.713	470	469	2.0	3.4	23.258	C
			2	A	2	0.41	361	253	0.007	2	2	0.0	0.0	5.461	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	80	20	961	664	0.121	81	80	0.1	0.2	7.312	A
		2	1	A	2	0.41	-	-	-	2	2	0.0	0.0	38.638	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	-	-	-	27	26	0.1	0.5	47.151	E
				D	155	39	-	-	-	143	141	0.3	3.2	46.907	E
				E	604	151	-	-	-	552	554	1.2	12.8	47.044	E
C - Gibbet Lane	Entry	1	1	A	24	6	900	327	0.073	24	22	0.1	0.2	23.168	C
				B	26	7	884	318	0.082	25	24	0.1	0.3	25.594	D
				C	1	0.34	208	78	0.018	1	1	0.0	0.0	19.180	C
				D	5	1	502	189	0.028	5	5	0.0	0.0	30.958	D
				E	63	16	916	332	0.188	62	61	0.2	0.4	21.204	C
				A	318	80	964	644	0.495	318	314	0.8	1.3	13.270	B

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	213	53	964	644	0.331	214	208	0.6	0.8	14.201	B
			2	A	37	9	964	646	0.057	36	36	0.1	0.1	9.641	A
				B	239	60	964	644	0.371	240	237	0.6	0.7	10.601	B
				C	36	9	964	646	0.055	36	34	0.1	0.1	10.745	B
				D	6	1	548	371	0.015	6	6	0.0	0.0	14.095	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	358	89	-	-	-	355	352	0.6	3.1	24.934	C
				B	240	60	-	-	-	239	237	0.4	1.9	23.808	C
				C	36	9	-	-	-	36	34	0.0	0.3	23.410	C
				D	6	1	-	-	-	6	6	0.0	0.1	21.996	C
				E	216	54	-	-	-	213	209	0.3	1.9	25.378	D
E - A426	Entry	1	1	A	207	52	867	690	0.300	206	206	0.6	0.8	12.538	B
				B	198	50	867	690	0.287	197	200	0.6	0.8	11.631	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	31	8	864	688	0.045	31	32	0.0	0.1	7.277	A
				C	22	6	855	685	0.032	22	21	0.1	0.1	8.694	A
				D	114	28	867	689	0.165	114	110	0.2	0.3	8.447	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	207	52	-	-	-	207	207	0.1	0.2	2.643	A
				B	230	57	-	-	-	229	233	0.1	0.2	2.555	A
				C	22	6	-	-	-	22	22	0.0	0.0	2.219	A
				D	114	28	-	-	-	114	110	0.0	0.1	2.118	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	747	606	0.008	5	6	0.0	0.0	9.537	A
				C	33	8	1003	816	0.040	33	35	0.1	0.1	11.175	B
				D	387	97	1003	816	0.475	387	383	1.2	1.2	10.593	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	490	123	1003	815	0.601	490	493	1.8	1.7	12.388	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	-	-	-	5	5	0.0	0.0	0.203	A
				C	33	8	-	-	-	33	35	0.0	0.0	0.324	A
				D	387	97	-	-	-	387	383	0.0	0.0	0.316	A
				E	490	122	-	-	-	490	492	0.1	0.0	0.375	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	27	7	957	667	0.041	26	25	0.2	0.2	27.141	D
				D	152	38	961	667	0.228	152	147	1.1	1.1	25.639	D
				E	478	119	961	667	0.716	480	481	3.4	3.4	25.764	D
			2	A	2	0.57	437	302	0.008	2	3	0.0	0.0	6.814	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	89	22	961	668	0.133	89	87	0.2	0.2	7.632	A

		2	1	A	2	0.47	-	-	-	2	3	0.0	0.1	108.618	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	29	7	-	-	-	27	25	0.5	1.0	111.461	F
				D	155	39	-	-	-	152	147	3.2	5.2	111.998	F
				E	588	147	-	-	-	566	569	12.8	19.6	108.706	F
C - Gibbet Lane	Entry	1	1	A	23	6	900	316	0.071	22	22	0.2	0.2	27.821	D
				B	26	7	903	317	0.083	26	25	0.3	0.3	29.569	D
				C	0.74	0.19	190	67	0.011	0.70	0.91	0.0	0.0	21.889	C
				D	6	1	527	188	0.031	6	6	0.0	0.1	28.933	D
				E	63	16	916	322	0.195	62	62	0.4	0.5	24.592	C
D - A5 (South)	Entry	1	1	A	317	79	964	640	0.495	316	319	1.3	1.4	14.140	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	218	55	964	641	0.340	217	210	0.8	0.9	15.162	C
			2	A	40	10	964	638	0.063	40	40	0.1	0.1	10.372	B
				B	237	59	964	641	0.370	238	240	0.7	0.7	10.991	B
				C	35	9	964	637	0.056	35	36	0.1	0.1	10.684	B
				D	4	1	502	335	0.013	4	5	0.0	0.0	12.632	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	363	91	-	-	-	357	359	3.1	4.2	38.535	E
				B	242	61	-	-	-	237	240	1.9	2.8	36.935	E
				C	36	9	-	-	-	35	36	0.3	0.4	36.361	E
				D	5	1	-	-	-	4	5	0.1	0.1	39.433	E
				E	221	55	-	-	-	218	211	1.9	2.4	39.696	E
E - A426	Entry	1	1	A	211	53	867	691	0.305	209	209	0.8	0.9	13.132	B
				B	203	51	867	691	0.294	202	203	0.8	0.7	12.202	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	32	8	867	691	0.047	33	32	0.1	0.1	7.382	A
				C	19	5	846	673	0.029	19	20	0.1	0.1	8.975	A
				D	109	27	867	692	0.157	109	110	0.3	0.2	8.829	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	211	53	-	-	-	211	209	0.2	0.2	3.733	A
				B	236	59	-	-	-	236	235	0.2	0.3	3.409	A
				C	20	5	-	-	-	19	20	0.0	0.0	2.575	A
				D	110	27	-	-	-	109	110	0.1	0.1	2.924	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	688	577	0.009	5	4	0.0	0.0	8.114	A
				C	31	8	993	837	0.037	31	30	0.1	0.1	10.301	B
				D	316	79	1003	846	0.373	319	320	1.2	0.7	8.881	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	398	100	1003	847	0.471	398	407	1.7	1.1	9.519	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	-	-	-	5	5	0.0	0.0	0.059	A
				C	31	8	-	-	-	31	30	0.0	0.0	0.067	A

				D	316	79	-	-	-	316	318	0.0	0.0	0.074	A
				E	398	100	-	-	-	398	404	0.0	0.0	0.074	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	25	6	948	707	0.036	24	25	0.2	0.2	23.767	C
				D	136	34	961	715	0.190	138	142	1.1	0.7	21.845	C
				E	466	116	961	717	0.650	470	474	3.4	2.4	22.040	C
			2	A	2	0.49	364	270	0.007	2	2	0.0	0.0	6.604	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	75	19	961	717	0.105	75	78	0.2	0.1	6.756	A
		2	1	A	2	0.48	-	-	-	2	2	0.1	0.0	72.882	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	23	6	-	-	-	25	25	1.0	0.3	73.551	F
				D	126	32	-	-	-	136	141	5.2	1.5	74.019	F
				E	499	125	-	-	-	541	548	19.6	5.9	73.977	F
C - Gibbet Lane	Entry	1	1	A	18	4	884	376	0.047	18	18	0.2	0.1	18.073	C
				B	20	5	903	381	0.052	20	21	0.3	0.1	19.925	C
				C	0.99	0.25	231	96	0.010	1	1	0.0	0.0	16.766	C
				D	4	1	471	192	0.023	4	5	0.1	0.0	22.000	C
				E	49	12	916	394	0.125	49	52	0.5	0.3	16.885	C
D - A5 (South)	Entry	1	1	A	268	67	964	679	0.395	269	281	1.4	0.8	12.261	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	173	43	964	679	0.255	175	182	0.9	0.6	12.998	B
			2	A	28	7	964	675	0.041	28	31	0.1	0.1	9.093	A
				B	197	49	964	678	0.290	196	206	0.7	0.6	9.228	A
				C	28	7	960	678	0.041	28	30	0.1	0.1	8.847	A
				D	4	1	459	318	0.013	4	5	0.0	0.0	12.395	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	294	73	-	-	-	296	310	4.2	0.8	18.494	C
				B	194	49	-	-	-	197	206	2.8	0.5	17.063	C
				C	28	7	-	-	-	28	30	0.4	0.1	16.270	C
				D	4	1	-	-	-	4	5	0.1	0.0	17.014	C
				E	173	43	-	-	-	173	181	2.4	0.6	18.700	C
E - A426	Entry	1	1	A	173	43	867	721	0.240	173	175	0.9	0.5	10.939	B
				B	171	43	867	721	0.236	170	170	0.7	0.4	9.952	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	25	6	864	716	0.035	25	26	0.1	0.0	6.841	A
				C	17	4	843	695	0.025	18	18	0.1	0.0	8.163	A
				D	96	24	867	722	0.133	96	92	0.2	0.2	7.781	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	173	43	-	-	-	173	173	0.2	0.0	1.586	A
				B	195	49	-	-	-	196	195	0.3	0.1	1.532	A
				C	17	4	-	-	-	17	17	0.0	0.0	1.040	A
				D	96	24	-	-	-	96	92	0.1	0.0	1.282	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	0.92	616	532	0.007	4	4	0.0	0.0	6.663	A

A - A5 (North)	Entry	1	1	C	24	6	1003	868	0.028	24	23	0.1	0.1	8.426	A
				D	268	67	1003	871	0.308	267	268	0.7	0.6	7.371	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	339	85	1003	871	0.389	338	346	1.1	0.7	7.583	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	0.92	-	-	-	4	4	0.0	0.0	0.000	A
				C	24	6	-	-	-	24	24	0.0	0.0	0.014	A
				D	268	67	-	-	-	268	268	0.0	0.0	0.004	A
				E	339	85	-	-	-	339	345	0.0	0.0	0.006	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	19	5	944	741	0.026	19	21	0.2	0.1	16.196	C
				D	103	26	961	755	0.136	103	111	0.7	0.4	14.770	B
				E	366	91	961	756	0.484	366	385	2.4	1.3	14.595	B
			2	A	1	0.37	354	273	0.005	1	2	0.0	0.0	5.549	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	50	12	961	755	0.066	51	54	0.1	0.1	5.733	A
		2	1	A	1	0.36	-	-	-	1	2	0.0	0.0	10.881	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	18	5	-	-	-	19	20	0.3	0.0	12.301	B
				D	100	25	-	-	-	103	110	1.5	0.0	11.294	B
				E	407	102	-	-	-	415	435	5.9	0.3	12.278	B
C - Gibbet Lane	Entry	1	1	A	16	4	862	451	0.035	15	15	0.1	0.1	13.340	B
				B	20	5	872	463	0.044	20	19	0.1	0.1	13.834	B
				C	0.83	0.21	174	88	0.009	0.79	0.84	0.0	0.0	11.254	B
				D	4	0.88	404	205	0.017	4	4	0.0	0.0	15.136	C
				E	43	11	916	492	0.087	44	43	0.3	0.1	11.177	B
D - A5 (South)	Entry	1	1	A	235	59	964	733	0.320	235	230	0.8	0.5	9.459	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	145	36	964	734	0.198	144	148	0.6	0.5	10.357	B
			2	A	23	6	960	726	0.031	23	24	0.1	0.0	6.812	A
				B	165	41	964	733	0.225	165	168	0.6	0.4	7.506	A
				C	23	6	964	729	0.032	24	25	0.1	0.1	7.565	A
				D	3	0.78	389	288	0.011	3	4	0.0	0.0	10.976	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	258	65	-	-	-	257	253	0.8	0.2	3.488	A
				B	165	41	-	-	-	165	167	0.5	0.2	3.183	A
				C	24	6	-	-	-	23	25	0.1	0.0	3.762	A
				D	3	0.78	-	-	-	3	3	0.0	0.0	2.970	A
				E	145	36	-	-	-	145	147	0.6	0.2	3.853	A
E - A426	Entry	1	1	A	140	35	867	742	0.189	141	142	0.5	0.3	9.481	A
				B	142	35	867	742	0.191	143	145	0.4	0.3	8.705	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	20	5	861	738	0.027	19	21	0.0	0.0	5.717	A
				C	15	4	819	701	0.022	15	15	0.0	0.0	7.340	A
				D	80	20	867	741	0.107	80	77	0.2	0.2	7.360	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

		2	1	A	140	35	-	-	-	140	141	0.0	0.0	0.793	A
				B	162	40	-	-	-	162	166	0.1	0.0	0.603	A
				C	15	4	-	-	-	15	15	0.0	0.0	0.420	A
				D	80	20	-	-	-	80	77	0.0	0.0	0.525	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	68.28	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	68.28	F

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
D2	2023	PM	Observed Flows	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	622	100.000
B - Rugby Road		ONE HOUR	✓	630	100.000
C - Gibbet Lane		ONE HOUR	✓	98	100.000
D - A5 (South)		ONE HOUR	✓	721	100.000
E - A426		ONE HOUR	✓	887	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	5	25	230	362
	B - Rugby Road	1	0	16	163	450
	C - Gibbet Lane	20	19	0	13	46
	D - A5 (South)	432	125	23	7	134
	E - A426	290	468	14	111	4

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	16	11
	B - Rugby Road	0	0	7	12	8
	C - Gibbet Lane	11	0	0	0	0
	D - A5 (South)	8	1	10	40	30
	E - A426	13	6	0	48	33

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.53	9.95	2.4	A	571	856
B - Rugby Road	0.86	34.05	6.5	D	577	866
C - Gibbet Lane	0.27	12.84	0.5	B	91	136
D - A5 (South)	0.86	34.71	8.0	D	665	997
E - A426	1.09	167.16	51.1	F	813	1220

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	470	117	580	1414	0.332	470	465	566	0.0	1.0	6.899	A
B - Rugby Road	472	118	588	912	0.517	470	468	462	0.0	1.5	10.091	B
C - Gibbet Lane	76	19	1000	571	0.132	76	77	58	0.0	0.1	7.413	A
D - A5 (South)	548	137	681	1068	0.513	544	538	396	0.0	1.7	9.698	A
E - A426	668	167	476	967	0.691	670	657	748	0.0	3.1	15.508	C

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	563	141	689	1350	0.417	562	555	658	1.0	1.2	7.975	A
B - Rugby Road	571	143	700	873	0.654	570	562	551	1.5	2.5	14.160	B
C - Gibbet Lane	88	22	1199	498	0.177	88	88	70	0.1	0.3	9.026	A
D - A5 (South)	645	161	809	1032	0.625	644	647	478	1.7	2.6	12.916	B
E - A426	796	199	560	978	0.814	786	779	893	3.1	7.2	29.004	D

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	679	170	789	1320	0.514	680	682	789	1.2	2.0	9.825	A
B - Rugby Road	690	173	834	806	0.857	689	681	635	2.5	5.9	27.176	D
C - Gibbet Lane	109	27	1441	410	0.265	107	106	82	0.3	0.5	11.946	B
D - A5 (South)	807	202	983	939	0.860	797	778	565	2.6	8.0	28.454	D
E - A426	972	243	692	905	1.074	886	877	1088	7.2	30.5	81.675	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	690	172	795	1301	0.530	685	686	801	2.0	2.4	9.945	A
B - Rugby Road	689	172	843	841	0.819	693	689	637	5.9	6.5	34.048	D
C - Gibbet Lane	108	27	1450	404	0.266	106	107	86	0.5	0.5	12.843	B
D - A5 (South)	798	200	992	966	0.826	805	801	565	8.0	7.2	34.709	D
E - A426	978	245	698	896	1.091	898	893	1098	30.5	51.1	167.161	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	554	139	754	1312	0.423	554	565	694	2.4	1.4	8.543	A
B - Rugby Road	566	141	705	862	0.656	569	581	604	6.5	2.4	18.225	C
C - Gibbet Lane	89	22	1202	491	0.181	90	89	71	0.5	0.2	9.566	A
D - A5 (South)	644	161	814	1017	0.633	643	662	478	7.2	2.8	17.355	C
E - A426	803	201	559	940	0.855	889	905	898	51.1	25.9	148.884	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	468	117	599	1392	0.336	470	473	570	1.4	0.9	7.136	A
B - Rugby Road	476	119	594	905	0.526	479	481	476	2.4	1.3	10.879	B
C - Gibbet Lane	76	19	1012	565	0.134	75	75	61	0.2	0.2	7.789	A
D - A5 (South)	547	137	688	1068	0.512	547	550	399	2.8	1.4	10.258	B
E - A426	662	166	478	987	0.671	691	747	756	25.9	4.8	48.357	E

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	193	840	0.230	194	193	0.0	0.3	6.480	A
			2	E, A	276	840	0.329	276	272	0.0	0.7	7.180	A
		2	1	(B, C, D, E, A)	470			470	469	0.0	0.0	0.005	A
	Exit	1	1		566			566	557	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	433	800	0.541	432	430	0.0	1.3	9.731	A
			2	B, (E), A	38	800	0.048	38	38	0.0	0.0	5.026	A
		2	1	(B, C, D, E, A)	472			471	474	0.0	0.1	0.734	A
	Exit	1	1		462			462	455	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	76	568	0.133	76	77	0.0	0.1	7.413	A
	Exit	1	1		58			58	58	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	397	776	0.511	394	390	0.0	1.1	8.626	A
			2	(A), B, C, D	150	776	0.194	150	148	0.0	0.3	5.684	A
		2	1	(B, C, D, E, A)	548			547	543	0.0	0.3	1.919	A
	Exit	1	1		396			396	391	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	517	745	0.695	517	507	0.0	1.9	12.073	B
			2	(B), C, D, E	152	745	0.204	152	150	0.0	0.4	7.656	A
		2	1	(B, C, D, E, A)	668			669	666	0.0	0.9	4.301	A
	Exit	1	1		748			748	744	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	238	809	0.293	237	233	0.3	0.5	7.305	A
			2	E, A	325	809	0.402	325	322	0.7	0.7	8.410	A
		2	1	(B, C, D, E, A)	563			563	556	0.0	0.0	0.022	A
	Exit	1	1		658			658	657	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	519	770	0.674	518	513	1.3	1.9	12.502	B
			2	B, (E), A	51	770	0.066	51	49	0.0	0.1	5.248	A
		2	1	(B, C, D, E, A)	571			570	565	0.1	0.5	2.272	A
	Exit	1	1		551			551	548	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	88	499	0.176	88	88	0.1	0.3	9.026	A
	Exit	1	1		70			70	70	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	464	740	0.627	464	464	1.1	1.4	9.981	A
			2	(A), B, C, D	180	740	0.243	180	183	0.3	0.3	6.581	A
		2	1	(B, C, D, E, A)	645			644	649	0.3	0.9	3.937	A
	Exit	1	1		478			478	469	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	604	723	0.835	602	597	1.9	2.7	15.280	C
			2	(B), C, D, E	184	723	0.254	184	181	0.4	0.4	8.505	A
		2	1	(B, C, D, E, A)	796			788	782	0.9	4.1	15.064	C
	Exit	1	1		893			893	887	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	283	781	0.362	283	288	0.5	0.7	8.405	A
			2	E, A	396	781	0.507	397	394	0.7	1.3	10.658	B
		2	1	(B, C, D, E, A)	679			679	685	0.0	0.0	0.102	A
	Exit	1	1		789			789	776	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	622	733	0.848	621	614	1.9	3.2	17.323	C
			2	B, (E), A	67	733	0.091	67	67	0.1	0.1	6.062	A
		2	1	(B, C, D, E, A)	690			689	686	0.5	2.5	10.890	B
	Exit	1	1		635			635	625	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	109	415	0.262	107	106	0.3	0.5	11.946	B
	Exit	1	1		82			82	82	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	568	692	0.820	567	556	1.4	2.2	12.730	B
			2	(A), B, C, D	231	692	0.334	231	222	0.3	0.6	7.988	A
		2	1	(B, C, D, E, A)	807			799	782	0.9	5.2	17.105	C
	Exit	1	1		565			565	566	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	675	689	0.979	672	665	2.7	3.9	18.957	C
			2	(B), C, D, E	215	689	0.312	214	212	0.4	0.6	9.850	A
		2	1	(B, C, D, E, A)	972			890	883	4.1	26.0	64.569	F
	Exit	1	1		1088			1088	1075	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	288	779	0.369	286	287	0.7	0.9	8.694	A
			2	E, A	402	779	0.516	399	399	1.3	1.5	10.711	B
		2	1	(B, C, D, E, A)	690			690	687	0.0	0.0	0.063	A
	Exit	1	1		801			801	798	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	623	731	0.853	623	621	3.2	3.3	18.616	C
			2	B, (E), A	70	731	0.096	70	67	0.1	0.1	6.163	A
		2	1	(B, C, D, E, A)	689			693	689	2.5	3.1	16.640	C
	Exit	1	1		637			637	635	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	108	412	0.261	106	107	0.5	0.5	12.843	B
	Exit	1	1		86			86	86	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	572	690	0.830	573	571	2.2	2.1	13.250	B
			2	(A), B, C, D	231	690	0.335	231	230	0.6	0.5	8.320	A
		2	1	(B, C, D, E, A)	798			804	800	5.2	4.6	22.946	C
	Exit	1	1		565			565	564	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	681	688	0.990	681	678	3.9	3.9	20.272	C
			2	(B), C, D, E	217	688	0.315	217	216	0.6	0.7	10.283	B
		2	1	(B, C, D, E, A)	978			898	894	26.0	46.5	149.147	F
	Exit	1	1		1098			1098	1093	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	229	791	0.289	229	237	0.9	0.5	7.566	A
			2	E, A	325	791	0.411	325	328	1.5	0.9	9.180	A
		2	1	(B, C, D, E, A)	554			554	561	0.0	0.0	0.033	A
	Exit	1	1		694			694	713	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	515	768	0.670	518	529	3.3	1.8	13.930	B
			2	B, (E), A	51	768	0.067	51	52	0.1	0.1	5.562	A
		2	1	(B, C, D, E, A)	566			566	575	3.1	0.5	5.229	A
	Exit	1	1		604			604	612	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	89	498	0.179	90	89	0.5	0.2	9.566	A
	Exit	1	1		71			71	73	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	466	739	0.630	466	477	2.1	1.4	10.878	B
			2	(A), B, C, D	177	739	0.240	177	185	0.5	0.3	6.996	A
		2	1	(B, C, D, E, A)	644			643	658	4.6	1.1	7.714	A
	Exit	1	1		478			478	494	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	677	724	0.936	678	687	3.9	3.4	18.752	C
			2	(B), C, D, E	211	724	0.291	211	218	0.7	0.6	10.112	B
		2	1	(B, C, D, E, A)	803			888	903	46.5	21.9	132.205	F
	Exit	1	1		898			898	911	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	193	835	0.231	194	199	0.5	0.4	6.635	A
			2	E, A	275	835	0.329	277	274	0.9	0.5	7.486	A
		2	1	(B, C, D, E, A)	468			468	471	0.0	0.0	0.003	A
	Exit	1	1		570			570	590	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	438	799	0.549	441	442	1.8	1.1	10.292	B
			2	B, (E), A	38	799	0.048	38	39	0.1	0.1	5.120	A
		2	1	(B, C, D, E, A)	476			476	478	0.5	0.1	1.067	A
	Exit	1	1		476			476	506	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	76	564	0.134	75	75	0.2	0.2	7.789	A
	Exit	1	1		61			61	62	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	399	774	0.515	398	398	1.4	1.0	8.887	A
			2	(A), B, C, D	149	774	0.192	149	152	0.3	0.2	5.995	A
		2	1	(B, C, D, E, A)	547			547	548	1.1	0.3	2.258	A
	Exit	1	1		399			399	408	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	529	744	0.711	531	574	3.4	2.0	14.881	B
			2	(B), C, D, E	159	744	0.214	160	172	0.6	0.4	8.247	A
		2	1	(B, C, D, E, A)	662			688	740	21.9	2.5	35.169	E
	Exit	1	1		756			756	758	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	0.92	609	513	0.007	4	4	0.0	0.0	5.880	A
				C	18	4	993	834	0.021	18	18	0.0	0.0	5.972	A
				D	172	43	1003	840	0.205	173	171	0.0	0.3	6.559	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	276	69	1003	840	0.329	276	272	0.0	0.7	7.180	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	0.92	-	-	-	4	4	0.0	0.0	0.000	A
				C	18	4	-	-	-	18	19	0.0	0.0	0.005	A
				D	172	43	-	-	-	172	172	0.0	0.0	0.004	A
				E	276	69	-	-	-	276	274	0.0	0.0	0.005	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	892	744	0.017	12	12	0.0	0.0	9.442	A
				D	123	31	961	802	0.153	122	120	0.0	0.4	10.079	B
				E	298	74	961	801	0.372	297	297	0.0	0.9	9.607	A
			2	A	0.57	0.14	153	128	0.004	0.57	0.67	0.0	0.0	5.285	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	38	9	961	802	0.047	38	38	0.0	0.0	5.021	A
		2	1	A	0.57	0.14	-	-	-	0.57	0.67	0.0	0.0	0.289	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	-	-	-	13	12	0.0	0.0	0.635	A
				D	123	31	-	-	-	123	122	0.0	0.0	0.761	A
				E	336	84	-	-	-	335	338	0.0	0.1	0.729	A
C - Gibbet Lane	Entry	1	1	A	15	4	894	556	0.027	15	15	0.0	0.0	7.977	A
				B	15	4	892	553	0.027	15	15	0.0	0.0	7.503	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	10	2	872	540	0.018	10	11	0.0	0.0	7.309	A
				E	36	9	916	570	0.062	36	36	0.0	0.0	7.192	A
D - A5 (South)	Entry	1	1	A	297	74	964	776	0.383	296	292	0.0	0.7	8.335	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	100	25	964	777	0.128	98	98	0.0	0.3	9.674	A
			2	A	35	9	964	777	0.045	35	33	0.0	0.1	5.513	A
				B	93	23	964	778	0.120	93	93	0.0	0.2	5.657	A
				C	17	4	943	763	0.022	17	16	0.0	0.0	5.909	A
				D	6	1	619	498	0.011	5	5	0.0	0.0	6.774	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	332	83	-	-	-	332	327	0.0	0.2	2.031	A
				B	93	23	-	-	-	93	94	0.0	0.0	1.387	A
				C	17	4	-	-	-	17	17	0.0	0.0	1.565	A
				D	6	1	-	-	-	6	5	0.0	0.0	1.427	A
				E	100	25	-	-	-	100	100	0.0	0.1	2.215	A
E - A426	Entry	1	1	A	218	55	867	744	0.293	219	217	0.0	0.7	12.468	B
				B	299	75	867	745	0.401	298	291	0.0	1.1	11.798	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	53	13	867	746	0.071	53	53	0.0	0.1	6.217	A
				C	11	3	793	680	0.017	12	10	0.0	0.0	6.619	A

