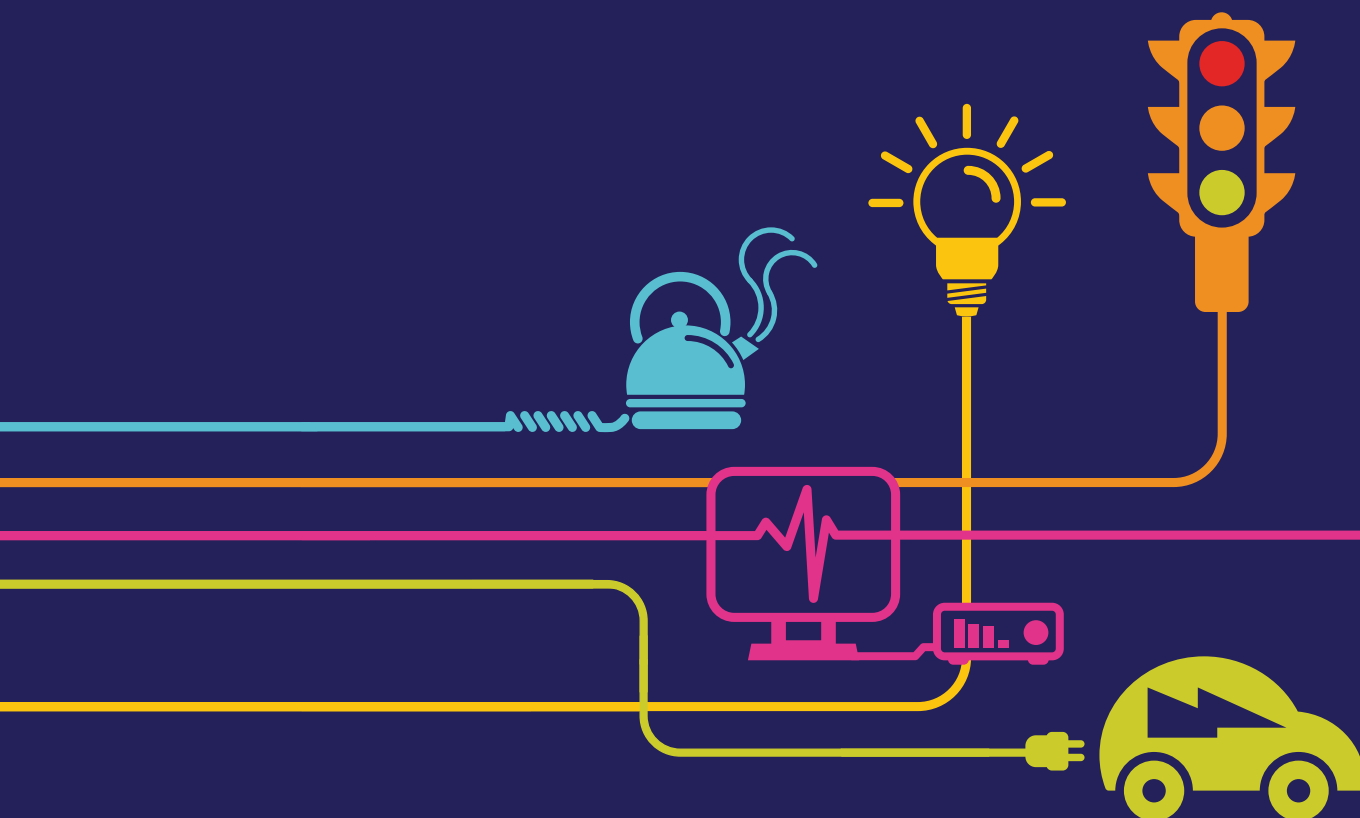


Environmental Statement Transport Assessment Appendices 22H Part 2

Hinkley Point C Connection Project

*Regulation 5(2)(q) of the Infrastructure Planning
(Applications: Prescribed Forms and Procedure)
Regulations 2009*



Environmental Statement

Hinkley Point C Connection Project

5.22.2 – Transport Assessment – Appendices (orange highlight indicates the contents of this Volume)

Appendix	Title
Volume 5.22.2.1	
22A	Raw Automatic Traffic Counters Data
22B	Raw TRADs Data
Volume 5.22.2.2	
22C	Accident Data
22D	Abnormal Indivisible Loads Report
Volume 5.22.2.3	
22E	Network Traffic Flow Diagrams
22F	Proposed Development Traffic Generation Data
Volume 5.22.2.4	
22G	Proposed Development Traffic Generation Profiles
Volume 5.22.2.5	
22H	Capacity Model Outputs and Queue Length Data (Part 1)
Volume 5.22.2.6	
22H	Capacity Model Outputs and Queue Length Data (Part 2)
Volume 5.22.2.7	
22H	Capacity Model Outputs and Queue Length Data (Part 3)
Volume 5.22.2.8	
22H	Capacity Model Outputs and Queue Length Data (Part 4)
Volume 5.22.2.9	
22H	Capacity Model Outputs and Queue Length Data (Part 5)
Volume 5.22.2.10	
22H	Capacity Model Outputs and Queue Length Data (Part 6)
Volume 5.22.2.11	
22I	Sensitivity Modelling Results (Part 1)
Volume 5.22.2.12	
22I	Sensitivity Modelling Results (Part 2)
Volume 5.22.2.13	
22I	Sensitivity Modelling Results (Part 3)

Document Control			
Document Properties			
Organisation		National Grid	
Author		Ben Dawson, Curtins	
Approved By		Curtins	
Title		Environmental Statement – Transport Assessment - Appendices	
Document Reference		Volume 5.22.2.6	
Date	Version	Status	Description/Changes
09/05/14	A	Live	Final version for DCO submission

Appendix 22H – Capacity Model Outputs and Queue Length Data

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	0.63	0.04	7.526	A	A
A-BCD	0.92	0.06	6.091	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-ABC	4.87	0.32	9.942	A	A
C-ABD	0.28	0.02	5.616	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	0.80	0.05	7.809	A	A
A-BCD	1.24	0.08	6.005	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-ABC	6.55	0.44	11.110	B	B
C-ABD	0.36	0.02	5.548	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	1.02	0.07	8.230	A	A
A-BCD	1.76	0.12	5.886	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-ABC	9.34	0.62	13.113	B	B
C-ABD	0.48	0.03	5.467	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
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B-ACD	1.05	0.07	8.233	A	A
A-BCD	1.77	0.12	5.869	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-ABC	9.83	0.66	13.188	B	B
C-ABD	0.48	0.03	5.478	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	0.85	0.06	7.815	A	A
A-BCD	1.26	0.08	5.971	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-ABC	7.28	0.49	11.198	B	B
C-ABD	0.36	0.02	5.573	A	A
C-D	-	-	-	-	-

C-A	-	-	-	-	-
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Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	0.68	0.05	7.533	A	A
A-BCD	0.95	0.06	6.079	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-ABC	5.43	0.36	10.046	B	B
C-ABD	0.28	0.02	5.629	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Junctions 8			
ARCADY 8 - Roundabout Module			
Version: 8.0.3.332 [14595,13/11/2013] © Copyright TRL Limited, 2014			
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: J9 M5 Jct 22 - A38 Bristol Road - B3140.arc8

Path: P:\TP London\TP Projects\Hinkley Point C Connection\Modelling\Junctions 8\J9

Report generation date: 24/02/2014 14:20:20

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2013 Obs							
M5	1.18	3.70	0.52	A	3.17	7.60	0.76	A

A38 Bristol Road south	0.87	4.46	0.44	A	1.89	9.90	0.65	A
B3140	5.38	22.23	0.85	C	1.26	8.26	0.56	A
A38 Bristol Road north	2.51	6.68	0.71	A	1.69	4.57	0.62	A
	A1 - 2016 Base							
M5	1.38	4.09	0.56	A	5.00	11.38	0.83	B
A38 Bristol Road south	1.04	5.08	0.49	A	3.35	16.76	0.77	C
B3140	13.93	54.33	0.96	F	1.81	11.18	0.64	B
A38 Bristol Road north	3.36	8.49	0.77	A	2.13	5.41	0.68	A
	A1 - 2016 Dev							
M5	2.15	5.44	0.65	A	10.30	21.97	0.92	C
A38 Bristol Road south	1.41	6.89	0.56	A	10.55	52.50	0.94	F
B3140	69.64	229.72	1.15	F	3.05	19.27	0.76	C
A38 Bristol Road north	5.00	11.46	0.82	B	3.68	8.28	0.78	A
	A1 - 2016 Q Dev							
M5	2.11	5.37	0.65	A	9.73	20.84	0.91	C
A38 Bristol Road south	1.39	6.76	0.56	A	9.53	47.68	0.93	E
B3140	65.62	216.38	1.14	F	2.94	18.56	0.75	C
A38 Bristol Road north	4.73	10.96	0.82	B	3.41	7.80	0.76	A

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

"D1 - 2013 Obs, AM " model duration: 07:45 - 09:15
"D2 - 2013 Obs, PM" model duration: 16:45 - 18:15
"D3 - 2016 Base, AM" model duration: 07:45 - 09:15
"D4 - 2016 Base, PM" model duration: 16:45 - 18:15
"D5 - 2016 Dev, AM" model duration: 07:45 - 09:15
"D6 - 2016 Dev, PM" model duration: 16:45 - 18:15
"D7 - 2016 Q Dev, AM" model duration: 07:45 - 09:15
"D8 - 2016 Q Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.3.332 at 24/02/2014 14:20:17

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	28/11/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

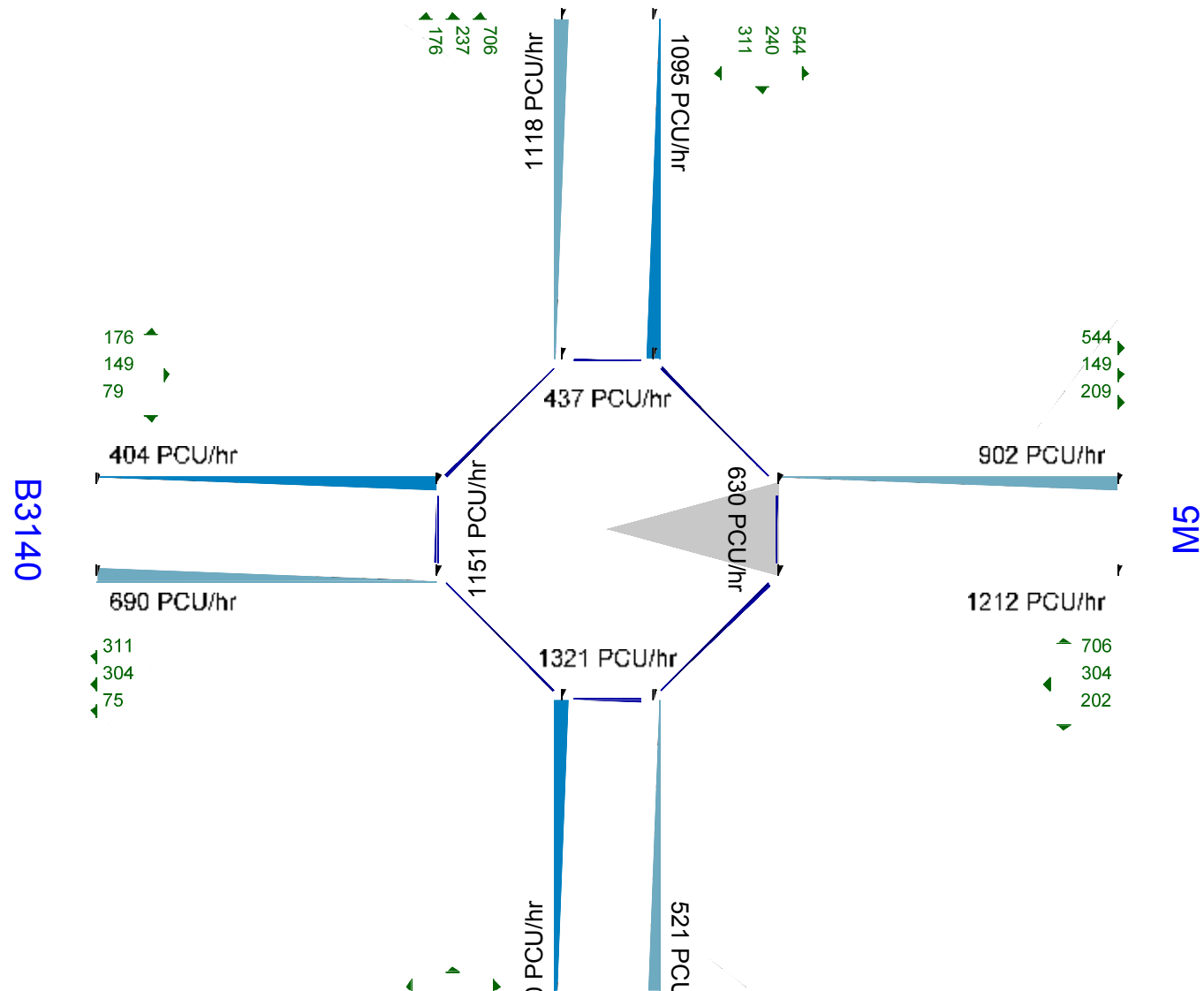
Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
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m	kph	Veh	PCU	perHour	s	-Min	perMin
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A38 Bristol Road north



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2013 Obs, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013 Obs, AM	2013 Obs	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
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(untitled)	Roundabout	1,2,3,4		✓		8.91	A
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Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	
A38 Bristol Road north	A38 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00
B3140	0.00	99999.00		0.00

A38 Bristol Road north	0.00	99999.00		0.00
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Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	
A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00
A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
M5	None

A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	945.00	100.000
A38 Bristol Road south	ONE HOUR	✓	580.00	100.000
B3140	ONE HOUR	✓	809.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1183.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	213.000	127.000	605.000
	2	207.000	0.000	88.000	285.000
	3	386.000	78.000	0.000	345.000
	4	683.000	248.000	252.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.23	0.13	0.64
	2	0.36	0.00	0.15	0.49
	3	0.48	0.10	0.00	0.43
	4	0.58	0.21	0.21	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.130	1.050	1.110
	2	1.190	1.000	1.060	1.050
	3	1.020	1.090	1.000	1.020
	4	1.060	1.030	1.060	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
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From		1	2	3	4
	1	0.000	13.000	5.000	11.000
	2	19.000	0.000	6.000	5.000
	3	2.000	9.000	0.000	2.000
	4	6.000	3.000	6.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.52	3.70	1.18	A	959.45	1439.18	72.38	3.02	0.80	72.38	3.02
A38 Bristol Road south	0.44	4.46	0.87	A	586.23	879.34	51.63	3.52	0.57	51.63	3.52
B3140	0.85	22.23	5.38	C	762.21	1143.31	210.62	11.05	2.34	210.63	11.05
A38 Bristol Road north	0.71	6.68	2.51	A	1143.85	1715.77	132.93	4.65	1.48	132.94	4.65

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	787.17	196.79	785.10	1023.06	455.78	0.00	2457.44	1940.47	0.320	0.00	0.52	2.378	A
A38 Bristol Road south	480.97	120.24	479.55	436.08	804.80	0.00	1973.06	816.08	0.244	0.00	0.35	2.652	A
B3140	625.35	156.34	622.21	370.58	913.78	0.00	1436.27	566.32	0.435	0.00	0.78	4.523	A
A38 Bristol Road north	938.46	234.62	935.33	992.47	543.52	0.00	2195.04	2096.85	0.428	0.00	0.78	3.003	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	939.96	234.99	939.13	1223.84	545.23	0.00	2361.34	1940.46	0.398	0.52	0.73	2.799	A
A38 Bristol Road south	574.32	143.58	573.70	521.65	962.72	0.00	1812.56	816.08	0.317	0.35	0.51	3.199	A
B3140	746.73	186.68	744.27	443.31	1093.11	0.00	1284.72	566.32	0.581	0.78	1.40	6.807	A
A38 Bristol Road north	1120.61	280.15	1118.90	1187.21	650.17	0.00	2087.68	2096.85	0.537	0.78	1.21	3.908	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1151.22	287.80	1149.45	1491.53	665.39	0.00	2232.25	1940.46	0.516	0.73	1.17	3.672	A
A38 Bristol Road south	703.40	175.85	701.98	636.95	1177.89	0.00	1593.85	816.08	0.441	0.51	0.86	4.438	A
B3140	914.55	228.64	900.08	542.13	1337.74	0.00	1077.99	566.33	0.848	1.40	5.02	19.403	C
A38 Bristol Road north	1372.47	343.12	1367.48	1448.40	789.43	0.00	1947.49	2096.85	0.705	1.21	2.46	6.485	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1151.22	287.80	1151.18	1501.01	668.72	0.00	2228.67	1940.46	0.517	1.17	1.18	3.695	A
A38 Bristol Road south	703.40	175.85	703.38	639.66	1180.24	0.00	1591.46	816.08	0.442	0.86	0.87	4.464	A
B3140	914.55	228.64	913.12	543.57	1340.05	0.00	1076.05	566.33	0.850	5.02	5.38	22.228	C
A38 Bristol Road north	1372.47	343.12	1372.24	1455.68	797.48	0.00	1939.39	2096.85	0.708	2.46	2.51	6.682	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	939.96	234.99	941.72	1237.14	549.93	0.00	2356.30	1940.46	0.399	1.18	0.74	2.818	A
A38 Bristol Road south	574.32	143.58	575.73	525.49	966.16	0.00	1809.06	816.08	0.317	0.87	0.52	3.218	A
B3140	746.73	186.68	762.39	445.39	1096.51	0.00	1281.85	566.32	0.583	5.38	1.46	7.324	A
A38 Bristol Road north	1120.61	280.15	1125.67	1197.50	661.40	0.00	2076.38	2096.85	0.540	2.51	1.25	4.012	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	787.17	196.79	788.03	1029.46	458.45	0.00	2454.58	1940.47	0.321	0.74	0.52	2.392	A
A38 Bristol Road south	480.97	120.24	481.60	438.36	808.12	0.00	1969.69	816.08	0.244	0.52	0.36	2.667	A
B3140	625.35	156.34	627.98	372.31	917.41	0.00	1433.20	566.32	0.436	1.46	0.80	4.604	A
A38 Bristol Road north	938.46	234.62	940.27	997.76	547.63	0.00	2190.90	2096.85	0.428	1.25	0.79	3.039	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	7.66	0.51	2.378	A	A

A38 Bristol Road south	5.21	0.35	2.652	A	A
B3140	11.40	0.76	4.523	A	A
A38 Bristol Road north	11.46	0.76	3.003	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	10.75	0.72	2.799	A	A
A38 Bristol Road south	7.50	0.50	3.199	A	A
B3140	20.13	1.34	6.807	A	A
A38 Bristol Road north	17.69	1.18	3.908	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	17.11	1.14	3.672	A	A
A38 Bristol Road south	12.61	0.84	4.438	A	A
B3140	64.03	4.27	19.403	C	B

A38 Bristol Road north	34.91	2.33	6.485	A	A
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Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	17.60	1.17	3.695	A	A
A38 Bristol Road south	12.99	0.87	4.464	A	A
B3140	78.48	5.23	22.228	C	C
A38 Bristol Road north	37.39	2.49	6.682	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	11.28	0.75	2.818	A	A
A38 Bristol Road south	7.88	0.53	3.218	A	A
B3140	24.18	1.61	7.324	A	A
A38 Bristol Road north	19.32	1.29	4.012	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	7.98	0.53	2.392	A	A
A38 Bristol Road south	5.44	0.36	2.667	A	A
B3140	12.39	0.83	4.604	A	A
A38 Bristol Road north	12.16	0.81	3.039	A	A

(Default Analysis Set) - 2013 Obs, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
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2013 Obs, PM	2013 Obs	PM		ONE HOUR	16:45	18:15	90	15				✓		
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Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4		✓		7.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	

A38 Bristol Road north	A38 Bristol Road north	
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Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00
B3140	0.00	99999.00		0.00
A38 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	
A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00

A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
M5	None
A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	1346.00	100.000
A38 Bristol Road south	ONE HOUR	✓	600.00	100.000
B3140	ONE HOUR	✓	494.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1184.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To
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From		1	2	3	4
	1	0.000	235.000	376.000	735.000
	2	221.000	0.000	91.000	288.000
	3	179.000	98.000	0.000	217.000
	4	516.000	291.000	377.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

From	To				
		1	2	3	4
	1	0.00	0.17	0.28	0.55
	2	0.37	0.00	0.15	0.48
	3	0.36	0.20	0.00	0.44
	4	0.44	0.25	0.32	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

From	To				
		1	2	3	4

	1	1.000	1.070	1.010	1.030
	2	1.110	1.000	1.030	1.030
	3	1.040	1.010	1.000	1.010
	4	1.030	1.030	1.030	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	7.000	1.000	3.000
	2	11.000	0.000	3.000	3.000
	3	4.000	1.000	0.000	1.000
	4	3.000	3.000	3.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.76	7.60	3.17	A	1273.89	1910.84	157.85	4.96	1.75	157.86	4.96

A38 Bristol Road south	0.65	9.90	1.89	A	583.31	874.97	89.48	6.14	0.99	89.48	6.14
B3140	0.56	8.26	1.26	A	462.76	694.15	66.15	5.72	0.74	66.16	5.72
A38 Bristol Road north	0.62	4.57	1.69	A	1119.05	1678.58	98.65	3.53	1.10	98.65	3.53

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1045.15	261.29	1041.77	722.56	590.72	0.00	2312.47	1598.72	0.452	0.00	0.85	2.915	A
A38 Bristol Road south	478.57	119.64	476.82	487.91	1144.58	0.00	1627.71	838.19	0.294	0.00	0.44	3.310	A
B3140	379.67	94.92	378.14	646.78	974.61	0.00	1384.86	867.85	0.274	0.00	0.38	3.646	A
A38 Bristol Road north	918.12	229.53	915.47	954.95	397.81	0.00	2341.72	1922.62	0.392	0.00	0.66	2.596	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1248.02	312.00	1245.98	864.39	706.67	0.00	2187.90	1598.73	0.570	0.85	1.36	3.933	A
A38 Bristol Road south	571.46	142.87	570.32	583.65	1369.00	0.00	1399.61	838.20	0.408	0.44	0.72	4.592	A
B3140	453.36	113.34	452.51	773.63	1165.69	0.00	1223.39	867.84	0.371	0.38	0.60	4.762	A
A38 Bristol Road north	1096.32	274.08	1095.12	1142.26	475.94	0.00	2263.06	1922.62	0.484	0.66	0.96	3.172	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1528.50	382.13	1521.47	1056.32	864.41	0.00	2018.42	1598.73	0.757	1.36	3.11	7.370	A
A38 Bristol Road south	699.90	174.97	695.43	713.36	1672.52	0.00	1091.10	838.19	0.641	0.72	1.84	9.533	A
B3140	555.26	138.81	552.71	945.37	1422.58	0.00	1006.30	867.84	0.552	0.60	1.23	8.057	A
A38 Bristol Road north	1342.72	335.68	1339.86	1394.42	580.87	0.00	2157.43	1922.62	0.622	0.96	1.68	4.520	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	1528.50	382.13	1528.26	1060.08	866.47	0.00	2016.21	1598.73	0.758	3.11	3.17	7.600	A
A38 Bristol Road south	699.90	174.97	699.69	715.76	1678.97	0.00	1084.55	838.19	0.645	1.84	1.89	9.899	A
B3140	555.26	138.81	555.15	948.74	1429.92	0.00	1000.10	867.84	0.555	1.23	1.26	8.256	A
A38 Bristol Road north	1342.72	335.68	1342.65	1401.17	583.90	0.00	2154.39	1922.62	0.623	1.68	1.69	4.567	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1248.02	312.00	1255.16	869.64	709.63	0.00	2184.72	1598.73	0.571	3.17	1.39	4.025	A
A38 Bristol Road south	571.46	142.87	576.05	586.98	1377.81	0.00	1390.65	838.20	0.411	1.89	0.75	4.709	A
B3140	453.36	113.34	455.95	778.28	1175.58	0.00	1215.03	867.84	0.373	1.26	0.61	4.859	A
A38 Bristol Road north	1096.32	274.08	1099.18	1151.43	480.09	0.00	2258.88	1922.62	0.485	1.69	0.98	3.204	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1045.15	261.29	1047.28	726.29	593.38	0.00	2309.61	1598.72	0.453	1.39	0.86	2.945	A
A38 Bristol Road south	478.57	119.64	479.77	490.34	1150.32	0.00	1621.87	838.19	0.295	0.75	0.45	3.344	A

B3140	379.67	94.92	380.56	649.96	980.13	0.00	1380.19	867.85	0.275	0.61	0.39	3.678	A
A38 Bristol Road north	918.12	229.53	919.36	960.38	400.32	0.00	2339.19	1922.62	0.392	0.98	0.67	2.613	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	12.39	0.83	2.915	A	A
A38 Bristol Road south	6.44	0.43	3.310	A	A
B3140	5.62	0.37	3.646	A	A
A38 Bristol Road north	9.72	0.65	2.596	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	19.79	1.32	3.933	A	A
A38 Bristol Road south	10.60	0.71	4.592	A	A
B3140	8.73	0.58	4.762	A	A

A38 Bristol Road north	14.14	0.94	3.172	A	A
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Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	43.65	2.91	7.370	A	A
A38 Bristol Road south	25.89	1.73	9.533	A	A
B3140	17.62	1.17	8.057	A	A
A38 Bristol Road north	24.29	1.62	4.520	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	47.27	3.15	7.600	A	A
A38 Bristol Road south	28.11	1.87	9.899	A	A
B3140	18.74	1.25	8.256	A	A
A38 Bristol Road north	25.28	1.69	4.567	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	21.63	1.44	4.025	A	A
A38 Bristol Road south	11.60	0.77	4.709	A	A
B3140	9.48	0.63	4.859	A	A
A38 Bristol Road north	15.03	1.00	3.204	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	13.14	0.88	2.945	A	A
A38 Bristol Road south	6.82	0.45	3.344	A	A
B3140	5.96	0.40	3.678	A	A
A38 Bristol Road north	10.20	0.68	2.613	A	A

(Default Analysis Set) - 2016 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, AM	2016 Base	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4		✓		16.83	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	
A38 Bristol Road north	A38 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00
B3140	0.00	99999.00		0.00
A38 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	

A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00
A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
M5	None
A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	1001.00	100.000

A38 Bristol Road south	ONE HOUR	✓	614.00	100.000
B3140	ONE HOUR	✓	858.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1254.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

		To			
From		1	2	3	4
	1	0.000	225.000	135.000	641.000
	2	219.000	0.000	93.000	302.000
	3	410.000	82.000	0.000	366.000
	4	724.000	263.000	267.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To			
From		1	2	3	4
	1	0.00	0.22	0.13	0.64
	2	0.36	0.00	0.15	0.49

	3	0.48	0.10	0.00	0.43
	4	0.58	0.21	0.21	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.120	1.050	1.110
	2	1.180	1.000	1.060	1.050
	3	1.020	1.090	1.000	1.020
	4	1.060	1.030	1.060	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	0.000	12.000	5.000	11.000
	2	18.000	0.000	6.000	5.000
	3	2.000	9.000	0.000	2.000

	4	6.000	3.000	6.000	0.000
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Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.56	4.09	1.38	A	1014.21	1521.31	82.52	3.25	0.92	82.53	3.25
A38 Bristol Road south	0.49	5.08	1.04	A	618.57	927.85	59.86	3.87	0.67	59.87	3.87
B3140	0.96	54.33	13.93	F	808.33	1212.49	405.41	20.06	4.50	405.43	20.06
A38 Bristol Road north	0.77	8.49	3.36	A	1212.49	1818.74	166.08	5.48	1.85	166.09	5.48

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	832.10	208.02	829.81	1082.74	482.43	0.00	2428.81	1939.63	0.343	0.00	0.57	2.483	A
A38 Bristol Road south	507.50	126.87	505.93	459.32	852.92	0.00	1924.16	812.00	0.264	0.00	0.39	2.784	A
B3140	663.19	165.80	659.49	392.72	966.13	0.00	1392.03	567.45	0.476	0.00	0.92	5.021	A
A38 Bristol Road north	994.78	248.70	991.22	1051.67	573.95	0.00	2164.40	2099.67	0.460	0.00	0.89	3.224	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	993.61	248.40	992.63	1294.97	577.04	0.00	2327.17	1939.63	0.427	0.57	0.82	2.977	A
A38 Bristol Road south	606.00	151.50	605.26	549.39	1020.27	0.00	1754.06	812.00	0.345	0.39	0.58	3.439	A
B3140	791.91	197.98	788.40	469.78	1155.75	0.00	1231.78	567.45	0.643	0.92	1.80	8.271	A
A38 Bristol Road north	1187.87	296.97	1185.69	1257.84	686.31	0.00	2051.30	2099.67	0.579	0.89	1.43	4.372	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1216.91	304.23	1214.74	1567.66	701.56	0.00	2193.38	1939.63	0.555	0.82	1.36	4.052	A
A38 Bristol Road south	742.20	185.55	740.37	668.44	1247.86	0.00	1522.73	812.00	0.487	0.58	1.03	5.041	A