				D	85	21	867	745	0.114	85	83	0.0	0.3	9.066	A
				E	3	0.64	400	346	0.007	3	3	0.0	0.0	8.755	A
		2	1	A	218	54	-	-	-	218	220	0.0	0.3	4.524	A
				B	352	88	-	-	-	351	348	0.0	0.5	4.248	A
				C	11	3	-	-	-	11	10	0.0	0.0	3.312	A
				D	85	21	-	-	-	85	84	0.0	0.1	4.074	A
				E	3	0.63	-	-	-	3	3	0.0	0.0	3.349	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	671	543	0.008	4	5	0.0	0.0	6.500	A
				C	22	6	1003	807	0.027	22	22	0.0	0.1	6.635	A
				D	211	53	1003	809	0.261	210	206	0.3	0.5	7.410	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	325	81	1003	809	0.402	325	322	0.7	0.7	8.410	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	-	-	-	4	5	0.0	0.0	0.029	A
				C	22	6	-	-	-	22	22	0.0	0.0	0.016	A
				D	211	53	-	-	-	211	207	0.0	0.0	0.011	A
				E	325	81	-	-	-	325	322	0.0	0.0	0.028	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	4	933	751	0.019	14	14	0.0	0.0	12.646	B
				D	152	38	961	770	0.198	151	148	0.4	0.6	12.819	B
				E	352	88	961	770	0.458	354	350	0.9	1.3	12.367	B
			2	A	0.76	0.19	178	144	0.005	0.76	0.77	0.0	0.0	4.550	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	50	13	961	769	0.065	51	49	0.0	0.1	5.260	A
		2	1	A	0.80	0.20	-	-	-	0.76	0.77	0.0	0.0	1.889	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	4	-	-	-	14	14	0.0	0.0	2.634	A
				D	152	38	-	-	-	152	149	0.0	0.1	2.316	A
				E	403	101	-	-	-	403	401	0.1	0.4	2.244	A
C - Gibbet Lane	Entry	1	1	A	18	4	909	500	0.036	18	18	0.0	0.1	9.662	A
				B	18	4	901	497	0.035	18	17	0.0	0.1	9.138	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	12	3	863	477	0.025	12	12	0.0	0.0	8.712	A
				E	40	10	916	500	0.081	40	41	0.0	0.1	8.812	A
D - A5 (South)	Entry	1	1	A	343	86	964	740	0.464	344	342	0.7	1.0	9.733	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	121	30	964	740	0.163	120	122	0.3	0.4	10.812	B
			2	A	41	10	964	741	0.055	41	42	0.1	0.1	6.207	A
				B	111	28	964	741	0.150	112	114	0.2	0.2	6.557	A
				C	21	5	954	735	0.029	21	21	0.0	0.0	7.123	A
				D	6	2	611	472	0.014	6	6	0.0	0.0	8.168	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	385	96	-	-	-	384	385	0.2	0.5	4.083	A
				B	111	28	-	-	-	111	114	0.0	0.1	3.281	A

		2	1	C	21	5	-	-	-	21	21	0.0	0.0	3.155	A
				D	6	2	-	-	-	6	6	0.0	0.0	3.480	A
				E	121	30	-	-	-	121	122	0.1	0.2	4.345	A
E - A426	Entry	1	1	A	256	64	867	723	0.354	254	253	0.7	1.2	15.572	C
				B	348	87	867	723	0.481	347	344	1.1	1.5	15.078	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	70	17	867	722	0.097	70	69	0.1	0.2	7.469	A
				C	13	3	814	676	0.019	13	12	0.0	0.0	7.407	A
				D	98	24	867	722	0.135	98	96	0.3	0.2	9.752	A
				E	3	0.87	411	346	0.010	3	3	0.0	0.0	8.490	A
		2	1	A	259	65	-	-	-	256	255	0.3	1.3	15.485	C
				B	421	105	-	-	-	417	415	0.5	2.1	14.952	B
				C	13	3	-	-	-	13	12	0.0	0.1	13.484	B
				D	99	25	-	-	-	98	96	0.1	0.5	14.676	B
				E	4	0.91	-	-	-	3	3	0.0	0.0	12.470	B

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	6	1	727	570	0.010	6	5	0.0	0.0	7.538	A
				C	27	7	1003	783	0.034	27	27	0.1	0.1	7.800	A
				D	251	63	1003	781	0.321	251	256	0.5	0.6	8.499	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	396	99	1003	781	0.507	397	394	0.7	1.3	10.658	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	6	1	-	-	-	6	5	0.0	0.0	0.167	A
				C	27	7	-	-	-	27	27	0.0	0.0	0.087	A
				D	251	63	-	-	-	251	257	0.0	0.0	0.091	A
				E	396	99	-	-	-	396	396	0.0	0.0	0.109	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	17	4	946	721	0.024	17	17	0.0	0.1	17.234	C
				D	180	45	961	733	0.246	181	178	0.6	0.9	17.743	C
				E	425	106	961	733	0.580	424	419	1.3	2.2	17.156	C
			2	A	0.64	0.16	191	146	0.004	0.67	0.89	0.0	0.0	6.584	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	66	17	961	732	0.090	66	66	0.1	0.1	6.055	A
		2	1	A	0.64	0.16	-	-	-	0.64	0.90	0.0	0.0	8.484	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	17	4	-	-	-	17	17	0.0	0.1	10.603	B
				D	181	45	-	-	-	180	179	0.1	0.7	11.105	B
				E	492	123	-	-	-	491	489	0.4	1.8	10.830	B
C - Gibbet Lane	Entry	1	1	A	24	6	911	412	0.059	23	22	0.1	0.2	12.722	B
				B	20	5	916	414	0.049	20	21	0.1	0.1	11.764	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	14	4	901	411	0.035	14	14	0.0	0.1	11.710	B
				E	50	13	916	412	0.121	50	49	0.1	0.2	11.773	B
				A	418	105	964	692	0.604	418	412	1.0	1.6	12.399	B

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	150	37	964	693	0.216	149	143	0.4	0.7	13.866	B
			2	A	59	15	964	693	0.085	58	55	0.1	0.2	7.993	A
				B	141	35	964	691	0.204	141	135	0.2	0.3	7.830	A
				C	24	6	954	687	0.035	24	25	0.0	0.1	8.531	A
				D	8	2	741	539	0.014	8	8	0.0	0.0	9.609	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	482	121	-	-	-	477	470	0.5	3.2	17.281	C
				B	142	36	-	-	-	141	136	0.1	0.9	16.171	C
				C	25	6	-	-	-	24	25	0.0	0.2	16.466	C
				D	8	2	-	-	-	8	8	0.0	0.1	15.655	C
				E	151	38	-	-	-	150	144	0.2	0.9	17.749	C
E - A426	Entry	1	1	A	292	73	867	690	0.423	290	286	1.2	1.8	19.260	C
				B	383	96	867	689	0.556	382	379	1.5	2.1	18.742	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	88	22	867	689	0.128	87	85	0.2	0.2	8.927	A
				C	14	3	828	664	0.021	14	14	0.0	0.0	9.176	A
				D	110	28	867	690	0.159	111	111	0.2	0.3	10.922	B
				E	3	0.80	432	348	0.009	3	3	0.0	0.0	10.678	B
		2	1	A	319	80	-	-	-	292	288	1.3	8.6	64.994	F
				B	512	128	-	-	-	471	466	2.1	13.7	64.445	F
				C	15	4	-	-	-	14	14	0.1	0.4	61.840	F
				D	122	30	-	-	-	110	111	0.5	3.3	64.417	F
				E	4	0.97	-	-	-	3	4	0.0	0.1	62.559	F

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	6	2	758	589	0.010	6	6	0.0	0.0	7.732	A
				C	27	7	1003	782	0.034	27	28	0.1	0.1	8.101	A
				D	255	64	1003	779	0.327	253	254	0.6	0.8	8.794	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	402	100	1003	780	0.515	399	399	1.3	1.5	10.711	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	6	2	-	-	-	6	6	0.0	0.0	0.067	A
				C	27	7	-	-	-	27	28	0.0	0.0	0.034	A
				D	255	64	-	-	-	255	254	0.0	0.0	0.062	A
				E	402	101	-	-	-	402	399	0.0	0.0	0.066	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	18	4	933	710	0.025	18	17	0.1	0.1	18.509	C
				D	179	45	961	730	0.245	178	178	0.9	0.9	18.841	C
				E	426	107	961	731	0.583	427	426	2.2	2.3	18.530	C
			2	A	1	0.25	245	186	0.005	1	1	0.0	0.0	6.245	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	69	17	961	730	0.095	69	66	0.1	0.1	6.162	A

		2	1	A	0.92	0.23	-	-	-	1	1	0.0	0.0	16.302	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	18	4	-	-	-	18	17	0.1	0.1	16.827	C
				D	177	44	-	-	-	179	178	0.7	0.8	16.772	C
				E	494	123	-	-	-	495	493	1.8	2.2	16.589	C
C - Gibbet Lane	Entry	1	1	A	22	6	911	407	0.054	21	22	0.2	0.1	13.417	B
				B	20	5	904	408	0.050	20	21	0.1	0.1	12.635	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	15	4	892	401	0.037	15	15	0.1	0.1	12.846	B
				E	50	13	916	412	0.122	50	49	0.2	0.2	12.700	B
D - A5 (South)	Entry	1	1	A	424	106	964	690	0.615	424	423	1.6	1.5	12.975	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	148	37	964	691	0.214	149	148	0.7	0.6	14.201	B
			2	A	57	14	964	691	0.082	56	57	0.2	0.2	8.129	A
				B	139	35	964	690	0.201	139	139	0.3	0.3	8.283	A
				C	27	7	961	690	0.040	27	26	0.1	0.1	8.636	A
				D	8	2	759	547	0.015	9	8	0.0	0.0	9.606	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	478	119	-	-	-	481	480	3.2	2.7	23.224	C
				B	136	34	-	-	-	139	139	0.9	0.7	21.496	C
				C	27	7	-	-	-	27	26	0.2	0.1	21.825	C
				D	8	2	-	-	-	8	8	0.1	0.0	21.137	C
				E	149	37	-	-	-	148	147	0.9	1.0	23.935	C
E - A426	Entry	1	1	A	298	74	867	688	0.433	297	295	1.8	1.7	20.542	C
				B	383	96	867	688	0.557	383	383	2.1	2.2	20.078	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	89	22	867	688	0.129	88	88	0.2	0.3	9.522	A
				C	15	4	855	680	0.021	15	15	0.0	0.0	9.287	A
				D	110	27	867	688	0.159	110	109	0.3	0.4	11.353	B
				E	4	1	469	375	0.011	4	4	0.0	0.0	9.611	A
		2	1	A	323	81	-	-	-	298	295	8.6	15.3	150.075	F
				B	512	128	-	-	-	472	471	13.7	24.4	148.605	F
				C	16	4	-	-	-	15	15	0.4	0.8	149.863	F
				D	122	31	-	-	-	110	110	3.3	5.8	149.175	F
				E	5	1	-	-	-	4	4	0.1	0.2	144.768	F

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	692	543	0.008	4	5	0.0	0.0	7.163	A
				C	22	5	1001	789	0.028	22	23	0.1	0.0	6.611	A
				D	203	51	1003	791	0.256	202	209	0.8	0.5	7.697	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	325	81	1003	791	0.411	325	328	1.5	0.9	9.180	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	5	1	-	-	-	5	5	0.0	0.0	0.000	A
				C	22	5	-	-	-	22	23	0.0	0.0	0.023	A

				D	203	51	-	-	-	203	208	0.0	0.0	0.033	A
				E	325	81	-	-	-	325	326	0.0	0.0	0.035	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	3	933	742	0.019	14	15	0.1	0.0	13.503	B
				D	147	37	961	767	0.191	148	152	0.9	0.5	14.134	B
				E	355	89	961	768	0.462	355	363	2.3	1.3	13.865	B
			2	A	0.76	0.19	194	152	0.005	0.80	0.89	0.0	0.0	4.534	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	50	13	961	766	0.066	50	52	0.1	0.1	5.581	A
		2	1	A	0.76	0.19	-	-	-	0.76	0.88	0.0	0.0	2.980	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	14	3	-	-	-	14	14	0.1	0.0	5.326	A
				D	147	37	-	-	-	147	150	0.8	0.1	5.307	A
				E	404	101	-	-	-	405	410	2.2	0.3	5.203	A
C - Gibbet Lane	Entry	1	1	A	18	5	894	480	0.038	18	18	0.1	0.1	10.043	B
				B	17	4	901	487	0.036	18	17	0.1	0.0	9.605	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	11	3	875	462	0.025	11	12	0.1	0.0	9.537	A
				E	42	10	916	492	0.085	42	42	0.2	0.1	9.371	A
D - A5 (South)	Entry	1	1	A	344	86	964	739	0.465	345	355	1.5	0.9	10.618	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	122	30	964	740	0.165	121	122	0.6	0.4	11.782	B
			2	A	39	10	964	738	0.053	39	43	0.2	0.1	7.092	A
				B	111	28	964	739	0.150	111	114	0.3	0.2	6.847	A
				C	21	5	946	724	0.029	21	22	0.1	0.0	7.353	A
				D	6	2	660	500	0.012	6	6	0.0	0.0	8.354	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	383	96	-	-	-	383	395	2.7	0.6	7.883	A
				B	111	28	-	-	-	111	113	0.7	0.2	7.143	A
				C	21	5	-	-	-	21	22	0.1	0.0	6.626	A
				D	6	2	-	-	-	6	6	0.0	0.0	5.088	A
				E	122	30	-	-	-	122	122	1.0	0.2	8.092	A
E - A426	Entry	1	1	A	290	72	867	723	0.401	291	296	1.7	1.4	18.951	C
				B	387	97	867	724	0.535	387	391	2.2	2.0	18.610	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	84	21	867	723	0.116	84	85	0.3	0.2	9.212	A
				C	14	4	839	698	0.020	14	14	0.0	0.1	8.969	A
				D	109	27	867	722	0.151	109	114	0.4	0.3	11.241	B
				E	4	0.99	478	393	0.010	4	4	0.0	0.0	10.497	B
		2	1	A	259	65	-	-	-	290	295	15.3	7.1	132.972	F
				B	433	108	-	-	-	471	475	24.4	11.9	131.918	F
				C	13	3	-	-	-	14	14	0.8	0.4	131.677	F
				D	95	24	-	-	-	109	114	5.8	2.5	131.300	F
				E	3	0.80	-	-	-	4	4	0.2	0.1	134.311	F

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.81	639	522	0.006	3	4	0.0	0.0	6.452	A

A - A5 (North)	Entry	1	1	C	19	5	998	827	0.023	19	20	0.0	0.0	5.851	A
				D	171	43	1003	835	0.204	171	175	0.5	0.4	6.743	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	275	69	1003	835	0.329	277	274	0.9	0.5	7.486	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.81	-	-	-	3	4	0.0	0.0	0.000	A
				C	19	5	-	-	-	19	20	0.0	0.0	0.000	A
				D	171	43	-	-	-	171	174	0.0	0.0	0.004	A
				E	275	69	-	-	-	275	273	0.0	0.0	0.002	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	920	762	0.017	13	12	0.0	0.0	10.610	B
				D	124	31	961	799	0.155	125	125	0.5	0.4	10.631	B
				E	302	75	961	799	0.378	304	305	1.3	0.7	10.145	B
			2	A	0.76	0.19	166	137	0.006	0.73	0.76	0.0	0.0	4.954	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	37	9	961	797	0.047	37	38	0.1	0.1	5.123	A
		2	1	A	0.76	0.19	-	-	-	0.76	0.77	0.0	0.0	0.435	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	-	-	-	13	12	0.0	0.0	1.188	A
				D	124	31	-	-	-	124	124	0.1	0.0	1.126	A
				E	339	85	-	-	-	339	341	0.3	0.1	1.043	A
C - Gibbet Lane	Entry	1	1	A	15	4	877	539	0.029	15	15	0.1	0.0	8.442	A
				B	15	4	904	554	0.026	15	15	0.0	0.0	7.667	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	10	2	838	511	0.019	10	10	0.0	0.0	7.092	A
				E	36	9	916	563	0.064	35	35	0.1	0.1	7.785	A
D - A5 (South)	Entry	1	1	A	299	75	964	774	0.386	299	296	0.9	0.7	8.616	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	99	25	964	774	0.128	100	102	0.4	0.2	9.837	A
			2	A	32	8	964	775	0.041	32	33	0.1	0.0	5.754	A
				B	94	23	964	775	0.121	94	96	0.2	0.1	5.936	A
				C	18	5	948	761	0.024	18	18	0.0	0.0	6.345	A
				D	5	1	562	451	0.011	5	5	0.0	0.0	8.032	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	332	83	-	-	-	331	328	0.6	0.2	2.354	A
				B	94	23	-	-	-	94	96	0.2	0.0	1.830	A
				C	18	5	-	-	-	18	18	0.0	0.0	1.569	A
				D	5	1	-	-	-	5	5	0.0	0.0	2.312	A
				E	99	25	-	-	-	99	101	0.2	0.0	2.543	A
E - A426	Entry	1	1	A	222	55	867	744	0.298	223	245	1.4	0.9	15.373	C
				B	307	77	867	744	0.413	308	329	2.0	1.1	14.537	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	56	14	867	744	0.075	56	63	0.2	0.1	7.285	A
				C	11	3	825	709	0.016	11	12	0.1	0.0	7.067	A
				D	88	22	867	745	0.119	89	94	0.3	0.2	9.390	A
				E	4	0.88	411	354	0.010	4	4	0.0	0.0	7.929	A