B3140	969.89	242.47	933.14	574.15	1414.09	0.00	1013.48	567.45	0.957	1.80	10.99	36.126	E
A38 Bristol Road north	1454.83	363.71	1447.72	1525.72	821.51	0.00	1915.21	2099.67	0.760	1.43	3.21	7.994	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1216.91	304.23	1216.86	1584.01	706.84	0.00	2187.71	1939.63	0.556	1.36	1.38	4.094	A
A38 Bristol Road south	742.20	185.55	742.16	672.80	1250.90	0.00	1519.64	812.00	0.488	1.03	1.04	5.083	A
B3140	969.89	242.47	958.13	576.08	1416.98	0.00	1011.03	567.45	0.959	10.99	13.93	54.330	F
A38 Bristol Road north	1454.83	363.71	1454.26	1538.52	836.59	0.00	1900.02	2099.67	0.766	3.21	3.36	8.488	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	993.61	248.40	995.77	1325.96	586.26	0.00	2317.26	1939.63	0.429	1.38	0.83	3.014	A
A38 Bristol Road south	606.00	151.50	607.83	557.29	1024.74	0.00	1749.52	812.00	0.346	1.04	0.59	3.466	A
B3140	791.91	197.98	839.96	472.60	1159.97	0.00	1228.22	567.45	0.645	13.93	1.92	10.689	B
A38 Bristol Road north	1187.87	296.97	1195.21	1282.93	717.01	0.00	2020.40	2099.67	0.588	3.36	1.52	4.636	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	832.10	208.02	833.12	1090.72	485.73	0.00	2425.27	1939.63	0.343	0.83	0.58	2.499	A
A38 Bristol Road south	507.50	126.87	508.25	462.08	856.76	0.00	1920.25	812.00	0.264	0.59	0.40	2.802	A
B3140	663.19	165.80	667.06	394.77	970.25	0.00	1388.55	567.45	0.478	1.92	0.95	5.149	A
A38 Bristol Road north	994.78	248.70	997.24	1058.10	579.21	0.00	2159.11	2099.67	0.461	1.52	0.91	3.270	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	8.44	0.56	2.483	A	A
A38 Bristol Road south	5.77	0.38	2.784	A	A
B3140	13.36	0.89	5.021	A	A
A38 Bristol Road north	13.01	0.87	3.224	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	12.06	0.80	2.977	A	A
A38 Bristol Road south	8.49	0.57	3.439	A	A
B3140	25.60	1.71	8.271	A	A
A38 Bristol Road north	20.86	1.39	4.372	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	19.87	1.32	4.052	A	A
A38 Bristol Road south	15.03	1.00	5.041	A	A
B3140	119.97	8.00	36.126	E	D
A38 Bristol Road north	44.88	2.99	7.994	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	20.56	1.37	4.094	A	A

A38 Bristol Road south	15.58	1.04	5.083	A	A
B3140	189.27	12.62	54.330	F	D
A38 Bristol Road north	49.61	3.31	8.488	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	12.77	0.85	3.014	A	A
A38 Bristol Road south	8.97	0.60	3.466	A	A
B3140	42.46	2.83	10.689	B	B
A38 Bristol Road north	23.79	1.59	4.636	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	8.82	0.59	2.499	A	A
A38 Bristol Road south	6.03	0.40	2.802	A	A
B3140	14.75	0.98	5.149	A	A

A38 Bristol Road north	13.92	0.93	3.270	A	A
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(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, PM	2016 Base	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4		✓		10.32	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	
A38 Bristol Road north	A38 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00

B3140	0.00	99999.00		0.00
A38 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	
A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00
A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
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M5	None
A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
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		✓	✓	HV Percentages	2.00				✓	✓
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Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	1436.00	100.000
A38 Bristol Road south	ONE HOUR	✓	639.00	100.000
B3140	ONE HOUR	✓	528.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1262.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	250.000	402.000	784.000
	2	235.000	0.000	97.000	307.000
	3	191.000	105.000	0.000	232.000

	4	550.000	310.000	402.000	0.000
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Turning Proportions (Veh) - (untitled) (for whole period)

	To				
	1	2	3	4	
From	1	0.00	0.17	0.28	0.55
	2	0.37	0.00	0.15	0.48
	3	0.36	0.20	0.00	0.44
	4	0.44	0.25	0.32	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
		1	2	3	4
From	1	1.000	1.070	1.010	1.030
	2	1.110	1.000	1.030	1.030
	3	1.040	1.010	1.000	1.010
	4	1.030	1.030	1.030	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	7.000	1.000	3.000
	2	11.000	0.000	3.000	3.000
	3	4.000	1.000	0.000	1.000
	4	3.000	3.000	3.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.83	11.38	5.00	B	1359.03	2038.54	220.49	6.49	2.45	220.50	6.49
A38 Bristol Road south	0.77	16.76	3.35	C	621.20	931.80	135.09	8.70	1.50	135.09	8.70
B3140	0.64	11.18	1.81	B	494.61	741.91	86.92	7.03	0.97	86.93	7.03
A38 Bristol Road north	0.68	5.41	2.13	A	1192.77	1789.16	118.76	3.98	1.32	118.76	3.98

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1115.00	278.75	1111.05	769.66	629.91	0.00	2270.37	1597.93	0.491	0.00	0.99	3.192	A
A38 Bristol Road south	509.66	127.41	507.59	519.81	1221.15	0.00	1549.88	837.68	0.329	0.00	0.52	3.651	A
B3140	405.79	101.45	404.02	690.27	1038.47	0.00	1330.90	868.79	0.305	0.00	0.44	3.958	A
A38 Bristol Road north	978.60	244.65	975.60	1018.52	423.97	0.00	2315.38	1922.88	0.423	0.00	0.75	2.762	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1331.42	332.86	1328.65	920.67	753.55	0.00	2137.53	1597.93	0.623	0.99	1.68	4.574	A
A38 Bristol Road south	608.58	152.15	606.99	621.77	1460.43	0.00	1306.67	837.69	0.466	0.52	0.91	5.439	A
B3140	484.56	121.14	483.43	825.58	1241.84	0.00	1159.03	868.78	0.418	0.44	0.73	5.431	A
A38 Bristol Road north	1168.55	292.14	1167.05	1218.12	507.16	0.00	2231.64	1922.88	0.524	0.75	1.12	3.478	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1630.66	407.66	1618.14	1123.04	921.21	0.00	1957.40	1597.93	0.833	1.68	4.81	10.577	B
A38 Bristol Road south	745.36	186.34	736.50	758.83	1780.53	0.00	981.33	837.69	0.760	0.91	3.13	15.071	C
B3140	593.46	148.37	589.44	1006.95	1510.08	0.00	932.36	868.78	0.637	0.73	1.73	10.595	B
A38 Bristol Road north	1431.17	357.79	1427.27	1482.53	616.98	0.00	2121.09	1922.88	0.675	1.12	2.10	5.315	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1630.66	407.66	1629.89	1129.13	924.08	0.00	1954.32	1597.93	0.834	4.81	5.00	11.376	B
A38 Bristol Road south	745.36	186.34	744.48	762.62	1791.36	0.00	970.32	837.69	0.768	3.13	3.35	16.758	C
B3140	593.46	148.37	593.16	1012.55	1523.29	0.00	921.20	868.78	0.644	1.73	1.81	11.184	B
A38 Bristol Road north	1431.17	357.79	1431.05	1494.28	622.16	0.00	2115.87	1922.88	0.676	2.10	2.13	5.412	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	1331.42	332.86	1344.48	929.29	757.65	0.00	2133.13	1597.93	0.624	5.00	1.74	4.783	A
A38 Bristol Road south	608.58	152.15	618.15	627.00	1475.12	0.00	1291.74	837.69	0.471	3.35	0.95	5.739	A
B3140	484.56	121.14	488.75	833.29	1259.98	0.00	1143.70	868.78	0.424	1.81	0.76	5.647	A
A38 Bristol Road north	1168.55	292.14	1172.47	1234.27	514.47	0.00	2224.28	1922.88	0.525	2.13	1.15	3.537	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1115.00	278.75	1117.93	774.21	633.07	0.00	2266.97	1597.93	0.492	1.74	1.01	3.238	A
A38 Bristol Road south	509.66	127.41	511.37	522.76	1228.23	0.00	1542.68	837.68	0.330	0.95	0.53	3.703	A
B3140	405.79	101.45	407.01	694.17	1045.44	0.00	1325.00	868.79	0.306	0.76	0.45	4.008	A
A38 Bristol Road north	978.60	244.65	980.16	1025.34	427.12	0.00	2312.21	1922.88	0.423	1.15	0.76	2.788	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	14.44	0.96	3.192	A	A

A38 Bristol Road south	7.55	0.50	3.651	A	A
B3140	6.51	0.43	3.958	A	A
A38 Bristol Road north	11.01	0.73	2.762	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	24.37	1.62	4.574	A	A
A38 Bristol Road south	13.28	0.89	5.439	A	A
B3140	10.59	0.71	5.431	A	A
A38 Bristol Road north	16.47	1.10	3.478	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	64.71	4.31	10.577	B	B
A38 Bristol Road south	41.92	2.79	15.071	C	B
B3140	24.29	1.62	10.595	B	B

A38 Bristol Road north	30.16	2.01	5.315	A	A
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Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	73.88	4.93	11.376	B	B
A38 Bristol Road south	49.02	3.27	16.758	C	B
B3140	26.73	1.78	11.184	B	B
A38 Bristol Road north	31.78	2.12	5.412	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	27.64	1.84	4.783	A	A
A38 Bristol Road south	15.25	1.02	5.739	A	A
B3140	11.85	0.79	5.647	A	A
A38 Bristol Road north	17.73	1.18	3.537	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	15.45	1.03	3.238	A	A
A38 Bristol Road south	8.07	0.54	3.703	A	A
B3140	6.96	0.46	4.008	A	A
A38 Bristol Road north	11.61	0.77	2.788	A	A

(Default Analysis Set) - 2016 Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
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2016 Dev, AM	2016 Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		
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Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4		✓		53.32	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	

A38 Bristol Road north	A38 Bristol Road north	
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Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00
B3140	0.00	99999.00		0.00
A38 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	
A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00

A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
M5	None
A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	1125.00	100.000
A38 Bristol Road south	ONE HOUR	✓	615.00	100.000
B3140	ONE HOUR	✓	858.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1327.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To
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From		1	2	3	4
	1	0.000	243.000	135.000	747.000
	2	220.000	0.000	93.000	302.000
	3	410.000	82.000	0.000	366.000
	4	797.000	263.000	267.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

From	To				
		1	2	3	4
	1	0.00	0.22	0.12	0.66
	2	0.36	0.00	0.15	0.49
	3	0.48	0.10	0.00	0.43
	4	0.60	0.20	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

From	To			
	1	2	3	4

	1	1.000	1.120	1.050	1.190
	2	1.190	1.000	1.060	1.050
	3	1.020	1.090	1.000	1.020
	4	1.150	1.030	1.060	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	12.000	5.000	19.000
	2	19.000	0.000	6.000	5.000
	3	2.000	9.000	0.000	2.000
	4	15.000	3.000	6.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.65	5.44	2.15	A	1195.51	1793.26	121.96	4.08	1.36	121.96	4.08

A38 Bristol Road south	0.56	6.89	1.41	A	621.67	932.50	74.89	4.82	0.83	74.90	4.82
B3140	1.15	229.72	69.64	F	808.33	1212.49	1707.38	84.49	18.97	1707.41	84.49
A38 Bristol Road north	0.82	11.46	5.00	B	1349.32	2023.98	244.08	7.24	2.71	244.10	7.24

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	980.85	245.21	977.73	1196.34	482.12	0.00	2429.14	2018.41	0.404	0.00	0.78	2.866	A
A38 Bristol Road south	510.04	127.51	508.29	474.18	985.67	0.00	1789.23	745.84	0.285	0.00	0.44	3.092	A
B3140	663.19	165.80	658.82	392.52	1101.44	0.00	1277.68	506.11	0.519	0.00	1.09	5.931	A
A38 Bristol Road north	1107.04	276.76	1102.43	1184.22	576.03	0.00	2162.31	2158.47	0.512	0.00	1.15	3.749	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1171.23	292.81	1169.69	1430.04	576.46	0.00	2327.79	2018.41	0.503	0.78	1.16	3.595	A
A38 Bristol Road south	609.04	152.26	608.08	567.01	1179.14	0.00	1592.58	745.84	0.382	0.44	0.68	4.023	A
B3140	791.91	197.98	786.03	469.54	1317.68	0.00	1094.94	506.11	0.723	1.09	2.56	11.746	B
A38 Bristol Road north	1321.91	330.48	1318.61	1415.81	687.90	0.00	2049.70	2158.47	0.645	1.15	1.98	5.431	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1434.45	358.61	1430.64	1683.60	689.92	0.00	2205.89	2018.41	0.650	1.16	2.12	5.350	A
A38 Bristol Road south	745.92	186.48	743.06	679.32	1441.24	0.00	1326.18	745.84	0.562	0.68	1.39	6.769	A
B3140	969.89	242.47	830.56	573.23	1611.06	0.00	847.02	506.11	1.145	2.56	37.40	100.210	F
A38 Bristol Road north	1619.01	404.75	1607.81	1675.90	765.71	0.00	1971.37	2158.48	0.821	1.98	4.78	10.657	B

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	1434.45	358.61	1434.34	1696.03	694.86	0.00	2200.58	2018.41	0.652	2.12	2.15	5.439	A
A38 Bristol Road south	745.92	186.48	745.83	683.05	1446.15	0.00	1321.19	745.84	0.565	1.39	1.41	6.890	A
B3140	969.89	242.47	840.92	576.03	1615.96	0.00	842.88	506.11	1.151	37.40	69.64	229.724	F
A38 Bristol Road north	1619.01	404.75	1618.13	1684.12	772.76	0.00	1964.28	2158.48	0.824	4.78	5.00	11.458	B

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1171.23	292.81	1174.94	1567.72	608.68	0.00	2293.18	2018.41	0.511	2.15	1.22	3.742	A
A38 Bristol Road south	609.04	152.26	611.93	597.87	1185.74	0.00	1585.87	745.84	0.384	1.41	0.69	4.085	A
B3140	791.91	197.98	1056.15	473.12	1324.55	0.00	1089.14	506.11	0.727	69.64	3.58	123.171	F
A38 Bristol Road north	1321.91	330.48	1331.36	1535.67	845.03	0.00	1891.53	2158.47	0.699	5.00	2.64	7.239	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	980.85	245.21	982.56	1210.62	487.48	0.00	2423.38	2018.41	0.405	1.22	0.79	2.896	A
A38 Bristol Road south	510.04	127.51	511.04	478.55	991.49	0.00	1783.31	745.84	0.286	0.69	0.44	3.121	A

B3140	663.19	165.80	672.98	395.45	1107.07	0.00	1272.92	506.11	0.521	3.58	1.13	6.260	A
A38 Bristol Road north	1107.04	276.76	1112.85	1194.80	585.26	0.00	2153.02	2158.47	0.514	2.64	1.18	3.855	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	11.45	0.76	2.866	A	A
A38 Bristol Road south	6.42	0.43	3.092	A	A
B3140	15.69	1.05	5.931	A	A
A38 Bristol Road north	16.76	1.12	3.749	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	17.06	1.14	3.595	A	A
A38 Bristol Road south	9.94	0.66	4.023	A	A
B3140	35.39	2.36	11.746	B	B

A38 Bristol Road north	28.53	1.90	5.431	A	A
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Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	30.49	2.03	5.350	A	A
A38 Bristol Road south	20.00	1.33	6.769	A	A
B3140	315.53	21.04	100.210	F	F
A38 Bristol Road north	64.83	4.32	10.657	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	32.04	2.14	5.439	A	A
A38 Bristol Road south	21.09	1.41	6.890	A	A
B3140	803.45	53.56	229.724	F	F
A38 Bristol Road north	73.72	4.91	11.458	B	B

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	18.80	1.25	3.742	A	A
A38 Bristol Road south	10.67	0.71	4.085	A	A
B3140	519.19	34.61	123.171	F	F
A38 Bristol Road north	41.89	2.79	7.239	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	12.10	0.81	2.896	A	A
A38 Bristol Road south	6.77	0.45	3.121	A	A
B3140	18.14	1.21	6.260	A	A
A38 Bristol Road north	18.34	1.22	3.855	A	A

(Default Analysis Set) - 2016 Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Dev, PM	2016 Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4		✓		21.84	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	
A38 Bristol Road north	A38 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00
B3140	0.00	99999.00		0.00
A38 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	

A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00
A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
M5	None
A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	1511.00	100.000

A38 Bristol Road south	ONE HOUR	✓	657.00	100.000
B3140	ONE HOUR	✓	528.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1369.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	252.000	402.000	857.000
	2	253.000	0.000	97.000	307.000
	3	191.000	105.000	0.000	232.000
	4	657.000	310.000	402.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.17	0.27	0.57
	2	0.39	0.00	0.15	0.47

	3	0.36	0.20	0.00	0.44
	4	0.48	0.23	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.070	1.010	1.110
	2	1.100	1.000	1.030	1.030
	3	1.040	1.010	1.000	1.010
	4	1.140	1.030	1.030	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	7.000	1.000	11.000
	2	10.000	0.000	3.000	3.000
	3	4.000	1.000	0.000	1.000

	4	14.000	3.000	3.000	0.000
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Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.92	21.97	10.30	C	1492.90	2239.35	373.48	10.01	4.15	373.50	10.01
A38 Bristol Road south	0.94	52.50	10.55	F	637.21	955.82	290.31	18.22	3.23	290.32	18.22
B3140	0.76	19.27	3.05	C	494.61	741.91	124.19	10.04	1.38	124.19	10.04
A38 Bristol Road north	0.78	8.28	3.68	A	1360.22	2040.33	184.66	5.43	2.05	184.68	5.43

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	1224.84	306.21	1219.84	919.20	629.56	0.00	2270.74	1726.79	0.539	0.00	1.25	3.670	A
A38 Bristol Road south	522.80	130.70	520.41	521.13	1328.26	0.00	1441.01	765.47	0.363	0.00	0.60	4.122	A
B3140	405.79	101.45	403.80	689.90	1158.78	0.00	1229.23	801.44	0.330	0.00	0.50	4.441	A
A38 Bristol Road north	1115.98	279.00	1111.94	1125.75	436.82	0.00	2302.45	1977.31	0.485	0.00	1.01	3.264	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1462.58	365.64	1458.43	1099.37	753.12	0.00	2137.99	1726.72	0.684	1.25	2.29	5.668	A
A38 Bristol Road south	624.27	156.07	621.96	623.27	1588.27	0.00	1176.73	765.50	0.531	0.60	1.18	6.830	A
B3140	484.56	121.14	483.03	825.01	1385.22	0.00	1037.87	801.46	0.467	0.50	0.88	6.604	A
A38 Bristol Road north	1332.59	333.15	1330.19	1345.94	522.30	0.00	2216.39	1977.29	0.601	1.01	1.61	4.387	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1791.28	447.82	1763.51	1332.65	918.93	0.00	1959.85	1726.72	0.914	2.29	9.23	17.714	C
A38 Bristol Road south	764.57	191.14	738.37	757.49	1924.96	0.00	834.53	765.50	0.916	1.18	7.73	33.377	D

B3140	593.46	148.37	586.18	1000.06	1663.27	0.00	802.91	801.45	0.739	0.88	2.70	16.439	C
A38 Bristol Road north	1632.09	408.02	1624.31	1622.18	627.26	0.00	2110.74	1977.29	0.773	1.61	3.56	7.890	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1791.28	447.82	1787.01	1344.49	923.70	0.00	1954.73	1726.72	0.916	9.23	10.30	21.970	C
A38 Bristol Road south	764.57	191.14	753.28	764.11	1946.60	0.00	812.53	765.50	0.941	7.73	10.55	52.496	F
B3140	593.46	148.37	592.08	1010.10	1689.77	0.00	780.50	801.45	0.760	2.70	3.05	19.273	C
A38 Bristol Road north	1632.09	408.02	1631.61	1645.27	636.58	0.00	2101.36	1977.29	0.777	3.56	3.68	8.280	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1462.58	365.64	1494.13	1123.95	760.16	0.00	2130.43	1726.72	0.687	10.30	2.41	6.386	A
A38 Bristol Road south	624.27	156.07	661.29	633.34	1620.95	0.00	1143.52	765.50	0.546	10.55	1.29	8.493	A
B3140	484.56	121.14	492.80	842.47	1439.77	0.00	991.78	801.46	0.489	3.05	0.99	7.481	A
A38 Bristol Road north	1332.59	333.15	1340.52	1388.97	543.59	0.00	2194.97	1977.29	0.607	3.68	1.69	4.603	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1224.84	306.21	1229.36	926.08	633.64	0.00	2266.35	1726.79	0.540	2.41	1.28	3.755	A
A38 Bristol Road south	522.80	130.70	525.52	524.92	1338.08	0.00	1431.03	765.47	0.365	1.29	0.61	4.214	A
B3140	405.79	101.45	407.71	694.88	1168.72	0.00	1220.82	801.44	0.332	0.99	0.51	4.531	A
A38 Bristol Road north	1115.98	279.00	1118.64	1135.35	441.08	0.00	2298.15	1977.31	0.486	1.69	1.03	3.311	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	18.16	1.21	3.670	A	A
A38 Bristol Road south	8.72	0.58	4.122	A	A
B3140	7.28	0.49	4.441	A	A
A38 Bristol Road north	14.77	0.98	3.264	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	32.78	2.19	5.668	A	A
A38 Bristol Road south	16.92	1.13	6.830	A	A
B3140	12.77	0.85	6.604	A	A
A38 Bristol Road north	23.46	1.56	4.387	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	113.27	7.55	17.714	C	B
A38 Bristol Road south	88.51	5.90	33.377	D	C
B3140	36.30	2.42	16.439	C	B
A38 Bristol Road north	49.62	3.31	7.890	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	147.89	9.86	21.970	C	C

A38 Bristol Road south	140.28	9.35	52.496	F	D
B3140	44.02	2.93	19.273	C	B
A38 Bristol Road north	54.50	3.63	8.280	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	41.63	2.78	6.386	A	A
A38 Bristol Road south	26.43	1.76	8.493	A	A
B3140	15.92	1.06	7.481	A	A
A38 Bristol Road north	26.50	1.77	4.603	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	19.75	1.32	3.755	A	A
A38 Bristol Road south	9.45	0.63	4.214	A	A
B3140	7.89	0.53	4.531	A	A

A38 Bristol Road north	15.82	1.05	3.311	A	A
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(Default Analysis Set) - 2016 Q Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Q Dev, AM	2016 Q Dev	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4		✓		50.65	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	
A38 Bristol Road north	A38 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00

B3140	0.00	99999.00		0.00
A38 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	
A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00
A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
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M5	None
A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
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		✓	✓	HV Percentages	2.00				✓	✓
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Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	1117.00	100.000
A38 Bristol Road south	ONE HOUR	✓	615.00	100.000
B3140	ONE HOUR	✓	858.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1319.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	243.000	135.000	739.000
	2	220.000	0.000	93.000	302.000
	3	410.000	82.000	0.000	366.000

	4	789.000	263.000	267.000	0.000
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Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.22	0.12	0.66
	2	0.36	0.00	0.15	0.49
	3	0.48	0.10	0.00	0.43
	4	0.60	0.20	0.20	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.120	1.050	1.190
	2	1.190	1.000	1.060	1.050
	3	1.020	1.090	1.000	1.020
	4	1.140	1.030	1.060	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	12.000	5.000	19.000
	2	19.000	0.000	6.000	5.000
	3	2.000	9.000	0.000	2.000
	4	14.000	3.000	6.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.65	5.37	2.11	A	1186.77	1780.16	119.91	4.04	1.33	119.92	4.04
A38 Bristol Road south	0.56	6.76	1.39	A	621.67	932.50	73.93	4.76	0.82	73.94	4.76
B3140	1.14	216.38	65.62	F	808.33	1212.49	1583.84	78.38	17.60	1583.87	78.38
A38 Bristol Road north	0.82	10.96	4.73	B	1333.64	2000.46	232.59	6.98	2.58	232.61	6.98

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	973.68	243.42	970.60	1183.60	482.16	0.00	2429.11	2009.70	0.401	0.00	0.77	2.852	A
A38 Bristol Road south	510.04	127.51	508.30	474.20	978.55	0.00	1796.46	752.02	0.284	0.00	0.43	3.074	A
B3140	663.19	165.80	658.86	392.54	1094.31	0.00	1283.71	510.64	0.517	0.00	1.08	5.876	A
A38 Bristol Road north	1094.17	273.54	1089.70	1177.11	576.06	0.00	2162.28	2153.44	0.506	0.00	1.12	3.683	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1162.67	290.67	1161.16	1414.88	576.53	0.00	2327.72	2009.70	0.499	0.77	1.15	3.568	A
A38 Bristol Road south	609.04	152.26	608.09	567.06	1170.63	0.00	1601.23	752.02	0.380	0.43	0.67	3.990	A
B3140	791.91	197.98	786.21	469.56	1309.16	0.00	1102.15	510.64	0.719	1.08	2.51	11.496	B
A38 Bristol Road north	1306.55	326.64	1303.40	1407.36	688.00	0.00	2049.59	2153.44	0.637	1.12	1.91	5.294	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1423.97	355.99	1420.25	1668.79	690.88	0.00	2204.86	2009.71	0.646	1.15	2.08	5.287	A
A38 Bristol Road south	745.92	186.48	743.13	680.19	1430.94	0.00	1336.65	752.02	0.558	0.67	1.37	6.652	A
B3140	969.89	242.47	837.92	573.36	1600.72	0.00	855.76	510.64	1.133	2.51	35.50	95.339	F
A38 Bristol Road north	1600.19	400.05	1589.69	1668.65	769.99	0.00	1967.07	2153.44	0.813	1.91	4.53	10.235	B

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1423.97	355.99	1423.86	1681.30	695.75	0.00	2199.63	2009.71	0.647	2.08	2.11	5.371	A
A38 Bristol Road south	745.92	186.48	745.84	683.92	1435.69	0.00	1331.83	752.02	0.560	1.37	1.39	6.765	A
B3140	969.89	242.47	849.42	576.04	1605.49	0.00	851.73	510.64	1.139	35.50	65.62	216.380	F
A38 Bristol Road north	1600.19	400.05	1599.39	1677.25	777.66	0.00	1959.35	2153.44	0.817	4.53	4.73	10.964	B

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	1162.67	290.67	1166.29	1545.07	607.07	0.00	2294.91	2009.70	0.507	2.11	1.20	3.704	A
A38 Bristol Road south	609.04	152.26	611.85	596.31	1177.05	0.00	1594.71	752.02	0.382	1.39	0.69	4.046	A
B3140	791.91	197.98	1041.53	473.04	1315.86	0.00	1096.49	510.64	0.722	65.62	3.21	107.869	F
A38 Bristol Road north	1306.55	326.64	1315.56	1520.81	836.57	0.00	1900.04	2153.44	0.688	4.73	2.48	6.889	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	973.68	243.42	975.35	1196.75	487.19	0.00	2423.70	2009.70	0.402	1.20	0.78	2.880	A
A38 Bristol Road south	510.04	127.51	511.02	478.32	984.21	0.00	1790.71	752.02	0.285	0.69	0.44	3.103	A
B3140	663.19	165.80	671.56	395.37	1099.86	0.00	1279.01	510.64	0.519	3.21	1.12	6.167	A
A38 Bristol Road north	1094.17	273.54	1099.51	1186.99	584.43	0.00	2153.85	2153.44	0.508	2.48	1.15	3.780	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	11.31	0.75	2.852	A	A

A38 Bristol Road south	6.39	0.43	3.074	A	A
B3140	15.55	1.04	5.876	A	A
A38 Bristol Road north	16.29	1.09	3.683	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	16.82	1.12	3.568	A	A
A38 Bristol Road south	9.86	0.66	3.990	A	A
B3140	34.70	2.31	11.496	B	B
A38 Bristol Road north	27.52	1.83	5.294	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	29.93	2.00	5.287	A	A
A38 Bristol Road south	19.67	1.31	6.652	A	A
B3140	301.70	20.11	95.339	F	F

A38 Bristol Road north	61.79	4.12	10.235	B	B
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Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	31.43	2.10	5.371	A	A
A38 Bristol Road south	20.72	1.38	6.765	A	A
B3140	759.14	50.61	216.380	F	F
A38 Bristol Road north	69.88	4.66	10.964	B	B

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	18.48	1.23	3.704	A	A
A38 Bristol Road south	10.56	0.70	4.046	A	A
B3140	454.92	30.33	107.869	F	F
A38 Bristol Road north	39.34	2.62	6.889	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	11.95	0.80	2.880	A	A
A38 Bristol Road south	6.73	0.45	3.103	A	A
B3140	17.83	1.19	6.167	A	A
A38 Bristol Road north	17.76	1.18	3.780	A	A

(Default Analysis Set) - 2016 Q Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
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2016 Q Dev, PM	2016 Q Dev	PM		ONE HOUR	16:45	18:15	90	15				✓		
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Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4		✓		20.47	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
M5	M5	
A38 Bristol Road south	A38 Bristol Road south	
B3140	B3140	

A38 Bristol Road north	A38 Bristol Road north	
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Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
M5	0.00	99999.00		0.00
A38 Bristol Road south	0.00	99999.00		0.00
B3140	0.00	99999.00		0.00
A38 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
M5	6.80	6.80	0.00	18.00	107.00	26.00	
A38 Bristol Road south	3.90	7.70	25.00	20.00	107.00	35.00	
B3140	3.60	7.90	3.60	20.00	107.00	34.00	
A38 Bristol Road north	3.40	7.65	27.00	28.00	107.00	36.00	

Large Roundabout Data

Name	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
M5	0.00	0.00

A38 Bristol Road south	0.00	0.00
B3140	0.00	0.00
A38 Bristol Road north	0.00	0.00

Pedestrian Crossings

Name	Crossing Type
M5	None
A38 Bristol Road south	None
B3140	None
A38 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
M5		(calculated)	(calculated)	1.074	2947.115
A38 Bristol Road south		(calculated)	(calculated)	1.016	2791.071
B3140		(calculated)	(calculated)	0.845	2208.465
A38 Bristol Road north		(calculated)	(calculated)	1.007	2742.160

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
M5	ONE HOUR	✓	1502.00	100.000
A38 Bristol Road south	ONE HOUR	✓	657.00	100.000
B3140	ONE HOUR	✓	528.00	100.000
A38 Bristol Road north	ONE HOUR	✓	1360.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To
--	----

From		1	2	3	4
	1	0.000	252.000	402.000	848.000
	2	253.000	0.000	97.000	307.000
	3	191.000	105.000	0.000	232.000
	4	648.000	310.000	402.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.17	0.27	0.56
	2	0.39	0.00	0.15	0.47
	3	0.36	0.20	0.00	0.44
	4	0.48	0.23	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

From	To			
	1	2	3	4

	1	1.000	1.070	1.010	1.110
	2	1.100	1.000	1.030	1.030
	3	1.040	1.010	1.000	1.010
	4	1.120	1.030	1.030	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	7.000	1.000	11.000
	2	10.000	0.000	3.000	3.000
	3	4.000	1.000	0.000	1.000
	4	12.000	3.000	3.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
M5	0.91	20.84	9.73	C	1483.73	2225.60	358.99	9.68	3.99	359.01	9.68

A38 Bristol Road south	0.93	47.68	9.53	E	637.21	955.82	271.60	17.05	3.02	271.61	17.05
B3140	0.75	18.56	2.94	C	494.61	741.91	121.11	9.79	1.35	121.11	9.79
A38 Bristol Road north	0.76	7.80	3.41	A	1338.91	2008.37	173.98	5.20	1.93	173.99	5.20

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1217.32	304.33	1212.38	901.84	629.61	0.00	2270.69	1712.16	0.536	0.00	1.23	3.646	A
A38 Bristol Road south	522.80	130.70	520.43	521.16	1320.83	0.00	1448.57	772.51	0.361	0.00	0.59	4.090	A
B3140	405.79	101.45	403.81	689.93	1151.32	0.00	1235.53	807.29	0.328	0.00	0.50	4.408	A
A38 Bristol Road north	1098.50	274.63	1094.61	1118.30	436.83	0.00	2302.43	1971.14	0.477	0.00	0.97	3.187	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1453.60	363.40	1449.55	1078.62	753.18	0.00	2137.93	1712.09	0.680	1.23	2.24	5.599	A
A38 Bristol Road south	624.27	156.07	622.01	623.32	1579.42	0.00	1185.74	772.53	0.526	0.59	1.16	6.723	A
B3140	484.56	121.14	483.06	825.07	1376.36	0.00	1045.36	807.31	0.464	0.50	0.87	6.519	A
A38 Bristol Road north	1311.72	327.93	1309.46	1337.07	522.34	0.00	2216.35	1971.12	0.592	0.97	1.54	4.249	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1780.28	445.07	1754.08	1308.39	919.26	0.00	1959.50	1712.09	0.909	2.24	8.79	17.073	C
A38 Bristol Road south	764.57	191.14	740.39	757.90	1915.45	0.00	844.19	772.54	0.906	1.16	7.20	31.464	D
B3140	593.46	148.37	586.44	1000.86	1654.98	0.00	809.91	807.31	0.733	0.87	2.62	15.973	C
A38 Bristol Road north	1606.52	401.63	1599.43	1613.20	628.23	0.00	2109.77	1971.12	0.761	1.54	3.31	7.467	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
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M5	1780.28	445.07	1776.56	1319.80	923.75	0.00	1954.67	1712.09	0.911	8.79	9.73	20.842	C
A38 Bristol Road south	764.57	191.14	755.28	764.24	1936.07	0.00	823.23	772.54	0.929	7.20	9.53	47.680	E
B3140	593.46	148.37	592.19	1010.54	1680.81	0.00	788.08	807.31	0.753	2.62	2.94	18.564	C
A38 Bristol Road north	1606.52	401.63	1606.11	1635.56	637.44	0.00	2100.49	1971.12	0.765	3.31	3.41	7.798	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1453.60	363.40	1483.07	1100.95	759.80	0.00	2130.82	1712.09	0.682	9.73	2.36	6.246	A
A38 Bristol Road south	624.27	156.07	657.31	632.83	1610.04	0.00	1154.61	772.53	0.541	9.53	1.27	8.154	A
B3140	484.56	121.14	492.46	841.26	1426.09	0.00	1003.34	807.31	0.483	2.94	0.97	7.303	A
A38 Bristol Road north	1311.72	327.93	1318.94	1376.74	541.80	0.00	2196.77	1971.12	0.597	3.41	1.61	4.435	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
M5	1217.32	304.33	1221.71	908.42	633.56	0.00	2266.44	1712.16	0.537	2.36	1.26	3.723	A
A38 Bristol Road south	522.80	130.70	525.43	524.86	1330.41	0.00	1438.83	772.51	0.363	1.27	0.61	4.177	A

B3140	405.79	101.45	407.63	694.80	1161.04	0.00	1227.32	807.29	0.331	0.97	0.51	4.493	A
A38 Bristol Road north	1098.50	274.63	1100.98	1127.67	441.00	0.00	2298.23	1971.14	0.478	1.61	0.99	3.231	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	17.92	1.19	3.646	A	A
A38 Bristol Road south	8.65	0.58	4.090	A	A
B3140	7.23	0.48	4.408	A	A
A38 Bristol Road north	14.21	0.95	3.187	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	32.19	2.15	5.599	A	A
A38 Bristol Road south	16.67	1.11	6.723	A	A
B3140	12.61	0.84	6.519	A	A

A38 Bristol Road north	22.40	1.49	4.249	A	A
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Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	108.87	7.26	17.073	C	B
A38 Bristol Road south	83.81	5.59	31.464	D	C
B3140	35.37	2.36	15.973	C	B
A38 Bristol Road north	46.42	3.09	7.467	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	140.20	9.35	20.842	C	C
A38 Bristol Road south	128.38	8.56	47.680	E	D
B3140	42.56	2.84	18.564	C	B
A38 Bristol Road north	50.66	3.38	7.798	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	40.33	2.69	6.246	A	A
A38 Bristol Road south	24.72	1.65	8.154	A	A
B3140	15.51	1.03	7.303	A	A
A38 Bristol Road north	25.11	1.67	4.435	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
M5	19.47	1.30	3.723	A	A
A38 Bristol Road south	9.37	0.62	4.177	A	A
B3140	7.83	0.52	4.493	A	A
A38 Bristol Road north	15.18	1.01	3.231	A	A

Junctions 8			
PICADY 8 - Priority Intersection Module			
Version: 8.0.3.332 [14595,13/11/2013] © Copyright TRL Limited, 2014			
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Filename: A38 Harp Road - Brent Street.arc8

Path: P:\TP London\TP Projects\Hinkley Point C Connection\Modelling\Junctions 8\J10

Report generation date: 24/02/2014 14:25:29

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
A1 - 2013 Obs								
Stream B-ACD	0.76	14.32	0.43	B	0.56	13.70	0.36	B

Stream A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.18	12.00	0.15	B	0.18	13.79	0.15	B
Stream D-BC	0.57	26.58	0.37	D	0.35	29.23	0.26	D
Stream C-ABD	0.17	8.41	0.15	A	0.43	11.53	0.30	B
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2016 Base							
Stream B-ACD	0.91	16.19	0.48	C	0.69	15.73	0.41	C
Stream A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.24	14.47	0.19	B	0.26	18.28	0.21	C
Stream D-BC	0.86	38.99	0.47	E	0.57	47.33	0.37	E
Stream C-ABD	0.19	8.90	0.16	A	0.52	13.04	0.34	B
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2016 Dev							
Stream B-ACD	1.11	20.01	0.53	C	0.89	20.44	0.48	C

Stream A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.57	31.37	0.37	D	1.38	85.52	0.61	F
Stream D-BC	3.46	176.96	0.86	F	4.17	383.07	1.06	F
Stream C-ABD	0.22	10.11	0.18	B	0.65	16.52	0.40	C
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2016 Q Dev							
Stream B-ACD	1.10	19.72	0.53	C	0.87	20.10	0.47	C
Stream A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-AB	0.52	28.90	0.35	D	1.20	74.32	0.57	F
Stream D-BC	3.03	161.95	0.82	F	3.16	312.81	0.92	F
Stream C-ABD	0.21	10.02	0.18	B	0.64	16.28	0.40	C
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-

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

"D1 - 2013 Obs, AM " model duration: 07:45 - 09:15
"D2 - 2013 Obs, PM" model duration: 16:45 - 18:15
"D3 - 2016 Base, AM" model duration: 07:45 - 09:15
"D4 - 2016 Base, PM" model duration: 16:45 - 18:15
"D5 - 2016 Dev, AM" model duration: 07:45 - 09:15
"D6 - 2016 Dev, PM" model duration: 16:45 - 18:15
"D7 - 2016 Q Dev, AM" model duration: 07:45 - 09:15
"D8 - 2016 Q Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.3.332 at 24/02/2014 14:25:22

File summary

File Description

Title	A38 / Harp Road / Brent Street
Location	
Site Number	
Date	26/11/2013
Version	
Status	
Identifier	
Client	
Jobnumber	TPLO1028
Enumerator	T Nichol
Description	Existing Layout

Analysis Options

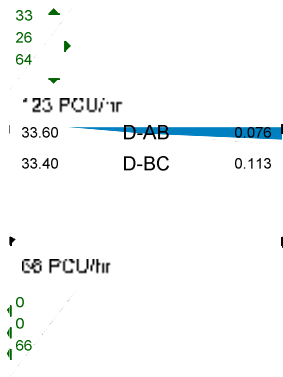
Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

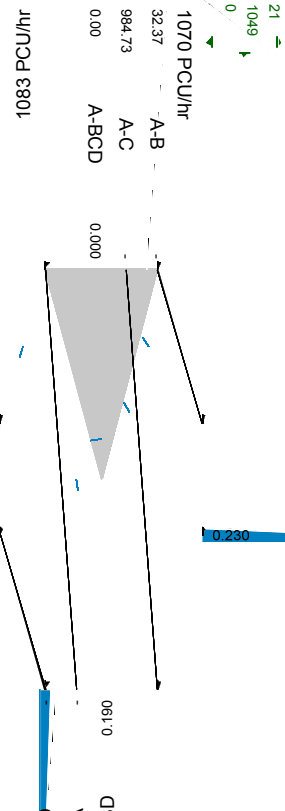
Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
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m	kph	Veh	Veh	perHour	s	-Min	perMin
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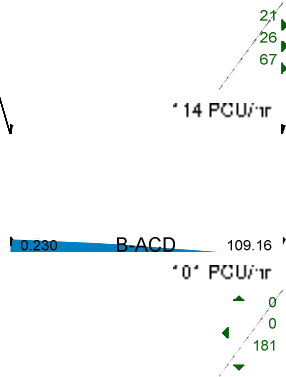
Brent Street



A38 (N)



Harp Road



20.00 m

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2013 Obs, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013 Obs, AM	2013 Obs	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
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untitled	Crossroads	Two-way	A,B,C,D		15.40	C
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Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major
Brent Street	Brent Street		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Harp Road	One lane	4.85										35	53
Brent Street	Two lanes		5.00	3.95								250	136

Pedestrian Crossings

Name	Crossing Type
A38 (N)	None
Harp Road	None
A38 (S)	None
Brent Street	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	573.963	-	-	-	-	-	-	0.203	0.290	0.203	-	-	-

1	B-A	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
1	B-C	779.045	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-
1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1000.00	100.000
Harp Road	ONE HOUR	✓	175.00	100.000
A38 (S)	ONE HOUR	✓	1107.00	100.000
Brent Street	ONE HOUR	✓	121.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	20.000	980.000	0.000
	B	0.000	0.000	175.000	0.000
	C	983.000	66.000	0.000	58.000
	D	32.000	26.000	63.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.02	0.98	0.00
	B	0.00	0.00	1.00	0.00
	C	0.89	0.06	0.00	0.05
	D	0.26	0.21	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.050	1.070	1.000
	B	1.000	1.000	1.034	1.000
	C	1.068	1.015	1.000	1.138
	D	1.031	1.000	1.016	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	To
--	----

From		A	B	C	D
	A	0.000	5.000	7.000	0.000
	B	0.000	0.000	3.400	0.000
	C	6.800	1.500	0.000	13.800
	D	3.100	0.000	1.600	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.43	14.32	0.76	B	160.58	240.87	45.34	11.29	0.50	45.34	11.29
A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	18.35	27.53	-	-	-	-	-
A-C	-	-	-	-	899.27	1348.90	-	-	-	-	-
D-AB	0.15	12.00	0.18	B	43.99	65.99	10.37	9.43	0.12	10.37	9.43
D-BC	0.37	26.58	0.57	D	67.04	100.56	28.48	16.99	0.32	28.48	16.99
C-ABD	0.15	8.41	0.17	A	60.56	90.84	11.22	7.41	0.12	11.22	7.41

C-D	-	-	-	-	53.22	79.83	-	-	-	-	-
C-A	-	-	-	-	902.02	1353.03	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	131.75	32.94	130.48	0.00	541.77	0.243	0.00	0.32	8.726	A
A-BCD	0.00	0.00	0.00	0.00	377.79	0.000	0.00	0.00	0.000	A
A-B	15.06	3.76	15.06	0.00	-	-	-	-	-	-
A-C	737.80	184.45	737.80	0.00	-	-	-	-	-	-
D-AB	35.02	8.75	34.74	0.00	537.15	0.065	0.00	0.07	7.162	A
D-BC	56.08	14.02	55.46	0.00	413.31	0.136	0.00	0.15	10.043	B
C-ABD	49.69	12.42	49.34	0.00	613.29	0.081	0.00	0.09	6.379	A
C-D	43.67	10.92	43.67	0.00	-	-	-	-	-	-
C-A	740.05	185.01	740.05	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	157.32	39.33	156.79	0.00	500.68	0.314	0.32	0.45	10.451	B
A-BCD	0.00	0.00	0.00	0.00	342.86	0.000	0.00	0.00	0.000	A
A-B	17.98	4.49	17.98	0.00	-	-	-	-	-	-
A-C	881.00	220.25	881.00	0.00	-	-	-	-	-	-
D-AB	42.52	10.63	42.40	0.00	466.60	0.091	0.07	0.10	8.486	A
D-BC	66.26	16.56	65.89	0.00	330.11	0.201	0.15	0.25	13.605	B
C-ABD	59.33	14.83	59.22	0.00	566.00	0.105	0.09	0.12	7.101	A
C-D	52.14	13.04	52.14	0.00	-	-	-	-	-	-
C-A	883.70	220.92	883.70	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	192.68	48.17	191.49	0.00	443.88	0.434	0.45	0.75	14.195	B
A-BCD	0.00	0.00	0.00	0.00	294.67	0.000	0.00	0.00	0.000	A
A-B	22.02	5.51	22.02	0.00	-	-	-	-	-	-
A-C	1079.00	269.75	1079.00	0.00	-	-	-	-	-	-

D-AB	54.36	13.59	54.04	0.00	355.18	0.153	0.10	0.18	11.948	B
D-BC	78.87	19.72	77.63	0.00	214.45	0.368	0.25	0.56	26.070	D
C-ABD	72.67	18.17	72.46	0.00	500.62	0.145	0.12	0.17	8.403	A
C-D	63.86	15.96	63.86	0.00	-	-	-	-	-	-
C-A	1082.30	270.58	1082.30	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	192.68	48.17	192.64	0.00	443.88	0.434	0.75	0.76	14.321	B
A-BCD	0.00	0.00	0.00	0.00	294.61	0.000	0.00	0.00	0.000	A
A-B	22.02	5.51	22.02	0.00	-	-	-	-	-	-
A-C	1079.00	269.75	1079.00	0.00	-	-	-	-	-	-
D-AB	54.44	13.61	54.44	0.00	354.31	0.154	0.18	0.18	12.005	B
D-BC	78.78	19.69	78.73	0.00	214.00	0.368	0.56	0.57	26.585	D
C-ABD	72.67	18.17	72.66	0.00	500.62	0.145	0.17	0.17	8.411	A
C-D	63.86	15.96	63.86	0.00	-	-	-	-	-	-
C-A	1082.30	270.58	1082.30	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	157.32	39.33	158.48	0.00	500.68	0.314	0.76	0.47	10.555	B
A-BCD	0.00	0.00	0.00	0.00	342.77	0.000	0.00	0.00	0.000	A
A-B	17.98	4.49	17.98	0.00	-	-	-	-	-	-
A-C	881.00	220.25	881.00	0.00	-	-	-	-	-	-
D-AB	42.57	10.64	42.89	0.00	465.71	0.091	0.18	0.10	8.515	A
D-BC	66.20	16.55	67.45	0.00	329.47	0.201	0.57	0.26	13.805	B
C-ABD	59.33	14.83	59.54	0.00	566.00	0.105	0.17	0.12	7.112	A
C-D	52.14	13.04	52.14	0.00	-	-	-	-	-	-
C-A	883.70	220.92	883.70	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	131.75	32.94	132.31	0.00	541.77	0.243	0.47	0.33	8.805	A
A-BCD	0.00	0.00	0.00	0.00	377.66	0.000	0.00	0.00	0.000	A
A-B	15.06	3.76	15.06	0.00	-	-	-	-	-	-
A-C	737.80	184.45	737.80	0.00	-	-	-	-	-	-

D-AB	35.04	8.76	35.17	0.00	536.66	0.065	0.10	0.07	7.180	A
D-BC	56.05	14.01	56.44	0.00	412.67	0.136	0.26	0.16	10.117	B
C-ABD	49.69	12.42	49.81	0.00	613.29	0.081	0.12	0.09	6.391	A
C-D	43.67	10.92	43.67	0.00	-	-	-	-	-	-
C-A	740.05	185.01	740.05	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	4.56	0.30	8.726	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.00	0.07	7.162	A	A
D-BC	2.22	0.15	10.043	B	B
C-ABD	1.30	0.09	6.379	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	6.53	0.44	10.451	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.45	0.10	8.486	A	A
D-BC	3.55	0.24	13.605	B	B
C-ABD	1.74	0.12	7.101	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	10.63	0.71	14.195	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	2.57	0.17	11.948	B	B
D-BC	7.69	0.51	26.070	D	C
C-ABD	2.52	0.17	8.403	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	11.29	0.75	14.321	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	2.69	0.18	12.005	B	B
D-BC	8.47	0.56	26.585	D	C
C-ABD	2.55	0.17	8.411	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	7.29	0.49	10.555	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.58	0.11	8.515	A	A
D-BC	4.07	0.27	13.805	B	B
C-ABD	1.78	0.12	7.112	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	5.04	0.34	8.805	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	1.08	0.07	7.180	A	A
D-BC	2.48	0.17	10.117	B	B
C-ABD	1.33	0.09	6.391	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2013 Obs, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
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2013 Obs, PM	2013 Obs	PM		Varies by Arm	16:45	18:15	90	15				✓		
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Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	Crossroads	Two-way	A,B,C,D		14.79	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major

Brent Street	Brent Street		Minor
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Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Harp Road	One lane	4.85										35	53
Brent Street	Two lanes		5.00	3.95								250	136

Pedestrian Crossings

Name	Crossing Type
A38 (N)	None
Harp Road	None
A38 (S)	None

Brent Street	None
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Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	573.963	-	-	-	-	-	-	0.203	0.290	0.203	-	-	-
1	B-A	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
1	B-C	779.045	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-
1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1175.00	100.000
Harp Road	ONE HOUR	✓	136.00	100.000
A38 (S)	ONE HOUR	✓	1282.00	100.000
Brent Street	ONE HOUR	✓	83.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To
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From		A	B	C	D
	A	0.000	40.000	1135.000	0.000
	B	0.000	0.000	136.000	0.000
	C	1056.000	123.000	0.000	103.000
	D	28.000	25.000	30.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.03	0.97	0.00
	B	0.00	0.00	1.00	0.00
	C	0.82	0.10	0.00	0.08
	D	0.34	0.30	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

	To				
From		A	B	C	D

	A	1.000	1.050	1.040	1.000
	B	1.000	1.000	1.010	1.000
	C	1.030	1.020	1.000	1.030
	D	1.040	1.000	1.030	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	5.000	4.000	0.000
	B	0.000	0.000	1.000	0.000
	C	3.000	2.000	0.000	3.000
	D	4.000	0.000	3.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.36	13.70	0.56	B	124.80	187.19	33.96	10.88	0.38	33.96	10.89

A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	36.70	55.06	-	-	-	-	-
A-C	-	-	-	-	1041.50	1562.24	-	-	-	-	-
D-AB	0.15	13.79	0.18	B	38.70	58.05	10.02	10.36	0.11	10.02	10.36
D-BC	0.26	29.23	0.35	D	37.46	56.19	17.06	18.22	0.19	17.06	18.22
C-ABD	0.30	11.53	0.43	B	112.87	169.30	26.70	9.46	0.30	26.70	9.46
C-D	-	-	-	-	94.51	141.77	-	-	-	-	-
C-A	-	-	-	-	969.00	1453.50	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	102.39	25.60	101.43	0.00	525.91	0.195	0.00	0.24	8.463	A
A-BCD	0.00	0.00	0.00	0.00	356.47	0.000	0.00	0.00	0.000	A
A-B	30.11	7.53	30.11	0.00	-	-	-	-	-	-

A-C	854.49	213.62	854.49	0.00	-	-	-	-	-	-
D-AB	31.07	7.77	30.81	0.00	513.05	0.061	0.00	0.06	7.462	A
D-BC	31.42	7.86	31.06	0.00	378.77	0.083	0.00	0.09	10.343	B
C-ABD	92.60	23.15	91.84	0.00	575.65	0.161	0.00	0.19	7.431	A
C-D	77.54	19.39	77.54	0.00	-	-	-	-	-	-
C-A	795.01	198.75	795.01	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	122.26	30.57	121.86	0.00	478.28	0.256	0.24	0.34	10.089	B
A-BCD	0.00	0.00	0.00	0.00	316.49	0.000	0.00	0.00	0.000	A
A-B	35.96	8.99	35.96	0.00	-	-	-	-	-	-
A-C	1020.34	255.09	1020.34	0.00	-	-	-	-	-	-
D-AB	37.50	9.37	37.38	0.00	436.04	0.086	0.06	0.09	9.028	A
D-BC	37.12	9.28	36.90	0.00	290.27	0.128	0.09	0.14	14.195	B
C-ABD	110.57	27.64	110.27	0.00	521.87	0.212	0.19	0.27	8.740	A
C-D	92.59	23.15	92.59	0.00	-	-	-	-	-	-
C-A	949.32	237.33	949.32	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	149.74	37.43	148.86	0.00	412.42	0.363	0.34	0.56	13.613	B
A-BCD	0.00	0.00	0.00	0.00	261.43	0.000	0.00	0.00	0.000	A
A-B	44.04	11.01	44.04	0.00	-	-	-	-	-	-
A-C	1249.66	312.41	1249.66	0.00	-	-	-	-	-	-
D-AB	47.49	11.87	47.15	0.00	309.44	0.153	0.09	0.18	13.713	B
D-BC	43.90	10.97	43.11	0.00	167.34	0.262	0.14	0.34	28.786	D
C-ABD	135.43	33.86	134.79	0.00	447.52	0.303	0.27	0.43	11.487	B
C-D	113.40	28.35	113.40	0.00	-	-	-	-	-	-
C-A	1162.67	290.67	1162.67	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	149.74	37.43	149.71	0.00	412.42	0.363	0.56	0.56	13.701	B
A-BCD	0.00	0.00	0.00	0.00	261.24	0.000	0.00	0.00	0.000	A
A-B	44.04	11.01	44.04	0.00	-	-	-	-	-	-
A-C	1249.66	312.41	1249.66	0.00	-	-	-	-	-	-

D-AB	47.55	11.89	47.54	0.00	308.62	0.154	0.18	0.18	13.788	B
D-BC	43.84	10.96	43.81	0.00	166.90	0.263	0.34	0.35	29.226	D
C-ABD	135.43	33.86	135.41	0.00	447.52	0.303	0.43	0.43	11.534	B
C-D	113.40	28.35	113.40	0.00	-	-	-	-	-	-
C-A	1162.67	290.67	1162.67	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	122.26	30.57	123.12	0.00	478.28	0.256	0.56	0.35	10.162	B
A-BCD	0.00	0.00	0.00	0.00	316.21	0.000	0.00	0.00	0.000	A
A-B	35.96	8.99	35.96	0.00	-	-	-	-	-	-
A-C	1020.34	255.09	1020.34	0.00	-	-	-	-	-	-
D-AB	37.53	9.38	37.87	0.00	435.25	0.086	0.18	0.10	9.062	A
D-BC	37.08	9.27	37.88	0.00	289.65	0.128	0.35	0.15	14.347	B
C-ABD	110.57	27.64	111.21	0.00	521.87	0.212	0.43	0.27	8.781	A
C-D	92.59	23.15	92.59	0.00	-	-	-	-	-	-
C-A	949.32	237.33	949.32	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	102.39	25.60	102.80	0.00	525.91	0.195	0.35	0.24	8.518	A
A-BCD	0.00	0.00	0.00	0.00	356.16	0.000	0.00	0.00	0.000	A
A-B	30.11	7.53	30.11	0.00	-	-	-	-	-	-
A-C	854.49	213.62	854.49	0.00	-	-	-	-	-	-
D-AB	31.08	7.77	31.20	0.00	512.62	0.061	0.10	0.07	7.480	A
D-BC	31.41	7.85	31.64	0.00	378.13	0.083	0.15	0.09	10.399	B
C-ABD	92.60	23.15	92.91	0.00	575.65	0.161	0.27	0.19	7.464	A
C-D	77.54	19.39	77.54	0.00	-	-	-	-	-	-
C-A	795.01	198.75	795.01	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	3.44	0.23	8.463	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-

A-C	-	-	-	-	-
D-AB	0.93	0.06	7.462	A	A
D-BC	1.28	0.09	10.343	B	B
C-ABD	2.82	0.19	7.431	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	4.91	0.33	10.089	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.36	0.09	9.028	A	A
D-BC	2.08	0.14	14.195	B	B
C-ABD	3.99	0.27	8.740	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	7.97	0.53	13.613	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	2.56	0.17	13.713	B	B
D-BC	4.71	0.31	28.786	D	C
C-ABD	6.37	0.42	11.487	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	8.41	0.56	13.701	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	2.69	0.18	13.788	B	B
D-BC	5.18	0.35	29.226	D	C
C-ABD	6.50	0.43	11.534	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	5.44	0.36	10.162	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.48	0.10	9.062	A	A
D-BC	2.38	0.16	14.347	B	B
C-ABD	4.11	0.27	8.781	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	3.78	0.25	8.518	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.00	0.07	7.480	A	A
D-BC	1.43	0.10	10.399	B	B
C-ABD	2.91	0.19	7.464	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2016 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, AM	2016 Base	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	Crossroads	Two-way	A,B,C,D		19.19	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
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A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major
Brent Street	Brent Street		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Harp Road	One lane	4.85										35	53
Brent Street	Two lanes		5.00	3.95								250	136

Pedestrian Crossings

Name	Crossing Type
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A38 (N)	None
Harp Road	None
A38 (S)	None
Brent Street	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	573.963	-	-	-	-	-	-	0.203	0.290	0.203	-	-	-
1	B-A	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
1	B-C	779.045	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-