		2	1	A	212	53	-	-	-	222	243	7.1	0.8	36.381	E
				B	350	88	-	-	-	364	388	11.9	1.3	34.594	D
				C	11	3	-	-	-	11	12	0.4	0.0	34.658	D
				D	86	22	-	-	-	88	93	2.5	0.4	34.572	D
				E	3	0.85	-	-	-	4	4	0.1	0.0	32.658	D

2036 WoD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	D - A5 (South)	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	285.63	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	285.63	F

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	2036 WoD	AM	PRTM 2.2 Demand Flows	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	660	100.000
B - Rugby Road		ONE HOUR	✓	638	100.000
C - Gibbet Lane		ONE HOUR	✓	365	100.000
D - A5 (South)		ONE HOUR	✓	1107	100.000
E - A426		ONE HOUR	✓	488	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	1	32	245	382
	B - Rugby Road	1	0	30	101	506
	C - Gibbet Lane	46	36	6	10	267
	D - A5 (South)	467	312	46	7	275
	E - A426	191	138	33	126	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	39	16	11
	B - Rugby Road	0	0	50	9	11
	C - Gibbet Lane	21	64	0	43	5
	D - A5 (South)	12	4	3	67	27
	E - A426	35	55	27	26	0

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.53	9.87	2.1	A	604	906
B - Rugby Road	0.91	46.70	9.7	E	583	875
C - Gibbet Lane	1.01	158.21	19.1	F	333	500
D - A5 (South)	1.49	747.06	206.0	F	1018	1527
E - A426	0.55	14.77	2.3	B	448	672

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	503	126	526	1436	0.350	502	494	522	0.0	1.0	6.818	A
B - Rugby Road	476	119	665	891	0.534	476	477	364	0.0	1.7	11.148	B
C - Gibbet Lane	274	68	1032	566	0.484	272	273	109	0.0	1.1	14.353	B
D - A5 (South)	832	208	930	1059	0.786	832	811	374	0.0	6.3	24.105	C
E - A426	363	91	685	1037	0.350	364	369	1077	0.0	1.1	10.267	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	587	147	613	1402	0.419	590	591	609	1.0	1.3	8.021	A
B - Rugby Road	575	144	780	851	0.675	567	565	423	1.7	3.0	15.251	C
C - Gibbet Lane	329	82	1220	491	0.669	328	320	128	1.1	2.7	25.240	D
D - A5 (South)	995	249	1108	971	1.024	932	916	440	6.3	25.0	65.334	F
E - A426	440	110	782	982	0.448	440	434	1258	1.1	1.7	11.957	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	733	183	660	1388	0.528	736	728	630	1.3	2.1	9.870	A
B - Rugby Road	696	174	958	781	0.892	681	674	438	3.0	9.1	35.580	E
C - Gibbet Lane	405	101	1491	400	1.012	364	361	148	2.7	12.5	79.011	F
D - A5 (South)	1224	306	1319	903	1.356	880	902	536	25.0	104.5	259.833	F
E - A426	537	134	751	1002	0.536	538	535	1448	1.7	2.3	14.775	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	724	181	662	1356	0.534	723	728	626	2.1	2.1	9.852	A
B - Rugby Road	704	176	948	771	0.913	700	700	437	9.1	9.7	46.699	E
C - Gibbet Lane	396	99	1500	395	1.002	376	371	148	12.5	19.1	158.212	F
D - A5 (South)	1227	307	1342	826	1.485	879	881	534	104.5	190.7	597.237	F
E - A426	538	134	751	981	0.548	536	534	1470	2.3	2.3	14.498	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	584	146	620	1384	0.422	582	593	625	2.1	1.5	8.214	A
B - Rugby Road	573	143	776	867	0.661	577	602	426	9.7	2.9	23.757	C
C - Gibbet Lane	332	83	1223	502	0.662	374	384	130	19.1	5.3	100.704	F
D - A5 (South)	995	249	1163	951	1.047	952	932	435	190.7	206.0	747.061	F
E - A426	436	109	808	979	0.445	437	445	1307	2.3	1.6	12.799	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	493	123	600	1412	0.349	492	499	623	1.5	1.2	7.310	A
B - Rugby Road	474	119	665	882	0.538	474	482	427	2.9	1.5	11.712	B
C - Gibbet Lane	265	66	1026	565	0.468	268	290	114	5.3	1.1	20.779	C
D - A5 (South)	835	209	922	1049	0.796	1040	1014	372	206.0	161.9	594.973	F
E - A426	374	93	847	961	0.389	375	370	1115	1.6	1.1	11.346	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	214	855	0.251	214	208	0.0	0.4	6.656	A
			2	E, A	289	855	0.338	288	285	0.0	0.6	6.923	A
		2	1	(B, C, D, E, A)	503			503	498	0.0	0.0	0.004	A
	Exit	1	1		522			522	520	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	433	779	0.556	432	432	0.0	1.5	10.652	B
			2	B, (E), A	44	779	0.056	44	45	0.0	0.1	5.293	A
		2	1	(B, C, D, E, A)	476			477	483	0.0	0.1	0.989	A
	Exit	1	1		364			364	362	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	274	557	0.491	272	273	0.0	1.1	14.353	B
	Exit	1	1		109			109	109	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	526	707	0.744	526	510	0.0	2.0	11.926	B
			2	(A), B, C, D	307	707	0.434	306	302	0.0	0.8	9.007	A
		2	1	(B, C, D, E, A)	832			833	822	0.0	3.6	13.308	B
	Exit	1	1		374			374	367	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	232	691	0.335	232	238	0.0	0.7	10.441	B
			2	(B), C, D, E	132	691	0.191	131	131	0.0	0.4	8.106	A
		2	1	(B, C, D, E, A)	363			364	373	0.0	0.0	0.713	A
	Exit	1	1		1077			1077	1066	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	248	831	0.299	249	251	0.4	0.5	7.714	A
			2	E, A	339	831	0.408	341	340	0.6	0.8	8.200	A
		2	1	(B, C, D, E, A)	587			587	592	0.0	0.0	0.020	A
	Exit	1	1		609			609	602	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	516	748	0.690	511	508	1.5	2.3	13.137	B
			2	B, (E), A	56	748	0.075	56	57	0.1	0.1	5.682	A
		2	1	(B, C, D, E, A)	575			572	568	0.1	0.6	2.828	A
	Exit	1	1		423			423	411	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	329	492	0.668	328	320	1.1	2.7	25.240	D
	Exit	1	1		128			128	128	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	584	658	0.887	581	572	2.0	2.6	14.317	B
			2	(A), B, C, D	351	658	0.534	351	344	0.8	1.2	10.825	B
		2	1	(B, C, D, E, A)	995			935	920	3.6	21.2	52.350	F
	Exit	1	1		440			440	439	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	283	666	0.424	283	277	0.7	1.0	11.748	B
			2	(B), C, D, E	158	666	0.237	157	157	0.4	0.5	9.025	A
		2	1	(B, C, D, E, A)	440			440	436	0.0	0.2	1.245	A
	Exit	1	1		1258			1258	1246	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	307	818	0.375	309	305	0.5	0.7	8.512	A
			2	E, A	426	818	0.521	427	423	0.8	1.4	10.620	B
		2	1	(B, C, D, E, A)	733			733	731	0.0	0.0	0.099	A
	Exit	1	1		630			630	635	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	607	699	0.868	607	600	2.3	3.9	19.672	C
			2	B, (E), A	74	699	0.106	75	74	0.1	0.2	6.815	A
		2	1	(B, C, D, E, A)	696			681	681	0.6	5.0	17.179	C
	Exit	1	1		438			438	441	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	405	398	1.019	364	361	2.7	12.5	79.011	F
	Exit	1	1		148			148	148	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	545	600	0.909	546	563	2.6	2.6	16.480	C
			2	(A), B, C, D	332	600	0.554	333	339	1.2	1.2	12.441	B
		2	1	(B, C, D, E, A)	1224			877	902	21.2	100.7	244.758	F
	Exit	1	1		536			536	532	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	346	674	0.513	346	341	1.0	1.3	13.193	B
			2	(B), C, D, E	191	674	0.283	192	194	0.5	0.5	9.850	A
		2	1	(B, C, D, E, A)	537			537	536	0.2	0.5	2.859	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	305	817	0.373	304	308	0.7	0.8	8.711	A
			2	E, A	419	817	0.513	419	420	1.4	1.3	10.423	B
		2	1	(B, C, D, E, A)	724			724	728	0.0	0.0	0.127	A
	Exit	1	1		626			626	628	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	623	702	0.887	621	622	3.9	3.8	20.779	C
			2	B, (E), A	78	702	0.111	79	79	0.2	0.2	6.763	A
		2	1	(B, C, D, E, A)	704			701	700	5.0	5.7	27.532	D
	Exit	1	1		437			437	439	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	396	395	1.003	376	371	12.5	19.1	158.212	F
	Exit	1	1		148			148	147	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	546	593	0.921	549	551	2.6	2.5	16.915	C
			2	(A), B, C, D	333	593	0.562	330	331	1.2	1.4	13.067	B
		2	1	(B, C, D, E, A)	1227			880	882	100.7	186.7	582.355	F
	Exit	1	1		534			534	540	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	341	674	0.506	339	339	1.3	1.4	13.174	B
			2	(B), C, D, E	196	674	0.290	197	195	0.5	0.5	9.475	A
		2	1	(B, C, D, E, A)	538			537	534	0.5	0.5	2.749	A
	Exit	1	1		1470			1470	1461	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	243	829	0.293	240	246	0.8	0.6	7.514	A
			2	E, A	341	829	0.412	342	347	1.3	0.8	8.651	A
		2	1	(B, C, D, E, A)	584			584	590	0.0	0.0	0.024	A
	Exit	1	1		625			625	616	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	517	749	0.690	518	540	3.8	2.1	15.656	C
			2	B, (E), A	59	749	0.079	59	61	0.2	0.1	6.035	A
		2	1	(B, C, D, E, A)	573			576	595	5.7	0.7	9.392	A
	Exit	1	1		426			426	429	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	332	491	0.677	374	384	19.1	5.3	100.704	F
	Exit	1	1		130			130	132	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	594	643	0.924	595	581	2.5	2.7	15.952	C
			2	(A), B, C, D	356	643	0.555	357	351	1.4	1.2	12.230	B
		2	1	(B, C, D, E, A)	995			951	932	186.7	202.2	734.000	F
	Exit	1	1		435			435	445	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	280	660	0.425	280	284	1.4	1.0	12.197	B
			2	(B), C, D, E	156	660	0.237	157	160	0.5	0.4	9.358	A
		2	1	(B, C, D, E, A)	436			436	443	0.5	0.2	1.724	A
	Exit	1	1		1307			1307	1334	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	211	834	0.253	210	210	0.6	0.5	7.158	A
			2	E, A	282	834	0.338	282	290	0.8	0.7	7.411	A
		2	1	(B, C, D, E, A)	493			493	499	0.0	0.0	0.003	A
	Exit	1	1		623			623	610	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	427	779	0.548	428	437	2.1	1.3	11.073	B
			2	B, (E), A	47	779	0.060	47	45	0.1	0.1	5.451	A
		2	1	(B, C, D, E, A)	474			474	479	0.7	0.1	1.248	A
	Exit	1	1		427			427	418	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	265	559	0.473	268	290	5.3	1.1	20.779	C
	Exit	1	1		114			114	117	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	648	709	0.914	650	634	2.7	2.7	14.575	B
			2	(A), B, C, D	390	709	0.550	390	380	1.2	1.1	10.876	B
		2	1	(B, C, D, E, A)	835			1039	1013	202.2	158.2	584.297	F
	Exit	1	1		372			372	373	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	240	649	0.369	240	236	1.0	0.8	11.265	B
			2	(B), C, D, E	134	649	0.207	136	134	0.4	0.3	9.031	A
		2	1	(B, C, D, E, A)	374			374	369	0.2	0.1	0.955	A
	Exit	1	1		1115			1115	1137	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.61	0.15	154	132	0.005	0.61	0.69	0.0	0.0	4.784	A
				C	24	6	990	844	0.029	24	23	0.0	0.1	7.646	A
				D	190	47	1003	855	0.222	189	184	0.0	0.4	6.559	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	289	72	1003	855	0.338	288	285	0.0	0.6	6.923	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.61	0.15	-	-	-	0.61	0.69	0.0	0.0	0.000	A
				C	24	6	-	-	-	24	24	0.0	0.0	0.000	A
				D	190	47	-	-	-	190	186	0.0	0.0	0.004	A
				E	289	72	-	-	-	289	288	0.0	0.0	0.005	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	23	6	945	768	0.030	22	23	0.0	0.1	12.705	B
				D	76	19	961	780	0.097	76	76	0.0	0.2	10.468	B
				E	335	84	961	780	0.429	334	334	0.0	1.1	10.591	B
			2	A	1	0.27	206	168	0.006	1.00	0.91	0.0	0.0	5.650	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	43	11	961	779	0.055	43	44	0.0	0.1	5.285	A
		2	1	A	1	0.27	-	-	-	1	0.93	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	23	6	-	-	-	23	23	0.0	0.0	1.114	A
				D	75	19	-	-	-	76	76	0.0	0.0	0.937	A
				E	377	94	-	-	-	377	382	0.0	0.1	0.997	A
C - Gibbet Lane	Entry	1	1	A	33	8	916	559	0.059	33	35	0.0	0.1	14.886	B
				B	26	6	907	551	0.047	26	26	0.0	0.1	17.712	C
				C	5	1	658	406	0.012	5	5	0.0	0.0	13.205	B
				D	8	2	664	403	0.020	8	7	0.0	0.0	16.066	C
				E	202	51	916	557	0.363	201	200	0.0	0.8	13.980	B
D - A5 (South)	Entry	1	1	A	317	79	964	707	0.449	315	307	0.0	1.2	11.561	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	209	52	964	706	0.296	211	203	0.0	0.7	12.554	B
			2	A	35	9	964	707	0.049	35	34	0.0	0.1	8.272	A
				B	233	58	964	707	0.330	233	229	0.0	0.5	9.054	A
				C	33	8	964	706	0.047	33	34	0.0	0.1	8.994	A
				D	6	1	545	403	0.014	5	5	0.0	0.0	12.777	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	353	88	-	-	-	352	346	0.0	1.6	13.331	B
				B	233	58	-	-	-	233	231	0.0	1.0	12.828	B
				C	33	8	-	-	-	33	34	0.0	0.1	12.923	B
				D	6	1	-	-	-	6	5	0.0	0.0	12.442	B
				E	207	52	-	-	-	209	206	0.0	0.9	14.023	B
E - A426	Entry	1	1	A	138	35	867	692	0.200	139	144	0.0	0.4	10.095	B
				B	94	23	867	691	0.135	93	94	0.0	0.3	11.046	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	734	590	0.019	11	12	0.0	0.0	8.695	A
				C	25	6	853	682	0.036	25	25	0.0	0.0	8.356	A

				D	96	24	867	692	0.138	95	95	0.0	0.3	7.984	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	138	35	-	-	-	138	145	0.0	0.0	0.812	A
				B	105	26	-	-	-	105	108	0.0	0.0	0.838	A
				C	25	6	-	-	-	25	25	0.0	0.0	0.539	A
				D	95	24	-	-	-	96	96	0.0	0.0	0.504	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.88	0.22	173	144	0.006	0.84	0.79	0.0	0.0	8.135	A
				C	29	7	997	828	0.035	29	28	0.1	0.1	8.546	A
				D	218	55	1003	831	0.263	220	223	0.4	0.4	7.623	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	339	85	1003	830	0.408	341	340	0.6	0.8	8.200	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.88	0.22	-	-	-	0.88	0.81	0.0	0.0	0.000	A
				C	29	7	-	-	-	29	28	0.0	0.0	0.003	A
				D	218	55	-	-	-	218	223	0.0	0.0	0.015	A
				E	339	85	-	-	-	339	341	0.0	0.0	0.024	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	955	746	0.037	28	27	0.1	0.1	15.594	C
				D	92	23	961	748	0.123	91	89	0.2	0.4	13.151	B
				E	396	99	961	748	0.529	392	392	1.1	1.8	13.009	B
			2	A	0.92	0.23	169	132	0.007	0.92	0.79	0.0	0.0	5.580	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	55	14	961	748	0.074	55	56	0.1	0.1	5.683	A
		2	1	A	0.92	0.23	-	-	-	0.92	0.77	0.0	0.0	2.383	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	-	-	-	28	27	0.0	0.0	2.853	A
				D	92	23	-	-	-	92	90	0.0	0.1	2.855	A
				E	453	113	-	-	-	451	451	0.1	0.4	2.822	A
C - Gibbet Lane	Entry	1	1	A	42	11	916	493	0.085	42	41	0.1	0.4	25.840	D
				B	30	8	904	485	0.062	30	32	0.1	0.3	28.846	D
				C	6	1	691	376	0.016	6	6	0.0	0.1	25.764	D
				D	9	2	714	389	0.024	9	8	0.0	0.1	29.033	D
				E	241	60	916	493	0.489	240	233	0.8	1.9	24.722	C
D - A5 (South)	Entry	1	1	A	353	88	964	658	0.536	352	348	1.2	1.4	13.918	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	231	58	964	658	0.351	229	224	0.7	1.2	15.014	C
			2	A	42	10	964	660	0.064	42	42	0.1	0.2	10.394	B
				B	266	66	964	658	0.404	266	258	0.5	0.9	10.855	B
				C	38	9	964	660	0.057	37	38	0.1	0.1	10.744	B
				D	6	1	585	402	0.014	6	6	0.0	0.0	13.974	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	418	105	-	-	-	395	390	1.6	8.8	52.339	F
				B	282	70	-	-	-	266	260	1.0	5.9	51.283	F

		2	1	C	42	10	-	-	-	38	39	0.1	0.9	52.417	F
				D	7	2	-	-	-	6	6	0.0	0.2	54.363	F
				E	246	62	-	-	-	231	226	0.9	5.4	53.806	F
E - A426	Entry	1	1	A	173	43	867	667	0.259	172	171	0.4	0.6	11.515	B
				B	110	27	867	666	0.165	110	106	0.3	0.4	12.178	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	16	4	789	610	0.026	15	15	0.0	0.1	9.581	A
				C	28	7	856	659	0.042	27	29	0.0	0.1	9.035	A
				D	114	29	867	667	0.171	114	113	0.3	0.4	8.963	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	173	43	-	-	-	173	172	0.0	0.1	1.560	A
				B	125	31	-	-	-	125	121	0.0	0.0	1.233	A
				C	28	7	-	-	-	28	29	0.0	0.0	0.823	A
				D	115	29	-	-	-	114	113	0.0	0.0	0.917	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.73	0.18	208	171	0.004	0.77	0.92	0.0	0.0	6.841	A
				C	35	9	1003	815	0.043	35	35	0.1	0.1	9.346	A
				D	271	68	1003	818	0.331	273	269	0.4	0.6	8.428	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	426	107	1003	818	0.521	427	423	0.8	1.4	10.620	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.73	0.18	-	-	-	0.73	0.91	0.0	0.0	0.147	A
				C	35	9	-	-	-	35	35	0.0	0.0	0.131	A
				D	271	68	-	-	-	271	270	0.0	0.0	0.073	A
				E	426	107	-	-	-	426	425	0.0	0.0	0.112	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	34	8	958	696	0.049	33	32	0.1	0.3	21.760	C
				D	109	27	961	698	0.156	110	108	0.4	0.7	19.568	C
				E	464	116	961	700	0.663	464	459	1.8	2.9	19.587	C
			2	A	1	0.30	227	169	0.007	1	1	0.0	0.0	5.710	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	73	18	961	698	0.105	74	73	0.1	0.2	6.833	A
		2	1	A	1	0.29	-	-	-	1	1	0.0	0.0	12.515	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	34	9	-	-	-	34	33	0.0	0.2	17.513	C
				D	112	28	-	-	-	109	109	0.1	0.8	17.884	C
				E	549	137	-	-	-	537	537	0.4	4.0	17.028	C
C - Gibbet Lane	Entry	1	1	A	52	13	916	397	0.132	47	46	0.4	1.6	80.094	F
				B	40	10	913	398	0.100	36	35	0.3	1.3	85.483	F
				C	7	2	755	338	0.020	6	7	0.1	0.2	74.625	F
				D	13	3	764	338	0.037	10	10	0.1	0.4	89.763	F
				E	293	73	916	398	0.738	265	263	1.9	8.9	78.086	F
				A	328	82	964	600	0.546	328	338	1.4	1.6	16.160	C

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	218	54	964	599	0.363	218	225	1.2	1.1	17.023	C
			2	A	38	9	964	599	0.063	39	41	0.2	0.1	12.101	B
				B	251	63	964	599	0.419	251	255	0.9	0.9	12.503	B
				C	38	9	964	599	0.063	38	38	0.1	0.1	12.117	B
				D	5	1	548	348	0.016	5	6	0.0	0.0	15.064	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	515	129	-	-	-	366	379	8.8	42.6	245.848	F
				B	345	86	-	-	-	251	255	5.9	28.3	242.676	F
				C	54	13	-	-	-	38	38	0.9	4.4	243.000	F
				D	8	2	-	-	-	5	6	0.2	0.7	258.433	F
				E	302	75	-	-	-	218	225	5.4	24.7	245.664	F
E - A426	Entry	1	1	A	214	53	867	674	0.317	215	209	0.6	0.8	12.990	B
				B	132	33	867	675	0.196	131	131	0.4	0.6	13.567	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	18	4	833	645	0.028	18	19	0.1	0.0	9.753	A
				C	36	9	867	675	0.054	36	37	0.1	0.1	9.824	A
				D	137	34	867	675	0.203	137	139	0.4	0.3	9.868	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	214	53	-	-	-	214	210	0.1	0.2	3.242	A
				B	150	38	-	-	-	150	150	0.0	0.1	2.864	A
				C	36	9	-	-	-	36	37	0.0	0.0	2.462	A
				D	137	34	-	-	-	137	139	0.0	0.1	2.414	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.36	263	213	0.007	1	1	0.0	0.0	8.238	A
				C	35	9	1000	815	0.043	35	35	0.1	0.1	9.817	A
				D	269	67	1003	818	0.329	268	272	0.6	0.7	8.594	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	419	105	1003	817	0.513	419	420	1.4	1.3	10.423	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.36	-	-	-	1	1	0.0	0.0	0.000	A
				C	35	9	-	-	-	35	35	0.0	0.0	0.116	A
				D	269	67	-	-	-	269	272	0.0	0.0	0.128	A
				E	419	105	-	-	-	419	419	0.0	0.0	0.128	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	33	8	949	696	0.048	34	33	0.3	0.2	23.524	C
				D	108	27	961	703	0.154	108	111	0.7	0.6	20.734	C
				E	481	120	961	702	0.685	479	478	2.9	3.0	20.650	C
			2	A	1	0.30	221	162	0.007	1	1	0.0	0.0	5.115	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	77	19	961	702	0.110	78	77	0.2	0.2	6.788	A