1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-
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The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1060.00	100.000
Harp Road	ONE HOUR	✓	186.00	100.000
A38 (S)	ONE HOUR	✓	1174.00	100.000
Brent Street	ONE HOUR	✓	129.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	21.000	1039.000	0.000
	B	0.000	0.000	186.000	0.000
	C	1043.000	70.000	0.000	61.000
	D	34.000	28.000	67.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.02	0.98	0.00
	B	0.00	0.00	1.00	0.00
	C	0.89	0.06	0.00	0.05
	D	0.26	0.22	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.050	1.070	1.000
	B	1.000	1.000	1.030	1.000
	C	1.070	1.010	1.000	1.130
	D	1.030	1.000	1.020	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	5.000	7.000	0.000
	B	0.000	0.000	3.000	0.000
	C	7.000	1.000	0.000	13.000
	D	3.000	0.000	2.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.48	16.19	0.91	C	170.68	256.02	52.58	12.32	0.58	52.59	12.32
A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	953.40	1430.11	-	-	-	-	-
D-AB	0.19	14.47	0.24	B	47.71	71.56	12.77	10.71	0.14	12.77	10.71
D-BC	0.47	38.99	0.86	E	70.66	106.00	38.67	21.89	0.43	38.68	21.89
C-ABD	0.16	8.90	0.19	A	64.23	96.35	12.42	7.74	0.14	12.42	7.74
C-D	-	-	-	-	55.97	83.96	-	-	-	-	-
C-A	-	-	-	-	957.08	1435.61	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
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B-ACD	140.03	35.01	138.62	0.00	531.09	0.264	0.00	0.35	9.140	A
A-BCD	0.00	0.00	0.00	0.00	366.77	0.000	0.00	0.00	0.000	A
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	782.21	195.55	782.21	0.00	-	-	-	-	-	-
D-AB	37.54	9.38	37.23	0.00	515.22	0.073	0.00	0.08	7.526	A
D-BC	59.58	14.90	58.86	0.00	386.01	0.154	0.00	0.18	10.980	B
C-ABD	52.70	13.17	52.32	0.00	601.63	0.088	0.00	0.10	6.549	A
C-D	45.92	11.48	45.92	0.00	-	-	-	-	-	-
C-A	785.23	196.31	785.23	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	167.21	41.80	166.57	0.00	487.37	0.343	0.35	0.51	11.199	B
A-BCD	0.00	0.00	0.00	0.00	329.69	0.000	0.00	0.00	0.000	A
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	934.04	233.51	934.04	0.00	-	-	-	-	-	-
D-AB	45.78	11.44	45.63	0.00	437.69	0.105	0.08	0.12	9.184	A
D-BC	70.19	17.55	69.70	0.00	297.80	0.236	0.18	0.30	15.743	C

C-ABD	62.93	15.73	62.80	0.00	551.26	0.114	0.10	0.13	7.368	A
C-D	54.84	13.71	54.84	0.00	-	-	-	-	-	-
C-A	937.64	234.41	937.64	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	204.79	51.20	203.27	0.00	426.92	0.480	0.51	0.89	15.986	C
A-BCD	0.00	0.00	0.00	0.00	278.54	0.000	0.00	0.00	0.000	A
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	1143.96	285.99	1143.96	0.00	-	-	-	-	-	-
D-AB	59.64	14.91	59.17	0.00	310.21	0.192	0.12	0.23	14.322	B
D-BC	82.39	20.60	80.29	0.00	174.70	0.472	0.30	0.83	37.327	E
C-ABD	77.07	19.27	76.83	0.00	481.61	0.160	0.13	0.19	8.888	A
C-D	67.16	16.79	67.16	0.00	-	-	-	-	-	-
C-A	1148.36	287.09	1148.36	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
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B-ACD	204.79	51.20	204.73	0.00	426.92	0.480	0.89	0.91	16.190	C
A-BCD	0.00	0.00	0.00	0.00	278.47	0.000	0.00	0.00	0.000	A
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	1143.96	285.99	1143.96	0.00	-	-	-	-	-	-
D-AB	59.83	14.96	59.82	0.00	308.59	0.194	0.23	0.24	14.468	B
D-BC	82.20	20.55	82.07	0.00	174.08	0.472	0.83	0.86	38.986	E
C-ABD	77.07	19.27	77.07	0.00	481.61	0.160	0.19	0.19	8.898	A
C-D	67.16	16.79	67.16	0.00	-	-	-	-	-	-
C-A	1148.36	287.09	1148.36	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	167.21	41.80	168.71	0.00	487.37	0.343	0.91	0.53	11.348	B
A-BCD	0.00	0.00	0.00	0.00	329.59	0.000	0.00	0.00	0.000	A
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	934.04	233.51	934.04	0.00	-	-	-	-	-	-
D-AB	45.89	11.47	46.37	0.00	436.13	0.105	0.24	0.12	9.242	A
D-BC	70.07	17.52	72.25	0.00	296.95	0.236	0.86	0.32	16.176	C

C-ABD	62.93	15.73	63.17	0.00	551.26	0.114	0.19	0.13	7.381	A
C-D	54.84	13.71	54.84	0.00	-	-	-	-	-	-
C-A	937.64	234.41	937.64	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	140.03	35.01	140.71	0.00	531.09	0.264	0.53	0.36	9.239	A
A-BCD	0.00	0.00	0.00	0.00	366.63	0.000	0.00	0.00	0.000	A
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	782.21	195.55	782.21	0.00	-	-	-	-	-	-
D-AB	37.57	9.39	37.73	0.00	514.60	0.073	0.12	0.08	7.551	A
D-BC	59.55	14.89	60.07	0.00	385.28	0.155	0.32	0.19	11.090	B
C-ABD	52.70	13.17	52.83	0.00	601.63	0.088	0.13	0.10	6.560	A
C-D	45.92	11.48	45.92	0.00	-	-	-	-	-	-
C-A	785.23	196.31	785.23	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	5.06	0.34	9.140	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.13	0.08	7.526	A	A
D-BC	2.57	0.17	10.980	B	B
C-ABD	1.42	0.09	6.549	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	7.41	0.49	11.199	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	1.68	0.11	9.184	A	A
D-BC	4.31	0.29	15.743	C	B
C-ABD	1.92	0.13	7.368	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	12.59	0.84	15.986	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.34	0.22	14.322	B	B
D-BC	11.05	0.74	37.327	E	D
C-ABD	2.82	0.19	8.888	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	13.52	0.90	16.190	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.54	0.24	14.468	B	B
D-BC	12.71	0.85	38.986	E	D
C-ABD	2.86	0.19	8.898	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	8.37	0.56	11.348	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	1.85	0.12	9.242	A	A
D-BC	5.12	0.34	16.176	C	B
C-ABD	1.96	0.13	7.381	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	5.64	0.38	9.239	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.22	0.08	7.551	A	A
D-BC	2.90	0.19	11.090	B	B
C-ABD	1.45	0.10	6.560	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, PM	2016 Base	PM		Varies by Arm	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	Crossroads	Two-way	A,B,C,D		18.83	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major
Brent Street	Brent Street		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

[illegible]

Pedestrian Crossings

Name	Crossing Type
A38 (N)	None
Harp Road	None
A38 (S)	None
Brent Street	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

[illegible]

1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-
1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1254.00	100.000
Harp Road	ONE HOUR	✓	145.00	100.000
A38 (S)	ONE HOUR	✓	1368.00	100.000
Brent Street	ONE HOUR	✓	89.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	43.000	1211.000	0.000
	B	0.000	0.000	145.000	0.000
	C	1127.000	131.000	0.000	110.000
	D	30.000	27.000	32.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To
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From		A	B	C	D
	A	0.00	0.03	0.97	0.00
	B	0.00	0.00	1.00	0.00
	C	0.82	0.10	0.00	0.08
	D	0.34	0.30	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

Average Cost Per Vehicle and					
	To				
From		A	B	C	D
	A	1.000	1.050	1.040	1.000
	B	1.000	1.000	1.010	1.000
	C	1.030	1.020	1.000	1.030
	D	1.030	1.000	1.030	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	To			
From	A	B	C	D

	A	0.000	5.000	4.000	0.000
	B	0.000	0.000	1.000	0.000
	C	3.000	2.000	0.000	3.000
	D	3.000	0.000	3.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.41	15.73	0.69	C	133.05	199.58	40.02	12.03	0.44	40.03	12.03
A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	39.46	59.19	-	-	-	-	-
A-C	-	-	-	-	1111.23	1666.85	-	-	-	-	-
D-AB	0.21	18.28	0.26	C	42.23	63.35	13.16	12.46	0.15	13.16	12.47
D-BC	0.37	47.33	0.57	E	39.43	59.15	24.64	24.99	0.27	24.64	24.99
C-ABD	0.34	13.04	0.52	B	120.21	180.32	31.18	10.38	0.35	31.18	10.38
C-D	-	-	-	-	100.94	151.41	-	-	-	-	-

C-A	-	-	-	-	1034.15	1551.23	-	-	-	-	-
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Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	109.16	27.29	108.09	0.00	509.45	0.214	0.00	0.27	8.945	A
A-BCD	0.00	0.00	0.00	0.00	342.75	0.000	0.00	0.00	0.000	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	911.70	227.93	911.70	0.00	-	-	-	-	-	-
D-AB	33.47	8.37	33.18	0.00	489.91	0.068	0.00	0.07	7.877	A
D-BC	33.53	8.38	33.11	0.00	348.49	0.096	0.00	0.11	11.400	B
C-ABD	98.62	24.66	97.77	0.00	557.02	0.177	0.00	0.21	7.825	A
C-D	82.81	20.70	82.81	0.00	-	-	-	-	-	-
C-A	848.46	212.12	848.46	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	130.35	32.59	129.87	0.00	458.62	0.284	0.27	0.39	10.933	B
A-BCD	0.00	0.00	0.00	0.00	300.07	0.000	0.00	0.00	0.000	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	1088.66	272.17	1088.66	0.00	-	-	-	-	-	-
D-AB	40.55	10.14	40.40	0.00	403.25	0.101	0.07	0.11	9.918	A
D-BC	39.46	9.87	39.16	0.00	253.90	0.155	0.10	0.18	16.739	C
C-ABD	117.77	29.44	117.40	0.00	499.62	0.236	0.21	0.30	9.411	A
C-D	98.89	24.72	98.89	0.00	-	-	-	-	-	-
C-A	1013.15	253.29	1013.15	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	159.65	39.91	158.50	0.00	388.34	0.411	0.39	0.68	15.584	C
A-BCD	0.00	0.00	0.00	0.00	241.31	0.000	0.00	0.00	0.000	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	1333.34	333.33	1333.34	0.00	-	-	-	-	-	-

D-AB	52.54	13.14	51.95	0.00	251.32	0.209	0.11	0.26	18.011	C
D-BC	45.45	11.36	43.96	0.00	121.67	0.374	0.18	0.55	45.477	E
C-ABD	144.25	36.06	143.42	0.00	420.30	0.343	0.30	0.51	12.963	B
C-D	121.11	30.28	121.11	0.00	-	-	-	-	-	-
C-A	1240.84	310.21	1240.84	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	159.65	39.91	159.61	0.00	388.34	0.411	0.68	0.69	15.731	C
A-BCD	0.00	0.00	0.00	0.00	241.07	0.000	0.00	0.00	0.000	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	1333.34	333.33	1333.34	0.00	-	-	-	-	-	-
D-AB	52.72	13.18	52.70	0.00	249.60	0.211	0.26	0.26	18.282	C
D-BC	45.27	11.32	45.18	0.00	121.02	0.374	0.55	0.57	47.329	E
C-ABD	144.25	36.06	144.23	0.00	420.30	0.343	0.51	0.52	13.037	B
C-D	121.11	30.28	121.11	0.00	-	-	-	-	-	-
C-A	1240.84	310.21	1240.84	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	130.35	32.59	131.49	0.00	458.62	0.284	0.69	0.40	11.043	B
A-BCD	0.00	0.00	0.00	0.00	299.72	0.000	0.00	0.00	0.000	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	1088.66	272.17	1088.66	0.00	-	-	-	-	-	-
D-AB	40.63	10.16	41.23	0.00	401.72	0.101	0.26	0.11	9.997	A
D-BC	39.38	9.85	40.92	0.00	253.02	0.156	0.57	0.19	17.102	C
C-ABD	117.77	29.44	118.58	0.00	499.62	0.236	0.52	0.31	9.469	A
C-D	98.89	24.72	98.89	0.00	-	-	-	-	-	-
C-A	1013.15	253.29	1013.15	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	109.16	27.29	109.67	0.00	509.45	0.214	0.40	0.28	9.017	A
A-BCD	0.00	0.00	0.00	0.00	342.39	0.000	0.00	0.00	0.000	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	911.70	227.93	911.70	0.00	-	-	-	-	-	-

D-AB	33.49	8.37	33.65	0.00	489.34	0.068	0.11	0.07	7.901	A
D-BC	33.51	8.38	33.84	0.00	347.76	0.096	0.19	0.11	11.481	B
C-ABD	98.62	24.66	99.00	0.00	557.02	0.177	0.31	0.22	7.867	A
C-D	82.81	20.70	82.81	0.00	-	-	-	-	-	-
C-A	848.46	212.12	848.46	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	3.87	0.26	8.945	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.05	0.07	7.877	A	A
D-BC	1.50	0.10	11.400	B	B
C-ABD	3.16	0.21	7.825	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	5.65	0.38	10.933	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.61	0.11	9.918	A	A
D-BC	2.58	0.17	16.739	C	B
C-ABD	4.56	0.30	9.411	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	9.62	0.64	15.584	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	3.65	0.24	18.011	C	B
D-BC	7.32	0.49	45.477	E	D
C-ABD	7.63	0.51	12.963	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	10.27	0.68	15.731	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	3.93	0.26	18.282	C	B
D-BC	8.48	0.57	47.329	E	D
C-ABD	7.83	0.52	13.037	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	6.33	0.42	11.043	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.78	0.12	9.997	A	A
D-BC	3.06	0.20	17.102	C	B
C-ABD	4.73	0.32	9.469	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	4.28	0.29	9.017	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	1.14	0.08	7.901	A	A
D-BC	1.69	0.11	11.481	B	B
C-ABD	3.27	0.22	7.867	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2016 Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
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2016 Dev, AM	2016 Dev	AM		Varies by Arm	07:45	09:15	90	15				✓		
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Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	Crossroads	Two-way	A,B,C,D		49.84	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major

Brent Street	Brent Street		Minor
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Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Harp Road	One lane	4.85										35	53
Brent Street	Two lanes		5.00	3.95								250	136

Pedestrian Crossings

Name	Crossing Type
A38 (N)	None
Harp Road	None
A38 (S)	None

Brent Street	None
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Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	573.963	-	-	-	-	-	-	0.203	0.290	0.203	-	-	-
1	B-A	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
1	B-C	779.045	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-
1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1133.00	100.000
Harp Road	ONE HOUR	✓	186.00	100.000
A38 (S)	ONE HOUR	✓	1280.00	100.000
Brent Street	ONE HOUR	✓	129.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To
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From		A	B	C	D
	A	0.000	21.000	1112.000	0.000
	B	0.000	0.000	186.000	0.000
	C	1149.000	70.000	0.000	61.000
	D	34.000	28.000	67.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.02	0.98	0.00
	B	0.00	0.00	1.00	0.00
	C	0.90	0.05	0.00	0.05
	D	0.26	0.22	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

	To			
From	A	B	C	D

	A	1.000	1.050	1.130	1.000
	B	1.000	1.000	1.030	1.000
	C	1.120	1.010	1.000	1.130
	D	1.030	1.000	1.020	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	5.000	13.000	0.000
	B	0.000	0.000	3.000	0.000
	C	12.000	1.000	0.000	13.000
	D	3.000	0.000	2.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.53	20.01	1.11	C	170.68	256.02	61.04	14.31	0.68	61.05	14.31

A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	1020.39	1530.59	-	-	-	-	-
D-AB	0.37	31.37	0.57	D	50.58	75.87	22.34	17.66	0.25	22.34	17.66
D-BC	0.86	176.96	3.46	F	67.79	101.69	99.10	58.47	1.10	99.10	58.47
C-ABD	0.18	10.11	0.22	B	64.23	96.35	13.72	8.54	0.15	13.72	8.54
C-D	-	-	-	-	55.97	83.96	-	-	-	-	-
C-A	-	-	-	-	1054.34	1581.51	-	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	140.03	35.01	138.51	0.00	501.98	0.279	0.00	0.38	9.864	A
A-BCD	0.00	0.00	0.00	0.00	336.56	0.000	0.00	0.00	0.000	A
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-

A-C	837.17	209.29	837.17	0.00	-	-	-	-	-	-
D-AB	37.78	9.45	37.43	0.00	464.16	0.081	0.00	0.09	8.429	A
D-BC	59.34	14.83	58.47	0.00	329.39	0.180	0.00	0.22	13.289	B
C-ABD	52.70	13.17	52.29	0.00	568.48	0.093	0.00	0.10	6.974	A
C-D	45.92	11.48	45.92	0.00	-	-	-	-	-	-
C-A	865.03	216.26	865.03	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	167.21	41.80	166.44	0.00	452.60	0.369	0.38	0.57	12.540	B
A-BCD	0.00	0.00	0.00	0.00	295.17	0.000	0.00	0.00	0.000	A
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	999.67	249.92	999.67	0.00	-	-	-	-	-	-
D-AB	46.57	11.64	46.36	0.00	369.46	0.126	0.09	0.14	11.139	B
D-BC	69.39	17.35	68.58	0.00	229.81	0.302	0.22	0.42	22.213	C
C-ABD	62.93	15.73	62.78	0.00	511.67	0.123	0.10	0.14	8.017	A
C-D	54.84	13.71	54.84	0.00	-	-	-	-	-	-
C-A	1032.93	258.23	1032.93	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	204.79	51.20	202.72	0.00	384.34	0.533	0.57	1.09	19.597	C
A-BCD	0.00	0.00	0.00	0.00	238.05	0.000	0.00	0.00	0.000	A
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	1224.33	306.08	1224.33	0.00	-	-	-	-	-	-
D-AB	66.10	16.52	64.64	0.00	190.90	0.346	0.14	0.51	28.252	D
D-BC	75.93	18.98	66.51	0.00	88.62	0.857	0.42	2.77	131.577	F
C-ABD	77.07	19.27	76.77	0.00	433.13	0.178	0.14	0.21	10.094	B
C-D	67.16	16.79	67.16	0.00	-	-	-	-	-	-
C-A	1265.07	316.27	1265.07	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	204.79	51.20	204.70	0.00	384.34	0.533	1.09	1.11	20.010	C
A-BCD	0.00	0.00	0.00	0.00	237.96	0.000	0.00	0.00	0.000	A
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	1224.33	306.08	1224.33	0.00	-	-	-	-	-	-

D-AB	67.86	16.96	67.60	0.00	182.03	0.373	0.51	0.57	31.367	D
D-BC	74.17	18.54	71.45	0.00	87.13	0.851	2.77	3.45	176.960	F
C-ABD	77.07	19.27	77.07	0.00	433.13	0.178	0.21	0.22	10.110	B
C-D	67.16	16.79	67.16	0.00	-	-	-	-	-	-
C-A	1265.07	316.27	1265.07	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	167.21	41.80	169.28	0.00	452.60	0.369	1.11	0.60	12.797	B
A-BCD	0.00	0.00	0.00	0.00	295.04	0.000	0.00	0.00	0.000	A
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	999.67	249.92	999.67	0.00	-	-	-	-	-	-
D-AB	47.32	11.83	48.99	0.00	361.06	0.131	0.57	0.15	11.574	B
D-BC	68.64	17.16	80.67	0.00	227.59	0.302	3.45	0.45	26.384	D
C-ABD	62.93	15.73	63.22	0.00	511.67	0.123	0.22	0.14	8.032	A
C-D	54.84	13.71	54.84	0.00	-	-	-	-	-	-
C-A	1032.93	258.23	1032.93	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	140.03	35.01	140.85	0.00	501.98	0.279	0.60	0.39	9.991	A
A-BCD	0.00	0.00	0.00	0.00	336.40	0.000	0.00	0.00	0.000	A
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	837.17	209.29	837.17	0.00	-	-	-	-	-	-
D-AB	37.84	9.46	38.09	0.00	463.17	0.082	0.15	0.09	8.469	A
D-BC	59.28	14.82	60.18	0.00	328.54	0.180	0.45	0.22	13.464	B
C-ABD	52.70	13.17	52.85	0.00	568.48	0.093	0.14	0.10	6.983	A
C-D	45.92	11.48	45.92	0.00	-	-	-	-	-	-
C-A	865.03	216.26	865.03	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	5.44	0.36	9.864	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-

A-C	-	-	-	-	-
D-AB	1.27	0.08	8.429	A	A
D-BC	3.06	0.20	13.289	B	B
C-ABD	1.51	0.10	6.974	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	8.24	0.55	12.540	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	2.06	0.14	11.139	B	B
D-BC	5.87	0.39	22.213	C	C
C-ABD	2.08	0.14	8.017	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	15.17	1.01	19.597	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	6.91	0.46	28.252	D	C
D-BC	29.57	1.97	131.577	F	F
C-ABD	3.20	0.21	10.094	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	16.58	1.11	20.010	C	C
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	8.27	0.55	31.367	D	C
D-BC	47.25	3.15	176.960	F	F
C-ABD	3.25	0.22	10.110	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	9.49	0.63	12.797	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	2.45	0.16	11.574	B	B
D-BC	9.71	0.65	26.384	D	C
C-ABD	2.13	0.14	8.032	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	6.12	0.41	9.991	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.39	0.09	8.469	A	A
D-BC	3.54	0.24	13.464	B	B
C-ABD	1.55	0.10	6.983	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2016 Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Dev, PM	2016 Dev	PM		Varies by Arm	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	Crossroads	Two-way	A,B,C,D		66.91	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
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A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major
Brent Street	Brent Street		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Harp Road	One lane	4.85										35	53
Brent Street	Two lanes		5.00	3.95								250	136

Pedestrian Crossings

Name	Crossing Type
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A38 (N)	None
Harp Road	None
A38 (S)	None
Brent Street	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	573.963	-	-	-	-	-	-	0.203	0.290	0.203	-	-	-
1	B-A	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
1	B-C	779.045	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-

1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-
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The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1360.00	100.000
Harp Road	ONE HOUR	✓	145.00	100.000
A38 (S)	ONE HOUR	✓	1441.00	100.000
Brent Street	ONE HOUR	✓	89.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	43.000	1317.000	0.000
	B	0.000	0.000	145.000	0.000
	C	1200.000	131.000	0.000	110.000
	D	30.000	27.000	32.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.03	0.97	0.00
	B	0.00	0.00	1.00	0.00
	C	0.83	0.09	0.00	0.08
	D	0.34	0.30	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.050	1.090	1.000
	B	1.000	1.000	1.010	1.000
	C	1.090	1.020	1.000	1.030
	D	1.030	1.000	1.030	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	5.000	9.000	0.000
	B	0.000	0.000	1.000	0.000
	C	9.000	2.000	0.000	3.000
	D	3.000	0.000	3.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.48	20.44	0.89	C	133.05	199.58	48.17	14.48	0.54	48.17	14.48
A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	39.46	59.19	-	-	-	-	-
A-C	-	-	-	-	1208.50	1812.75	-	-	-	-	-
D-AB	0.61	85.52	1.38	F	46.01	69.01	42.28	36.76	0.47	42.28	36.76
D-BC	1.06	383.07	4.17	F	35.66	53.49	93.27	104.63	1.04	93.27	104.63
C-ABD	0.40	16.52	0.65	C	120.23	180.35	37.16	12.36	0.41	37.16	12.36
C-D	-	-	-	-	100.94	151.40	-	-	-	-	-
C-A	-	-	-	-	1101.12	1651.68	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
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B-ACD	109.16	27.29	107.98	0.00	473.35	0.231	0.00	0.30	9.822	A
A-BCD	0.00	0.00	0.00	0.00	316.91	0.000	0.00	0.00	0.000	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	991.51	247.88	991.51	0.00	-	-	-	-	-	-
D-AB	33.61	8.40	33.28	0.00	439.91	0.076	0.00	0.08	8.846	A
D-BC	33.39	8.35	32.89	0.00	293.04	0.114	0.00	0.13	13.812	B
C-ABD	98.62	24.66	97.69	0.00	517.11	0.191	0.00	0.23	8.565	A
C-D	82.81	20.70	82.81	0.00	-	-	-	-	-	-
C-A	903.42	225.86	903.42	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	130.35	32.59	129.74	0.00	415.51	0.314	0.30	0.45	12.569	B
A-BCD	0.00	0.00	0.00	0.00	270.52	0.000	0.00	0.00	0.000	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	1183.96	295.99	1183.96	0.00	-	-	-	-	-	-
D-AB	41.08	10.27	40.85	0.00	332.99	0.123	0.08	0.14	12.307	B
D-BC	38.93	9.73	38.42	0.00	187.31	0.208	0.13	0.25	24.091	C

C-ABD	117.77	29.44	117.31	0.00	451.97	0.261	0.23	0.35	10.741	B
C-D	98.89	24.72	98.89	0.00	-	-	-	-	-	-
C-A	1078.77	269.69	1078.77	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	159.65	39.91	157.95	0.00	335.54	0.476	0.45	0.87	20.080	C
A-BCD	0.00	0.00	0.00	0.00	206.61	0.000	0.00	0.00	0.000	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	1450.04	362.51	1450.04	0.00	-	-	-	-	-	-
D-AB	62.76	15.69	58.28	0.00	103.86	0.604	0.14	1.26	73.727	F
D-BC	35.23	8.81	25.59	0.00	34.17	1.031	0.25	2.67	302.772	F
C-ABD	144.30	36.08	143.12	0.00	362.03	0.399	0.35	0.64	16.356	C
C-D	121.11	30.28	121.11	0.00	-	-	-	-	-	-
C-A	1321.16	330.29	1321.16	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
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B-ACD	159.65	39.91	159.58	0.00	335.54	0.476	0.87	0.89	20.436	C
A-BCD	0.00	0.00	0.00	0.00	206.28	0.000	0.00	0.00	0.000	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	1450.04	362.51	1450.04	0.00	-	-	-	-	-	-
D-AB	62.76	15.69	62.26	0.00	103.29	0.608	1.26	1.38	85.516	F
D-BC	35.23	8.81	29.28	0.00	33.21	1.061	2.67	4.15	383.074	F
C-ABD	144.30	36.08	144.27	0.00	362.04	0.399	0.64	0.65	16.523	C
C-D	121.11	30.28	121.11	0.00	-	-	-	-	-	-
C-A	1321.16	330.29	1321.16	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	130.35	32.59	132.04	0.00	415.51	0.314	0.89	0.47	12.772	B
A-BCD	0.00	0.00	0.00	0.00	270.04	0.000	0.00	0.00	0.000	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	1183.96	295.99	1183.96	0.00	-	-	-	-	-	-
D-AB	42.20	10.55	47.11	0.00	317.74	0.133	1.38	0.16	13.508	B
D-BC	37.81	9.45	53.34	0.00	183.10	0.206	4.15	0.27	30.924	D

C-ABD	117.77	29.44	118.95	0.00	451.97	0.261	0.65	0.36	10.849	B
C-D	98.89	24.72	98.89	0.00	-	-	-	-	-	-
C-A	1078.77	269.69	1078.77	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	109.16	27.29	109.81	0.00	473.35	0.231	0.47	0.30	9.921	A
A-BCD	0.00	0.00	0.00	0.00	316.50	0.000	0.00	0.00	0.000	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	991.51	247.88	991.51	0.00	-	-	-	-	-	-
D-AB	33.64	8.41	33.93	0.00	438.98	0.077	0.16	0.08	8.890	A
D-BC	33.36	8.34	33.92	0.00	292.16	0.114	0.27	0.13	13.977	B
C-ABD	98.62	24.66	99.10	0.00	517.11	0.191	0.36	0.24	8.623	A
C-D	82.81	20.70	82.81	0.00	-	-	-	-	-	-
C-A	903.42	225.86	903.42	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	4.23	0.28	9.822	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.18	0.08	8.846	A	A
D-BC	1.79	0.12	13.812	B	B
C-ABD	3.45	0.23	8.565	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	6.45	0.43	12.569	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	2.00	0.13	12.307	B	B
D-BC	3.56	0.24	24.091	C	C
C-ABD	5.20	0.35	10.741	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	12.15	0.81	20.080	C	C
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	15.12	1.01	73.727	F	E
D-BC	25.36	1.69	302.772	F	F
C-ABD	9.55	0.64	16.356	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	13.23	0.88	20.436	C	C
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	19.98	1.33	85.516	F	F
D-BC	51.65	3.44	383.074	F	F
C-ABD	9.92	0.66	16.523	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	7.38	0.49	12.772	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	2.76	0.18	13.508	B	B
D-BC	8.47	0.56	30.924	D	C
C-ABD	5.44	0.36	10.849	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	4.73	0.32	9.921	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.30	0.09	8.890	A	A
D-BC	2.07	0.14	13.977	B	B
C-ABD	3.59	0.24	8.623	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2016 Q Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Q Dev, AM	2016 Q Dev	AM		Varies by Arm	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	Crossroads	Two-way	A,B,C,D		46.58	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major
Brent Street	Brent Street		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-
1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1125.00	100.000
Harp Road	ONE HOUR	✓	186.00	100.000
A38 (S)	ONE HOUR	✓	1272.00	100.000
Brent Street	ONE HOUR	✓	129.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To				
		A	B	C	D
From	A	0.000	21.000	1104.000	0.000
	B	0.000	0.000	186.000	0.000
	C	1141.000	70.000	0.000	61.000
	D	34.000	28.000	67.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To
--	----

From		A	B	C	D
	A	0.00	0.02	0.98	0.00
	B	0.00	0.00	1.00	0.00
	C	0.90	0.06	0.00	0.05
	D	0.26	0.22	0.52	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.050	1.130	1.000
	B	1.000	1.000	1.030	1.000
	C	1.120	1.010	1.000	1.130
	D	1.030	1.000	1.020	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	From	To			
		A	B	C	D

	A	0.000	5.000	13.000	0.000
	B	0.000	0.000	3.000	0.000
	C	12.000	1.000	0.000	13.000
	D	3.000	0.000	2.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.53	19.72	1.10	C	170.68	256.02	60.43	14.16	0.67	60.44	14.16
A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	19.27	28.90	-	-	-	-	-
A-C	-	-	-	-	1013.05	1519.57	-	-	-	-	-
D-AB	0.35	28.90	0.52	D	50.27	75.40	21.09	16.78	0.23	21.09	16.78
D-BC	0.82	161.95	3.03	F	68.11	102.16	90.62	53.22	1.01	90.62	53.22
C-ABD	0.18	10.02	0.21	B	64.23	96.35	13.63	8.49	0.15	13.63	8.49
C-D	-	-	-	-	55.97	83.96	-	-	-	-	-

C-A	-	-	-	-	1047.00	1570.50	-	-	-	-	-
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Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	140.03	35.01	138.51	0.00	503.79	0.278	0.00	0.38	9.816	A
A-BCD	0.00	0.00	0.00	0.00	337.87	0.000	0.00	0.00	0.000	A
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	831.15	207.79	831.15	0.00	-	-	-	-	-	-
D-AB	37.77	9.44	37.42	0.00	467.01	0.081	0.00	0.09	8.373	A
D-BC	59.35	14.84	58.50	0.00	332.55	0.178	0.00	0.21	13.096	B
C-ABD	52.70	13.17	52.30	0.00	570.55	0.092	0.00	0.10	6.946	A
C-D	45.92	11.48	45.92	0.00	-	-	-	-	-	-
C-A	859.00	214.75	859.00	0.00	-	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	167.21	41.80	166.45	0.00	454.77	0.368	0.38	0.57	12.452	B
A-BCD	0.00	0.00	0.00	0.00	296.73	0.000	0.00	0.00	0.000	A
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	992.47	248.12	992.47	0.00	-	-	-	-	-	-
D-AB	46.52	11.63	46.30	0.00	373.40	0.125	0.09	0.14	11.002	B
D-BC	69.45	17.36	68.67	0.00	233.61	0.297	0.21	0.41	21.718	C
C-ABD	62.93	15.73	62.78	0.00	514.14	0.122	0.10	0.14	7.973	A
C-D	54.84	13.71	54.84	0.00	-	-	-	-	-	-
C-A	1025.74	256.43	1025.74	0.00	-	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	204.79	51.20	202.76	0.00	386.99	0.529	0.57	1.08	19.327	C
A-BCD	0.00	0.00	0.00	0.00	239.96	0.000	0.00	0.00	0.000	A
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	1215.53	303.88	1215.53	0.00	-	-	-	-	-	-

D-AB	65.43	16.36	64.11	0.00	198.82	0.329	0.14	0.47	26.515	D
D-BC	76.60	19.15	68.23	0.00	93.56	0.819	0.41	2.50	118.421	F
C-ABD	77.07	19.27	76.78	0.00	436.15	0.177	0.14	0.21	10.009	B
C-D	67.16	16.79	67.16	0.00	-	-	-	-	-	-
C-A	1256.26	314.07	1256.26	0.00	-	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	204.79	51.20	204.70	0.00	386.99	0.529	1.08	1.10	19.720	C
A-BCD	0.00	0.00	0.00	0.00	239.88	0.000	0.00	0.00	0.000	A
A-B	23.12	5.78	23.12	0.00	-	-	-	-	-	-
A-C	1215.53	303.88	1215.53	0.00	-	-	-	-	-	-
D-AB	66.91	16.73	66.71	0.00	191.04	0.350	0.47	0.52	28.895	D
D-BC	75.12	18.78	73.02	0.00	92.19	0.815	2.50	3.03	161.946	F
C-ABD	77.07	19.27	77.07	0.00	436.15	0.177	0.21	0.21	10.025	B
C-D	67.16	16.79	67.16	0.00	-	-	-	-	-	-
C-A	1256.26	314.07	1256.26	0.00	-	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	167.21	41.80	169.23	0.00	454.77	0.368	1.10	0.59	12.693	B
A-BCD	0.00	0.00	0.00	0.00	296.60	0.000	0.00	0.00	0.000	A
A-B	18.88	4.72	18.88	0.00	-	-	-	-	-	-
A-C	992.47	248.12	992.47	0.00	-	-	-	-	-	-
D-AB	47.15	11.79	48.63	0.00	366.17	0.129	0.52	0.15	11.368	B
D-BC	68.82	17.20	79.17	0.00	231.64	0.297	3.03	0.44	25.117	D
C-ABD	62.93	15.73	63.22	0.00	514.14	0.122	0.21	0.14	7.989	A
C-D	54.84	13.71	54.84	0.00	-	-	-	-	-	-
C-A	1025.74	256.43	1025.74	0.00	-	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	140.03	35.01	140.84	0.00	503.79	0.278	0.59	0.39	9.942	A
A-BCD	0.00	0.00	0.00	0.00	337.71	0.000	0.00	0.00	0.000	A
A-B	15.81	3.95	15.81	0.00	-	-	-	-	-	-
A-C	831.15	207.79	831.15	0.00	-	-	-	-	-	-

D-AB	37.82	9.45	38.06	0.00	466.05	0.081	0.15	0.09	8.411	A
D-BC	59.30	14.82	60.17	0.00	331.71	0.179	0.44	0.22	13.301	B
C-ABD	52.70	13.17	52.85	0.00	570.55	0.092	0.14	0.10	6.955	A
C-D	45.92	11.48	45.92	0.00	-	-	-	-	-	-
C-A	859.00	214.75	859.00	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	5.42	0.36	9.816	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.26	0.08	8.373	A	A
D-BC	3.03	0.20	13.096	B	B
C-ABD	1.50	0.10	6.946	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	8.18	0.55	12.452	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	2.04	0.14	11.002	B	B
D-BC	5.75	0.38	21.718	C	C
C-ABD	2.07	0.14	7.973	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	14.98	1.00	19.327	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	6.46	0.43	26.515	D	C
D-BC	27.36	1.82	118.421	F	F
C-ABD	3.17	0.21	10.009	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	16.35	1.09	19.720	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	7.58	0.51	28.895	D	C
D-BC	41.96	2.80	161.946	F	F
C-ABD	3.22	0.21	10.025	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	9.41	0.63	12.693	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	2.39	0.16	11.368	B	B
D-BC	8.93	0.60	25.117	D	C
C-ABD	2.12	0.14	7.989	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	6.09	0.41	9.942	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	1.38	0.09	8.411	A	A
D-BC	3.50	0.23	13.301	B	B
C-ABD	1.54	0.10	6.955	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

(Default Analysis Set) - 2016 Q Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
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2016 Q Dev, PM	2016 Q Dev	PM		Varies by Arm	16:45	18:15	90	15				✓		
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Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
untitled	Crossroads	Two-way	A,B,C,D		57.79	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 (N)	A38 (N)		Major
Harp Road	Harp Road		Minor
A38 (S)	A38 (S)		Major

Brent Street	Brent Street		Minor
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Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 (N)	8.04	✓	10.00		2.20	0.00	✓	0.00
A38 (S)	8.04	✓	10.00	✓	5.00	160.00	✓	10.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Harp Road	One lane	4.85										35	53
Brent Street	Two lanes		5.00	3.95								250	136

Pedestrian Crossings

Name	Crossing Type
A38 (N)	None
Harp Road	None
A38 (S)	None

Brent Street	None
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Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	573.963	-	-	-	-	-	-	0.203	0.290	0.203	-	-	-
1	B-A	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
1	B-C	779.045	0.109	0.275	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	B-D, offside lane	746.709	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
1	C-B	869.764	0.307	0.307	0.439	-	-	-	-	-	-	-	-	-
1	D-A	851.630	-	-	-	-	-	-	0.301	-	0.119	-	-	-
1	D-B, nearside lane	929.385	0.201	0.201	0.455	-	-	-	0.319	0.319	0.126	-	-	-
1	D-B, offside lane	847.985	0.183	0.183	0.415	-	-	-	0.291	0.291	0.115	-	-	-
1	D-C	847.985	-	0.183	0.415	0.145	0.291	0.291	0.291	0.291	0.115	-	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 (N)	ONE HOUR	✓	1351.00	100.000
Harp Road	ONE HOUR	✓	145.00	100.000
A38 (S)	ONE HOUR	✓	1432.00	100.000
Brent Street	ONE HOUR	✓	89.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - untitled (for whole period)

	To
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From		A	B	C	D
	A	0.000	43.000	1308.000	0.000
	B	0.000	0.000	145.000	0.000
	C	1191.000	131.000	0.000	110.000
	D	30.000	27.000	32.000	0.000

Turning Proportions (Veh) - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.03	0.97	0.00
	B	0.00	0.00	1.00	0.00
	C	0.83	0.09	0.00	0.08
	D	0.34	0.30	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - untitled (for whole period)

	To			
From	A	B	C	D

	A	1.000	1.050	1.090	1.000
	B	1.000	1.000	1.010	1.000
	C	1.090	1.020	1.000	1.030
	D	1.030	1.000	1.030	1.000

Heavy Vehicle Percentages - untitled (for whole period)

	To				
From		A	B	C	D
	A	0.000	5.000	9.000	0.000
	B	0.000	0.000	1.000	0.000
	C	9.000	2.000	0.000	3.000
	D	3.000	0.000	3.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
B-ACD	0.47	20.10	0.87	C	133.05	199.58	47.62	14.32	0.53	47.62	14.32

A-BCD	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A-B	-	-	-	-	39.46	59.19	-	-	-	-	-
A-C	-	-	-	-	1200.24	1800.37	-	-	-	-	-
D-AB	0.57	74.32	1.20	F	45.75	68.62	36.82	32.19	0.41	36.82	32.19
D-BC	0.92	312.81	3.16	F	35.92	53.88	77.67	86.49	0.86	77.67	86.50
C-ABD	0.40	16.28	0.64	C	120.23	180.34	36.76	12.23	0.41	36.76	12.23
C-D	-	-	-	-	100.94	151.40	-	-	-	-	-
C-A	-	-	-	-	1092.86	1639.29	-	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	109.16	27.29	107.99	0.00	475.36	0.230	0.00	0.29	9.768	A
A-BCD	0.00	0.00	0.00	0.00	318.36	0.000	0.00	0.00	0.000	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-

A-C	984.73	246.18	984.73	0.00	-	-	-	-	-	-
D-AB	33.60	8.40	33.28	0.00	443.17	0.076	0.00	0.08	8.769	A
D-BC	33.40	8.35	32.90	0.00	296.48	0.113	0.00	0.12	13.632	B
C-ABD	98.62	24.66	97.70	0.00	519.33	0.190	0.00	0.23	8.519	A
C-D	82.81	20.70	82.81	0.00	-	-	-	-	-	-
C-A	896.65	224.16	896.65	0.00	-	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	130.35	32.59	129.75	0.00	417.91	0.312	0.29	0.44	12.466	B
A-BCD	0.00	0.00	0.00	0.00	272.25	0.000	0.00	0.00	0.000	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	1175.87	293.97	1175.87	0.00	-	-	-	-	-	-
D-AB	41.04	10.26	40.82	0.00	337.72	0.122	0.08	0.14	12.119	B
D-BC	38.97	9.74	38.48	0.00	191.44	0.204	0.12	0.25	23.454	C
C-ABD	117.77	29.44	117.32	0.00	454.62	0.259	0.23	0.34	10.659	B
C-D	98.89	24.72	98.89	0.00	-	-	-	-	-	-
C-A	1070.68	267.67	1070.68	0.00	-	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	159.65	39.91	157.99	0.00	338.49	0.472	0.44	0.86	19.762	C
A-BCD	0.00	0.00	0.00	0.00	208.73	0.000	0.00	0.00	0.000	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	1440.13	360.03	1440.13	0.00	-	-	-	-	-	-
D-AB	61.60	15.40	58.02	0.00	113.54	0.543	0.14	1.03	61.792	F
D-BC	36.39	9.10	28.35	0.00	39.77	0.915	0.25	2.26	242.694	F
C-ABD	144.30	36.07	143.13	0.00	365.27	0.395	0.34	0.63	16.122	C
C-D	121.11	30.28	121.11	0.00	-	-	-	-	-	-
C-A	1311.26	327.81	1311.26	0.00	-	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	159.65	39.91	159.58	0.00	338.49	0.472	0.86	0.87	20.101	C
A-BCD	0.00	0.00	0.00	0.00	208.40	0.000	0.00	0.00	0.000	A
A-B	47.34	11.84	47.34	0.00	-	-	-	-	-	-
A-C	1440.13	360.03	1440.13	0.00	-	-	-	-	-	-

D-AB	62.76	15.69	62.07	0.00	109.39	0.574	1.03	1.20	74.320	F
D-BC	35.23	8.81	31.70	0.00	38.33	0.919	2.26	3.14	312.811	F
C-ABD	144.30	36.07	144.26	0.00	365.28	0.395	0.63	0.64	16.281	C
C-D	121.11	30.28	121.11	0.00	-	-	-	-	-	-
C-A	1311.26	327.81	1311.26	0.00	-	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	130.35	32.59	132.00	0.00	417.91	0.312	0.87	0.46	12.660	B
A-BCD	0.00	0.00	0.00	0.00	271.78	0.000	0.00	0.00	0.000	A
A-B	38.66	9.66	38.66	0.00	-	-	-	-	-	-
A-C	1175.87	293.97	1175.87	0.00	-	-	-	-	-	-
D-AB	41.86	10.47	46.07	0.00	325.67	0.129	1.20	0.15	13.033	B
D-BC	38.15	9.54	49.66	0.00	187.84	0.203	3.14	0.26	28.133	D
C-ABD	117.77	29.44	118.92	0.00	454.63	0.259	0.64	0.36	10.759	B
C-D	98.89	24.72	98.89	0.00	-	-	-	-	-	-
C-A	1070.68	267.67	1070.68	0.00	-	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Entry Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)	Delay (s)	LOS
B-ACD	109.16	27.29	109.80	0.00	475.36	0.230	0.46	0.30	9.864	A
A-BCD	0.00	0.00	0.00	0.00	317.95	0.000	0.00	0.00	0.000	A
A-B	32.37	8.09	32.37	0.00	-	-	-	-	-	-
A-C	984.73	246.18	984.73	0.00	-	-	-	-	-	-
D-AB	33.63	8.41	33.90	0.00	442.29	0.076	0.15	0.08	8.816	A
D-BC	33.37	8.34	33.91	0.00	295.61	0.113	0.26	0.13	13.793	B
C-ABD	98.62	24.66	99.10	0.00	519.33	0.190	0.36	0.24	8.575	A
C-D	82.81	20.70	82.81	0.00	-	-	-	-	-	-
C-A	896.65	224.16	896.65	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	4.21	0.28	9.768	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-

A-C	-	-	-	-	-
D-AB	1.17	0.08	8.769	A	A
D-BC	1.77	0.12	13.632	B	B
C-ABD	3.44	0.23	8.519	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	6.40	0.43	12.466	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.97	0.13	12.119	B	B
D-BC	3.48	0.23	23.454	C	C
C-ABD	5.16	0.34	10.659	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	11.97	0.80	19.762	C	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	12.78	0.85	61.792	F	E
D-BC	22.47	1.50	242.694	F	F
C-ABD	9.42	0.63	16.122	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	13.02	0.87	20.101	C	C
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-

D-AB	17.07	1.14	74.320	F	E
D-BC	40.99	2.73	312.811	F	F
C-ABD	9.78	0.65	16.281	C	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	7.31	0.49	12.660	B	B
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	2.59	0.17	13.033	B	B
D-BC	6.63	0.44	28.133	D	C
C-ABD	5.39	0.36	10.759	B	B
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-ACD	4.70	0.31	9.864	A	A
A-BCD	0.00	0.00	0.000	A	A
A-B	-	-	-	-	-
A-C	-	-	-	-	-
D-AB	1.29	0.09	8.816	A	A
D-BC	2.04	0.14	13.793	B	B
C-ABD	3.57	0.24	8.575	A	A
C-D	-	-	-	-	-
C-A	-	-	-	-	-

Junctions 8			
ARCADY 8 - Roundabout Module			
Version: 8.0.3.332 [14595,13/11/2013] © Copyright TRL Limited, 2014			
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Filename: J11 A38 Bristol Road - Bridgewater Road.arc8

Path: P:\TP London\TP Projects\Hinkley Point C Connection\Modelling\Junctions 8\J11

Report generation date: 24/02/2014 15:03:38

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2013							
A38 Bristol Road north	0.65	3.15	0.37	A	0.58	2.94	0.36	A

A38 Bristol Road south	0.85	2.48	0.44	A	0.29	1.67	0.22	A
Bridgewater Road	0.66	3.72	0.39	A	0.53	2.76	0.34	A
	A1 - 2018 Base							
A38 Bristol Road north	0.72	3.29	0.40	A	0.66	3.11	0.39	A
A38 Bristol Road south	0.95	2.62	0.47	A	0.76	2.28	0.42	A
Bridgewater Road	0.75	3.97	0.42	A	0.80	3.90	0.44	A
	A1 - 2018 Dev							
A38 Bristol Road north	1.09	4.15	0.48	A	1.06	4.03	0.49	A
A38 Bristol Road south	1.33	3.18	0.54	A	1.01	2.68	0.48	A
Bridgewater Road	0.87	4.60	0.45	A	0.90	4.39	0.47	A
	A1 - 2018 Q Dev							
A38 Bristol Road north	1.05	4.05	0.47	A	1.02	3.93	0.48	A
A38 Bristol Road south	1.29	3.12	0.53	A	0.98	2.63	0.48	A
Bridgewater Road	0.86	4.54	0.45	A	0.88	4.33	0.46	A

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

"D1 - 2013, AM " model duration: 07:45 - 09:15

"D2 - 2013, PM" model duration: 16:45 - 18:15

"D3 - 2018 Base, AM" model duration: 07:45 - 09:15

"D4 - 2018 Base, PM" model duration: 16:45 - 18:15

"D5 - 2018 Dev, AM" model duration: 07:45 - 09:15

"D6 - 2018 Dev, PM" model duration: 16:45 - 18:15

"D7 - 2018 Q Dev, AM" model duration: 07:45 - 09:15

"D8 - 2018 Q Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.3.332 at 24/02/2014 15:03:35

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	28/11/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	Veh	PCU	perHour	s	-Min	perMin

Bridgewater Road

529 PCU/hr
101
428

504 PCU/hr
93
411

489 PCU/hr

411 PCU/hr

582 PCU/hr

638 PCU/hr

101
537

A38 Bristol Road north

101 PCU/hr

428
489

917 PCU/hr

948 PCU/hr

1
7

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2013, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013, AM	2013	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
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(untitled)	Roundabout	1,2,3			2.98	A
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Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	
Bridgewater Road	Bridgewater Road	

Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825
Bridgewater Road		(calculated)	(calculated)	0.657	2065.140

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	623.00	100.000
A38 Bristol Road south	ONE HOUR	✓	1040.00	100.000
Bridgewater Road	ONE HOUR	✓	555.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	471.000	152.000
	2	512.000	0.000	528.000
	3	94.000	461.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To			
	From	1	2	3

	1	0.00	0.76	0.24
	2	0.49	0.00	0.51
	3	0.17	0.83	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.100	1.070
	2	1.090	1.000	1.070
	3	1.070	1.050	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	10.000	7.000
	2	9.000	0.000	7.000
	3	7.000	5.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.37	3.15	0.65	A
A38 Bristol Road south	0.44	2.48	0.85	A
Bridgewater Road	0.39	3.72	0.66	A

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	512.50	511.11	363.29	0.00	2123.94	0.241	0.35	2.436	A
A38 Bristol Road south	845.48	843.67	122.11	0.00	2852.32	0.296	0.45	1.933	A
Bridgewater Road	440.14	438.77	419.25	0.00	1789.65	0.246	0.34	2.805	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	611.97	611.53	434.78	0.00	2071.19	0.295	0.46	2.695	A
A38 Bristol Road south	1009.59	1009.02	146.10	0.00	2831.60	0.357	0.60	2.133	A
Bridgewater Road	525.57	525.12	501.42	0.00	1735.66	0.303	0.46	3.133	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	749.51	748.73	532.27	0.00	1999.26	0.375	0.65	3.144	A
A38 Bristol Road south	1236.49	1235.48	178.88	0.00	2803.28	0.441	0.85	2.478	A
Bridgewater Road	643.69	642.86	613.96	0.00	1661.71	0.387	0.66	3.718	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	749.51	749.50	532.94	0.00	1998.76	0.375	0.65	3.148	A
A38 Bristol Road south	1236.49	1236.48	179.07	0.00	2803.12	0.441	0.85	2.480	A
Bridgewater Road	643.69	643.68	614.45	0.00	1661.38	0.387	0.66	3.725	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	611.97	612.74	435.83	0.00	2070.42	0.296	0.46	2.699	A
A38 Bristol Road south	1009.59	1010.59	146.39	0.00	2831.35	0.357	0.60	2.137	A
Bridgewater Road	525.57	526.39	502.20	0.00	1735.15	0.303	0.46	3.141	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	512.50	512.94	364.80	0.00	2122.82	0.241	0.35	2.443	A
A38 Bristol Road south	845.48	846.06	122.55	0.00	2851.95	0.296	0.46	1.938	A
Bridgewater Road	440.14	440.60	420.44	0.00	1788.87	0.246	0.35	2.813	A

(Default Analysis Set) - 2013, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013, PM	2013	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3			2.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	
Bridgewater Road	Bridgewater Road	

Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825
Bridgewater Road		(calculated)	(calculated)	0.657	2065.140

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	632.00	100.000
A38 Bristol Road south	ONE HOUR	✓	565.00	100.000

Bridgewater Road	ONE HOUR	✓	613.00	100.000
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Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To			
		1	2	3
From	1	0.000	508.000	124.000
	2	41.000	0.000	524.000
	3	110.000	503.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To			
		1	2	3
From	1	0.00	0.80	0.20
	2	0.07	0.00	0.93
	3	0.18	0.82	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.030	1.020
	2	1.040	1.000	1.020
	3	1.060	1.020	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	3.000	2.000
	2	4.000	0.000	2.000
	3	6.000	2.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.36	2.94	0.58	A
A38 Bristol Road south	0.22	1.67	0.29	A

Bridgewater Road	0.34	2.76	0.53	A
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Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	489.14	487.90	385.25	0.00	2107.73	0.232	0.31	2.284	A
A38 Bristol Road south	434.49	433.76	94.98	0.00	2875.77	0.151	0.18	1.505	A
Bridgewater Road	474.04	472.80	32.05	0.00	2044.08	0.232	0.31	2.350	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	584.08	583.69	460.96	0.00	2051.87	0.285	0.41	2.520	A
A38 Bristol Road south	518.82	518.64	113.63	0.00	2859.66	0.181	0.23	1.570	A
Bridgewater Road	566.05	565.72	38.32	0.00	2039.96	0.277	0.39	2.508	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	715.36	714.66	564.45	0.00	1975.52	0.362	0.58	2.933	A
A38 Bristol Road south	635.42	635.15	139.12	0.00	2837.63	0.224	0.29	1.668	A
Bridgewater Road	693.27	692.73	46.93	0.00	2034.30	0.341	0.53	2.754	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	715.36	715.35	564.89	0.00	1975.20	0.362	0.58	2.936	A
A38 Bristol Road south	635.42	635.42	139.26	0.00	2837.51	0.224	0.29	1.669	A
Bridgewater Road	693.27	693.26	46.95	0.00	2034.29	0.341	0.53	2.756	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	584.08	584.77	461.67	0.00	2051.35	0.285	0.41	2.524	A
A38 Bristol Road south	518.82	519.09	113.84	0.00	2859.47	0.181	0.23	1.573	A

Bridgewater Road	566.05	566.59	38.35	0.00	2039.94	0.277	0.40	2.510	A
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Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	489.14	489.54	386.53	0.00	2106.78	0.232	0.31	2.290	A
A38 Bristol Road south	434.49	434.67	95.30	0.00	2875.49	0.151	0.18	1.505	A
Bridgewater Road	474.04	474.38	32.11	0.00	2044.04	0.232	0.31	2.357	A

(Default Analysis Set) - 2018 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Base, AM	2018 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3			3.14	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	

Bridgewater Road	Bridgewater Road	
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Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825

Bridgewater Road		(calculated)	(calculated)	0.657	2065.140
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The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	660.00	100.000
A38 Bristol Road south	ONE HOUR	✓	1103.00	100.000
Bridgewater Road	ONE HOUR	✓	588.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	499.000	161.000
	2	543.000	0.000	560.000
	3	99.000	489.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.00	0.76	0.24
	2	0.49	0.00	0.51
	3	0.17	0.83	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.090	1.070

	2	1.090	1.000	1.070
	3	1.070	1.050	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
From		1	2	3
	1	0.000	9.000	7.000
	2	9.000	0.000	7.000
	3	7.000	5.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.40	3.29	0.72	A
A38 Bristol Road south	0.47	2.62	0.95	A
Bridgewater Road	0.42	3.97	0.75	A

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	539.18	537.69	385.31	0.00	2107.69	0.256	0.37	2.486	A
A38 Bristol Road south	896.70	894.72	129.34	0.00	2846.08	0.315	0.50	1.990	A
Bridgewater Road	466.30	464.80	444.61	0.00	1772.99	0.263	0.37	2.896	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	643.83	643.34	461.15	0.00	2051.73	0.314	0.49	2.774	A
A38 Bristol Road south	1070.75	1070.10	154.75	0.00	2824.13	0.379	0.66	2.216	A
Bridgewater Road	556.81	556.29	531.76	0.00	1715.72	0.325	0.50	3.268	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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A38 Bristol Road north	788.53	787.64	564.51	0.00	1975.47	0.399	0.72	3.287	A
A38 Bristol Road south	1311.39	1310.22	189.46	0.00	2794.14	0.469	0.95	2.617	A
Bridgewater Road	681.95	680.98	651.08	0.00	1637.32	0.417	0.75	3.961	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	788.53	788.52	565.31	0.00	1974.88	0.399	0.72	3.292	A
A38 Bristol Road south	1311.39	1311.38	189.67	0.00	2793.96	0.469	0.95	2.621	A
Bridgewater Road	681.95	681.94	651.66	0.00	1636.94	0.417	0.75	3.970	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	643.83	644.71	462.38	0.00	2050.83	0.314	0.50	2.781	A
A38 Bristol Road south	1070.75	1071.91	155.08	0.00	2823.84	0.379	0.66	2.221	A
Bridgewater Road	556.81	557.77	532.66	0.00	1715.13	0.325	0.51	3.281	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	539.18	539.67	386.99	0.00	2106.45	0.256	0.37	2.493	A
A38 Bristol Road south	896.70	897.35	129.81	0.00	2845.67	0.315	0.50	1.997	A
Bridgewater Road	466.30	466.83	445.92	0.00	1772.13	0.263	0.38	2.905	A

(Default Analysis Set) - 2018 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
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2018 Base, PM	2018 Base	PM		ONE HOUR	16:45	18:15	90	15		
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Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3			2.96	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	
Bridgewater Road	Bridgewater Road	

Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825
Bridgewater Road		(calculated)	(calculated)	0.657	2065.140

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	674.00	100.000
A38 Bristol Road south	ONE HOUR	✓	1061.00	100.000
Bridgewater Road	ONE HOUR	✓	654.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To		
From	1	2	3