		2	1	A	1	0.31	-	-	-	1	1	0.0	0.0	26.642	D
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	33	8	-	-	-	33	33	0.2	0.2	27.112	D
				D	111	28	-	-	-	108	111	0.8	1.0	27.896	D
				E	558	140	-	-	-	558	556	4.0	4.5	27.478	D
C - Gibbet Lane	Entry	1	1	A	49	12	916	396	0.124	46	47	1.6	2.4	157.654	F
				B	39	10	916	397	0.098	38	38	1.3	1.9	159.883	F
				C	7	2	717	314	0.021	6	6	0.2	0.3	158.298	F
				D	11	3	764	331	0.032	11	11	0.4	0.5	154.415	F
				E	291	73	916	395	0.736	275	269	8.9	14.0	158.258	F
D - A5 (South)	Entry	1	1	A	328	82	964	594	0.552	329	333	1.6	1.5	16.615	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	219	55	964	593	0.369	220	217	1.1	1.1	17.438	C
			2	A	41	10	964	595	0.068	41	39	0.1	0.1	12.365	B
				B	251	63	964	593	0.423	247	248	0.9	1.1	13.063	B
				C	37	9	964	596	0.062	37	37	0.1	0.2	13.381	B
				D	5	1	563	349	0.016	5	6	0.0	0.0	17.214	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	519	130	-	-	-	368	373	42.6	78.8	583.600	F
				B	345	86	-	-	-	251	249	28.3	52.8	580.901	F
				C	52	13	-	-	-	37	37	4.4	7.9	580.179	F
				D	8	2	-	-	-	5	6	0.7	1.2	571.795	F
				E	303	76	-	-	-	219	217	24.7	46.0	582.634	F
E - A426	Entry	1	1	A	210	52	867	675	0.311	208	207	0.8	0.8	12.895	B
				B	131	33	867	675	0.195	131	133	0.6	0.5	13.680	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	19	5	828	643	0.029	19	20	0.0	0.0	9.347	A
				C	37	9	867	672	0.055	37	35	0.1	0.1	9.378	A
				D	140	35	867	674	0.208	141	140	0.3	0.4	9.514	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	210	53	-	-	-	210	207	0.2	0.2	3.126	A
				B	151	38	-	-	-	150	152	0.1	0.1	2.725	A
				C	37	9	-	-	-	37	35	0.0	0.0	2.318	A
				D	140	35	-	-	-	140	141	0.1	0.1	2.361	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.69	0.17	151	125	0.006	0.69	0.68	0.0	0.0	6.334	A
				C	28	7	997	821	0.034	27	29	0.1	0.1	8.284	A
				D	214	54	1003	829	0.259	213	216	0.7	0.5	7.433	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	341	85	1003	829	0.412	342	347	1.3	0.8	8.651	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.69	0.17	-	-	-	0.69	0.65	0.0	0.0	0.000	A
				C	28	7	-	-	-	28	29	0.0	0.0	0.015	A

				D	214	54	-	-	-	214	216	0.0	0.0	0.027	A
				E	341	85	-	-	-	341	345	0.0	0.0	0.023	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	958	744	0.037	28	27	0.2	0.1	18.187	C
				D	92	23	961	748	0.123	92	97	0.6	0.4	15.663	C
				E	397	99	961	749	0.530	398	416	3.0	1.6	15.533	C
			2	A	0.81	0.20	184	142	0.006	0.84	0.82	0.0	0.0	5.176	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	58	15	961	749	0.078	58	61	0.2	0.1	6.047	A
		2	1	A	0.84	0.21	-	-	-	0.81	0.82	0.0	0.0	5.271	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	-	-	-	28	27	0.2	0.0	9.462	A
				D	92	23	-	-	-	92	96	1.0	0.1	9.833	A
				E	453	113	-	-	-	455	471	4.5	0.6	9.306	A
C - Gibbet Lane	Entry	1	1	A	41	10	916	488	0.085	46	49	2.4	0.7	101.840	F
				B	32	8	916	488	0.065	36	38	1.9	0.6	106.174	F
				C	5	1	737	382	0.014	6	6	0.3	0.1	96.616	F
				D	8	2	770	406	0.020	11	11	0.5	0.1	107.698	F
				E	246	61	916	491	0.501	275	281	14.0	3.9	99.949	F
D - A5 (South)	Entry	1	1	A	362	90	964	643	0.563	362	351	1.5	1.6	15.592	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	233	58	964	643	0.362	234	230	1.1	1.1	16.580	C
			2	A	44	11	964	642	0.069	45	41	0.1	0.1	11.885	B
				B	265	66	964	642	0.412	265	264	1.1	0.8	12.227	B
				C	42	10	964	639	0.065	41	40	0.2	0.2	12.218	B
				D	6	2	579	382	0.016	6	6	0.0	0.0	16.225	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	420	105	-	-	-	406	393	78.8	85.2	734.474	F
				B	280	70	-	-	-	265	263	52.8	56.7	731.210	F
				C	42	11	-	-	-	42	40	7.9	8.4	733.776	F
				D	6	2	-	-	-	6	6	1.2	1.3	740.211	F
				E	247	62	-	-	-	233	230	46.0	50.5	736.865	F
E - A426	Entry	1	1	A	172	43	867	660	0.260	172	174	0.8	0.6	11.903	B
				B	109	27	867	660	0.165	108	110	0.5	0.4	12.725	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	15	4	795	607	0.025	15	16	0.0	0.1	9.757	A
				C	28	7	864	657	0.043	28	30	0.1	0.1	9.158	A
				D	113	28	867	659	0.171	114	115	0.4	0.3	9.366	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	172	43	-	-	-	172	173	0.2	0.1	1.930	A
				B	124	31	-	-	-	124	125	0.1	0.1	1.827	A
				C	28	7	-	-	-	28	30	0.0	0.0	1.708	A
				D	113	28	-	-	-	113	114	0.1	0.0	1.342	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.61	0.15	144	120	0.005	0.65	0.63	0.0	0.0	8.494	A

A - A5 (North)	Entry	1	1	C	23	6	984	820	0.028	24	24	0.1	0.0	7.895	A
				D	187	47	1003	835	0.224	186	185	0.5	0.5	7.074	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	282	71	1003	835	0.338	282	290	0.8	0.7	7.411	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.61	0.15	-	-	-	0.61	0.63	0.0	0.0	0.000	A
				C	23	6	-	-	-	23	24	0.0	0.0	0.000	A
				D	187	47	-	-	-	187	185	0.0	0.0	0.001	A
				E	282	71	-	-	-	282	289	0.0	0.0	0.005	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	20	5	939	760	0.027	20	22	0.1	0.1	12.941	B
				D	75	19	961	778	0.096	76	78	0.4	0.2	10.865	B
				E	332	83	961	779	0.426	333	338	1.6	1.0	11.032	B
			2	A	1	0.28	166	134	0.008	1	0.74	0.0	0.0	4.521	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	46	11	961	779	0.059	45	45	0.1	0.1	5.468	A
		2	1	A	1	0.28	-	-	-	1	0.74	0.0	0.0	1.279	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	20	5	-	-	-	20	21	0.0	0.0	1.091	A
				D	75	19	-	-	-	75	77	0.1	0.0	1.398	A
				E	378	95	-	-	-	378	380	0.6	0.1	1.224	A
C - Gibbet Lane	Entry	1	1	A	35	9	916	559	0.062	34	37	0.7	0.2	20.339	C
				B	27	7	907	551	0.049	27	28	0.6	0.1	25.867	D
				C	5	1	638	385	0.013	5	5	0.1	0.0	20.287	C
				D	7	2	699	421	0.016	7	8	0.1	0.0	21.732	C
				E	192	48	916	559	0.343	195	212	3.9	0.7	20.404	C
D - A5 (South)	Entry	1	1	A	389	97	964	710	0.549	390	381	1.6	1.5	14.327	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	259	65	964	709	0.366	260	253	1.1	1.2	14.997	B
			2	A	48	12	964	710	0.067	48	46	0.1	0.1	10.931	B
				B	295	74	964	710	0.415	294	286	0.8	0.8	10.860	B
				C	42	10	964	709	0.059	42	42	0.2	0.1	10.667	B
				D	6	1	591	427	0.014	6	6	0.0	0.0	13.704	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	351	88	-	-	-	437	427	85.2	66.7	584.015	F
				B	234	59	-	-	-	295	286	56.7	44.0	583.138	F
				C	33	8	-	-	-	42	42	8.4	6.5	585.513	F
				D	5	1	-	-	-	6	6	1.3	1.0	618.615	F
				E	211	53	-	-	-	259	253	50.5	40.0	585.555	F
E - A426	Entry	1	1	A	149	37	867	650	0.229	149	145	0.6	0.5	10.979	B
				B	91	23	867	649	0.140	91	91	0.4	0.3	11.792	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	14	4	764	575	0.025	14	13	0.1	0.0	9.205	A
				C	24	6	861	648	0.037	24	25	0.1	0.1	8.656	A
				D	96	24	867	649	0.148	97	96	0.3	0.2	9.108	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

		2	1	A	149	37	-	-	-	149	145	0.1	0.0	1.125	A
				B	105	26	-	-	-	105	104	0.1	0.0	1.045	A
				C	24	6	-	-	-	24	25	0.0	0.0	0.426	A
				D	96	24	-	-	-	96	96	0.0	0.0	0.771	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2036 WoD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	D - A5 (South)	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	273.69	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	273.69	F

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	2036 WoD	PM	PRTM 2.2 Demand Flows	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	623	100.000
B - Rugby Road		ONE HOUR	✓	787	100.000
C - Gibbet Lane		ONE HOUR	✓	168	100.000
D - A5 (South)		ONE HOUR	✓	1088	100.000
E - A426		ONE HOUR	✓	875	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	3	15	246	359
	B - Rugby Road	1	0	17	220	549
	C - Gibbet Lane	22	20	0	33	93
	D - A5 (South)	651	189	35	11	202
	E - A426	207	485	13	166	4

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	6	7
	B - Rugby Road	0	0	31	11	12
	C - Gibbet Lane	38	0	0	0	0
	D - A5 (South)	8	1	10	40	30
	E - A426	22	9	0	30	33

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.55	10.22	2.2	B	570	855
B - Rugby Road	1.09	182.38	49.0	F	722	1083
C - Gibbet Lane	0.53	24.44	1.4	C	155	232
D - A5 (South)	1.29	643.72	174.4	F	1000	1500
E - A426	1.02	129.83	37.4	F	802	1203

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	461	115	694	1399	0.329	461	467	658	0.0	0.9	6.947	A
B - Rugby Road	599	150	631	879	0.682	599	585	523	0.0	2.7	15.387	C
C - Gibbet Lane	131	33	1169	506	0.259	131	128	60	0.0	0.4	9.990	A
D - A5 (South)	818	205	797	1027	0.797	814	794	503	0.0	5.9	21.590	C
E - A426	661	165	697	962	0.687	655	649	914	0.0	3.8	16.010	C

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	561	140	827	1334	0.420	561	556	763	0.9	1.3	7.864	A
B - Rugby Road	706	177	767	847	0.834	704	691	621	2.7	6.2	27.820	D
C - Gibbet Lane	152	38	1400	437	0.348	152	149	71	0.4	0.6	12.829	B
D - A5 (South)	995	249	942	936	1.063	941	918	610	5.9	22.6	60.459	F
E - A426	789	197	802	939	0.840	788	774	1082	3.8	7.3	29.690	D

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	684	171	906	1241	0.551	687	686	781	1.3	1.8	10.102	B
B - Rugby Road	869	217	914	799	1.088	780	770	679	6.2	29.6	87.177	F
C - Gibbet Lane	186	46	1618	351	0.528	185	184	76	0.6	1.4	22.488	C
D - A5 (South)	1189	297	1090	924	1.287	906	918	712	22.6	91.2	227.638	F
E - A426	948	237	785	940	1.008	902	889	1212	7.3	26.0	76.450	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	685	171	929	1244	0.551	680	682	789	1.8	2.2	10.225	B
B - Rugby Road	866	216	908	792	1.093	786	790	701	29.6	49.0	182.380	F
C - Gibbet Lane	178	45	1619	349	0.510	180	183	75	1.4	1.2	24.444	C
D - A5 (South)	1191	298	1091	920	1.294	911	914	707	91.2	161.4	503.450	F
E - A426	958	240	789	938	1.022	929	920	1213	26.0	37.4	129.833	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	566	141	865	1303	0.434	564	566	784	2.2	1.3	8.500	A
B - Rugby Road	696	174	776	845	0.824	787	799	653	49.0	25.4	165.759	F
C - Gibbet Lane	152	38	1487	418	0.363	153	155	76	1.2	0.6	17.161	C
D - A5 (South)	983	246	1005	942	1.043	949	932	635	161.4	174.4	643.716	F
E - A426	788	197	811	919	0.857	838	872	1144	37.4	16.0	98.621	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	464	116	740	1305	0.355	465	468	793	1.3	0.8	7.248	A
B - Rugby Road	597	149	638	881	0.678	634	676	568	25.4	5.0	53.885	F
C - Gibbet Lane	131	33	1206	492	0.265	130	129	66	0.6	0.3	12.111	B
D - A5 (South)	824	206	817	1017	0.810	1018	991	519	174.4	132.5	512.646	F
E - A426	667	167	859	918	0.726	674	707	976	16.0	5.0	36.106	E

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	193	808	0.239	192	196	0.0	0.4	6.399	A
			2	E, A	268	808	0.331	268	271	0.0	0.5	7.329	A
		2	1	(B, C, D, E, A)	461			461	471	0.0	0.0	0.011	A
	Exit	1	1		658			658	644	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	544	789	0.689	543	532	0.0	2.0	12.854	B
			2	B, (E), A	55	789	0.070	55	53	0.0	0.1	5.595	A
		2	1	(B, C, D, E, A)	599			599	593	0.0	0.6	3.142	A
	Exit	1	1		523			523	516	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	131	510	0.257	131	128	0.0	0.4	9.990	A
	Exit	1	1		60			60	61	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	583	744	0.783	581	566	0.0	2.1	11.358	B
			2	(A), B, C, D	232	744	0.312	232	228	0.0	0.4	7.415	A
		2	1	(B, C, D, E, A)	818			815	805	0.0	3.4	11.377	B
	Exit	1	1		503			503	503	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	470	688	0.683	469	461	0.0	2.0	12.867	B
			2	(B), C, D, E	186	688	0.270	186	188	0.0	0.4	8.508	A
		2	1	(B, C, D, E, A)	661			656	659	0.0	1.3	4.284	A
	Exit	1	1		914			914	900	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	236	771	0.306	236	236	0.4	0.5	7.067	A
			2	E, A	325	771	0.421	325	320	0.5	0.8	8.429	A
		2	1	(B, C, D, E, A)	561			560	557	0.0	0.0	0.013	A
	Exit	1	1		763			763	751	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	634	751	0.843	634	624	2.0	3.2	17.232	C
			2	B, (E), A	70	751	0.093	70	67	0.1	0.2	5.939	A
		2	1	(B, C, D, E, A)	706			703	696	0.6	2.8	11.607	B
	Exit	1	1		621			621	610	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	152	429	0.354	152	149	0.4	0.6	12.829	B
	Exit	1	1		71			71	69	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	668	704	0.950	666	652	2.1	2.8	13.588	B
			2	(A), B, C, D	277	704	0.394	275	266	0.4	0.7	8.688	A
		2	1	(B, C, D, E, A)	995			946	921	3.4	19.1	48.261	E
	Exit	1	1		610			610	599	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	550	661	0.831	550	544	2.0	2.6	16.208	C
			2	(B), C, D, E	237	661	0.359	238	231	0.4	0.6	10.193	B
		2	1	(B, C, D, E, A)	789			787	777	1.3	4.0	15.122	C
	Exit	1	1		1082			1082	1059	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	291	748	0.389	293	291	0.5	0.6	8.504	A
			2	E, A	393	748	0.525	394	395	0.8	1.1	11.059	B
		2	1	(B, C, D, E, A)	684			684	687	0.0	0.1	0.130	A
	Exit	1	1		781			781	784	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	702	711	0.986	701	689	3.2	4.9	22.997	C
			2	B, (E), A	79	711	0.111	80	81	0.2	0.2	6.977	A
		2	1	(B, C, D, E, A)	869			781	776	2.8	24.5	65.665	F
	Exit	1	1		679			679	676	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	186	354	0.525	185	184	0.6	1.4	22.488	C
	Exit	1	1		76			76	76	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	642	663	0.969	641	650	2.8	3.0	15.704	C
			2	(A), B, C, D	264	663	0.398	265	268	0.7	0.8	9.672	A
		2	1	(B, C, D, E, A)	1189			906	919	19.1	87.5	213.702	F
	Exit	1	1		712			712	703	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	627	666	0.943	628	619	2.6	3.6	19.569	C
			2	(B), C, D, E	276	666	0.414	274	270	0.6	1.1	11.530	B
		2	1	(B, C, D, E, A)	948			903	895	4.0	21.4	59.098	F
	Exit	1	1		1212			1212	1208	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	290	742	0.391	289	290	0.6	0.7	8.561	A
			2	E, A	395	742	0.533	391	392	1.1	1.5	11.334	B
		2	1	(B, C, D, E, A)	685			685	684	0.1	0.0	0.082	A
	Exit	1	1		789			789	792	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	705	713	0.989	705	709	4.9	5.0	24.777	C
			2	B, (E), A	81	713	0.113	81	81	0.2	0.2	6.834	A
		2	1	(B, C, D, E, A)	866			786	790	24.5	43.8	159.494	F
	Exit	1	1		701			701	692	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	178	353	0.505	180	183	1.4	1.2	24.444	C
	Exit	1	1		75			75	77	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	645	663	0.974	644	647	3.0	3.0	15.873	C
			2	(A), B, C, D	265	663	0.400	267	268	0.8	0.7	10.085	B
		2	1	(B, C, D, E, A)	1191			911	914	87.5	157.7	489.535	F
	Exit	1	1		707			707	712	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	645	664	0.971	645	639	3.6	3.8	20.340	C
			2	(B), C, D, E	285	664	0.429	285	282	1.1	1.0	12.151	B
		2	1	(B, C, D, E, A)	958			930	921	21.4	32.6	111.934	F
	Exit	1	1		1213			1213	1215	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	240	760	0.315	239	239	0.7	0.5	7.604	A
			2	E, A	326	760	0.429	325	327	1.5	0.8	9.157	A
		2	1	(B, C, D, E, A)	566			566	563	0.0	0.0	0.010	A
	Exit	1	1		784			784	784	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	700	749	0.935	704	714	5.0	4.2	22.957	C
			2	B, (E), A	82	749	0.110	83	84	0.2	0.2	6.857	A
		2	1	(B, C, D, E, A)	696			782	795	43.8	21.0	144.820	F
	Exit	1	1		653			653	666	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	152	399	0.380	153	155	1.2	0.6	17.161	C
	Exit	1	1		76			76	74	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	674	686	0.981	673	661	3.0	2.9	15.521	C
			2	(A), B, C, D	276	686	0.402	276	271	0.7	0.8	9.655	A
		2	1	(B, C, D, E, A)	983			950	932	157.7	170.7	630.756	F
	Exit	1	1		635			635	651	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	591	659	0.897	589	610	3.8	3.2	19.108	C
			2	(B), C, D, E	246	659	0.374	249	262	1.0	0.6	11.552	B
		2	1	(B, C, D, E, A)	788			837	868	32.6	12.2	81.744	F
	Exit	1	1		1144			1144	1149	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	201	795	0.253	201	200	0.5	0.4	6.602	A
			2	E, A	263	795	0.331	264	268	0.8	0.5	7.726	A
		2	1	(B, C, D, E, A)	464			464	466	0.0	0.0	0.006	A
	Exit	1	1		793			793	782	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	572	787	0.727	575	612	4.2	2.4	16.758	C
			2	B, (E), A	58	787	0.074	59	64	0.2	0.1	6.078	A
		2	1	(B, C, D, E, A)	597			631	669	21.0	2.6	38.768	E
	Exit	1	1		568			568	580	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	131	497	0.263	130	129	0.6	0.3	12.111	B
	Exit	1	1		66			66	69	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	721	738	0.976	722	703	2.9	2.9	14.485	B
			2	(A), B, C, D	297	738	0.402	297	288	0.8	0.8	9.009	A
		2	1	(B, C, D, E, A)	824			1017	991	170.7	128.9	501.176	F
	Exit	1	1		519			519	542	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	485	646	0.750	485	500	3.2	2.2	16.342	C
			2	(B), C, D, E	190	646	0.294	190	206	0.6	0.6	10.077	B
		2	1	(B, C, D, E, A)	667			675	702	12.2	2.3	21.763	C
	Exit	1	1		976			976	999	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	2	0.51	426	344	0.006	2	2	0.0	0.0	5.934	A
				C	10	3	930	748	0.013	10	11	0.0	0.0	5.703	A
				D	181	45	1003	808	0.224	180	183	0.0	0.4	6.450	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	268	67	1003	808	0.331	268	271	0.0	0.5	7.329	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	2	0.51	-	-	-	2	2	0.0	0.0	0.000	A
				C	10	3	-	-	-	10	11	0.0	0.0	0.020	A
				D	181	45	-	-	-	181	184	0.0	0.0	0.004	A
				E	268	67	-	-	-	268	273	0.0	0.0	0.016	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	888	725	0.018	13	13	0.0	0.0	13.511	B
				D	167	42	961	789	0.211	166	163	0.0	0.6	13.065	B
				E	364	91	961	788	0.462	364	357	0.0	1.4	12.736	B
			2	A	0.59	0.15	134	110	0.005	0.63	0.62	0.0	0.0	5.011	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	55	14	961	788	0.069	55	52	0.0	0.1	5.603	A
		2	1	A	0.59	0.15	-	-	-	0.59	0.62	0.0	0.0	1.981	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	-	-	-	13	13	0.0	0.0	2.858	A
				D	166	42	-	-	-	167	165	0.0	0.2	3.347	A
				E	420	105	-	-	-	419	414	0.0	0.4	3.068	A
C - Gibbet Lane	Entry	1	1	A	17	4	884	496	0.033	16	16	0.0	0.1	12.739	B
				B	15	4	900	505	0.030	15	15	0.0	0.0	9.332	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	25	6	913	509	0.049	25	25	0.0	0.1	9.577	A
				E	74	19	916	508	0.146	74	72	0.0	0.2	9.816	A
D - A5 (South)	Entry	1	1	A	433	108	964	744	0.583	432	421	0.0	1.5	11.069	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	149	37	964	744	0.200	149	146	0.0	0.6	12.356	B
			2	A	54	14	964	743	0.073	54	53	0.0	0.1	7.397	A
				B	142	36	964	743	0.191	143	140	0.0	0.2	7.302	A
				C	27	7	958	741	0.036	27	27	0.0	0.1	7.669	A
				D	9	2	762	592	0.015	8	8	0.0	0.0	9.194	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	491	123	-	-	-	488	480	0.0	2.2	11.609	B
				B	142	35	-	-	-	142	141	0.0	0.4	10.410	B
				C	27	7	-	-	-	27	27	0.0	0.1	10.321	B
				D	9	2	-	-	-	9	8	0.0	0.0	9.695	A
				E	150	37	-	-	-	149	148	0.0	0.7	11.961	B
E - A426	Entry	1	1	A	155	39	867	689	0.225	155	153	0.0	0.7	13.694	B
				B	315	79	867	687	0.458	314	308	0.0	1.3	12.500	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	50	12	867	690	0.072	49	51	0.0	0.1	7.399	A
				C	10	3	819	653	0.016	10	10	0.0	0.0	7.389	A

				D	123	31	867	688	0.178	123	124	0.0	0.3	9.149	A
				E	3	0.78	343	275	0.011	3	3	0.0	0.0	9.949	A
		2	1	A	156	39	-	-	-	155	156	0.0	0.3	4.759	A
				B	368	92	-	-	-	365	364	0.0	0.8	4.314	A
				C	10	3	-	-	-	10	11	0.0	0.0	4.457	A
				D	124	31	-	-	-	123	126	0.0	0.2	3.567	A
				E	3	0.78	-	-	-	3	3	0.0	0.0	2.508	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.79	502	390	0.008	3	3	0.0	0.0	6.846	A
				C	13	3	968	751	0.017	13	14	0.0	0.0	6.745	A
				D	220	55	1003	771	0.285	220	220	0.4	0.5	7.092	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	325	81	1003	771	0.421	325	320	0.5	0.8	8.429	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.79	-	-	-	3	3	0.0	0.0	0.000	A
				C	13	3	-	-	-	13	14	0.0	0.0	0.007	A
				D	220	55	-	-	-	220	220	0.0	0.0	0.007	A
				E	325	81	-	-	-	325	321	0.0	0.0	0.017	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	913	719	0.021	15	15	0.0	0.1	17.152	C
				D	197	49	961	751	0.262	197	194	0.6	1.0	17.330	C
				E	421	105	961	751	0.561	422	416	1.4	2.1	17.188	C
			2	A	0.91	0.23	193	153	0.006	0.87	0.90	0.0	0.0	5.013	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	69	17	961	751	0.092	69	66	0.1	0.2	5.953	A
		2	1	A	0.91	0.23	-	-	-	0.91	0.91	0.0	0.0	9.862	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	-	-	-	15	15	0.0	0.0	10.255	B
				D	197	49	-	-	-	197	195	0.2	0.8	11.935	B
				E	493	123	-	-	-	490	485	0.4	2.0	11.513	B
C - Gibbet Lane	Entry	1	1	A	19	5	903	431	0.045	19	19	0.1	0.1	15.517	C
				B	18	5	913	435	0.042	18	17	0.0	0.1	12.464	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	30	7	916	432	0.069	30	29	0.1	0.1	12.507	B
				E	85	21	916	430	0.197	85	83	0.2	0.3	12.558	B
D - A5 (South)	Entry	1	1	A	490	123	964	704	0.697	488	482	1.5	2.0	13.324	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	178	45	964	704	0.253	178	170	0.6	0.8	14.486	B
			2	A	70	18	964	706	0.099	70	67	0.1	0.2	8.759	A
				B	165	41	964	704	0.234	164	159	0.2	0.4	8.605	A
				C	31	8	964	705	0.045	31	30	0.1	0.1	8.621	A
				D	11	3	790	583	0.018	11	10	0.0	0.0	10.189	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	593	148	-	-	-	561	552	2.2	11.5	48.634	E
				B	170	43	-	-	-	165	159	0.4	3.0	46.200	E

		2	1	C	33	8	-	-	-	31	30	0.1	0.6	47.470	E
				D	11	3	-	-	-	11	10	0.0	0.2	47.398	E
				E	188	47	-	-	-	178	171	0.7	3.8	49.483	E
E - A426	Entry	1	1	A	186	46	867	662	0.281	186	182	0.7	1.0	16.935	C
				B	364	91	867	661	0.550	365	362	1.3	1.6	15.882	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	70	17	867	663	0.106	70	69	0.1	0.1	9.156	A
				C	12	3	816	628	0.019	12	11	0.0	0.0	9.327	A
				D	152	38	867	662	0.230	152	147	0.3	0.5	10.805	B
				E	3	0.87	421	323	0.011	3	4	0.0	0.0	12.511	B
		2	1	A	185	46	-	-	-	186	183	0.3	0.9	15.406	C
				B	437	109	-	-	-	434	432	0.8	2.3	15.190	C
				C	12	3	-	-	-	12	12	0.0	0.1	13.953	B
				D	153	38	-	-	-	152	147	0.2	0.8	14.684	B
				E	3	0.81	-	-	-	3	4	0.0	0.0	12.804	B

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.75	563	422	0.007	3	3	0.0	0.0	7.687	A
				C	17	4	989	736	0.023	17	16	0.0	0.0	8.156	A
				D	271	68	1003	748	0.362	273	271	0.5	0.6	8.537	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	393	98	1003	748	0.525	394	395	0.8	1.1	11.059	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.76	-	-	-	3	3	0.0	0.0	0.534	A
				C	17	4	-	-	-	17	16	0.0	0.0	0.068	A
				D	271	68	-	-	-	271	272	0.0	0.0	0.099	A
				E	393	98	-	-	-	393	396	0.0	0.0	0.151	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	17	4	930	691	0.024	17	16	0.1	0.1	23.681	C
				D	219	55	961	712	0.308	220	215	1.0	1.5	22.986	C
				E	465	116	961	711	0.655	464	457	2.1	3.3	22.982	C
			2	A	0.98	0.24	207	156	0.006	0.98	0.98	0.0	0.0	5.141	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	78	20	961	712	0.110	79	80	0.2	0.2	7.002	A
		2	1	A	1	0.32	-	-	-	0.98	0.98	0.0	0.0	60.237	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	20	5	-	-	-	17	17	0.0	0.6	67.725	F
				D	244	61	-	-	-	219	217	0.8	6.8	65.547	F
				E	605	151	-	-	-	544	542	2.0	17.0	65.669	F
C - Gibbet Lane	Entry	1	1	A	25	6	905	352	0.072	25	24	0.1	0.2	26.948	D
				B	23	6	913	353	0.067	24	23	0.1	0.1	22.360	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	38	9	916	354	0.107	37	37	0.1	0.3	21.671	C
				E	99	25	916	355	0.278	99	100	0.3	0.7	22.028	C
				A	472	118	964	663	0.712	470	479	2.0	2.2	15.418	C

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	170	43	964	663	0.257	171	171	0.8	0.8	16.670	C
			2	A	70	17	964	663	0.105	69	70	0.2	0.2	9.815	A
				B	156	39	964	664	0.235	157	158	0.4	0.4	9.502	A
				C	28	7	961	664	0.043	29	30	0.1	0.1	10.068	B
				D	10	2	754	523	0.018	10	9	0.0	0.0	10.696	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	721	180	-	-	-	542	550	11.5	53.1	214.414	F
				B	203	51	-	-	-	156	158	3.0	14.8	211.212	F
				C	37	9	-	-	-	28	30	0.6	2.8	207.384	F
				D	12	3	-	-	-	10	9	0.2	0.9	218.533	F
				E	215	54	-	-	-	170	171	3.8	15.9	214.991	F
E - A426	Entry	1	1	A	217	54	867	665	0.326	216	210	1.0	1.3	20.306	C
				B	410	103	867	665	0.617	412	410	1.6	2.2	19.233	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	84	21	867	665	0.126	83	82	0.1	0.3	10.443	B
				C	14	3	844	647	0.021	14	14	0.0	0.0	10.184	B
				D	173	43	867	665	0.261	172	171	0.5	0.7	12.269	B
				E	5	1	481	369	0.014	5	4	0.0	0.0	12.565	B
		2	1	A	229	57	-	-	-	217	211	0.9	5.1	60.595	F
				B	520	130	-	-	-	494	494	2.3	11.9	58.914	F
				C	14	4	-	-	-	14	14	0.1	0.3	59.240	F
				D	180	45	-	-	-	173	171	0.8	3.9	57.596	F
				E	6	1	-	-	-	5	5	0.0	0.1	64.538	F

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.81	577	428	0.008	3	3	0.0	0.0	8.344	A
				C	17	4	997	737	0.023	17	16	0.0	0.0	8.359	A
				D	269	67	1003	742	0.363	269	270	0.6	0.7	8.577	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	395	99	1003	742	0.533	391	392	1.1	1.5	11.334	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.81	-	-	-	3	3	0.0	0.0	0.137	A
				C	17	4	-	-	-	17	16	0.0	0.0	0.116	A
				D	269	67	-	-	-	269	271	0.0	0.0	0.056	A
				E	395	99	-	-	-	395	393	0.0	0.0	0.099	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	17	4	941	700	0.024	17	18	0.1	0.2	25.106	D
				D	220	55	961	713	0.309	219	221	1.5	1.6	24.865	C
				E	468	117	961	713	0.656	469	469	3.3	3.3	24.725	C
			2	A	1	0.30	209	157	0.008	1	1	0.0	0.0	5.756	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	80	20	961	713	0.112	80	80	0.2	0.2	6.850	A

		2	1	A	1	0.32	-	-	-	1	1	0.0	0.1	151.438	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	21	5	-	-	-	17	19	0.6	1.1	157.783	F
				D	246	62	-	-	-	220	221	6.8	12.4	159.515	F
				E	598	149	-	-	-	547	549	17.0	30.2	159.552	F
C - Gibbet Lane	Entry	1	1	A	23	6	900	346	0.065	24	24	0.2	0.1	26.437	D
				B	21	5	913	354	0.059	21	21	0.1	0.1	25.210	D
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	35	9	916	356	0.097	34	36	0.3	0.2	24.833	C
				E	100	25	916	355	0.282	101	101	0.7	0.7	23.808	C
D - A5 (South)	Entry	1	1	A	479	120	964	662	0.723	476	479	2.2	2.2	15.631	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	167	42	964	663	0.252	167	167	0.8	0.8	16.705	C
			2	A	69	17	964	661	0.104	69	71	0.2	0.2	10.228	B
				B	161	40	964	662	0.243	162	159	0.4	0.4	9.901	A
				C	27	7	964	661	0.042	28	29	0.1	0.1	10.371	B
				D	8	2	754	518	0.016	8	9	0.0	0.0	11.989	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	713	178	-	-	-	548	550	53.1	94.3	490.113	F
				B	204	51	-	-	-	161	158	14.8	27.2	487.575	F
				C	40	10	-	-	-	27	29	2.8	5.1	490.159	F
				D	12	3	-	-	-	8	9	0.9	1.6	484.835	F
				E	222	55	-	-	-	167	167	15.9	29.5	489.760	F
E - A426	Entry	1	1	A	220	55	867	665	0.331	219	217	1.3	1.4	20.925	C
				B	426	106	867	665	0.640	425	422	2.2	2.3	20.070	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	89	22	867	666	0.134	89	88	0.3	0.3	11.363	B
				C	13	3	844	646	0.021	14	13	0.0	0.0	11.641	B
				D	178	44	867	665	0.268	177	176	0.7	0.7	12.647	B
				E	5	1	499	381	0.012	5	5	0.0	0.0	13.168	B
		2	1	A	226	57	-	-	-	220	218	5.1	7.8	113.705	F
				B	529	132	-	-	-	515	509	11.9	18.0	111.691	F
				C	14	3	-	-	-	13	13	0.3	0.5	109.000	F
				D	185	46	-	-	-	178	176	3.9	6.3	110.881	F
				E	4	1	-	-	-	5	4	0.1	0.1	105.645	F

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.73	519	390	0.008	3	3	0.0	0.0	7.081	A
				C	14	3	968	728	0.019	14	13	0.0	0.0	7.481	A
				D	223	56	1003	759	0.293	222	223	0.7	0.5	7.619	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	326	82	1003	759	0.429	325	327	1.5	0.8	9.157	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.73	-	-	-	3	3	0.0	0.0	0.013	A
				C	14	3	-	-	-	14	13	0.0	0.0	0.000	A

				D	223	56	-	-	-	223	222	0.0	0.0	0.008	A
				E	326	82	-	-	-	326	325	0.0	0.0	0.011	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	16	4	947	737	0.022	17	17	0.2	0.1	24.309	C
				D	216	54	961	748	0.288	217	224	1.6	1.3	22.854	C
				E	468	117	961	749	0.625	471	473	3.3	2.8	22.964	C
			2	A	0.94	0.24	221	169	0.006	0.91	1	0.0	0.0	5.573	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	81	20	961	748	0.108	82	83	0.2	0.1	6.875	A
		2	1	A	1	0.26	-	-	-	0.94	1	0.1	0.0	152.481	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	16	4	-	-	-	16	17	1.1	0.5	141.978	F
				D	190	48	-	-	-	216	222	12.4	5.8	144.942	F
				E	489	122	-	-	-	549	555	30.2	14.7	144.829	F
C - Gibbet Lane	Entry	1	1	A	20	5	887	384	0.053	20	21	0.1	0.1	19.482	C
				B	18	5	911	389	0.047	18	18	0.1	0.1	15.514	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	30	8	916	395	0.076	31	30	0.2	0.1	16.676	C
				E	83	21	916	397	0.209	84	86	0.7	0.3	17.277	C
D - A5 (South)	Entry	1	1	A	497	124	964	686	0.724	495	486	2.2	2.2	15.239	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	177	44	964	686	0.258	178	175	0.8	0.8	16.469	C
			2	A	72	18	964	686	0.105	72	71	0.2	0.2	9.680	A
				B	164	41	964	687	0.238	163	161	0.4	0.5	9.569	A
				C	32	8	958	681	0.047	32	30	0.1	0.1	9.764	A
				D	9	2	782	555	0.016	9	9	0.0	0.0	11.047	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	591	148	-	-	-	569	557	94.3	102.5	632.083	F
				B	168	42	-	-	-	164	161	27.2	29.2	627.909	F
				C	30	8	-	-	-	32	30	5.1	5.3	623.603	F
				D	9	2	-	-	-	9	9	1.6	1.8	631.405	F
				E	185	46	-	-	-	177	175	29.5	31.9	630.351	F
E - A426	Entry	1	1	A	196	49	867	659	0.298	195	205	1.4	1.1	19.651	C
				B	395	99	867	659	0.599	393	405	2.3	2.1	18.864	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	74	18	867	659	0.112	75	79	0.3	0.2	10.966	B
				C	13	3	829	632	0.021	14	13	0.0	0.0	10.541	B
				D	155	39	867	658	0.236	157	166	0.7	0.4	12.004	B
				E	4	0.95	431	330	0.012	4	4	0.0	0.0	11.049	B
		2	1	A	183	46	-	-	-	196	204	7.8	2.7	82.353	F
				B	443	111	-	-	-	469	482	18.0	7.0	81.568	F
				C	12	3	-	-	-	13	13	0.5	0.2	83.452	F
				D	145	36	-	-	-	155	165	6.3	2.2	81.205	F
				E	3	0.85	-	-	-	4	4	0.1	0.1	89.010	F

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	2	0.52	429	337	0.006	2	2	0.0	0.0	5.996	A

A - A5 (North)	Entry	1	1	C	12	3	965	759	0.015	11	11	0.0	0.0	6.437	A
				D	187	47	1003	795	0.235	188	186	0.5	0.3	6.620	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	263	66	1003	795	0.331	264	268	0.8	0.5	7.726	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	2	0.52	-	-	-	2	2	0.0	0.0	0.000	A
				C	12	3	-	-	-	12	11	0.0	0.0	0.022	A
				D	187	47	-	-	-	187	185	0.0	0.0	0.003	A
				E	263	66	-	-	-	263	267	0.0	0.0	0.007	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	908	739	0.018	13	15	0.1	0.1	17.407	C
				D	176	44	961	787	0.224	178	190	1.3	0.8	16.889	C
				E	383	96	961	787	0.486	385	408	2.8	1.5	16.675	C
			2	A	0.87	0.22	209	168	0.005	0.94	1	0.0	0.0	4.898	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	57	14	961	785	0.073	58	63	0.1	0.1	6.099	A
		2	1	A	0.73	0.18	-	-	-	0.87	0.99	0.0	0.0	42.670	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	-	-	-	13	15	0.5	0.1	38.983	E
				D	166	41	-	-	-	176	187	5.8	0.7	39.449	E
				E	418	104	-	-	-	440	465	14.7	1.8	38.479	E
C - Gibbet Lane	Entry	1	1	A	17	4	889	469	0.036	17	16	0.1	0.1	14.977	B
				B	15	4	889	469	0.033	15	16	0.1	0.0	11.249	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	24	6	911	486	0.049	23	25	0.1	0.1	11.908	B
				E	74	19	916	492	0.151	74	72	0.3	0.2	11.902	B
D - A5 (South)	Entry	1	1	A	528	132	964	738	0.715	529	518	2.2	2.0	14.213	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	193	48	964	738	0.261	192	185	0.8	0.9	15.400	C
			2	A	79	20	964	737	0.108	79	76	0.2	0.2	9.120	A
				B	175	44	964	737	0.237	176	170	0.5	0.4	8.861	A
				C	32	8	964	736	0.044	32	31	0.1	0.1	9.152	A
				D	10	3	793	600	0.017	10	10	0.0	0.0	10.874	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	492	123	-	-	-	608	594	102.5	77.0	501.266	F
				B	145	36	-	-	-	175	170	29.2	22.7	499.536	F
				C	26	6	-	-	-	32	31	5.3	4.0	490.652	F
				D	9	2	-	-	-	10	10	1.8	1.2	488.699	F
				E	152	38	-	-	-	193	186	31.9	23.9	505.464	F
E - A426	Entry	1	1	A	166	42	867	647	0.257	167	170	1.1	0.7	17.048	C
				B	319	80	867	647	0.493	318	330	2.1	1.4	16.017	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	57	14	867	647	0.089	57	61	0.2	0.2	9.252	A
				C	10	3	804	603	0.017	10	11	0.0	0.0	9.032	A
				D	120	30	867	646	0.185	120	132	0.4	0.4	10.653	B
				E	3	0.73	398	300	0.010	3	3	0.0	0.0	9.490	A

		2	1	A	164	41	-	-	-	166	169	2.7	0.5	21.717	C
				B	370	93	-	-	-	376	389	7.0	1.3	22.296	C
				C	10	3	-	-	-	10	11	0.2	0.0	19.780	C
				D	119	30	-	-	-	120	131	2.2	0.4	20.236	C
				E	3	0.65	-	-	-	3	3	0.1	0.0	19.034	C

2036 WD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	D - A5 (South)	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	313.34	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	313.34	F

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	2036 WD	AM	PRTM 2.2 Demand Flows	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	720	100.000
B - Rugby Road		ONE HOUR	✓	646	100.000
C - Gibbet Lane		ONE HOUR	✓	378	100.000
D - A5 (South)		ONE HOUR	✓	1115	100.000
E - A426		ONE HOUR	✓	469	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	1	40	287	392
	B - Rugby Road	1	0	31	105	509
	C - Gibbet Lane	53	35	6	12	272
	D - A5 (South)	499	300	44	11	261
	E - A426	199	120	28	122	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	48	28	13
	B - Rugby Road	0	0	48	13	11
	C - Gibbet Lane	23	67	0	50	3
	D - A5 (South)	12	4	3	67	27
	E - A426	38	56	22	30	0

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.55	10.77	2.4	B	662	993
B - Rugby Road	0.95	60.23	12.7	F	593	890
C - Gibbet Lane	1.17	232.19	29.8	F	348	522
D - A5 (South)	1.40	811.75	223.0	F	1020	1530
E - A426	0.53	15.14	2.4	C	435	652