	1	0.000	542.000	132.000
	2	502.000	0.000	559.000
	3	117.000	537.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.00	0.80	0.20
	2	0.47	0.00	0.53
	3	0.18	0.82	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.030	1.010
	2	1.040	1.000	1.020
	3	1.060	1.020	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
		1	2	3
From	1	0.000	3.000	1.000
	2	4.000	0.000	2.000
	3	6.000	2.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.39	3.11	0.66	A
A38 Bristol Road south	0.42	2.28	0.76	A
Bridgewater Road	0.44	3.90	0.80	A

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	520.66	519.30	411.07	0.00	2088.68	0.249	0.34	2.351	A
A38 Bristol Road south	822.31	820.66	100.11	0.00	2871.33	0.286	0.41	1.804	A
Bridgewater Road	505.74	504.15	392.26	0.00	1807.38	0.280	0.40	2.833	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	621.72	621.27	491.96	0.00	2029.00	0.306	0.45	2.624	A
A38 Bristol Road south	981.92	981.41	119.77	0.00	2854.35	0.344	0.54	1.979	A
Bridgewater Road	603.90	603.35	469.10	0.00	1756.90	0.344	0.54	3.203	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	761.44	760.63	602.22	0.00	1947.65	0.391	0.65	3.110	A
A38 Bristol Road south	1202.60	1201.73	146.63	0.00	2831.14	0.425	0.76	2.273	A
Bridgewater Road	739.62	738.58	574.40	0.00	1687.70	0.438	0.80	3.892	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	761.44	761.44	603.06	0.00	1947.03	0.391	0.66	3.114	A
A38 Bristol Road south	1202.60	1202.59	146.79	0.00	2831.01	0.425	0.76	2.275	A
Bridgewater Road	739.62	739.61	574.82	0.00	1687.43	0.438	0.80	3.901	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	621.72	622.52	493.25	0.00	2028.05	0.307	0.46	2.631	A
A38 Bristol Road south	981.92	982.79	120.01	0.00	2854.14	0.344	0.54	1.982	A
Bridgewater Road	603.90	604.93	469.75	0.00	1756.46	0.344	0.54	3.215	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	520.66	521.11	412.82	0.00	2087.39	0.249	0.34	2.360	A
A38 Bristol Road south	822.31	822.82	100.46	0.00	2871.03	0.286	0.41	1.808	A

Bridgewater Road	505.74	506.30	393.29	0.00	1806.71	0.280	0.40	2.844	A
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(Default Analysis Set) - 2018 Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Dev, AM	2018 Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
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(untitled)	Roundabout	1,2,3			3.78	A
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Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	
Bridgewater Road	Bridgewater Road	

Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825
Bridgewater Road		(calculated)	(calculated)	0.657	2065.140

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	733.00	100.000
A38 Bristol Road south	ONE HOUR	✓	1209.00	100.000
Bridgewater Road	ONE HOUR	✓	588.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

		To		
From		1	2	3
	1	0.000	572.000	161.000
	2	649.000	0.000	560.000
	3	99.000	489.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To		
From		1	2	3

	1	0.00	0.78	0.22
	2	0.54	0.00	0.46
	3	0.17	0.83	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.210	1.070
	2	1.190	1.000	1.070
	3	1.070	1.050	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	21.000	7.000
	2	19.000	0.000	7.000
	3	7.000	5.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.48	4.15	1.09	A
A38 Bristol Road south	0.54	3.18	1.33	A
Bridgewater Road	0.45	4.60	0.87	A

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	650.76	648.66	385.22	0.00	2107.75	0.309	0.52	2.906	A
A38 Bristol Road south	1032.54	1029.97	129.28	0.00	2846.14	0.363	0.64	2.246	A
Bridgewater Road	466.30	464.70	579.99	0.00	1684.03	0.277	0.40	3.106	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	777.07	776.31	461.08	0.00	2051.79	0.379	0.71	3.326	A
A38 Bristol Road south	1232.96	1232.03	154.72	0.00	2824.16	0.437	0.87	2.564	A
Bridgewater Road	556.81	556.20	693.77	0.00	1609.26	0.346	0.55	3.599	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	951.71	950.22	564.30	0.00	1975.63	0.482	1.09	4.134	A
A38 Bristol Road south	1510.06	1508.26	189.38	0.00	2794.21	0.540	1.32	3.172	A
Bridgewater Road	681.95	680.72	849.32	0.00	1507.05	0.453	0.86	4.582	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	951.71	951.69	565.30	0.00	1974.89	0.482	1.09	4.148	A
A38 Bristol Road south	1510.06	1510.04	189.67	0.00	2793.96	0.540	1.33	3.180	A
Bridgewater Road	681.95	681.93	850.32	0.00	1506.40	0.453	0.87	4.599	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	777.07	778.54	462.60	0.00	2050.67	0.379	0.72	3.340	A
A38 Bristol Road south	1232.96	1234.74	155.16	0.00	2823.77	0.437	0.88	2.574	A
Bridgewater Road	556.81	558.03	695.29	0.00	1608.26	0.346	0.56	3.614	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	650.76	651.53	387.07	0.00	2106.39	0.309	0.53	2.921	A
A38 Bristol Road south	1032.54	1033.48	129.85	0.00	2845.64	0.363	0.65	2.254	A
Bridgewater Road	466.30	466.92	581.96	0.00	1682.73	0.277	0.41	3.119	A

(Default Analysis Set) - 2018 Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Dev, PM	2018 Dev	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3			3.51	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	
Bridgewater Road	Bridgewater Road	

Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825
Bridgewater Road		(calculated)	(calculated)	0.657	2065.140

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	780.00	100.000
A38 Bristol Road south	ONE HOUR	✓	1134.00	100.000

Bridgewater Road	ONE HOUR	✓	654.00	100.000
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Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

		To		
From		1	2	3
	1	0.000	648.000	132.000
	2	575.000	0.000	559.000
	3	117.000	537.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

		To		
From		1	2	3
	1	0.00	0.83	0.17
	2	0.51	0.00	0.49
	3	0.18	0.82	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.130	1.020
	2	1.160	1.000	1.020
	3	1.060	1.020	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	13.000	2.000
	2	16.000	0.000	2.000
	3	6.000	2.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.49	4.03	1.06	A
A38 Bristol Road south	0.48	2.68	1.01	A

Bridgewater Road	0.47	4.39	0.90	A
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Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	652.63	650.62	411.00	0.00	2088.74	0.312	0.50	2.778	A
A38 Bristol Road south	931.41	929.32	101.05	0.00	2870.52	0.324	0.52	2.021	A
Bridgewater Road	505.74	504.05	501.03	0.00	1735.92	0.291	0.42	2.998	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	779.31	778.56	491.89	0.00	2029.05	0.384	0.69	3.198	A
A38 Bristol Road south	1112.20	1111.51	120.92	0.00	2853.35	0.390	0.69	2.253	A
Bridgewater Road	603.90	603.27	599.25	0.00	1671.37	0.361	0.58	3.460	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	954.45	952.97	602.05	0.00	1947.78	0.490	1.06	4.016	A
A38 Bristol Road south	1362.16	1360.91	148.01	0.00	2829.95	0.481	1.01	2.671	A
Bridgewater Road	739.62	738.36	733.71	0.00	1583.02	0.467	0.89	4.372	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	954.45	954.43	603.06	0.00	1947.03	0.490	1.06	4.030	A
A38 Bristol Road south	1362.16	1362.15	148.24	0.00	2829.75	0.481	1.01	2.675	A
Bridgewater Road	739.62	739.60	734.37	0.00	1582.58	0.467	0.90	4.386	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	779.31	780.77	493.43	0.00	2027.92	0.384	0.70	3.213	A
A38 Bristol Road south	1112.20	1113.44	121.27	0.00	2853.06	0.390	0.70	2.258	A

Bridgewater Road	603.90	605.15	600.29	0.00	1670.69	0.361	0.58	3.473	A
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Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	652.63	653.39	412.89	0.00	2087.34	0.313	0.51	2.793	A
A38 Bristol Road south	931.41	932.11	101.48	0.00	2870.15	0.325	0.53	2.028	A
Bridgewater Road	505.74	506.38	502.53	0.00	1734.93	0.292	0.42	3.013	A

(Default Analysis Set) - 2018 Q Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2018 Q Dev, AM	2018 Q Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3			3.71	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	

Bridgewater Road	Bridgewater Road	
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Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825

Bridgewater Road		(calculated)	(calculated)	0.657	2065.140
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The slope and intercept shown above include any corrections and adjustments.

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	725.00	100.000
A38 Bristol Road south	ONE HOUR	✓	1201.00	100.000
Bridgewater Road	ONE HOUR	✓	588.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	564.000	161.000
	2	641.000	0.000	560.000
	3	99.000	489.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.00	0.78	0.22
	2	0.53	0.00	0.47
	3	0.17	0.83	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.200	1.070

	2	1.180	1.000	1.070
	3	1.070	1.050	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.000	20.000	7.000
	2	18.000	0.000	7.000
	3	7.000	5.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.47	4.05	1.05	A
A38 Bristol Road south	0.53	3.12	1.29	A
Bridgewater Road	0.45	4.54	0.86	A

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	639.22	637.19	385.23	0.00	2107.75	0.303	0.51	2.863	A
A38 Bristol Road south	1020.55	1018.04	129.28	0.00	2846.13	0.359	0.63	2.220	A
Bridgewater Road	466.30	464.71	568.04	0.00	1691.88	0.276	0.40	3.086	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	763.30	762.57	461.08	0.00	2051.78	0.372	0.69	3.268	A
A38 Bristol Road south	1218.64	1217.74	154.72	0.00	2824.15	0.432	0.85	2.528	A
Bridgewater Road	556.81	556.21	679.47	0.00	1618.66	0.344	0.55	3.567	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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A38 Bristol Road north	934.84	933.43	564.32	0.00	1975.61	0.473	1.04	4.041	A
A38 Bristol Road south	1492.52	1490.79	189.39	0.00	2794.20	0.534	1.28	3.113	A
Bridgewater Road	681.95	680.74	831.83	0.00	1518.55	0.449	0.85	4.520	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	934.84	934.82	565.30	0.00	1974.89	0.473	1.05	4.053	A
A38 Bristol Road south	1492.52	1492.50	189.67	0.00	2793.96	0.534	1.29	3.121	A
Bridgewater Road	681.95	681.93	832.78	0.00	1517.92	0.449	0.86	4.535	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	763.30	764.70	462.57	0.00	2050.68	0.372	0.70	3.281	A
A38 Bristol Road south	1218.64	1220.35	155.15	0.00	2823.78	0.432	0.86	2.538	A
Bridgewater Road	556.81	558.01	680.93	0.00	1617.70	0.344	0.56	3.581	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	639.22	639.97	387.06	0.00	2106.40	0.303	0.51	2.878	A
A38 Bristol Road south	1020.55	1021.46	129.84	0.00	2845.64	0.359	0.63	2.229	A
Bridgewater Road	466.30	466.91	569.95	0.00	1690.63	0.276	0.40	3.099	A

(Default Analysis Set) - 2018 Q Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A38 Bristol Road north - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
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2018 Q Dev, PM	2018 Q Dev	PM		ONE HOUR	16:45	18:15	90	15		
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Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3			3.45	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A38 Bristol Road north	A38 Bristol Road north	
A38 Bristol Road south	A38 Bristol Road south	
Bridgewater Road	Bridgewater Road	

Roundabout Geometry

Name	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)	Exit Only
A38 Bristol Road north	5.30	9.50	31.00	26.00	48.00	45.00	
A38 Bristol Road south	9.75	9.75	0.00	24.00	47.00	32.00	
Bridgewater Road	3.90	10.00	30.00	13.00	48.00	52.00	

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road north	None
A38 Bristol Road south	None
Bridgewater Road	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A38 Bristol Road north		(calculated)	(calculated)	0.738	2391.974
A38 Bristol Road south		(calculated)	(calculated)	0.864	2957.825
Bridgewater Road		(calculated)	(calculated)	0.657	2065.140

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road north	ONE HOUR	✓	771.00	100.000
A38 Bristol Road south	ONE HOUR	✓	1125.00	100.000
Bridgewater Road	ONE HOUR	✓	654.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To		
From	1	2	3

	1	0.000	639.000	132.000
	2	566.000	0.000	559.000
	3	117.000	537.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To			
From		1	2	3
	1	0.00	0.83	0.17
	2	0.50	0.00	0.50
	3	0.18	0.82	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To			
From		1	2	3
	1	1.000	1.120	1.020
	2	1.150	1.000	1.020
	3	1.060	1.020	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
From		1	2	3
	1	0.000	12.000	2.000
	2	15.000	0.000	2.000
	3	6.000	2.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
A38 Bristol Road north	0.48	3.93	1.02	A
A38 Bristol Road south	0.48	2.63	0.98	A
Bridgewater Road	0.46	4.33	0.88	A

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	640.17	638.22	411.01	0.00	2088.73	0.306	0.49	2.733	A
A38 Bristol Road south	919.29	917.25	101.06	0.00	2870.52	0.320	0.51	1.999	A
Bridgewater Road	505.74	504.07	488.94	0.00	1743.85	0.290	0.42	2.978	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	764.42	763.71	491.90	0.00	2029.04	0.377	0.66	3.136	A
A38 Bristol Road south	1097.73	1097.06	120.93	0.00	2853.35	0.385	0.68	2.225	A
Bridgewater Road	603.90	603.28	584.79	0.00	1680.87	0.359	0.57	3.429	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	936.22	934.82	602.07	0.00	1947.76	0.481	1.01	3.914	A
A38 Bristol Road south	1344.43	1343.23	148.02	0.00	2829.94	0.475	0.98	2.625	A
Bridgewater Road	739.62	738.39	716.01	0.00	1594.65	0.464	0.88	4.312	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	936.22	936.20	603.06	0.00	1947.03	0.481	1.02	3.927	A
A38 Bristol Road south	1344.43	1344.42	148.24	0.00	2829.75	0.475	0.98	2.630	A
Bridgewater Road	739.62	739.60	716.65	0.00	1594.23	0.464	0.88	4.326	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	764.42	765.80	493.40	0.00	2027.94	0.377	0.67	3.148	A
A38 Bristol Road south	1097.73	1098.92	121.26	0.00	2853.06	0.385	0.68	2.230	A
Bridgewater Road	603.90	605.12	585.78	0.00	1680.22	0.359	0.58	3.445	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
A38 Bristol Road north	640.17	640.89	412.88	0.00	2087.34	0.307	0.49	2.745	A
A38 Bristol Road south	919.29	919.97	101.48	0.00	2870.15	0.320	0.51	2.004	A

Bridgewater Road	505.74	506.37	490.39	0.00	1742.90	0.290	0.42	2.991	A
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Junctions 8			
PICADY 8 - Priority Intersection Module			
Version: 8.0.3.332 [14595,13/11/2013] © Copyright TRL Limited, 2014			
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Filename: J12 A38 Bristol Road - Rooksbridge.arc8

Path: P:\TP London\TP Projects\Hinkley Point C Connection\Modelling\Junctions 8\J12

Report generation date: 24/02/2014 15:18:46

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2013 Obs								
Stream B-ACD	0.02	9.91	0.02	A	0.02	9.69	0.02	A

Stream A-BCD	1.01	5.04	0.29	A	0.38	4.76	0.14	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-ABC	0.22	10.32	0.18	B	0.27	10.44	0.21	B
Stream C-ABD	0.02	4.37	0.01	A	0.01	4.22	0.01	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2016 Base							
Stream B-ACD	0.02	10.21	0.02	B	0.02	10.08	0.02	B
Stream A-BCD	1.18	5.20	0.32	A	0.47	4.73	0.16	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-ABC	0.24	10.70	0.19	B	0.29	10.87	0.23	B
Stream C-ABD	0.02	4.32	0.02	A	0.01	4.18	0.01	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2016 Dev							
Stream B-ACD	0.03	12.50	0.03	B	0.03	12.44	0.03	B
Stream A-BCD	2.17	6.04	0.42	A	0.80	4.71	0.21	A
Stream A-B	-	-	-	-	-	-	-	-

Stream A-C	-	-	-	-	-	-	-	-
Stream D-ABC	0.28	12.52	0.22	B	0.34	12.47	0.25	B
Stream C-ABD	0.02	4.29	0.02	A	0.01	4.25	0.01	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
	A1 - 2016 Q Dev							
Stream B-ACD	0.03	12.33	0.03	B	0.03	12.22	0.03	B
Stream A-BCD	2.09	6.00	0.41	A	0.77	4.72	0.20	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream D-ABC	0.29	12.61	0.22	B	0.33	12.41	0.25	B
Stream C-ABD	0.02	4.32	0.02	A	0.01	4.27	0.01	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-

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

"D1 - 2013 Obs, AM" model duration: 07:45 - 09:15
"D2 - 2013 Obs, PM" model duration: 16:45 - 18:15
"D3 - 2016 Base, AM" model duration: 07:45 - 09:15
"D4 - 2016 Base, PM" model duration: 16:45 - 18:15
"D5 - 2016 Dev, AM" model duration: 07:45 - 09:15
"D6 - 2016 Dev, PM" model duration: 16:45 - 18:15
"D7 - 2016 Q Dev, AM" model duration: 07:45 - 09:15
"D8 - 2016 Q Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.3.332 at 24/02/2014 15:18:40

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	03/12/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

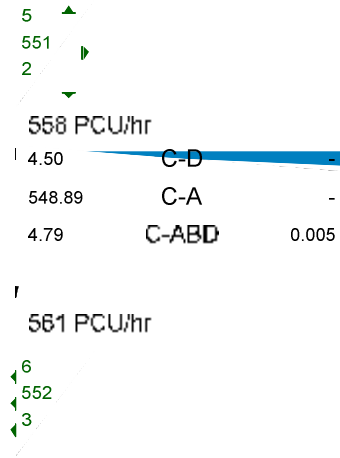
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

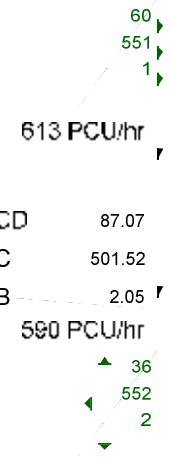
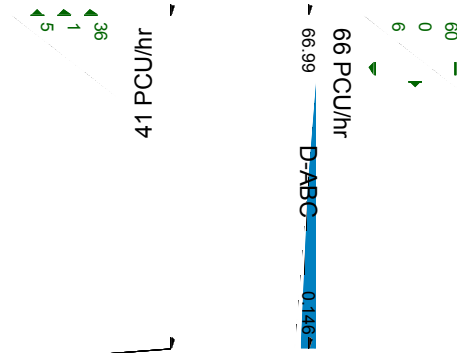
Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	PCU	perHour	s	-Min	perMin

A38 Bristol Road west



Pill Road

Rooksbridge Road



A38 Bristol Road east

The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2013 Obs, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Obs, AM	2013 Obs	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	6.32	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

[illegible]

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

[illegible]

1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	732.00	100.000
Pill Road	ONE HOUR	✓	8.00	100.000

A38 Bristol Road west	ONE HOUR	✓	556.00	100.000
Rooksbridge Road	ONE HOUR	✓	69.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	1.000	657.000	74.000
	B	1.000	0.000	6.000	1.000
	C	548.000	5.000	0.000	3.000
	D	65.000	0.000	4.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.00	0.90	0.10
	B	0.13	0.00	0.75	0.13
	C	0.99	0.01	0.00	0.01

	D	0.94	0.00	0.06	0.00
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Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
From		A	B	C	D
	A	1.000	1.000	1.080	1.010
	B	1.000	1.000	1.000	1.000
	C	1.100	1.000	1.000	1.000
	D	1.030	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
From		A	B	C	D
	A	0.000	0.000	8.000	1.000
	B	0.000	0.000	0.000	0.000
	C	10.000	0.000	0.000	0.000
	D	3.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	9.91	0.02	A
A-BCD	0.29	5.04	1.01	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.18	10.32	0.22	B
C-ABD	0.01	4.37	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-ACD	6.02	5.97	0.00	450.81	0.013	0.01	8.091	A
A-BCD	128.95	127.51	0.00	918.22	0.140	0.36	4.773	A
A-B	0.65	0.65	0.00	-	-	-	-	-
A-C	461.61	461.61	0.00	-	-	-	-	-
D-ABC	53.41	52.92	0.00	489.57	0.109	0.12	8.468	A
C-ABD	7.13	7.10	0.00	871.10	0.008	0.01	4.352	A
C-D	2.24	2.24	0.00	-	-	-	-	-
C-A	450.47	450.47	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.19	7.18	0.00	418.57	0.017	0.02	8.750	A
A-BCD	188.90	188.12	0.00	979.60	0.193	0.56	4.792	A
A-B	0.73	0.73	0.00	-	-	-	-	-
A-C	516.34	516.34	0.00	-	-	-	-	-
D-ABC	63.78	63.64	0.00	467.95	0.136	0.16	9.153	A
C-ABD	9.66	9.64	0.00	902.08	0.011	0.01	4.227	A
C-D	2.67	2.67	0.00	-	-	-	-	-

C-A	536.77	536.77	0.00	-	-	-	-	-
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Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.78	0.00	372.24	0.024	0.02	9.905	A
A-BCD	303.41	301.66	0.00	1064.57	0.285	0.99	5.004	A
A-B	0.79	0.79	0.00	-	-	-	-	-
A-C	560.43	560.43	0.00	-	-	-	-	-
D-ABC	78.12	77.88	0.00	437.00	0.179	0.22	10.300	B
C-ABD	14.01	13.99	0.00	944.33	0.015	0.02	4.082	A
C-D	3.26	3.26	0.00	-	-	-	-	-
C-A	655.23	655.23	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.81	0.00	371.86	0.024	0.02	9.915	A
A-BCD	304.44	304.37	0.00	1065.57	0.286	1.01	5.042	A
A-B	0.79	0.79	0.00	-	-	-	-	-
A-C	559.40	559.40	0.00	-	-	-	-	-

D-ABC	78.12	78.11	0.00	436.94	0.179	0.22	10.315	B
C-ABD	14.03	14.03	0.00	944.08	0.015	0.02	4.097	A
C-D	3.26	3.26	0.00	-	-	-	-	-
C-A	655.21	655.21	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.19	7.22	0.00	418.03	0.017	0.02	8.763	A
A-BCD	189.91	191.61	0.00	981.02	0.194	0.59	4.855	A
A-B	0.73	0.73	0.00	-	-	-	-	-
A-C	515.33	515.33	0.00	-	-	-	-	-
D-ABC	63.78	64.02	0.00	467.87	0.136	0.16	9.170	A
C-ABD	9.67	9.69	0.00	901.68	0.011	0.01	4.260	A
C-D	2.67	2.67	0.00	-	-	-	-	-
C-A	536.75	536.75	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.02	6.04	0.00	450.43	0.013	0.01	8.100	A

A-BCD	130.08	130.92	0.00	919.19	0.142	0.38	4.820	A
A-B	0.65	0.65	0.00	-	-	-	-	-
A-C	460.49	460.49	0.00	-	-	-	-	-
D-ABC	53.41	53.56	0.00	489.50	0.109	0.13	8.494	A
C-ABD	7.16	7.17	0.00	870.80	0.008	0.01	4.371	A
C-D	2.24	2.24	0.00	-	-	-	-	-
C-A	450.44	450.44	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Obs, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Obs, PM	2013 Obs	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.29	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Pill Road	One lane	3.20										25	20
Rooksbridge Road	One lane	2.50										21	21

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	660.830	-	-	-	0.231	0.231	0.231	-	0.231	-	-
1	B-AD	505.452	0.088	0.222	-	-	-	0.139	0.317	0.139	0.088	0.222
1	B-C	649.273	0.095	0.240	-	-	-	-	-	-	0.095	0.240
1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	570.00	100.000
Pill Road	ONE HOUR	✓	7.00	100.000
A38 Bristol Road west	ONE HOUR	✓	536.00	100.000
Rooksbridge Road	ONE HOUR	✓	83.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	3.000	523.000	44.000
	B	2.000	0.000	4.000	1.000
	C	527.000	3.000	0.000	6.000
	D	76.000	0.000	7.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.01	0.92	0.08
	B	0.29	0.00	0.57	0.14
	C	0.98	0.01	0.00	0.01
	D	0.92	0.00	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.030	1.020
	B	1.000	1.000	1.000	1.000
	C	1.050	1.000	1.000	1.000
	D	1.000	1.000	1.140	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To
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From		A	B	C	D
	A	0.000	0.000	3.000	2.000
	B	0.000	0.000	0.000	0.000
	C	5.000	0.000	0.000	0.000
	D	0.000	0.000	14.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	9.69	0.02	A
A-BCD	0.14	4.76	0.38	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.21	10.44	0.27	B
C-ABD	0.01	4.22	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	5.27	5.22	0.00	445.14	0.012	0.01	8.182	A
A-BCD	64.47	63.91	0.00	840.76	0.077	0.14	4.747	A
A-B	2.09	2.09	0.00	-	-	-	-	-
A-C	375.04	375.04	0.00	-	-	-	-	-
D-ABC	63.22	62.63	0.00	489.75	0.129	0.15	8.515	A
C-ABD	4.01	3.99	0.00	875.81	0.005	0.00	4.215	A
C-D	4.50	4.50	0.00	-	-	-	-	-
C-A	414.86	414.86	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.29	6.28	0.00	417.87	0.015	0.02	8.746	A

A-BCD	87.94	87.65	0.00	879.08	0.100	0.21	4.666	A
A-B	2.43	2.43	0.00	-	-	-	-	-
A-C	436.94	436.94	0.00	-	-	-	-	-
D-ABC	75.50	75.32	0.00	469.70	0.161	0.19	9.232	A
C-ABD	5.34	5.33	0.00	906.85	0.006	0.01	4.083	A
C-D	5.37	5.37	0.00	-	-	-	-	-
C-A	494.84	494.84	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.69	0.00	379.20	0.020	0.02	9.690	A
A-BCD	133.11	132.45	0.00	939.53	0.142	0.38	4.580	A
A-B	2.84	2.84	0.00	-	-	-	-	-
A-C	509.88	509.88	0.00	-	-	-	-	-
D-ABC	92.46	92.17	0.00	441.36	0.210	0.26	10.423	B
C-ABD	7.55	7.54	0.00	948.95	0.008	0.01	3.922	A
C-D	6.56	6.56	0.00	-	-	-	-	-
C-A	605.04	605.04	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.71	0.00	379.07	0.020	0.02	9.693	A
A-BCD	133.42	133.40	0.00	939.86	0.142	0.38	4.591	A
A-B	2.84	2.84	0.00	-	-	-	-	-
A-C	509.57	509.57	0.00	-	-	-	-	-
D-ABC	92.46	92.46	0.00	441.33	0.210	0.27	10.440	B
C-ABD	7.56	7.56	0.00	948.86	0.008	0.01	3.929	A
C-D	6.56	6.56	0.00	-	-	-	-	-
C-A	605.04	605.04	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.29	6.31	0.00	417.69	0.015	0.02	8.752	A
A-BCD	88.27	88.91	0.00	879.53	0.100	0.22	4.681	A
A-B	2.43	2.43	0.00	-	-	-	-	-
A-C	436.61	436.61	0.00	-	-	-	-	-
D-ABC	75.50	75.78	0.00	469.66	0.161	0.20	9.255	A
C-ABD	5.34	5.35	0.00	906.71	0.006	0.01	4.096	A

C-D	5.37	5.37	0.00	-	-	-	-	-
C-A	494.83	494.83	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	5.27	5.28	0.00	445.01	0.012	0.01	8.186	A
A-BCD	64.85	65.15	0.00	841.07	0.077	0.15	4.762	A
A-B	2.09	2.09	0.00	-	-	-	-	-
A-C	374.66	374.66	0.00	-	-	-	-	-
D-ABC	63.22	63.40	0.00	489.70	0.129	0.15	8.547	A
C-ABD	4.02	4.02	0.00	875.70	0.005	0.00	4.223	A
C-D	4.50	4.50	0.00	-	-	-	-	-
C-A	414.85	414.85	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
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(Default Analysis Set)			100.000	
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Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2016 Base, AM	2016 Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	6.47	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
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A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Pill Road	One lane	3.20										25	20
Rooksbridge Road	One lane	2.50										21	21

Pedestrian Crossings

Name	Crossing Type
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A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	660.830	-	-	-	0.231	0.231	0.231	-	0.231	-	-
1	B-AD	505.452	0.088	0.222	-	-	-	0.139	0.317	0.139	0.088	0.222
1	B-C	649.273	0.095	0.240	-	-	-	-	-	-	0.095	0.240
1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	766.00	100.000
Pill Road	ONE HOUR	✓	8.00	100.000
A38 Bristol Road west	ONE HOUR	✓	589.00	100.000
Rooksbridge Road	ONE HOUR	✓	73.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To			
From	A	B	C	D