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	542	136	508	1513	0.358	543	539	565	0.0	1.2	7.665	A
B - Rugby Road	480	120	702	889	0.540	479	478	349	0.0	1.7	11.560	B
C - Gibbet Lane	283	71	1071	539	0.526	284	280	110	0.0	1.2	15.319	C
D - A5 (South)	840	210	945	1014	0.829	837	818	411	0.0	6.3	23.804	C
E - A426	361	90	712	1008	0.358	362	358	1070	0.0	1.2	10.714	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	646	162	575	1475	0.438	645	644	634	1.2	1.7	8.755	A
B - Rugby Road	581	145	832	840	0.692	582	577	389	1.7	3.3	18.215	C
C - Gibbet Lane	338	84	1285	484	0.698	336	330	128	1.2	3.3	30.148	D
D - A5 (South)	996	249	1142	957	1.041	918	917	479	6.3	28.5	73.820	F
E - A426	427	107	784	979	0.436	426	422	1277	1.2	1.6	12.309	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	793	198	626	1434	0.553	791	787	660	1.7	2.4	10.756	B
B - Rugby Road	709	177	1006	772	0.918	691	681	411	3.3	11.0	43.272	E
C - Gibbet Lane	414	104	1545	378	1.096	366	362	153	3.3	16.7	105.180	F
D - A5 (South)	1216	304	1327	888	1.370	886	893	584	28.5	110.0	284.503	F
E - A426	518	130	770	980	0.529	517	515	1443	1.6	2.3	15.100	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	795	199	608	1447	0.550	801	791	660	2.4	2.4	10.771	B
B - Rugby Road	717	179	1011	757	0.946	709	708	398	11.0	12.7	60.230	F
C - Gibbet Lane	423	106	1567	362	1.169	363	365	153	16.7	29.8	232.188	F
D - A5 (South)	1232	308	1345	881	1.398	867	872	585	110.0	199.9	635.777	F
E - A426	513	128	755	970	0.529	513	513	1457	2.3	2.4	15.142	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	650	162	583	1468	0.443	649	650	652	2.4	1.8	8.774	A
B - Rugby Road	584	146	837	868	0.673	585	618	394	12.7	3.5	30.421	D
C - Gibbet Lane	347	87	1287	472	0.734	411	404	135	29.8	14.0	190.237	F
D - A5 (South)	999	250	1208	932	1.072	922	906	490	199.9	223.0	811.749	F
E - A426	431	108	806	956	0.451	428	425	1323	2.4	1.7	12.590	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	545	136	561	1458	0.374	548	545	654	1.8	1.2	7.717	A
B - Rugby Road	489	122	714	874	0.559	489	492	395	3.5	1.6	12.505	B
C - Gibbet Lane	285	71	1084	553	0.515	300	333	118	14.0	1.8	46.614	E
D - A5 (South)	836	209	977	1022	0.818	1025	989	407	223.0	185.1	668.430	F
E - A426	357	89	860	949	0.376	355	355	1142	1.7	1.4	11.452	B

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	250	860	0.291	250	247	0.0	0.6	7.999	A
			2	E, A	292	860	0.339	293	292	0.0	0.6	7.410	A
		2	1	(B, C, D, E, A)	542			542	544	0.0	0.0	0.005	A
	Exit	1	1		565			565	556	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	437	769	0.568	435	434	0.0	1.4	10.941	B
			2	B, (E), A	44	769	0.057	43	44	0.0	0.1	5.401	A
		2	1	(B, C, D, E, A)	480			480	484	0.0	0.2	1.119	A
	Exit	1	1		349			349	342	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	283	544	0.521	284	280	0.0	1.2	15.319	C
	Exit	1	1		110			110	110	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	530	703	0.754	529	516	0.0	1.9	12.033	B
			2	(A), B, C, D	307	703	0.437	308	302	0.0	0.8	8.929	A
		2	1	(B, C, D, E, A)	840			837	829	0.0	3.7	12.947	B
	Exit	1	1		411			411	403	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	236	684	0.345	237	234	0.0	0.8	10.784	B
			2	(B), C, D, E	125	684	0.183	125	124	0.0	0.3	8.228	A
		2	1	(B, C, D, E, A)	361			361	362	0.0	0.1	0.864	A
	Exit	1	1		1070			1070	1062	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	289	841	0.343	289	291	0.6	0.8	8.931	A
			2	E, A	357	841	0.425	357	353	0.6	0.9	8.549	A
		2	1	(B, C, D, E, A)	646			646	646	0.0	0.0	0.046	A
	Exit	1	1		634			634	635	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	526	734	0.717	525	521	1.4	2.4	14.568	B
			2	B, (E), A	56	734	0.076	56	57	0.1	0.1	5.935	A
		2	1	(B, C, D, E, A)	581			582	581	0.2	0.8	4.460	A
	Exit	1	1		389			389	385	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	338	469	0.720	336	330	1.2	3.3	30.148	D
	Exit	1	1		128			128	130	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	580	648	0.894	578	579	1.9	2.6	14.561	B
			2	(A), B, C, D	338	648	0.521	340	338	0.8	1.1	10.917	B
		2	1	(B, C, D, E, A)	996			918	921	3.7	24.8	60.560	F
	Exit	1	1		479			479	478	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	275	666	0.413	275	273	0.8	1.0	12.064	B
			2	(B), C, D, E	152	666	0.228	152	149	0.3	0.4	9.220	A
		2	1	(B, C, D, E, A)	427			427	423	0.1	0.2	1.306	A
	Exit	1	1		1277			1277	1262	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	367	827	0.444	366	360	0.8	1.1	10.454	B
			2	E, A	426	827	0.515	425	427	0.9	1.3	10.679	B
		2	1	(B, C, D, E, A)	793			793	790	0.0	0.0	0.172	A
	Exit	1	1		660			660	670	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	617	686	0.899	615	605	2.4	4.0	20.674	C
			2	B, (E), A	77	686	0.112	77	76	0.1	0.2	6.781	A
		2	1	(B, C, D, E, A)	709			693	687	0.8	6.9	23.979	C
	Exit	1	1		411			411	407	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	414	379	1.092	366	362	3.3	16.7	105.180	F
	Exit	1	1		153			153	150	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	558	598	0.934	557	564	2.6	2.8	16.706	C
			2	(A), B, C, D	328	598	0.549	329	329	1.1	1.1	12.478	B
		2	1	(B, C, D, E, A)	1216			886	894	24.8	106.1	269.288	F
	Exit	1	1		584			584	577	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	334	669	0.499	333	333	1.0	1.4	13.390	B
			2	(B), C, D, E	184	669	0.275	184	181	0.4	0.5	9.657	A
		2	1	(B, C, D, E, A)	518			518	516	0.2	0.4	3.081	A
	Exit	1	1		1443			1443	1433	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	363	832	0.436	366	360	1.1	1.1	10.716	B
			2	E, A	433	832	0.521	435	431	1.3	1.2	10.463	B
		2	1	(B, C, D, E, A)	795			796	791	0.0	0.1	0.195	A
	Exit	1	1		660			660	661	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	628	685	0.916	627	628	4.0	4.0	22.348	C
			2	B, (E), A	81	685	0.118	81	80	0.2	0.2	7.166	A
		2	1	(B, C, D, E, A)	717			708	708	6.9	8.5	39.624	E
	Exit	1	1		398			398	400	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	423	371	1.139	363	365	16.7	29.8	232.188	F
	Exit	1	1		153			153	151	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	547	592	0.923	548	552	2.8	2.7	17.109	C
			2	(A), B, C, D	321	592	0.541	319	320	1.1	1.2	12.810	B
		2	1	(B, C, D, E, A)	1232			867	873	106.1	196.0	620.670	F
	Exit	1	1		585			585	583	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	337	673	0.500	336	333	1.4	1.4	13.138	B
			2	(B), C, D, E	176	673	0.261	177	181	0.5	0.4	9.778	A
		2	1	(B, C, D, E, A)	513			512	513	0.4	0.6	3.251	A
	Exit	1	1		1457			1457	1456	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	300	839	0.358	301	298	1.1	0.8	8.890	A
			2	E, A	349	839	0.416	347	352	1.2	1.0	8.615	A
		2	1	(B, C, D, E, A)	650			650	648	0.1	0.0	0.049	A
	Exit	1	1		652			652	643	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	524	732	0.716	524	552	4.0	2.3	16.926	C
			2	B, (E), A	61	732	0.083	61	65	0.2	0.1	6.320	A
		2	1	(B, C, D, E, A)	584			585	611	8.5	1.1	15.074	C
	Exit	1	1		394			394	392	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	347	469	0.740	411	404	29.8	14.0	190.237	F
	Exit	1	1		135			135	134	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	583	630	0.925	583	573	2.7	2.7	16.489	C
			2	(A), B, C, D	338	630	0.536	339	333	1.2	1.1	12.352	B
		2	1	(B, C, D, E, A)	999			921	905	196.0	219.2	798.688	F
	Exit	1	1		490			490	492	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	277	660	0.420	277	274	1.4	1.0	12.248	B
			2	(B), C, D, E	152	660	0.230	151	151	0.4	0.4	9.147	A
		2	1	(B, C, D, E, A)	431			429	424	0.6	0.3	1.541	A
	Exit	1	1		1323			1323	1343	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	245	845	0.290	247	247	0.8	0.6	7.960	A
			2	E, A	300	845	0.355	301	298	1.0	0.6	7.525	A
		2	1	(B, C, D, E, A)	545			545	543	0.0	0.0	0.014	A
	Exit	1	1		654			654	643	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	445	766	0.580	444	447	2.3	1.4	11.480	B
			2	B, (E), A	44	766	0.058	45	45	0.1	0.1	5.456	A
		2	1	(B, C, D, E, A)	489			489	488	1.1	0.2	1.675	A
	Exit	1	1		395			395	388	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	285	539	0.528	300	333	14.0	1.8	46.614	E
	Exit	1	1		118			118	118	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	651	694	0.938	650	627	2.7	2.7	14.792	B
			2	(A), B, C, D	376	694	0.541	375	362	1.1	1.2	11.216	B
		2	1	(B, C, D, E, A)	836			1027	990	219.2	181.1	658.400	F
	Exit	1	1		407			407	411	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	232	646	0.359	230	231	1.0	0.9	11.424	B
			2	(B), C, D, E	125	646	0.193	125	124	0.4	0.4	9.064	A
		2	1	(B, C, D, E, A)	357			357	354	0.3	0.1	0.943	A
	Exit	1	1		1142			1142	1155	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.65	0.16	164	142	0.005	0.68	0.73	0.0	0.0	6.155	A
				C	29	7	999	859	0.034	29	30	0.0	0.1	8.953	A
				D	221	55	1003	860	0.257	220	216	0.0	0.6	7.892	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	292	73	1003	860	0.339	293	292	0.0	0.6	7.410	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.65	0.16	-	-	-	0.65	0.74	0.0	0.0	0.000	A
				C	29	7	-	-	-	29	30	0.0	0.0	0.001	A
				D	221	55	-	-	-	221	218	0.0	0.0	0.006	A
				E	292	73	-	-	-	292	295	0.0	0.0	0.005	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	23	6	940	755	0.030	23	22	0.0	0.1	12.397	B
				D	81	20	961	770	0.105	80	79	0.0	0.3	11.286	B
				E	333	83	961	770	0.433	333	334	0.0	1.1	10.788	B
			2	A	0.73	0.18	180	145	0.005	0.73	0.85	0.0	0.0	4.383	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	43	11	961	769	0.056	43	43	0.0	0.1	5.423	A
		2	1	A	0.73	0.18	-	-	-	0.73	0.85	0.0	0.0	0.902	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	23	6	-	-	-	23	22	0.0	0.0	1.464	A
				D	81	20	-	-	-	81	80	0.0	0.0	1.169	A
				E	376	94	-	-	-	376	382	0.0	0.1	1.094	A
C - Gibbet Lane	Entry	1	1	A	40	10	916	544	0.073	40	39	0.0	0.2	15.775	C
				B	27	7	902	538	0.050	27	27	0.0	0.1	18.962	C
				C	4	0.97	607	359	0.011	4	4	0.0	0.0	16.422	C
				D	9	2	726	432	0.021	9	9	0.0	0.0	17.197	C
				E	204	51	916	544	0.374	205	201	0.0	0.8	14.853	B
D - A5 (South)	Entry	1	1	A	333	83	964	703	0.473	332	324	0.0	1.1	11.751	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	197	49	964	704	0.280	197	192	0.0	0.7	12.573	B
			2	A	39	10	964	703	0.055	39	39	0.0	0.1	8.625	A
				B	226	57	964	703	0.322	227	223	0.0	0.5	8.903	A
				C	34	8	964	703	0.048	34	33	0.0	0.1	9.120	A
				D	8	2	678	495	0.017	8	8	0.0	0.0	10.991	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	374	94	-	-	-	371	367	0.0	1.7	13.216	B
				B	225	56	-	-	-	226	225	0.0	0.8	12.269	B
				C	34	8	-	-	-	34	33	0.0	0.1	12.473	B
				D	8	2	-	-	-	8	8	0.0	0.0	12.490	B
				E	199	50	-	-	-	197	195	0.0	1.0	13.440	B
E - A426	Entry	1	1	A	154	38	867	684	0.224	154	154	0.0	0.5	10.580	B
				B	82	21	867	685	0.120	83	80	0.0	0.3	11.223	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	11	3	716	569	0.020	11	11	0.0	0.0	8.285	A
				C	21	5	852	675	0.031	21	22	0.0	0.1	8.075	A

				D	93	23	867	683	0.136	93	91	0.0	0.2	8.261	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	154	38	-	-	-	154	156	0.0	0.1	1.039	A
				B	93	23	-	-	-	94	92	0.0	0.0	0.838	A
				C	21	5	-	-	-	21	22	0.0	0.0	0.521	A
				D	93	23	-	-	-	93	92	0.0	0.0	0.694	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.73	0.18	181	154	0.005	0.71	0.77	0.0	0.0	8.432	A
				C	35	9	1003	840	0.042	35	36	0.1	0.1	10.010	B
				D	253	63	1003	841	0.301	253	254	0.6	0.7	8.800	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	357	89	1003	841	0.425	357	353	0.6	0.9	8.549	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.73	0.18	-	-	-	0.73	0.77	0.0	0.0	0.000	A
				C	35	9	-	-	-	35	36	0.0	0.0	0.033	A
				D	253	63	-	-	-	253	254	0.0	0.0	0.052	A
				E	357	89	-	-	-	357	354	0.0	0.0	0.043	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	955	729	0.038	28	28	0.1	0.1	16.660	C
				D	93	23	961	734	0.126	93	93	0.3	0.4	14.834	B
				E	406	101	961	734	0.553	404	400	1.1	1.8	14.399	B
			2	A	0.81	0.20	161	125	0.007	0.78	0.78	0.0	0.0	5.189	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	55	14	961	734	0.075	55	56	0.1	0.1	5.946	A
		2	1	A	0.84	0.21	-	-	-	0.81	0.79	0.0	0.0	3.387	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	28	7	-	-	-	28	28	0.0	0.0	4.740	A
				D	92	23	-	-	-	93	94	0.0	0.1	4.754	A
				E	460	115	-	-	-	461	459	0.1	0.6	4.389	A
C - Gibbet Lane	Entry	1	1	A	48	12	916	468	0.102	49	47	0.2	0.5	31.049	D
				B	30	8	902	462	0.066	29	30	0.1	0.4	34.599	D
				C	5	1	641	334	0.014	5	5	0.0	0.0	29.484	D
				D	11	3	788	410	0.026	11	11	0.0	0.1	33.082	D
				E	244	61	916	469	0.519	242	237	0.8	2.3	29.571	D
D - A5 (South)	Entry	1	1	A	361	90	964	649	0.557	360	363	1.1	1.5	14.226	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	219	55	964	649	0.337	218	216	0.7	1.0	15.195	C
			2	A	44	11	964	650	0.068	44	44	0.1	0.2	10.621	B
				B	248	62	964	648	0.383	250	248	0.5	0.8	10.929	B
				C	36	9	964	650	0.055	35	36	0.1	0.1	10.725	B
				D	10	2	708	483	0.021	10	9	0.0	0.0	13.720	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	441	110	-	-	-	405	409	1.7	11.2	61.123	F
				B	270	67	-	-	-	248	249	0.8	6.6	59.647	F

		2	1	C	38	10	-	-	-	36	36	0.1	0.9	58.394	F
				D	10	3	-	-	-	10	9	0.0	0.3	60.924	F
				E	236	59	-	-	-	219	217	1.0	5.8	61.068	F
E - A426	Entry	1	1	A	181	45	867	666	0.272	181	179	0.5	0.7	11.874	B
				B	94	23	867	664	0.141	94	94	0.3	0.3	12.472	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	14	4	753	578	0.024	14	13	0.0	0.0	9.077	A
				C	25	6	861	660	0.038	25	25	0.1	0.1	8.504	A
				D	113	28	867	665	0.170	112	111	0.2	0.4	9.406	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	182	45	-	-	-	181	180	0.1	0.1	1.487	A
				B	108	27	-	-	-	108	107	0.0	0.0	1.445	A
				C	25	6	-	-	-	25	25	0.0	0.0	0.985	A
				D	113	28	-	-	-	113	112	0.0	0.0	0.994	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.29	251	208	0.006	1	1	0.0	0.0	8.243	A
				C	46	12	1001	825	0.056	46	45	0.1	0.1	11.098	B
				D	320	80	1003	827	0.387	319	314	0.7	1.0	10.386	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	426	106	1003	827	0.515	425	427	0.9	1.3	10.679	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.29	-	-	-	1	1	0.0	0.0	0.044	A
				C	46	12	-	-	-	46	45	0.0	0.0	0.216	A
				D	320	80	-	-	-	320	315	0.0	0.0	0.152	A
				E	426	106	-	-	-	426	429	0.0	0.0	0.182	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	34	9	955	682	0.050	34	33	0.1	0.3	22.714	C
				D	110	27	961	686	0.160	110	110	0.4	0.7	20.787	C
				E	473	118	961	686	0.689	471	462	1.8	3.0	20.537	C
			2	A	1	0.29	222	160	0.007	1	0.96	0.0	0.0	6.129	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	76	19	961	686	0.110	76	75	0.1	0.2	6.791	A
		2	1	A	1	0.27	-	-	-	1	0.96	0.0	0.0	23.451	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	34	8	-	-	-	34	34	0.0	0.3	23.705	C
				D	113	28	-	-	-	110	111	0.1	1.2	24.813	C
				E	562	140	-	-	-	549	542	0.6	5.4	23.824	C
C - Gibbet Lane	Entry	1	1	A	61	15	916	386	0.159	52	52	0.5	2.5	105.635	F
				B	39	10	906	380	0.101	34	33	0.4	1.6	108.811	F
				C	6	2	667	288	0.021	5	5	0.0	0.3	105.067	F
				D	12	3	802	343	0.036	12	11	0.1	0.5	106.918	F
				E	296	74	916	380	0.778	263	260	2.3	11.8	104.765	F
				A	348	87	964	598	0.582	348	355	1.5	1.6	16.395	C

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	210	52	964	598	0.351	209	209	1.0	1.1	17.305	C
			2	A	44	11	964	601	0.073	43	44	0.2	0.2	12.026	B
				B	240	60	964	599	0.400	241	241	0.8	0.8	12.509	B
				C	35	9	964	601	0.058	36	35	0.1	0.1	12.349	B
				D	9	2	699	441	0.021	9	9	0.0	0.0	15.118	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	544	136	-	-	-	392	399	11.2	47.5	269.487	F
				B	324	81	-	-	-	240	242	6.6	28.4	268.379	F
				C	49	12	-	-	-	35	35	0.9	4.2	270.048	F
				D	12	3	-	-	-	9	9	0.3	1.0	265.906	F
				E	287	72	-	-	-	210	209	5.8	25.0	270.086	F
E - A426	Entry	1	1	A	217	54	867	670	0.324	216	219	0.7	0.9	13.180	B
				B	117	29	867	670	0.175	117	114	0.3	0.5	13.846	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	17	4	819	631	0.027	17	17	0.0	0.0	10.251	B
				C	32	8	865	668	0.048	32	32	0.1	0.1	9.026	A
				D	135	34	867	670	0.201	134	133	0.4	0.4	9.753	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	217	54	-	-	-	217	220	0.1	0.2	3.459	A
				B	135	34	-	-	-	134	132	0.0	0.1	3.293	A
				C	32	8	-	-	-	32	32	0.0	0.0	2.611	A
				D	135	34	-	-	-	135	133	0.0	0.1	2.438	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.25	269	223	0.005	1	1	0.0	0.0	9.741	A
				C	45	11	1003	834	0.054	45	45	0.1	0.1	11.463	B
				D	317	79	1003	832	0.381	320	313	1.0	1.0	10.629	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	433	108	1003	832	0.521	435	431	1.3	1.2	10.463	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.25	-	-	-	1	1	0.0	0.0	0.144	A
				C	45	11	-	-	-	45	45	0.0	0.0	0.258	A
				D	317	79	-	-	-	317	313	0.0	0.0	0.174	A
				E	433	108	-	-	-	433	431	0.0	0.0	0.204	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	37	9	955	680	0.054	36	35	0.3	0.3	24.696	C
				D	114	29	961	686	0.167	114	115	0.7	0.8	22.271	C
				E	476	119	961	685	0.695	478	479	3.0	3.0	22.241	C
			2	A	1	0.29	241	173	0.007	1	1	0.0	0.0	5.982	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	80	20	961	685	0.116	80	79	0.2	0.2	7.184	A

		2	1	A	1	0.29	-	-	-	1	1	0.0	0.0	35.823	E
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	37	9	-	-	-	37	35	0.3	0.4	39.024	E
				D	114	29	-	-	-	114	115	1.2	1.3	40.341	E
				E	564	141	-	-	-	556	557	5.4	6.8	39.515	E
C - Gibbet Lane	Entry	1	1	A	60	15	916	373	0.160	51	52	2.5	4.2	230.686	F
				B	39	10	908	374	0.106	33	33	1.6	2.9	241.326	F
				C	8	2	714	292	0.028	6	6	0.3	0.6	234.785	F
				D	13	3	772	320	0.041	12	11	0.5	0.9	238.842	F
				E	302	76	916	372	0.813	262	263	11.8	21.2	231.456	F
D - A5 (South)	Entry	1	1	A	345	86	964	592	0.582	345	347	1.6	1.7	16.797	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	202	51	964	592	0.341	203	204	1.1	1.0	17.709	C
			2	A	42	11	964	594	0.071	42	43	0.2	0.2	11.994	B
				B	236	59	964	592	0.399	234	234	0.8	0.9	12.841	B
				C	33	8	964	594	0.056	33	34	0.1	0.1	12.946	B
				D	9	2	685	423	0.021	9	9	0.0	0.0	16.919	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	551	138	-	-	-	387	391	47.5	88.0	621.024	F
				B	332	83	-	-	-	236	235	28.4	52.7	618.727	F
				C	47	12	-	-	-	33	34	4.2	7.5	615.298	F
				D	12	3	-	-	-	9	9	1.0	1.9	620.424	F
				E	290	73	-	-	-	202	204	25.0	45.9	623.737	F
E - A426	Entry	1	1	A	220	55	867	673	0.327	220	217	0.9	0.9	12.949	B
				B	117	29	867	674	0.173	115	116	0.5	0.5	13.535	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	15	4	785	611	0.024	14	15	0.0	0.0	10.172	B
				C	33	8	867	674	0.049	32	31	0.1	0.1	9.354	A
				D	128	32	867	673	0.191	130	134	0.4	0.3	9.843	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	220	55	-	-	-	220	217	0.2	0.2	3.635	A
				B	131	33	-	-	-	131	131	0.1	0.2	3.441	A
				C	33	8	-	-	-	33	31	0.0	0.0	2.845	A
				D	129	32	-	-	-	128	134	0.1	0.1	2.609	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.84	0.21	205	172	0.005	0.81	0.86	0.0	0.0	7.229	A
				C	37	9	1003	841	0.044	36	37	0.1	0.2	9.706	A
				D	263	66	1003	840	0.313	264	260	1.0	0.6	8.798	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	349	87	1003	840	0.416	347	352	1.2	1.0	8.615	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0.84	0.21	-	-	-	0.84	0.87	0.0	0.0	0.000	A
				C	37	9	-	-	-	37	37	0.0	0.0	0.082	A