	A	0.000	1.000	686.000	79.000
	B	1.000	0.000	6.000	1.000
	C	581.000	5.000	0.000	3.000
	D	69.000	0.000	4.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.00	0.90	0.10
	B	0.13	0.00	0.75	0.13
	C	0.99	0.01	0.00	0.01
	D	0.95	0.00	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.070	1.010

	B	1.000	1.000	1.000	1.000
	C	1.100	1.000	1.000	1.000
	D	1.030	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	7.000	1.000
	B	0.000	0.000	0.000	0.000
	C	10.000	0.000	0.000	0.000
	D	3.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	10.21	0.02	B
A-BCD	0.32	5.20	1.18	A
A-B	-	-	-	-

A-C	-	-	-	-
D-ABC	0.19	10.70	0.24	B
C-ABD	0.02	4.32	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.02	5.97	0.00	444.43	0.014	0.01	8.209	A
A-BCD	145.83	144.20	0.00	931.08	0.157	0.41	4.780	A
A-B	0.64	0.64	0.00	-	-	-	-	-
A-C	466.97	466.97	0.00	-	-	-	-	-
D-ABC	56.52	55.98	0.00	484.25	0.117	0.13	8.634	A
C-ABD	7.39	7.35	0.00	883.47	0.008	0.01	4.299	A

C-D	2.24	2.24	0.00	-	-	-	-	-
C-A	477.54	477.54	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.19	7.18	0.00	410.61	0.018	0.02	8.923	A
A-BCD	210.16	209.28	0.00	989.60	0.212	0.63	4.840	A
A-B	0.71	0.71	0.00	-	-	-	-	-
A-C	521.62	521.62	0.00	-	-	-	-	-
D-ABC	67.49	67.33	0.00	461.39	0.146	0.17	9.390	A
C-ABD	10.06	10.04	0.00	916.52	0.011	0.01	4.169	A
C-D	2.67	2.67	0.00	-	-	-	-	-
C-A	569.00	569.00	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.78	0.00	361.75	0.024	0.02	10.199	B
A-BCD	342.27	340.15	0.00	1077.99	0.318	1.16	5.149	A
A-B	0.75	0.75	0.00	-	-	-	-	-

A-C	554.10	554.10	0.00	-	-	-	-	-
D-ABC	82.65	82.38	0.00	428.53	0.193	0.24	10.686	B
C-ABD	14.70	14.68	0.00	961.33	0.015	0.02	4.019	A
C-D	3.26	3.26	0.00	-	-	-	-	-
C-A	694.51	694.51	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.81	0.00	361.28	0.024	0.02	10.212	B
A-BCD	343.61	343.52	0.00	1079.22	0.318	1.18	5.196	A
A-B	0.75	0.75	0.00	-	-	-	-	-
A-C	552.76	552.76	0.00	-	-	-	-	-
D-ABC	82.65	82.65	0.00	428.45	0.193	0.24	10.705	B
C-ABD	14.72	14.72	0.00	961.03	0.015	0.02	4.033	A
C-D	3.26	3.26	0.00	-	-	-	-	-
C-A	694.49	694.49	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-ACD	7.19	7.22	0.00	409.96	0.018	0.02	8.940	A
A-BCD	211.43	213.49	0.00	991.30	0.213	0.66	4.905	A
A-B	0.71	0.71	0.00	-	-	-	-	-
A-C	520.36	520.36	0.00	-	-	-	-	-
D-ABC	67.49	67.75	0.00	461.30	0.146	0.18	9.412	A
C-ABD	10.07	10.10	0.00	916.05	0.011	0.01	4.200	A
C-D	2.67	2.67	0.00	-	-	-	-	-
C-A	568.98	568.98	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.02	6.04	0.00	443.99	0.014	0.01	8.221	A
A-BCD	147.22	148.16	0.00	932.26	0.158	0.43	4.827	A
A-B	0.63	0.63	0.00	-	-	-	-	-
A-C	465.58	465.58	0.00	-	-	-	-	-
D-ABC	56.52	56.68	0.00	484.18	0.117	0.14	8.664	A
C-ABD	7.41	7.42	0.00	883.13	0.008	0.01	4.318	A
C-D	2.24	2.24	0.00	-	-	-	-	-

C-A	477.52	477.52	0.00	-	-	-	-	-
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(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2016 Base, PM	2016 Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.37	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

[illegible]

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

[illegible]

1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	608.00	100.000
Pill Road	ONE HOUR	✓	7.00	100.000

A38 Bristol Road west	ONE HOUR	✓	571.00	100.000
Rooksbridge Road	ONE HOUR	✓	88.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	3.000	558.000	47.000
	B	2.000	0.000	4.000	1.000
	C	562.000	3.000	0.000	6.000
	D	81.000	0.000	7.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.00	0.92	0.08
	B	0.29	0.00	0.57	0.14
	C	0.98	0.01	0.00	0.01

	D	0.92	0.00	0.08	0.00
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Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
From		A	B	C	D
	A	1.000	1.000	1.030	1.020
	B	1.000	1.000	1.000	1.000
	C	1.050	1.000	1.000	1.000
	D	1.000	1.000	1.140	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
From		A	B	C	D
	A	0.000	0.000	3.000	2.000
	B	0.000	0.000	0.000	0.000
	C	5.000	0.000	0.000	0.000
	D	0.000	0.000	14.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	10.08	0.02	B
A-BCD	0.16	4.73	0.47	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.23	10.87	0.29	B
C-ABD	0.01	4.18	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-ACD	5.27	5.22	0.00	436.02	0.012	0.01	8.355	A
A-BCD	71.97	71.32	0.00	853.87	0.084	0.16	4.714	A
A-B	2.07	2.07	0.00	-	-	-	-	-
A-C	397.00	397.00	0.00	-	-	-	-	-
D-ABC	66.99	66.35	0.00	484.45	0.138	0.16	8.693	A
C-ABD	4.16	4.14	0.00	886.39	0.005	0.00	4.169	A
C-D	4.50	4.50	0.00	-	-	-	-	-
C-A	442.38	442.38	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.29	6.28	0.00	406.73	0.015	0.02	8.989	A
A-BCD	99.04	98.70	0.00	894.96	0.111	0.25	4.640	A
A-B	2.41	2.41	0.00	-	-	-	-	-
A-C	461.02	461.02	0.00	-	-	-	-	-
D-ABC	79.99	79.80	0.00	463.09	0.173	0.21	9.491	A
C-ABD	5.57	5.56	0.00	919.29	0.006	0.01	4.032	A
C-D	5.36	5.36	0.00	-	-	-	-	-

C-A	527.65	527.65	0.00	-	-	-	-	-
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Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.68	0.00	365.04	0.021	0.02	10.074	B
A-BCD	152.61	151.77	0.00	960.64	0.159	0.46	4.573	A
A-B	2.78	2.78	0.00	-	-	-	-	-
A-C	533.49	533.49	0.00	-	-	-	-	-
D-ABC	97.97	97.64	0.00	432.79	0.226	0.29	10.849	B
C-ABD	7.95	7.94	0.00	963.70	0.008	0.01	3.867	A
C-D	6.56	6.56	0.00	-	-	-	-	-
C-A	645.11	645.11	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.71	0.00	364.88	0.021	0.02	10.078	B
A-BCD	153.04	153.01	0.00	961.08	0.159	0.47	4.584	A
A-B	2.78	2.78	0.00	-	-	-	-	-
A-C	533.07	533.07	0.00	-	-	-	-	-

D-ABC	97.97	97.96	0.00	432.75	0.226	0.29	10.872	B
C-ABD	7.96	7.96	0.00	963.59	0.008	0.01	3.875	A
C-D	6.56	6.56	0.00	-	-	-	-	-
C-A	645.11	645.11	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.29	6.32	0.00	406.50	0.015	0.02	8.997	A
A-BCD	99.48	100.30	0.00	895.55	0.111	0.26	4.657	A
A-B	2.40	2.40	0.00	-	-	-	-	-
A-C	460.59	460.59	0.00	-	-	-	-	-
D-ABC	79.99	80.31	0.00	463.04	0.173	0.21	9.518	A
C-ABD	5.57	5.58	0.00	919.11	0.006	0.01	4.048	A
C-D	5.36	5.36	0.00	-	-	-	-	-
C-A	527.64	527.64	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	5.27	5.28	0.00	435.86	0.012	0.01	8.360	A

A-BCD	72.43	72.80	0.00	854.25	0.085	0.17	4.730	A
A-B	2.07	2.07	0.00	-	-	-	-	-
A-C	396.54	396.54	0.00	-	-	-	-	-
D-ABC	66.99	67.19	0.00	484.40	0.138	0.16	8.728	A
C-ABD	4.17	4.17	0.00	886.26	0.005	0.01	4.179	A
C-D	4.50	4.50	0.00	-	-	-	-	-
C-A	442.37	442.37	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2016 Dev, AM	2016 Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.20	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Pill Road	One lane	3.20										25	20
Rooksbridge Road	One lane	2.50										21	21

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	660.830	-	-	-	0.231	0.231	0.231	-	0.231	-	-
1	B-AD	505.452	0.088	0.222	-	-	-	0.139	0.317	0.139	0.088	0.222
1	B-C	649.273	0.095	0.240	-	-	-	-	-	-	0.095	0.240
1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	839.00	100.000
Pill Road	ONE HOUR	✓	8.00	100.000
A38 Bristol Road west	ONE HOUR	✓	695.00	100.000
Rooksbridge Road	ONE HOUR	✓	73.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	1.000	759.000	79.000
	B	1.000	0.000	6.000	1.000
	C	687.000	5.000	0.000	3.000
	D	69.000	0.000	4.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.00	0.90	0.09
	B	0.13	0.00	0.75	0.13
	C	0.99	0.01	0.00	0.00
	D	0.95	0.00	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.160	1.010
	B	1.000	1.000	1.000	1.000
	C	1.190	1.000	1.000	1.000
	D	1.030	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
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From		A	B	C	D
	A	0.000	0.000	16.000	1.000
	B	0.000	0.000	0.000	0.000
	C	19.000	0.000	0.000	0.000
	D	3.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	12.50	0.03	B
A-BCD	0.42	6.04	2.17	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.22	12.52	0.28	B
C-ABD	0.02	4.29	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.02	5.96	0.00	407.25	0.015	0.01	8.970	A
A-BCD	177.64	175.36	0.00	984.95	0.180	0.57	4.912	A
A-B	0.62	0.62	0.00	-	-	-	-	-
A-C	545.40	545.40	0.00	-	-	-	-	-
D-ABC	56.52	55.94	0.00	453.17	0.125	0.14	9.307	A
C-ABD	8.76	8.71	0.00	938.92	0.009	0.01	4.256	A
C-D	2.24	2.24	0.00	-	-	-	-	-
C-A	610.50	610.50	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.19	7.17	0.00	363.74	0.020	0.02	10.096	B

A-BCD	275.36	273.79	0.00	1062.37	0.259	0.96	5.089	A
A-B	0.67	0.67	0.00	-	-	-	-	-
A-C	588.10	588.10	0.00	-	-	-	-	-
D-ABC	67.49	67.30	0.00	423.21	0.159	0.19	10.396	B
C-ABD	12.28	12.27	0.00	980.66	0.013	0.02	4.114	A
C-D	2.67	2.67	0.00	-	-	-	-	-
C-A	727.18	727.18	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.77	0.00	297.95	0.030	0.03	12.447	B
A-BCD	487.44	482.89	0.00	1172.26	0.416	2.10	5.909	A
A-B	0.65	0.65	0.00	-	-	-	-	-
A-C	570.25	570.25	0.00	-	-	-	-	-
D-ABC	82.65	82.29	0.00	378.49	0.218	0.28	12.484	B
C-ABD	18.69	18.66	0.00	1035.67	0.018	0.02	3.966	A
C-D	3.25	3.25	0.00	-	-	-	-	-
C-A	886.98	886.98	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.81	0.00	296.80	0.030	0.03	12.499	B
A-BCD	491.35	491.07	0.00	1175.08	0.418	2.17	6.036	A
A-B	0.64	0.64	0.00	-	-	-	-	-
A-C	566.34	566.34	0.00	-	-	-	-	-
D-ABC	82.65	82.64	0.00	378.26	0.219	0.28	12.522	B
C-ABD	18.74	18.73	0.00	1035.07	0.018	0.02	3.989	A
C-D	3.25	3.25	0.00	-	-	-	-	-
C-A	886.94	886.94	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.19	7.23	0.00	362.28	0.020	0.02	10.140	B
A-BCD	278.51	283.00	0.00	1066.25	0.261	1.05	5.247	A
A-B	0.66	0.66	0.00	-	-	-	-	-
A-C	584.95	584.95	0.00	-	-	-	-	-
D-ABC	67.49	67.84	0.00	423.00	0.160	0.20	10.435	B
C-ABD	12.32	12.36	0.00	979.73	0.013	0.02	4.173	A

C-D	2.67	2.67	0.00	-	-	-	-	-
C-A	727.14	727.14	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.02	6.04	0.00	406.46	0.015	0.02	8.992	A
A-BCD	180.01	181.76	0.00	987.04	0.182	0.61	5.009	A
A-B	0.62	0.62	0.00	-	-	-	-	-
A-C	543.03	543.03	0.00	-	-	-	-	-
D-ABC	56.52	56.71	0.00	453.04	0.125	0.15	9.345	A
C-ABD	8.80	8.82	0.00	938.37	0.009	0.01	4.288	A
C-D	2.24	2.24	0.00	-	-	-	-	-
C-A	610.46	610.46	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
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(Default Analysis Set)			100.000	
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Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2016 Dev, PM	2016 Dev	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.51	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
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A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Pill Road	One lane	3.20										25	20
Rooksbridge Road	One lane	2.50										21	21

Pedestrian Crossings

Name	Crossing Type
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A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	660.830	-	-	-	0.231	0.231	0.231	-	0.231	-	-
1	B-AD	505.452	0.088	0.222	-	-	-	0.139	0.317	0.139	0.088	0.222
1	B-C	649.273	0.095	0.240	-	-	-	-	-	-	0.095	0.240
1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	714.00	100.000
Pill Road	ONE HOUR	✓	7.00	100.000
A38 Bristol Road west	ONE HOUR	✓	643.00	100.000
Rooksbridge Road	ONE HOUR	✓	88.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To			
From	A	B	C	D

	A	0.000	3.000	664.000	47.000
	B	2.000	0.000	4.000	1.000
	C	634.000	3.000	0.000	6.000
	D	81.000	0.000	7.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.00	0.93	0.07
	B	0.29	0.00	0.57	0.14
	C	0.99	0.00	0.00	0.01
	D	0.92	0.00	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.130	1.020

	B	1.000	1.000	1.000	1.000
	C	1.160	1.000	1.000	1.000
	D	1.000	1.000	1.140	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	0.000	13.000	2.000
	B	0.000	0.000	0.000	0.000
	C	16.000	0.000	0.000	0.000
	D	0.000	0.000	14.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	12.44	0.03	B
A-BCD	0.21	4.71	0.80	A
A-B	-	-	-	-

A-C	-	-	-	-
D-ABC	0.25	12.47	0.34	B
C-ABD	0.01	4.25	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	5.27	5.22	0.00	393.27	0.013	0.01	9.276	A
A-BCD	88.61	87.77	0.00	922.44	0.096	0.21	4.667	A
A-B	2.05	2.05	0.00	-	-	-	-	-
A-C	512.57	512.57	0.00	-	-	-	-	-
D-ABC	66.99	66.30	0.00	457.37	0.146	0.17	9.293	A
C-ABD	4.82	4.80	0.00	923.05	0.005	0.01	4.227	A

C-D	4.50	4.50	0.00	-	-	-	-	-
C-A	551.14	551.14	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.29	6.28	0.00	354.20	0.018	0.02	10.347	B
A-BCD	132.73	132.11	0.00	987.21	0.134	0.37	4.583	A
A-B	2.34	2.34	0.00	-	-	-	-	-
A-C	585.25	585.25	0.00	-	-	-	-	-
D-ABC	79.99	79.76	0.00	429.87	0.186	0.23	10.391	B
C-ABD	6.64	6.63	0.00	962.23	0.007	0.01	4.083	A
C-D	5.36	5.36	0.00	-	-	-	-	-
C-A	657.24	657.24	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.67	0.00	297.36	0.026	0.03	12.425	B
A-BCD	220.53	218.88	0.00	1077.42	0.205	0.78	4.610	A
A-B	2.64	2.64	0.00	-	-	-	-	-

A-C	659.04	659.04	0.00	-	-	-	-	-
D-ABC	97.97	97.55	0.00	389.83	0.251	0.33	12.434	B
C-ABD	9.84	9.82	0.00	1014.22	0.010	0.01	3.925	A
C-D	6.55	6.55	0.00	-	-	-	-	-
C-A	803.25	803.25	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.71	0.00	296.99	0.026	0.03	12.444	B
A-BCD	221.58	221.51	0.00	1078.38	0.205	0.80	4.647	A
A-B	2.63	2.63	0.00	-	-	-	-	-
A-C	657.99	657.99	0.00	-	-	-	-	-
D-ABC	97.97	97.96	0.00	389.73	0.251	0.34	12.475	B
C-ABD	9.85	9.85	0.00	1013.99	0.010	0.01	3.943	A
C-D	6.55	6.55	0.00	-	-	-	-	-
C-A	803.24	803.24	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-ACD	6.29	6.33	0.00	353.70	0.018	0.02	10.363	B
A-BCD	133.71	135.34	0.00	988.51	0.135	0.39	4.653	A
A-B	2.34	2.34	0.00	-	-	-	-	-
A-C	584.27	584.27	0.00	-	-	-	-	-
D-ABC	79.99	80.40	0.00	429.76	0.186	0.23	10.432	B
C-ABD	6.65	6.66	0.00	961.89	0.007	0.01	4.128	A
C-D	5.36	5.36	0.00	-	-	-	-	-
C-A	657.23	657.23	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	5.27	5.29	0.00	392.99	0.013	0.01	9.287	A
A-BCD	89.37	90.04	0.00	923.12	0.097	0.22	4.712	A
A-B	2.05	2.05	0.00	-	-	-	-	-
A-C	511.81	511.81	0.00	-	-	-	-	-
D-ABC	66.99	67.22	0.00	457.30	0.146	0.18	9.337	A
C-ABD	4.84	4.84	0.00	922.85	0.005	0.01	4.253	A
C-D	4.50	4.50	0.00	-	-	-	-	-

C-A	551.12	551.12	0.00	-	-	-	-	-
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(Default Analysis Set) - 2016 Q Dev, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2016 Q Dev, AM	2016 Q Dev	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.21	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

[illegible]

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

[illegible]

1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	831.00	100.000
Pill Road	ONE HOUR	✓	8.00	100.000

A38 Bristol Road west	ONE HOUR	✓	687.00	100.000
Rooksbridge Road	ONE HOUR	✓	73.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	1.000	751.000	79.000
	B	1.000	0.000	6.000	1.000
	C	679.000	5.000	0.000	3.000
	D	69.000	0.000	4.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.00	0.90	0.10
	B	0.13	0.00	0.75	0.13
	C	0.99	0.01	0.00	0.00

	D	0.95	0.00	0.05	0.00
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Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
From		A	B	C	D
	A	1.000	1.000	1.150	1.010
	B	1.000	1.000	1.000	1.000
	C	1.220	1.000	1.000	1.000
	D	1.030	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
From		A	B	C	D
	A	0.000	0.000	15.000	1.000
	B	0.000	0.000	0.000	0.000
	C	22.000	0.000	0.000	0.000
	D	3.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	12.33	0.03	B
A-BCD	0.41	6.00	2.09	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.22	12.61	0.29	B
C-ABD	0.02	4.32	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-ACD	6.02	5.96	0.00	409.76	0.015	0.01	8.914	A
A-BCD	174.83	172.59	0.00	975.19	0.179	0.56	4.923	A
A-B	0.62	0.62	0.00	-	-	-	-	-
A-C	535.57	535.57	0.00	-	-	-	-	-
D-ABC	56.52	55.94	0.00	451.67	0.125	0.15	9.342	A
C-ABD	8.80	8.75	0.00	945.70	0.009	0.01	4.282	A
C-D	2.24	2.24	0.00	-	-	-	-	-
C-A	618.63	618.63	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.19	7.17	0.00	366.76	0.020	0.02	10.011	B
A-BCD	269.91	268.39	0.00	1050.59	0.257	0.94	5.096	A
A-B	0.67	0.67	0.00	-	-	-	-	-
A-C	578.45	578.45	0.00	-	-	-	-	-
D-ABC	67.49	67.29	0.00	421.46	0.160	0.19	10.447	B
C-ABD	12.33	12.31	0.00	988.29	0.012	0.02	4.141	A
C-D	2.67	2.67	0.00	-	-	-	-	-

C-A	736.89	736.89	0.00	-	-	-	-	-
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Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.77	0.00	301.76	0.029	0.03	12.285	B
A-BCD	475.10	470.74	0.00	1157.96	0.410	2.03	5.884	A
A-B	0.65	0.65	0.00	-	-	-	-	-
A-C	564.09	564.09	0.00	-	-	-	-	-
D-ABC	82.65	82.29	0.00	376.47	0.220	0.28	12.569	B
C-ABD	18.73	18.69	0.00	1044.23	0.018	0.02	3.996	A
C-D	3.26	3.26	0.00	-	-	-	-	-
C-A	898.89	898.89	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	8.81	8.81	0.00	300.66	0.029	0.03	12.334	B
A-BCD	478.78	478.52	0.00	1160.66	0.413	2.09	6.003	A
A-B	0.65	0.65	0.00	-	-	-	-	-
A-C	560.42	560.42	0.00	-	-	-	-	-

D-ABC	82.65	82.64	0.00	376.25	0.220	0.29	12.608	B
C-ABD	18.77	18.77	0.00	1043.66	0.018	0.02	4.024	A
C-D	3.26	3.26	0.00	-	-	-	-	-
C-A	898.84	898.84	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.19	7.23	0.00	365.36	0.020	0.02	10.054	B
A-BCD	272.90	277.20	0.00	1054.32	0.259	1.02	5.247	A
A-B	0.67	0.67	0.00	-	-	-	-	-
A-C	575.46	575.46	0.00	-	-	-	-	-
D-ABC	67.49	67.84	0.00	421.26	0.160	0.20	10.486	B
C-ABD	12.37	12.40	0.00	987.41	0.013	0.02	4.207	A
C-D	2.67	2.67	0.00	-	-	-	-	-
C-A	736.85	736.85	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.02	6.04	0.00	408.99	0.015	0.02	8.935	A

A-BCD	177.12	178.81	0.00	977.22	0.181	0.60	5.016	A
A-B	0.62	0.62	0.00	-	-	-	-	-
A-C	533.29	533.29	0.00	-	-	-	-	-
D-ABC	56.52	56.72	0.00	451.54	0.125	0.15	9.382	A
C-ABD	8.84	8.86	0.00	945.17	0.009	0.01	4.320	A
C-D	2.24	2.24	0.00	-	-	-	-	-
C-A	618.59	618.59	0.00	-	-	-	-	-

(Default Analysis Set) - 2016 Q Dev, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2016 Q Dev, PM	2016 Q Dev	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description	Arm Type
A38 Bristol Road east	A38 Bristol Road east		Major
Pill Road	Pill Road		Minor
A38 Bristol Road west	A38 Bristol Road west		Major
Rooksbridge Road	Rooksbridge Road		Minor

Major Arm Geometry

Name	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A38 Bristol Road east	8.25		0.00		2.20	150.00	✓	0.00
A38 Bristol Road west	7.10		0.00		2.20	250.00	✓	0.00

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

Minor Arm Geometry

Name	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
Pill Road	One lane	3.20										25	20
Rooksbridge Road	One lane	2.50										21	21

Pedestrian Crossings

Name	Crossing Type
A38 Bristol Road east	None
Pill Road	None
A38 Bristol Road west	None
Rooksbridge Road	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	660.830	-	-	-	0.231	0.231	0.231	-	0.231	-	-
1	B-AD	505.452	0.088	0.222	-	-	-	0.139	0.317	0.139	0.088	0.222
1	B-C	649.273	0.095	0.240	-	-	-	-	-	-	0.095	0.240
1	C-B	718.741	0.265	0.265	-	-	-	-	-	-	0.265	0.265
1	D-A	605.262	-	-	-	0.212	0.084	0.212	-	0.084	-	-
1	D-BC	469.968	0.123	0.123	0.279	0.195	0.077	0.195	-	0.077	-	-

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

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A38 Bristol Road east	ONE HOUR	✓	705.00	100.000
Pill Road	ONE HOUR	✓	7.00	100.000
A38 Bristol Road west	ONE HOUR	✓	635.00	100.000
Rooksbridge Road	ONE HOUR	✓	88.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.000	3.000	655.000	47.000
	B	2.000	0.000	4.000	1.000
	C	626.000	3.000	0.000	6.000
	D	81.000	0.000	7.000	0.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	0.00	0.00	0.93	0.07
	B	0.29	0.00	0.57	0.14
	C	0.99	0.00	0.00	0.01
	D	0.92	0.00	0.08	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		A	B	C	D
	A	1.000	1.000	1.120	1.020
	B	1.000	1.000	1.000	1.000
	C	1.170	1.000	1.000	1.000
	D	1.000	1.000	1.140	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

	To			
--	----	--	--	--

From		A	B	C	D
	A	0.000	0.000	12.000	2.000
	B	0.000	0.000	0.000	0.000
	C	17.000	0.000	0.000	0.000
	D	0.000	0.000	14.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	12.22	0.03	B
A-BCD	0.20	4.72	0.77	A
A-B	-	-	-	-
A-C	-	-	-	-
D-ABC	0.25	12.41	0.33	B
C-ABD	0.01	4.27	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	5.27	5.22	0.00	396.57	0.013	0.01	9.197	A
A-BCD	87.07	86.24	0.00	914.61	0.095	0.21	4.676	A
A-B	2.05	2.05	0.00	-	-	-	-	-
A-C	501.52	501.52	0.00	-	-	-	-	-
D-ABC	66.99	66.30	0.00	458.22	0.146	0.17	9.272	A
C-ABD	4.79	4.77	0.00	924.15	0.005	0.01	4.238	A
C-D	4.50	4.50	0.00	-	-	-	-	-
C-A	548.89	548.89	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.29	6.28	0.00	358.24	0.018	0.02	10.228	B

A-BCD	129.73	129.13	0.00	977.38	0.133	0.36	4.591	A
A-B	2.34	2.34	0.00	-	-	-	-	-
A-C	573.21	573.21	0.00	-	-	-	-	-
D-ABC	79.99	79.77	0.00	430.97	0.186	0.23	10.358	B
C-ABD	6.59	6.58	0.00	963.43	0.007	0.01	4.095	A
C-D	5.36	5.36	0.00	-	-	-	-	-
C-A	654.57	654.57	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.67	0.00	302.55	0.025	0.03	12.206	B
A-BCD	214.04	212.47	0.00	1065.00	0.201	0.75	4.610	A
A-B	2.65	2.65	0.00	-	-	-	-	-
A-C	647.11	647.11	0.00	-	-	-	-	-
D-ABC	97.97	97.55	0.00	391.39	0.250	0.33	12.371	B
C-ABD	9.74	9.73	0.00	1015.50	0.010	0.01	3.938	A
C-D	6.55	6.55	0.00	-	-	-	-	-
C-A	800.02	800.02	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	7.71	7.71	0.00	302.21	0.026	0.03	12.223	B
A-BCD	215.02	214.95	0.00	1065.91	0.202	0.77	4.645	A
A-B	2.64	2.64	0.00	-	-	-	-	-
A-C	646.13	646.13	0.00	-	-	-	-	-
D-ABC	97.97	97.96	0.00	391.30	0.250	0.33	12.408	B
C-ABD	9.75	9.75	0.00	1015.29	0.010	0.01	3.956	A
C-D	6.55	6.55	0.00	-	-	-	-	-
C-A	800.01	800.01	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	6.29	6.32	0.00	357.77	0.018	0.02	10.243	B
A-BCD	130.65	132.20	0.00	978.61	0.134	0.38	4.658	A
A-B	2.34	2.34	0.00	-	-	-	-	-
A-C	572.29	572.29	0.00	-	-	-	-	-
D-ABC	79.99	80.40	0.00	430.87	0.186	0.23	10.399	B
C-ABD	6.60	6.61	0.00	963.10	0.007	0.01	4.141	A

C-D	5.36	5.36	0.00	-	-	-	-	-
C-A	654.56	654.56	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	5.27	5.29	0.00	396.30	0.013	0.01	9.206	A
A-BCD	87.80	88.44	0.00	915.26	0.096	0.22	4.717	A
A-B	2.05	2.05	0.00	-	-	-	-	-
A-C	500.79	500.79	0.00	-	-	-	-	-
D-ABC	66.99	67.22	0.00	458.15	0.146	0.18	9.318	A
C-ABD	4.81	4.82	0.00	923.96	0.005	0.01	4.265	A
C-D	4.50	4.50	0.00	-	-	-	-	-
C-A	548.88	548.88	0.00	-	-	-	-	-