				D	263	66	-	-	-	263	259	0.0	0.0	0.047	A
				E	349	87	-	-	-	349	351	0.0	0.0	0.047	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	29	7	952	726	0.040	29	30	0.3	0.2	18.546	C
				D	94	23	961	733	0.128	93	99	0.8	0.4	17.163	C
				E	401	100	961	732	0.548	402	423	3.0	1.7	16.786	C
			2	A	1	0.25	230	172	0.006	1	1	0.0	0.0	7.104	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	60	15	961	732	0.082	60	64	0.2	0.1	6.306	A
		2	1	A	1	0.26	-	-	-	1	1	0.0	0.0	18.075	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	29	7	-	-	-	29	30	0.4	0.1	15.429	C
				D	94	23	-	-	-	94	98	1.3	0.2	15.281	C
				E	460	115	-	-	-	461	482	6.8	0.9	15.009	C
C - Gibbet Lane	Entry	1	1	A	46	11	916	469	0.098	57	56	4.2	1.9	195.250	F
				B	33	8	912	466	0.071	39	38	2.9	1.4	192.959	F
				C	5	1	720	360	0.015	7	6	0.6	0.2	181.291	F
				D	12	3	790	398	0.030	13	13	0.9	0.5	193.344	F
				E	251	63	916	469	0.535	296	291	21.2	10.0	189.310	F
D - A5 (South)	Entry	1	1	A	366	91	964	631	0.579	365	361	1.7	1.7	16.195	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	217	54	964	630	0.345	218	212	1.0	1.0	17.060	C
			2	A	46	11	964	628	0.073	46	45	0.2	0.1	11.989	B
				B	248	62	964	630	0.394	248	245	0.9	0.8	12.393	B
				C	37	9	964	630	0.059	37	35	0.1	0.1	12.079	B
				D	7	2	699	450	0.016	8	8	0.0	0.0	15.201	C
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	451	113	-	-	-	411	406	88.0	98.4	798.571	F
				B	268	67	-	-	-	248	245	52.7	58.8	798.838	F
				C	37	9	-	-	-	37	35	7.5	8.4	792.627	F
				D	10	2	-	-	-	7	8	1.9	2.2	808.582	F
				E	233	58	-	-	-	217	211	45.9	51.4	799.653	F
E - A426	Entry	1	1	A	184	46	867	659	0.279	183	180	0.9	0.7	12.130	B
				B	94	23	867	661	0.142	94	94	0.5	0.4	12.505	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	13	3	767	587	0.022	13	14	0.0	0.0	8.974	A
				C	27	7	863	656	0.041	26	26	0.1	0.1	8.845	A
				D	112	28	867	659	0.170	112	112	0.3	0.3	9.239	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	185	46	-	-	-	184	179	0.2	0.1	1.822	A
				B	107	27	-	-	-	107	107	0.2	0.1	1.479	A
				C	27	7	-	-	-	27	26	0.0	0.0	1.407	A
				D	113	28	-	-	-	112	112	0.1	0.1	1.194	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.27	208	175	0.006	1	0.91	0.0	0.0	7.332	A

A - A5 (North)	Entry	1	1	C	30	8	997	840	0.036	31	30	0.2	0.1	8.882	A
				D	214	53	1003	846	0.253	215	216	0.6	0.5	7.853	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	300	75	1003	845	0.355	301	298	1.0	0.6	7.525	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	1	0.27	-	-	-	1	0.91	0.0	0.0	0.227	A
				C	30	8	-	-	-	30	30	0.0	0.0	0.020	A
				D	214	53	-	-	-	214	215	0.0	0.0	0.014	A
				E	300	75	-	-	-	300	296	0.0	0.0	0.013	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	22	6	931	745	0.030	22	24	0.2	0.1	13.302	B
				D	80	20	961	766	0.104	81	82	0.4	0.2	11.880	B
				E	342	86	961	766	0.447	341	342	1.7	1.1	11.292	B
			2	A	0.52	0.13	138	109	0.005	0.55	0.62	0.0	0.0	4.471	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	44	11	961	767	0.057	44	44	0.1	0.1	5.471	A
		2	1	A	0.52	0.13	-	-	-	0.52	0.62	0.0	0.0	3.057	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	22	6	-	-	-	22	23	0.1	0.0	1.702	A
				D	80	20	-	-	-	80	81	0.2	0.0	1.880	A
				E	386	97	-	-	-	386	384	0.9	0.1	1.629	A
[illegible]				A	39	10	916	543	0.073	42	47	1.9	0.2	46.688	E
				B	26	7	906	534	0.049	28	31	1.4	0.2	51.946	E
				D	9	2	776	452	0.020	9	11	0.5	0.1	42.082	E
				E	205	51	916	539	0.379	215	239	10.0	1.3	46.432	E
D - A5 (South)	Entry	1	1	A	410	103	964	695	0.590	409	395	1.7	1.7	14.482	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	241	60	964	695	0.347	241	232	1.0	1.0	15.390	C
			2	A	50	13	964	693	0.073	50	49	0.1	0.2	10.941	B
				B	277	69	964	694	0.399	276	266	0.8	0.9	11.187	B
				C	39	10	964	693	0.057	39	38	0.1	0.1	11.269	B
				D	9	2	748	531	0.018	10	10	0.0	0.0	14.199	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	377	94	-	-	-	460	444	98.4	81.7	658.771	F
				B	222	56	-	-	-	277	266	58.8	48.3	656.171	F
				C	33	8	-	-	-	39	38	8.4	7.0	655.450	F
				D	9	2	-	-	-	9	10	2.2	2.1	676.206	F
				E	195	49	-	-	-	241	232	51.4	42.1	660.718	F
E - A426	Entry	1	1	A	153	38	867	647	0.237	152	152	0.7	0.6	11.238	B
				B	79	20	867	648	0.122	78	79	0.4	0.3	11.831	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	12	3	704	529	0.022	12	11	0.0	0.0	10.066	B
				C	21	5	848	633	0.034	21	21	0.1	0.1	8.699	A
				D	92	23	867	647	0.142	92	92	0.3	0.3	9.052	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

		2	1	A	153	38	-	-	-	153	152	0.1	0.1	1.131	A
				B	91	23	-	-	-	90	90	0.1	0.0	1.018	A
				C	21	5	-	-	-	21	21	0.0	0.0	0.655	A
				D	92	23	-	-	-	92	92	0.1	0.0	0.661	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2036 WD , PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	D - A5 (South)	Arm D: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	B - Rugby Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J47	A5/A426/Gibbet Lane	Standard Roundabout		A, B, C, D, E	299.93	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	299.93	F

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
D6	2036 WD	PM	PRTM 2.2 Demand Flows	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - A5 (North)		ONE HOUR	✓	633	100.000
B - Rugby Road		ONE HOUR	✓	798	100.000
C - Gibbet Lane		ONE HOUR	✓	177	100.000
D - A5 (South)		ONE HOUR	✓	1126	100.000
E - A426		ONE HOUR	✓	875	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	4	15	275	339
	B - Rugby Road	1	0	16	254	527
	C - Gibbet Lane	22	24	0	35	96
	D - A5 (South)	706	199	33	13	175
	E - A426	206	496	14	155	4

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
J47	0.20	0.80

Heavy Vehicle %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	14	9
	B - Rugby Road	0	0	23	15	11
	C - Gibbet Lane	29	0	0	0	0
	D - A5 (South)	8	1	10	40	30
	E - A426	23	9	0	28	33

Cyclist %

		To				
		A - A5 (North)	B - Rugby Road	C - Gibbet Lane	D - A5 (South)	E - A426
From	A - A5 (North)	0	0	0	0	0
	B - Rugby Road	0	0	0	0	0
	C - Gibbet Lane	0	0	0	0	0
	D - A5 (South)	0	0	0	0	0
	E - A426	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - A5 (North)	0.53	10.65	2.3	B	580	870
B - Rugby Road	1.11	216.93	57.8	F	734	1102
C - Gibbet Lane	0.56	25.82	1.4	D	161	242
D - A5 (South)	1.34	659.13	184.3	F	1034	1552
E - A426	1.04	177.19	51.0	F	803	1205

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	477	119	710	1412	0.338	475	474	698	0.0	0.9	7.202	A
B - Rugby Road	596	149	640	858	0.695	600	590	545	0.0	2.7	17.019	C
C - Gibbet Lane	134	33	1182	500	0.268	135	136	58	0.0	0.3	10.431	B
D - A5 (South)	851	213	762	1057	0.805	841	820	555	0.0	6.7	23.307	C
E - A426	661	165	747	941	0.703	661	649	855	0.0	3.4	16.799	C

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	566	142	821	1386	0.409	566	566	794	0.9	1.6	8.411	A
B - Rugby Road	720	180	754	825	0.873	707	699	633	2.7	7.8	30.465	D
C - Gibbet Lane	152	38	1393	425	0.357	152	156	68	0.3	0.6	13.004	B
D - A5 (South)	1012	253	901	1007	1.005	946	938	644	6.7	24.7	64.263	F
E - A426	779	195	841	911	0.855	774	763	1006	3.4	8.6	33.683	D

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	688	172	906	1317	0.522	685	692	820	1.6	2.3	10.550	B
B - Rugby Road	879	220	892	791	1.111	777	768	699	7.8	35.0	105.566	F
C - Gibbet Lane	196	49	1598	354	0.555	197	194	71	0.6	1.3	22.755	C
D - A5 (South)	1234	309	1040	947	1.304	940	950	754	24.7	96.5	233.835	F
E - A426	964	241	843	941	1.024	884	862	1138	8.6	34.8	100.485	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	697	174	929	1305	0.534	698	696	821	2.3	2.1	10.645	B
B - Rugby Road	878	220	917	828	1.061	794	786	709	35.0	57.8	216.934	F
C - Gibbet Lane	195	49	1638	351	0.554	195	196	73	1.3	1.4	25.818	D
D - A5 (South)	1241	310	1058	926	1.341	927	938	776	96.5	172.4	515.529	F
E - A426	963	241	832	926	1.040	918	900	1153	34.8	51.0	177.188	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	568	142	870	1325	0.429	569	574	826	2.1	1.4	8.910	A
B - Rugby Road	727	182	765	844	0.861	790	800	673	57.8	37.2	209.179	F
C - Gibbet Lane	161	40	1486	390	0.413	162	163	69	1.4	0.8	18.275	C
D - A5 (South)	1017	254	957	974	1.044	982	968	690	172.4	184.3	659.125	F
E - A426	789	197	866	888	0.889	830	865	1073	51.0	31.8	162.480	F

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	483	121	782	1392	0.347	482	476	838	1.4	1.1	7.760	A
B - Rugby Road	607	152	656	884	0.687	671	725	608	37.2	7.4	82.082	F
C - Gibbet Lane	131	33	1263	478	0.274	132	135	64	0.8	0.4	12.578	B
D - A5 (South)	850	212	801	1015	0.837	1036	1018	594	184.3	140.9	526.664	F
E - A426	665	166	909	907	0.733	711	752	928	31.8	9.8	76.283	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	219	803	0.273	219	219	0.0	0.4	7.139	A
			2	E, A	258	803	0.321	256	255	0.0	0.5	7.254	A
		2	1	(B, C, D, E, A)	477			477	478	0.0	0.0	0.001	A
	Exit	1	1		698			698	684	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	550	786	0.700	551	540	0.0	2.0	13.264	B
			2	B, (E), A	49	786	0.062	49	50	0.0	0.1	5.390	A
		2	1	(B, C, D, E, A)	596			599	598	0.0	0.6	4.388	A
	Exit	1	1		545			545	537	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	134	505	0.265	135	136	0.0	0.3	10.431	B
	Exit	1	1		58			58	56	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	594	753	0.788	594	580	0.0	2.0	11.435	B
			2	(A), B, C, D	247	753	0.328	247	240	0.0	0.6	7.284	A
		2	1	(B, C, D, E, A)	851			841	830	0.0	4.1	13.091	B
	Exit	1	1		555			555	544	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	472	675	0.698	472	466	0.0	1.9	13.380	B
			2	(B), C, D, E	190	675	0.281	189	184	0.0	0.5	8.454	A
		2	1	(B, C, D, E, A)	661			661	659	0.0	1.0	4.700	A
	Exit	1	1		855			855	849	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	263	772	0.341	261	263	0.4	0.8	8.013	A
			2	E, A	303	772	0.393	304	303	0.5	0.8	8.717	A
		2	1	(B, C, D, E, A)	566			566	568	0.0	0.0	0.014	A
	Exit	1	1		794			794	791	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	644	755	0.854	643	635	2.0	3.5	17.488	C
			2	B, (E), A	65	755	0.086	65	63	0.1	0.1	5.717	A
		2	1	(B, C, D, E, A)	720			709	705	0.6	4.2	13.913	B
	Exit	1	1		633			633	623	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	152	432	0.351	152	156	0.3	0.6	13.004	B
	Exit	1	1		68			68	67	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	666	715	0.931	665	662	2.0	2.7	13.616	B
			2	(A), B, C, D	281	715	0.393	281	276	0.6	0.7	8.678	A
		2	1	(B, C, D, E, A)	1012			947	941	4.1	21.3	52.103	F
	Exit	1	1		644			644	644	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	550	651	0.844	549	544	1.9	2.8	17.286	C
			2	(B), C, D, E	224	651	0.345	225	219	0.5	0.6	10.042	B
		2	1	(B, C, D, E, A)	779			774	767	1.0	5.2	18.302	C
	Exit	1	1		1006			1006	996	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	320	748	0.427	318	322	0.8	1.0	10.011	B
			2	E, A	368	748	0.492	367	371	0.8	1.2	10.841	B
		2	1	(B, C, D, E, A)	688			688	695	0.0	0.0	0.088	A
	Exit	1	1		820			820	824	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	701	717	0.978	700	693	3.5	5.0	23.477	C
			2	B, (E), A	77	717	0.107	77	75	0.1	0.2	6.690	A
		2	1	(B, C, D, E, A)	879			778	774	4.2	29.9	83.400	F
	Exit	1	1		699			699	689	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	196	361	0.544	197	194	0.6	1.3	22.755	C
	Exit	1	1		71			71	72	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	664	677	0.981	665	667	2.7	2.9	15.280	C
			2	(A), B, C, D	276	677	0.408	276	284	0.7	0.7	9.593	A
		2	1	(B, C, D, E, A)	1234			940	951	21.3	92.9	220.258	F
	Exit	1	1		754			754	748	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	626	651	0.961	624	610	2.8	3.8	20.838	C
			2	(B), C, D, E	262	651	0.402	260	252	0.6	1.0	11.970	B
		2	1	(B, C, D, E, A)	964			887	868	5.2	30.0	82.092	F
	Exit	1	1		1138			1138	1132	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	322	742	0.435	323	324	1.0	0.9	10.104	B
			2	E, A	374	742	0.505	375	372	1.2	1.1	10.913	B
		2	1	(B, C, D, E, A)	697			697	695	0.0	0.0	0.100	A
	Exit	1	1		821			821	821	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	712	710	1.002	712	708	5.0	5.0	25.039	D
			2	B, (E), A	81	710	0.114	82	78	0.2	0.1	7.049	A
		2	1	(B, C, D, E, A)	878			793	787	29.9	52.7	193.919	F
	Exit	1	1		709			709	705	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	195	347	0.561	195	196	1.3	1.4	25.818	D
	Exit	1	1		73			73	75	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	655	672	0.975	655	658	2.9	2.9	15.483	C
			2	(A), B, C, D	275	672	0.409	272	279	0.7	0.8	9.803	A
		2	1	(B, C, D, E, A)	1241			930	938	92.9	168.7	501.949	F
	Exit	1	1		776			776	769	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	640	653	0.979	639	629	3.8	3.9	21.334	C
			2	(B), C, D, E	279	653	0.426	279	272	1.0	1.0	12.067	B
		2	1	(B, C, D, E, A)	963			918	901	30.0	46.1	158.518	F
	Exit	1	1		1153			1153	1147	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	264	758	0.348	264	268	0.9	0.6	8.778	A
			2	E, A	304	758	0.400	304	306	1.1	0.8	8.988	A
		2	1	(B, C, D, E, A)	568			568	571	0.0	0.0	0.024	A
	Exit	1	1		826			826	830	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	712	752	0.947	714	722	5.0	4.6	23.769	C
			2	B, (E), A	76	752	0.101	76	78	0.1	0.2	6.772	A
		2	1	(B, C, D, E, A)	727			788	798	52.7	32.4	187.459	F
	Exit	1	1		673			673	687	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	161	400	0.404	162	163	1.4	0.8	18.275	C
	Exit	1	1		69			69	73	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	690	700	0.986	689	681	2.9	2.9	14.993	B
			2	(A), B, C, D	291	700	0.416	293	288	0.8	0.7	9.658	A
		2	1	(B, C, D, E, A)	1017			981	967	168.7	180.7	646.444	F
	Exit	1	1		690			690	703	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	589	645	0.914	591	610	3.9	3.4	20.704	C
			2	(B), C, D, E	235	645	0.365	238	255	1.0	0.6	11.892	B
		2	1	(B, C, D, E, A)	789			824	862	46.1	27.7	144.394	F
	Exit	1	1		1073			1073	1077	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	B, C, D	231	783	0.295	230	224	0.6	0.5	7.609	A
			2	E, A	252	783	0.322	252	252	0.8	0.6	7.884	A
		2	1	(B, C, D, E, A)	483			483	475	0.0	0.0	0.003	A
	Exit	1	1		838			838	832	0.0	0.0	0.000	A
B - Rugby Road	Entry	1	1	C, D, E	608	782	0.778	615	659	4.6	2.8	19.006	C
			2	B, (E), A	56	782	0.072	56	66	0.2	0.1	6.117	A
		2	1	(B, C, D, E, A)	607			664	717	32.4	4.5	64.698	F
	Exit	1	1		608			608	628	0.0	0.0	0.000	A
C - Gibbet Lane	Entry	1	1	A, B, C, D, E	131	477	0.275	132	135	0.8	0.4	12.578	B
	Exit	1	1		64			64	67	0.0	0.0	0.000	A
D - A5 (South)	Entry	1	1	A, E	736	743	0.991	734	718	2.9	3.0	14.122	B
			2	(A), B, C, D	300	743	0.404	302	300	0.7	0.7	9.126	A
		2	1	(B, C, D, E, A)	850			1036	1018	180.7	137.2	515.501	F
	Exit	1	1		594			594	616	0.0	0.0	0.000	A
E - A426	Entry	1	1	A, B	506	634	0.799	509	533	3.4	2.5	18.522	C
			2	(B), C, D, E	202	634	0.318	202	218	0.6	0.6	10.633	B
		2	1	(B, C, D, E, A)	665			708	748	27.7	6.7	60.155	F
	Exit	1	1		928			928	964	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service

A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.75	503	405	0.007	3	3	0.0	0.0	6.988	A
				C	12	3	938	756	0.015	11	11	0.0	0.0	6.164	A
				D	205	51	1003	804	0.254	205	205	0.0	0.4	7.200	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	258	64	1003	804	0.320	256	255	0.0	0.5	7.254	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.75	-	-	-	3	3	0.0	0.0	0.000	A
				C	12	3	-	-	-	12	11	0.0	0.0	0.000	A
				D	205	51	-	-	-	205	207	0.0	0.0	0.000	A
				E	258	64	-	-	-	258	257	0.0	0.0	0.002	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	12	3	876	717	0.017	12	12	0.0	0.1	14.047	B
				D	192	48	961	786	0.245	193	187	0.0	0.8	13.622	B
				E	346	86	961	786	0.440	346	341	0.0	1.2	13.049	B
			2	A	0.74	0.18	141	116	0.006	0.74	0.61	0.0	0.0	5.163	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	48	12	961	785	0.061	48	49	0.0	0.1	5.393	A
		2	1	A	0.74	0.18	-	-	-	0.74	0.61	0.0	0.0	4.394	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	12	3	-	-	-	12	12	0.0	0.0	5.328	A
				D	192	48	-	-	-	192	190	0.0	0.2	4.378	A
				E	391	98	-	-	-	394	395	0.0	0.4	4.366	A
C - Gibbet Lane	Entry	1	1	A	17	4	888	492	0.034	17	17	0.0	0.1	12.895	B
				B	19	5	910	502	0.037	19	18	0.0	0.1	10.194	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	27	7	916	507	0.053	27	27	0.0	0.1	10.012	B
				E	71	18	916	503	0.142	72	73	0.0	0.2	10.198	B
D - A5 (South)	Entry	1	1	A	464	116	964	754	0.615	464	453	0.0	1.5	11.241	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	130	32	964	753	0.173	130	127	0.0	0.5	12.268	B
			2	A	60	15	964	753	0.080	60	61	0.0	0.2	6.976	A
				B	153	38	964	753	0.204	153	147	0.0	0.4	7.288	A
				C	24	6	960	750	0.032	24	23	0.0	0.1	7.739	A
				D	10	3	734	576	0.018	11	9	0.0	0.0	8.379	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	530	132	-	-	-	523	520	0.0	2.5	13.274	B
				B	156	39	-	-	-	153	149	0.0	0.7	12.151	B
				C	24	6	-	-	-	24	23	0.0	0.2	12.568	B
				D	10	2	-	-	-	10	9	0.0	0.0	13.188	B
				E	132	33	-	-	-	130	129	0.0	0.7	13.699	B
E - A426	Entry	1	1	A	156	39	867	677	0.230	157	152	0.0	0.7	14.169	B
				B	316	79	867	676	0.467	315	314	0.0	1.2	13.041	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	56	14	867	676	0.082	56	55	0.0	0.1	7.269	A
				C	11	3	822	647	0.017	11	10	0.0	0.0	7.691	A

				D	119	30	867	676	0.177	119	115	0.0	0.4	9.149	A
				E	4	0.97	385	302	0.013	4	3	0.0	0.0	10.250	B
		2	1	A	156	39	-	-	-	156	155	0.0	0.3	4.922	A
				B	371	93	-	-	-	371	374	0.0	0.5	4.724	A
				C	11	3	-	-	-	11	11	0.0	0.0	3.838	A
				D	119	30	-	-	-	119	117	0.0	0.2	4.407	A
				E	4	0.97	-	-	-	4	3	0.0	0.0	4.377	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.78	548	427	0.007	3	3	0.0	0.0	7.610	A
				C	14	3	949	733	0.019	14	13	0.0	0.0	7.382	A
				D	246	62	1003	773	0.319	245	247	0.4	0.7	8.057	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	303	76	1003	772	0.393	304	303	0.5	0.8	8.717	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.78	-	-	-	3	3	0.0	0.0	0.000	A
				C	14	3	-	-	-	14	13	0.0	0.0	0.000	A
				D	246	62	-	-	-	246	248	0.0	0.0	0.011	A
				E	303	76	-	-	-	303	304	0.0	0.0	0.016	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	921	728	0.021	15	15	0.1	0.1	18.605	C
				D	222	55	961	756	0.294	222	222	0.8	1.2	17.714	C
				E	407	102	961	755	0.539	406	399	1.2	2.2	17.331	C
			2	A	1	0.28	187	147	0.008	1	0.83	0.0	0.0	4.790	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	64	16	961	756	0.084	64	63	0.1	0.1	5.731	A
		2	1	A	1	0.27	-	-	-	1	0.83	0.0	0.0	12.978	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	16	4	-	-	-	15	15	0.0	0.1	14.523	B
				D	226	56	-	-	-	222	224	0.2	1.4	13.931	B
				E	478	119	-	-	-	471	466	0.4	2.7	13.890	B
C - Gibbet Lane	Entry	1	1	A	20	5	888	422	0.047	19	20	0.1	0.1	15.077	C
				B	21	5	913	434	0.049	21	21	0.1	0.1	12.785	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	30	7	916	430	0.069	30	31	0.1	0.1	12.529	B
				E	81	20	916	431	0.188	82	84	0.2	0.3	12.863	B
D - A5 (South)	Entry	1	1	A	519	130	964	715	0.726	518	517	1.5	2.1	13.444	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	147	37	964	716	0.205	146	144	0.5	0.6	14.355	B
			2	A	73	18	964	715	0.101	73	72	0.2	0.2	8.654	A
				B	171	43	964	715	0.239	171	167	0.4	0.4	8.549	A
				C	28	7	964	716	0.039	27	27	0.1	0.1	9.079	A
				D	10	3	799	596	0.017	10	10	0.0	0.0	10.534	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				A	632	158	-	-	-	592	592	2.5	13.4	52.359	F
				B	183	46	-	-	-	171	167	0.7	3.8	51.181	F

		2	1	C	29	7	-	-	-	28	27	0.2	0.6	51.465	F
				D	11	3	-	-	-	10	10	0.0	0.3	52.417	F
				E	156	39	-	-	-	147	145	0.7	3.2	52.318	F
E - A426	Entry	1	1	A	182	45	867	652	0.279	182	181	0.7	0.9	17.922	C
				B	368	92	867	652	0.564	367	363	1.2	1.8	17.007	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	71	18	867	653	0.108	71	69	0.1	0.2	9.008	A
				C	12	3	822	620	0.020	12	12	0.0	0.0	8.856	A
				D	137	34	867	652	0.211	138	134	0.4	0.4	10.782	B
				E	4	0.90	453	343	0.011	4	4	0.0	0.0	11.243	B
		2	1	A	183	46	-	-	-	182	182	0.3	1.3	18.727	C
				B	442	111	-	-	-	438	435	0.5	2.9	18.321	C
				C	13	3	-	-	-	12	12	0.0	0.1	15.678	C
				D	138	34	-	-	-	137	134	0.2	1.0	17.941	C
				E	4	0.88	-	-	-	4	4	0.0	0.0	18.278	C

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	668	503	0.009	4	4	0.0	0.0	9.311	A
				C	16	4	976	730	0.022	16	15	0.0	0.1	8.864	A
				D	299	75	1003	749	0.400	298	302	0.7	0.9	10.089	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	368	92	1003	748	0.492	367	371	0.8	1.2	10.841	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	-	-	-	4	4	0.0	0.0	0.025	A
				C	16	4	-	-	-	16	16	0.0	0.0	0.088	A
				D	300	75	-	-	-	299	303	0.0	0.0	0.085	A
				E	368	92	-	-	-	368	372	0.0	0.0	0.091	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	925	691	0.022	15	15	0.1	0.1	23.707	C
				D	252	63	961	717	0.351	251	244	1.2	1.9	23.685	C
				E	434	109	961	717	0.605	434	433	2.2	3.0	23.356	C
			2	A	0.74	0.18	157	118	0.006	0.70	0.68	0.0	0.0	5.744	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	76	19	961	716	0.107	76	74	0.1	0.2	6.700	A
		2	1	A	1	0.30	-	-	-	0.74	0.70	0.0	0.0	91.032	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	-	-	-	15	15	0.1	0.5	84.206	F
				D	282	71	-	-	-	252	247	1.4	9.5	83.536	F
				E	580	145	-	-	-	511	510	2.7	19.9	83.302	F
C - Gibbet Lane	Entry	1	1	A	25	6	916	365	0.069	26	24	0.1	0.2	25.496	D
				B	25	6	916	365	0.069	25	26	0.1	0.2	22.272	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	40	10	916	363	0.110	39	39	0.1	0.3	22.579	C
				E	106	26	916	362	0.293	107	104	0.3	0.7	22.456	C
				A	515	129	964	676	0.761	516	521	2.1	2.2	15.094	C

D - A5 (South)	Entry	1	1	B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	149	37	964	677	0.221	149	146	0.6	0.8	16.074	C
			2	A	73	18	964	675	0.109	73	76	0.2	0.2	9.702	A
				B	165	41	964	677	0.243	165	168	0.4	0.4	9.403	A
				C	28	7	960	675	0.042	28	29	0.1	0.1	9.927	A
				D	10	2	826	583	0.017	10	11	0.0	0.0	11.530	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	767	192	-	-	-	588	597	13.4	57.7	219.898	F
				B	222	55	-	-	-	165	168	3.8	16.8	220.199	F
				C	40	10	-	-	-	28	29	0.6	3.1	223.573	F
				D	15	4	-	-	-	10	11	0.3	1.2	222.626	F
				E	191	48	-	-	-	149	147	3.2	14.2	221.146	F
E - A426	Entry	1	1	A	205	51	867	649	0.316	206	202	0.9	1.3	21.601	C
				B	420	105	867	651	0.645	418	407	1.8	2.6	20.505	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	88	22	867	650	0.135	87	84	0.2	0.3	11.379	B
				C	12	3	834	624	0.020	12	13	0.0	0.0	11.117	B
				D	157	39	867	651	0.242	157	152	0.4	0.6	12.411	B
				E	4	0.98	414	309	0.013	4	4	0.0	0.0	13.555	B
		2	1	A	221	55	-	-	-	205	204	1.3	7.1	82.709	F
				B	550	138	-	-	-	508	494	2.9	16.9	82.170	F
				C	15	4	-	-	-	12	13	0.1	0.5	83.652	F
				D	173	43	-	-	-	157	153	1.0	5.4	80.705	F
				E	5	1	-	-	-	4	4	0.0	0.2	85.104	F

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	695	513	0.008	4	4	0.0	0.0	7.923	A
				C	17	4	986	730	0.024	17	16	0.1	0.1	9.596	A
				D	301	75	1003	742	0.405	302	303	0.9	0.9	10.170	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	374	94	1003	741	0.505	375	372	1.2	1.1	10.913	B
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	4	1	-	-	-	4	4	0.0	0.0	0.058	A
				C	17	4	-	-	-	17	16	0.0	0.0	0.059	A
				D	301	75	-	-	-	301	303	0.0	0.0	0.092	A
				E	375	94	-	-	-	374	371	0.0	0.0	0.108	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	16	4	925	687	0.023	16	15	0.1	0.1	25.577	D
				D	253	63	961	711	0.356	256	253	1.9	1.7	25.165	D
				E	443	111	961	711	0.623	440	440	3.0	3.3	24.953	C
			2	A	1	0.29	226	167	0.007	1	1	0.0	0.0	6.190	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	80	20	961	712	0.112	81	77	0.2	0.1	7.062	A

		2	1	A	0.86	0.22	-	-	-	1	1	0.0	0.0	192.895	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	18	5	-	-	-	16	15	0.5	1.1	189.508	F
				D	281	70	-	-	-	253	252	9.5	17.0	194.810	F
				E	579	145	-	-	-	523	519	19.9	34.5	193.626	F
C - Gibbet Lane	Entry	1	1	A	24	6	910	349	0.068	24	23	0.2	0.2	27.685	D
				B	27	7	916	354	0.076	26	27	0.2	0.2	25.957	D
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	37	9	916	349	0.107	38	39	0.3	0.3	25.660	D
				E	107	27	916	347	0.307	107	107	0.7	0.7	25.520	D
D - A5 (South)	Entry	1	1	A	509	127	964	671	0.758	508	512	2.2	2.2	15.228	C
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	146	37	964	672	0.218	147	146	0.8	0.7	16.559	C
			2	A	76	19	964	672	0.113	75	75	0.2	0.2	9.756	A
				B	161	40	964	672	0.239	159	164	0.4	0.5	9.650	A
				C	26	7	957	668	0.039	26	29	0.1	0.1	10.308	B
				D	12	3	809	565	0.021	12	11	0.0	0.0	11.672	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	775	194	-	-	-	585	588	57.7	105.6	500.983	F
				B	218	55	-	-	-	161	164	16.8	29.7	504.280	F
				C	38	10	-	-	-	26	29	3.1	5.2	503.290	F
				D	13	3	-	-	-	12	11	1.2	1.9	503.311	F
				E	196	49	-	-	-	146	146	14.2	26.3	502.866	F
E - A426	Entry	1	1	A	213	53	867	654	0.326	213	209	1.3	1.3	22.089	C
				B	426	107	867	654	0.652	426	419	2.6	2.5	20.999	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	92	23	867	653	0.142	93	90	0.3	0.3	11.422	B
				C	14	4	852	641	0.022	14	14	0.0	0.0	11.617	B
				D	168	42	867	654	0.257	168	163	0.6	0.7	12.541	B
				E	4	0.94	464	348	0.011	4	4	0.0	0.0	11.918	B
		2	1	A	225	56	-	-	-	213	210	7.1	11.0	159.619	F
				B	540	135	-	-	-	519	509	16.9	25.8	158.516	F
				C	15	4	-	-	-	14	14	0.5	0.7	156.306	F
				D	179	45	-	-	-	168	163	5.4	8.4	157.206	F
				E	4	1	-	-	-	4	4	0.2	0.2	162.142	F

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - A5 (North)	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.83	623	464	0.007	3	4	0.0	0.0	8.337	A
				C	14	3	979	733	0.019	14	14	0.1	0.0	8.161	A
				D	247	62	1003	759	0.326	247	250	0.9	0.6	8.824	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	304	76	1003	758	0.401	304	306	1.1	0.8	8.988	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.83	-	-	-	3	4	0.0	0.0	0.000	A
				C	14	3	-	-	-	14	14	0.0	0.0	0.002	A

				D	247	62	-	-	-	247	249	0.0	0.0	0.016	A
				E	304	76	-	-	-	304	305	0.0	0.0	0.031	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	915	711	0.021	15	16	0.1	0.1	24.418	C
				D	253	63	961	752	0.337	254	254	1.7	1.7	23.918	C
				E	444	111	961	752	0.591	445	452	3.3	2.8	23.666	C
			2	A	1	0.29	210	162	0.007	1	0.97	0.0	0.0	6.796	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	74	19	961	750	0.099	75	77	0.1	0.2	6.772	A
		2	1	A	0.82	0.20	-	-	-	1	0.96	0.0	0.0	170.571	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	15	4	-	-	-	15	16	1.1	0.7	182.531	F
				D	235	59	-	-	-	253	255	17.0	10.3	185.622	F
				E	476	119	-	-	-	519	527	34.5	21.4	188.477	F
C - Gibbet Lane	Entry	1	1	A	19	5	903	387	0.049	19	20	0.2	0.1	21.230	C
				B	20	5	913	392	0.050	21	22	0.2	0.1	17.733	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	33	8	916	395	0.084	34	34	0.3	0.1	18.228	C
				E	90	22	916	399	0.224	89	88	0.7	0.4	17.903	C
D - A5 (South)	Entry	1	1	A	533	133	964	699	0.762	533	530	2.2	2.2	14.756	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	157	39	964	700	0.224	156	151	0.7	0.8	15.980	C
			2	A	74	19	964	700	0.106	75	75	0.2	0.2	9.968	A
				B	175	44	964	700	0.251	177	172	0.5	0.4	9.429	A
				C	28	7	964	699	0.040	28	29	0.1	0.1	9.832	A
				D	13	3	829	599	0.021	13	11	0.0	0.0	11.199	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	633	158	-	-	-	607	604	105.6	113.0	647.324	F
				B	182	46	-	-	-	175	171	29.7	32.1	643.681	F
				C	31	8	-	-	-	28	29	5.2	5.5	641.453	F
				D	11	3	-	-	-	13	11	1.9	2.0	644.930	F
				E	160	40	-	-	-	157	151	26.3	28.1	647.518	F
E - A426	Entry	1	1	A	197	49	867	643	0.306	198	204	1.3	1.2	21.251	C
				B	392	98	867	645	0.607	393	406	2.5	2.2	20.460	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	79	20	867	645	0.122	80	85	0.3	0.2	11.290	B
				C	12	3	846	633	0.020	12	14	0.0	0.0	10.731	B
				D	140	35	867	644	0.218	142	153	0.7	0.4	12.396	B
				E	4	0.99	453	339	0.012	4	4	0.0	0.0	12.438	B
		2	1	A	185	46	-	-	-	197	204	11.0	6.4	144.600	F
				B	452	113	-	-	-	471	489	25.8	15.7	144.078	F
				C	13	3	-	-	-	12	13	0.7	0.5	142.399	F
				D	136	34	-	-	-	140	152	8.4	5.0	145.620	F
				E	3	0.83	-	-	-	4	4	0.2	0.1	141.050	F

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
				A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.74	527	405	0.007	3	3	0.0	0.0	6.475	A

A - A5 (North)	Entry	1	1	C	12	3	959	743	0.016	12	11	0.0	0.0	7.108	A
				D	216	54	1003	783	0.276	215	210	0.6	0.5	7.658	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	252	63	1003	783	0.322	252	252	0.8	0.6	7.884	A
		2	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	3	0.74	-	-	-	3	3	0.0	0.0	0.000	A
				C	12	3	-	-	-	12	11	0.0	0.0	0.000	A
				D	216	54	-	-	-	216	209	0.0	0.0	0.005	A
				E	252	63	-	-	-	252	251	0.0	0.0	0.002	A
B - Rugby Road	Entry	1	1	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	915	740	0.018	14	14	0.1	0.1	19.715	C
				D	214	53	961	782	0.273	217	233	1.7	1.0	19.291	C
				E	382	95	961	782	0.488	384	412	2.8	1.7	18.829	C
			2	A	0.61	0.15	171	137	0.004	0.66	0.79	0.0	0.0	6.945	A
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	55	14	961	781	0.071	56	65	0.2	0.1	6.106	A
		2	1	A	0.74	0.18	-	-	-	0.61	0.79	0.0	0.0	51.817	F
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	13	3	-	-	-	13	14	0.7	0.1	61.321	F
				D	194	49	-	-	-	214	230	10.3	1.4	64.760	F
				E	399	100	-	-	-	437	472	21.4	3.0	64.785	F
C - Gibbet Lane	Entry	1	1	A	18	4	866	437	0.040	17	17	0.1	0.1	14.891	B
				B	19	5	913	461	0.040	19	19	0.1	0.0	12.488	B
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	27	7	916	471	0.057	27	27	0.1	0.1	12.283	B
				E	68	17	916	473	0.144	69	72	0.4	0.2	12.292	B
D - A5 (South)	Entry	1	1	A	571	143	964	743	0.769	570	558	2.2	2.2	13.883	B
				B	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	165	41	964	741	0.223	164	159	0.8	0.8	15.137	C
			2	A	81	20	964	740	0.109	81	80	0.2	0.2	9.317	A
				B	180	45	964	741	0.242	180	179	0.4	0.4	8.901	A
				C	28	7	964	739	0.038	28	30	0.1	0.1	9.632	A
				D	12	3	852	645	0.019	12	11	0.0	0.1	10.619	B
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	A	534	134	-	-	-	652	638	113.0	86.2	516.232	F
				B	148	37	-	-	-	180	180	32.1	23.7	516.709	F
				C	25	6	-	-	-	28	30	5.5	4.0	504.728	F
				D	10	3	-	-	-	12	11	2.0	1.7	511.610	F
				E	132	33	-	-	-	165	160	28.1	21.5	512.962	F
E - A426	Entry	1	1	A	168	42	867	634	0.265	168	176	1.2	0.9	19.234	C
				B	338	84	867	634	0.533	340	357	2.2	1.5	18.210	C
				C	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				D	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				E	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	A	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				B	64	16	867	633	0.101	65	69	0.2	0.1	9.965	A
				C	10	3	816	602	0.017	10	11	0.0	0.0	9.840	A
				D	124	31	867	633	0.195	123	134	0.4	0.4	11.101	B
				E	4	0.99	399	294	0.014	4	3	0.0	0.0	11.578	B

		2	1	A	158	39	-	-	-	168	175	6.4	1.7	60.891	F
				B	379	95	-	-	-	402	424	15.7	3.8	60.200	F
				C	10	2	-	-	-	10	11	0.5	0.1	56.016	F
				D	115	29	-	-	-	124	135	5.0	1.1	59.451	F
				E	3	0.86	-	-	-	4	3	0.1	0.0	58.648	F

AM PEAK

Junction Arm	
A	Watling Street N
B	Rugby Road
C	Gibbet Lane
D	Wattling Street S
E	Rugby Road W

GIBBET ROUNDABOUT

2023 Observed Flows

	A	B	C	D	E	TOTAL
A	0	5	32	353	452	842
B	2	0	25	139	547	713
C	20	23	1	5	57	106
D	328	219	32	5	193	777
E	189	215	19	100	0	523
TOTAL	539	462	109	602	1249	2961

WoD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	1	32	245	382	660
B	1	0	30	101	506	638
C	46	36	6	10	267	365
D	463	118	87	6	433	**1107**
E	191	138	33	126	0	488
TOTAL	701	293	188	488	1588	3258

WD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	1	40	287	392	720
B	1	0	31	105	509	646
C	53	35	6	12	272	378
D	495	106	85	10	419	**1115**
E	199	120	28	122	0	469
TOTAL	748	262	190	536	1592	3328

GIBBET ROUNDABOUT

A	Watling Street N
B	Rugby Road
C	Gibbet Lane
D	Wattling Street S
E	Rugby Road W

	A	B	C	D	E	TOTAL
A	0	5	32	353	452	842
B	2	0	25	139	547	713
C	20	23	1	5	57	106
D	328	219	32	5	193	777
E	189	215	19	100	0	523
TOTAL	539	462	109	602	1249	2961

	A	B	C	D	E	TOTAL
A	0	1	32	245	382	660
B	1	0	30	101	506	638
C	46	36	6	10	267	365
D	467	312	46	7	275	**1107**
E	191	138	33	126	0	488
TOTAL	705	487	147	489	1430	3258

	A	B	C	D	E	TOTAL
A	0	1	40	287	392	720
B	1	0	31	105	509	646
C	53	35	6	12	272	378
D	499	300	44	11	261	**1115**
E	199	120	28	122	0	469
TOTAL	752	456	149	537	1434	3328

42.471% Increase

PM PEAK

Junction Arm	
A	Watling Street N
B	Rugby Road
C	Gibbet Lane
D	Wattling Street S
E	Rugby Road W

GIBBET ROUNDABOUT

2023 Observed Flows

	A	B	C	D	E	TOTAL
A	0	5	25	230	362	622
B	1	0	16	163	450	630
C	20	19	0	13	46	98
D	432	125	23	7	134	721
E	290	468	14	111	4	887
TOTAL	743	617	78	524	996	2958

WoD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	3	15	246	359	623
B	1	0	17	220	549	787
C	22	20	0	33	93	168
D	469	220	49	15	335	**1088**
E	207	485	13	166	4	875
TOTAL	699	728	94	680	1340	3541

WD 2036 FINAL MATIX

	A	B	C	D	E	TOTAL
A	0	4	15	275	339	633
B	1	0	16	254	527	798
C	22	24	0	35	96	177
D	524	230	47	17	308	**1126**
E	206	496	14	155	4	875
TOTAL	753	754	92	736	1274	3609

GIBBET ROUNDABOUT

A	Watling Street N
B	Rugby Road
C	Gibbet Lane
D	Wattling Street S
E	Rugby Road W

	A	B	C	D	E	TOTAL
A	0	5	25	230	362	622
B	1	0	16	163	450	630
C	20	19	0	13	46	98
D	432	125	23	7	134	721
E	290	468	14	111	4	887
TOTAL	743	617	78	524	996	2958

	A	B	C	D	E	TOTAL
A	0	3	15	246	359	623
B	1	0	17	220	549	787
C	22	20	0	33	93	168
D	651	189	35	11	202	**1088**
E	207	485	13	166	4	875
TOTAL	881	697	80	676	1207	3541

	A	B	C	D	E	TOTAL
A	0	4	15	275	339	633
B	1	0	16	254	527	798
C	22	24	0	35	96	177
D	706	199	33	13	175	**1126**
E	206	496	14	155	4	875
TOTAL	935	723	78	732	1141	3609

50.9% Increase

SPREADSHEET 1 - REASSIGNMENT OF TRAFFIC AT GIBBET ROUNDABOUT ON THE A5 (SOUTH) ARM FOR NATIONAL HIGHWAYS