Junctions 8			
ARCADY 8 - Roundabout Module			
Version: 8.0.3.332 [14595,13/11/2013] © Copyright TRL Limited, 2014			
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Filename: J13 Dunball Roundabout - Existing.arc8

Path: P:\TP London\TP Projects\Hinkley Point C Connection\Modelling\Junctions 8\J13

Report generation date: 26/02/2014 10:27:23

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2013							
A39	0.17	2.57	0.13	A	0.14	2.31	0.10	A

A39 Bristol Road south	0.71	2.57	0.40	A	1.59	3.75	0.61	A
Industrial Estate	0.00	0.00	0.00	A	0.00	0.00	0.00	A
A39 Bristol Road north	5.10	12.77	0.83	B	1.38	4.99	0.57	A
	A1 - 2016 Base							
A39	0.32	2.84	0.23	A	0.40	2.60	0.27	A
A39 Bristol Road south	1.15	3.19	0.51	A	2.62	5.31	0.72	A
Industrial Estate	0.00	0.00	0.00	A	0.00	0.00	0.00	A
A39 Bristol Road north	16.28	39.39	0.96	E	1.88	6.45	0.65	A
	A1 - 2016 Dev							
A39	0.46	3.22	0.29	A	0.42	2.68	0.28	A
A39 Bristol Road south	1.17	3.24	0.52	A	3.18	6.13	0.76	A
Industrial Estate	0.00	0.00	0.00	A	0.00	0.00	0.00	A
A39 Bristol Road north	17.04	41.14	0.96	E	2.04	7.03	0.66	A

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

"D1 - 2013, AM " model duration: 07:45 - 09:15

"D2 - 2013, PM" model duration: 16:45 - 18:15

"D3 - 2016 Base, AM" model duration: 07:45 - 09:15

"D4 - 2016 Base, PM" model duration: 16:45 - 18:15

"D5 - 2016 Dev, AM" model duration: 07:45 - 09:15

"D6 - 2016 Dev, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.3.332 at 26/02/2014 10:27:19

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	02/12/2013
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	
Description	

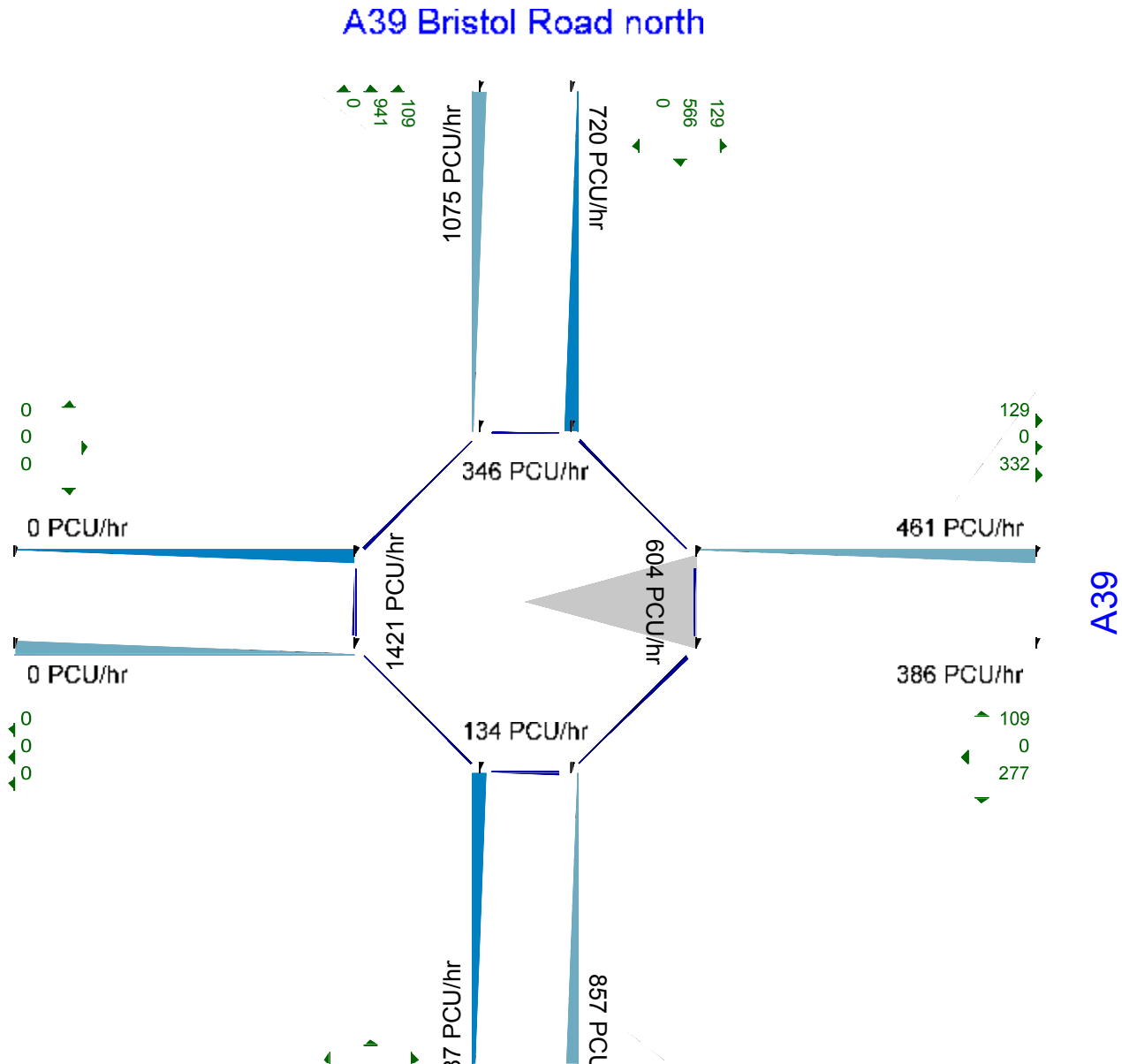
Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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	Veh	PCU	perHour	s	-Min	perMin

Industrial Estate



The junction diagram reflects the last run of ARCADY.

(Default Analysis Set) - 2013, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013, AM	2013	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
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(untitled)	Roundabout	1,2,3,4				8.13	A
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Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A39	A39	
A39 Bristol Road south	A39 Bristol Road south	
Industrial Estate	Industrial Estate	
A39 Bristol Road north	A39 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A39	0.00	99999.00		0.00
A39 Bristol Road south	0.00	99999.00		0.00
Industrial Estate	0.00	99999.00		0.00

A39 Bristol Road north	0.00	99999.00		0.00
------------------------	------	----------	--	------

Roundabout Geometry

Name	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)	Exit Only
A39	8.15	8.15	0.00	24.00	79.00	16.00	
A39 Bristol Road south	8.00	8.00	0.00	45.00	79.00	14.00	
Industrial Estate	3.70	6.05	7.88	14.36	79.00	10.00	
A39 Bristol Road north	3.50	7.70	17.00	19.00	79.00	17.00	

Pedestrian Crossings

Name	Crossing Type
A39	None
A39 Bristol Road south	None
Industrial Estate	None
A39 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
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A39		(calculated)	(calculated)	0.622	2609.542
A39 Bristol Road south		(calculated)	(calculated)	0.630	2624.432
Industrial Estate		(calculated)	(calculated)	0.465	1560.008
A39 Bristol Road north		(calculated)	(calculated)	0.506	1846.557

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A39	ONE HOUR	✓	195.00	100.000
A39 Bristol Road south	ONE HOUR	✓	832.00	100.000

Industrial Estate	ONE HOUR	✓	0.00	100.000
A39 Bristol Road north	ONE HOUR	✓	1227.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
		1	2	3	4
From	1	1.000	96.000	0.000	98.000
	2	59.000	38.000	0.000	735.000
	3	0.000	0.000	0.000	0.000
	4	123.000	1091.000	0.000	13.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
		1	2	3	4
From	1	0.01	0.49	0.00	0.50
	2	0.07	0.05	0.00	0.88
	3	0.25	0.25	0.25	0.25

	4	0.10	0.89	0.00	0.01
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Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.040	1.000	1.150
	2	1.050	1.030	1.000	1.100
	3	1.000	1.000	1.000	1.000
	4	1.280	1.070	1.000	1.690

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	4.000	0.000	15.000
	2	5.000	3.000	0.000	10.000
	3	0.000	0.000	0.000	0.000
	4	28.000	7.000	0.000	69.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A39	0.13	2.57	0.17	A	195.95	293.92	11.44	2.34	0.13	11.44	2.34
A39 Bristol Road south	0.40	2.57	0.71	A	834.66	1251.98	48.71	2.33	0.54	48.71	2.33
Industrial Estate	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A39 Bristol Road north	0.83	12.77	5.10	B	1235.83	1853.74	252.39	8.17	2.80	252.43	8.17

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	160.76	40.19	160.39	165.16	919.90	0.00	2037.73	1585.44	0.079	0.00	0.09	2.100	A

A39 Bristol Road south	684.79	171.20	683.20	978.44	101.85	0.00	2560.31	2043.88	0.267	0.00	0.40	2.094	A
Industrial Estate	0.00	0.00	0.00	0.00	785.05	0.00	1194.81	203.99	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1013.93	253.48	1008.39	708.37	76.68	0.00	1807.77	1650.53	0.561	0.00	1.38	4.910	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	191.97	47.99	191.86	197.71	1101.46	0.00	1924.88	1585.44	0.100	0.09	0.12	2.274	A
A39 Bristol Road south	817.70	204.43	817.23	1171.46	121.85	0.00	2547.71	2043.88	0.321	0.40	0.51	2.274	A
Industrial Estate	0.00	0.00	0.00	0.00	939.09	0.00	1123.15	203.99	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1210.73	302.68	1207.44	847.36	91.72	0.00	1800.16	1650.53	0.673	1.38	2.21	6.629	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	235.11	58.78	234.93	241.33	1342.94	0.00	1774.77	1585.44	0.132	0.12	0.17	2.559	A
A39 Bristol Road south	1001.48	250.37	1000.69	1428.76	149.10	0.00	2530.56	2043.88	0.396	0.51	0.71	2.571	A

Industrial Estate	0.00	0.00	0.00	0.00	1149.79	0.00	1025.14	203.99	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1482.83	370.71	1471.95	1037.47	112.31	0.00	1789.75	1650.53	0.829	2.21	4.93	12.033	B

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	235.11	58.78	235.11	242.57	1351.97	0.00	1769.16	1585.44	0.133	0.17	0.17	2.569	A
A39 Bristol Road south	1001.48	250.37	1001.47	1437.72	149.36	0.00	2530.39	2043.88	0.396	0.71	0.71	2.573	A
Industrial Estate	0.00	0.00	0.00	0.00	1150.83	0.00	1024.65	203.99	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1482.83	370.71	1482.14	1038.43	112.40	0.00	1789.71	1650.53	0.829	4.93	5.10	12.770	B

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	191.97	47.99	192.15	199.49	1114.29	0.00	1916.90	1585.44	0.100	0.17	0.12	2.287	A
A39 Bristol Road south	817.70	204.43	818.49	1184.19	122.24	0.00	2547.47	2043.88	0.321	0.71	0.52	2.276	A
Industrial Estate	0.00	0.00	0.00	0.00	940.73	0.00	1122.39	203.99	0.000	0.00	0.00	0.000	A

A39 Bristol Road north	1210.73	302.68	1221.91	848.86	91.86	0.00	1800.09	1650.53	0.673	5.10	2.30	6.960	A
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Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	160.76	40.19	160.88	166.37	928.01	0.00	2032.69	1585.44	0.079	0.12	0.09	2.105	A
A39 Bristol Road south	684.79	171.20	685.26	986.63	102.26	0.00	2560.05	2043.88	0.267	0.52	0.40	2.099	A
Industrial Estate	0.00	0.00	0.00	0.00	787.52	0.00	1193.66	203.99	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1013.93	253.48	1017.47	710.60	76.91	0.00	1807.66	1650.53	0.561	2.30	1.42	5.022	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.39	0.09	2.100	A	A
A39 Bristol Road south	5.88	0.39	2.094	A	A
Industrial Estate	0.00	0.00	0.000	A	A

A39 Bristol Road north	19.94	1.33	4.910	A	A
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Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.80	0.12	2.274	A	A
A39 Bristol Road south	7.63	0.51	2.274	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	31.63	2.11	6.629	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	2.47	0.16	2.559	A	A
A39 Bristol Road south	10.53	0.70	2.571	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	66.47	4.43	12.033	B	B

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	2.51	0.17	2.569	A	A
A39 Bristol Road south	10.71	0.71	2.573	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	75.48	5.03	12.770	B	B

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.85	0.12	2.287	A	A
A39 Bristol Road south	7.89	0.53	2.276	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	36.83	2.46	6.960	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.43	0.10	2.105	A	A

A39 Bristol Road south	6.07	0.41	2.099	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	22.05	1.47	5.022	A	A

(Default Analysis Set) - 2013, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013, PM	2013	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4				4.09	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A39	A39	
A39 Bristol Road south	A39 Bristol Road south	
Industrial Estate	Industrial Estate	
A39 Bristol Road north	A39 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
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A39	0.00	99999.00		0.00
A39 Bristol Road south	0.00	99999.00		0.00
Industrial Estate	0.00	99999.00		0.00
A39 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
A39	8.15	8.15	0.00	24.00	79.00	16.00	
A39 Bristol Road south	8.00	8.00	0.00	45.00	79.00	14.00	
Industrial Estate	3.70	6.05	7.88	14.36	79.00	10.00	
A39 Bristol Road north	3.50	7.70	17.00	19.00	79.00	17.00	

Pedestrian Crossings

Name	Crossing Type
A39	None
A39 Bristol Road south	None
Industrial Estate	None
A39 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A39		(calculated)	(calculated)	0.622	2609.542
A39 Bristol Road south		(calculated)	(calculated)	0.630	2624.432
Industrial Estate		(calculated)	(calculated)	0.465	1560.008
A39 Bristol Road north		(calculated)	(calculated)	0.506	1846.557

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
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A39	ONE HOUR	✓	164.00	100.000
A39 Bristol Road south	ONE HOUR	✓	1349.00	100.000
Industrial Estate	ONE HOUR	✓	0.00	100.000
A39 Bristol Road north	ONE HOUR	✓	871.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	76.000	0.000	88.000
	2	149.000	15.000	0.000	1185.000
	3	0.000	0.000	0.000	0.000
	4	133.000	713.000	0.000	25.000

Turning Proportions (Veh) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.00	0.46	0.00	0.54

	2	0.11	0.01	0.00	0.88
	3	0.25	0.25	0.25	0.25
	4	0.15	0.82	0.00	0.03

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	1.000	1.040	1.000	1.320
	2	1.020	1.200	1.000	1.030
	3	1.000	1.000	1.000	1.000
	4	1.060	1.030	1.000	1.320

Heavy Vehicle Percentages - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	4.000	0.000	32.000
	2	2.000	20.000	0.000	3.000

	3	0.000	0.000	0.000	0.000
	4	6.000	3.000	0.000	32.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A39	0.10	2.31	0.14	A	179.12	268.68	9.74	2.18	0.11	9.74	2.18
A39 Bristol Road south	0.61	3.75	1.59	A	1275.97	1913.96	98.22	3.08	1.09	98.22	3.08
Industrial Estate	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A39 Bristol Road north	0.57	4.99	1.38	A	833.54	1250.30	86.87	4.17	0.97	86.87	4.17

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	146.96	36.74	146.62	219.84	589.06	0.00	2243.38	1668.12	0.066	0.00	0.08	2.043	A
A39 Bristol Road south	1046.86	261.72	1044.01	623.68	112.00	0.00	2553.92	1934.64	0.410	0.00	0.71	2.454	A
Industrial Estate	0.00	0.00	0.00	0.00	1156.02	0.00	1022.24	170.16	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	683.87	170.97	681.29	1028.40	127.62	0.00	1782.01	1662.40	0.384	0.00	0.65	3.404	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	175.48	43.87	175.40	263.09	705.22	0.00	2171.18	1668.12	0.081	0.08	0.10	2.146	A
A39 Bristol Road south	1250.06	312.51	1248.94	746.61	134.01	0.00	2540.06	1934.64	0.492	0.71	0.99	2.871	A
Industrial Estate	0.00	0.00	0.00	0.00	1382.94	0.00	916.68	170.16	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	816.61	204.15	815.64	1230.27	152.67	0.00	1769.34	1662.40	0.462	0.65	0.89	3.932	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	214.92	53.73	214.79	322.00	863.07	0.00	2073.06	1668.12	0.104	0.10	0.14	2.305	A
A39 Bristol Road south	1531.00	382.75	1528.66	913.78	164.08	0.00	2521.13	1934.64	0.607	0.99	1.58	3.729	A
Industrial Estate	0.00	0.00	0.00	0.00	1692.74	0.00	772.56	170.16	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1000.13	250.03	998.20	1505.88	186.87	0.00	1752.04	1662.40	0.571	0.89	1.37	4.967	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	214.92	53.73	214.92	322.55	864.70	0.00	2072.04	1668.12	0.104	0.14	0.14	2.306	A
A39 Bristol Road south	1531.00	382.75	1530.97	915.39	164.23	0.00	2521.04	1934.64	0.607	1.58	1.59	3.747	A
Industrial Estate	0.00	0.00	0.00	0.00	1695.20	0.00	771.42	170.16	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1000.13	250.03	1000.10	1508.05	187.15	0.00	1751.90	1662.40	0.571	1.37	1.38	4.993	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	175.48	43.87	175.61	263.92	707.69	0.00	2169.64	1668.12	0.081	0.14	0.11	2.148	A
A39 Bristol Road south	1250.06	312.51	1252.38	749.06	134.24	0.00	2539.92	1934.64	0.492	1.59	1.01	2.888	A
Industrial Estate	0.00	0.00	0.00	0.00	1386.62	0.00	914.97	170.16	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	816.61	204.15	818.52	1233.53	153.09	0.00	1769.13	1662.40	0.462	1.38	0.90	3.958	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	146.96	36.74	147.04	220.83	592.13	0.00	2241.47	1668.12	0.066	0.11	0.08	2.045	A
A39 Bristol Road south	1046.86	261.72	1048.01	626.79	112.38	0.00	2553.68	1934.64	0.410	1.01	0.72	2.465	A
Industrial Estate	0.00	0.00	0.00	0.00	1160.39	0.00	1020.21	170.16	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	683.87	170.97	684.86	1032.28	128.11	0.00	1781.76	1662.40	0.384	0.90	0.65	3.427	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.23	0.08	2.043	A	A
A39 Bristol Road south	10.48	0.70	2.454	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	9.45	0.63	3.404	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.55	0.10	2.146	A	A
A39 Bristol Road south	14.62	0.97	2.871	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	13.02	0.87	3.932	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	2.04	0.14	2.305	A	A

A39 Bristol Road south	23.01	1.53	3.729	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	19.91	1.33	4.967	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	2.06	0.14	2.306	A	A
A39 Bristol Road south	23.74	1.58	3.747	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	20.63	1.38	4.993	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.59	0.11	2.148	A	A
A39 Bristol Road south	15.41	1.03	2.888	A	A
Industrial Estate	0.00	0.00	0.000	A	A

A39 Bristol Road north	13.86	0.92	3.958	A	A
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Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	1.27	0.08	2.045	A	A
A39 Bristol Road south	10.96	0.73	2.465	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	9.99	0.67	3.427	A	A

(Default Analysis Set) - 2016 Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, AM	2016 Base	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4				20.59	C

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A39	A39	

A39 Bristol Road south	A39 Bristol Road south	
Industrial Estate	Industrial Estate	
A39 Bristol Road north	A39 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A39	0.00	99999.00		0.00
A39 Bristol Road south	0.00	99999.00		0.00
Industrial Estate	0.00	99999.00		0.00
A39 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
A39	8.15	8.15	0.00	24.00	79.00	16.00	
A39 Bristol Road south	8.00	8.00	0.00	45.00	79.00	14.00	
Industrial Estate	3.70	6.05	7.88	14.36	79.00	10.00	
A39 Bristol Road north	3.50	7.70	17.00	19.00	79.00	17.00	

Pedestrian Crossings

Name	Crossing Type
A39	None
A39 Bristol Road south	None
Industrial Estate	None
A39 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A39		(calculated)	(calculated)	0.622	2609.542
A39 Bristol Road south		(calculated)	(calculated)	0.630	2624.432
Industrial Estate		(calculated)	(calculated)	0.465	1560.008
A39 Bristol Road north		(calculated)	(calculated)	0.506	1846.557

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
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		✓	✓	HV Percentages	2.00				✓	✓
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Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A39	ONE HOUR	✓	340.00	100.000
A39 Bristol Road south	ONE HOUR	✓	1087.00	100.000
Industrial Estate	ONE HOUR	✓	0.00	100.000
A39 Bristol Road north	ONE HOUR	✓	1311.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	1.000	225.000	0.000	114.000
	2	295.000	39.000	0.000	753.000
	3	0.000	0.000	0.000	0.000

	4	180.000	1118.000	0.000	13.000
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Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.66	0.00	0.34
	2	0.27	0.04	0.00	0.69
	3	0.25	0.25	0.25	0.25
	4	0.14	0.85	0.00	0.01

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.040	1.000	1.130
	2	1.050	1.030	1.000	1.100
	3	1.000	1.000	1.000	1.000
	4	1.200	1.070	1.000	1.690

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
From		1	2	3	4
	1	0.000	4.000	0.000	13.000
	2	5.000	3.000	0.000	10.000
	3	0.000	0.000	0.000	0.000
	4	20.000	7.000	0.000	69.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A39	0.23	2.84	0.32	A	333.85	500.77	21.07	2.52	0.23	21.07	2.52
A39 Bristol Road south	0.51	3.19	1.15	A	1081.16	1621.73	74.55	2.76	0.83	74.56	2.76
Industrial Estate	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A39 Bristol Road north	0.96	39.39	16.28	E	1316.07	1974.11	556.78	16.92	6.19	556.85	16.92

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	273.90	68.48	273.23	394.86	941.09	0.00	2024.56	1735.40	0.135	0.00	0.17	2.200	A
A39 Bristol Road south	887.03	221.76	884.73	1100.40	113.93	0.00	2552.71	2182.00	0.347	0.00	0.57	2.336	A
Industrial Estate	0.00	0.00	0.00	0.00	998.65	0.00	1095.45	246.77	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1079.76	269.94	1072.44	735.14	263.51	0.00	1713.28	1422.78	0.630	0.00	1.83	6.080	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	327.07	81.77	326.85	472.39	1125.93	0.00	1909.67	1735.40	0.171	0.17	0.22	2.433	A
A39 Bristol Road south	1059.20	264.80	1058.41	1316.50	136.28	0.00	2538.63	2182.00	0.417	0.57	0.77	2.634	A
Industrial Estate	0.00	0.00	0.00	0.00	1194.69	0.00	1004.25	246.77	0.000	0.00	0.00	0.000	A

A39 Bristol Road north	1289.34	322.34	1283.08	879.46	315.23	0.00	1687.12	1422.78	0.764	1.83	3.40	9.596	A
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Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	400.57	100.14	400.21	573.50	1351.24	0.00	1769.61	1735.40	0.226	0.22	0.31	2.813	A
A39 Bristol Road south	1297.24	324.31	1295.77	1585.07	166.38	0.00	2519.68	2182.00	0.515	0.77	1.14	3.183	A
Industrial Estate	0.00	0.00	0.00	0.00	1462.14	0.00	879.84	246.77	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1579.12	394.78	1538.81	1076.21	385.93	0.00	1651.36	1422.78	0.956	3.40	13.47	28.185	D

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	400.57	100.14	400.56	578.27	1376.00	0.00	1754.22	1735.40	0.228	0.31	0.32	2.845	A
A39 Bristol Road south	1297.24	324.31	1297.23	1609.61	166.95	0.00	2519.32	2182.00	0.515	1.14	1.15	3.192	A
Industrial Estate	0.00	0.00	0.00	0.00	1464.17	0.00	878.89	246.77	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1579.12	394.78	1567.90	1077.81	386.36	0.00	1651.14	1422.78	0.956	13.47	16.28	39.387	E

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	327.07	81.77	327.42	481.49	1173.98	0.00	1879.80	1735.40	0.174	0.32	0.23	2.483	A
A39 Bristol Road south	1059.20	264.80	1060.66	1364.05	137.35	0.00	2537.95	2182.00	0.417	1.15	0.78	2.645	A
Industrial Estate	0.00	0.00	0.00	0.00	1198.01	0.00	1002.70	246.77	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1289.34	322.34	1339.56	882.11	315.91	0.00	1686.78	1422.78	0.764	16.28	3.72	12.844	B

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	273.90	68.48	274.13	397.87	953.61	0.00	2016.78	1735.40	0.136	0.23	0.17	2.210	A
A39 Bristol Road south	887.03	221.76	887.83	1113.27	114.47	0.00	2552.36	2182.00	0.348	0.78	0.58	2.344	A
Industrial Estate	0.00	0.00	0.00	0.00	1002.30	0.00	1093.75	246.77	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1079.76	269.94	1087.06	737.87	264.43	0.00	1712.81	1422.78	0.630	3.72	1.90	6.364	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	2.47	0.16	2.200	A	A
A39 Bristol Road south	8.47	0.56	2.336	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	26.04	1.74	6.080	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	3.27	0.22	2.433	A	A
A39 Bristol Road south	11.41	0.76	2.634	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	47.34	3.16	9.596	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	4.61	0.31	2.813	A	A

A39 Bristol Road south	16.77	1.12	3.183	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	152.66	10.18	28.185	D	C

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	4.72	0.31	2.845	A	A
A39 Bristol Road south	17.17	1.14	3.192	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	225.64	15.04	39.387	E	D

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	3.43	0.23	2.483	A	A
A39 Bristol Road south	11.91	0.79	2.645	A	A
Industrial Estate	0.00	0.00	0.000	A	A

A39 Bristol Road north	75.19	5.01	12.844	B	B
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Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	2.56	0.17	2.210	A	A
A39 Bristol Road south	8.81	0.59	2.344	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	29.92	1.99	6.364	A	A

(Default Analysis Set) - 2016 Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2016 Base, PM	2016 Base	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4				5.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
A39	A39	

A39 Bristol Road south	A39 Bristol Road south	
Industrial Estate	Industrial Estate	
A39 Bristol Road north	A39 Bristol Road north	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A39	0.00	99999.00		0.00
A39 Bristol Road south	0.00	99999.00		0.00
Industrial Estate	0.00	99999.00		0.00
A39 Bristol Road north	0.00	99999.00		0.00

Roundabout Geometry

Name	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)	Exit Only
A39	8.15	8.15	0.00	24.00	79.00	16.00	
A39 Bristol Road south	8.00	8.00	0.00	45.00	79.00	14.00	
Industrial Estate	3.70	6.05	7.88	14.36	79.00	10.00	
A39 Bristol Road north	3.50	7.70	17.00	19.00	79.00	17.00	

Pedestrian Crossings

Name	Crossing Type
A39	None
A39 Bristol Road south	None
Industrial Estate	None
A39 Bristol Road north	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A39		(calculated)	(calculated)	0.622	2609.542
A39 Bristol Road south		(calculated)	(calculated)	0.630	2624.432
Industrial Estate		(calculated)	(calculated)	0.465	1560.008
A39 Bristol Road north		(calculated)	(calculated)	0.506	1846.557

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
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		✓	✓	HV Percentages	2.00				✓	✓
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Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
A39	ONE HOUR	✓	456.00	100.000
A39 Bristol Road south	ONE HOUR	✓	1560.00	100.000
Industrial Estate	ONE HOUR	✓	0.00	100.000
A39 Bristol Road north	ONE HOUR	✓	922.00	100.000

Turning Proportions

Turning Counts or Proportions (Veh/hr) - (untitled) (for whole period)

	To				
From		1	2	3	4
	1	0.000	339.000	0.000	117.000
	2	327.000	15.000	0.000	1218.000
	3	0.000	0.000	0.000	0.000

	4	164.000	733.000	0.000	25.000
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Turning Proportions (Veh) - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.74	0.00	0.26
	2	0.21	0.01	0.00	0.78
	3	0.25	0.25	0.25	0.25
	4	0.18	0.80	0.00	0.03

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.040	1.000	1.240
	2	1.090	1.200	1.000	1.030
	3	1.000	1.000	1.000	1.000
	4	1.050	1.030	1.000	1.320

Heavy Vehicle Percentages - (untitled) (for whole period)

		To			
From		1	2	3	4
	1	0.000	4.000	0.000	24.000
	2	9.000	20.000	0.000	3.000
	3	0.000	0.000	0.000	0.000
	4	5.000	3.000	0.000	32.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
A39	0.27	2.60	0.40	A	456.64	684.96	26.91	2.36	0.30	26.91	2.36
A39 Bristol Road south	0.72	5.31	2.62	A	1494.77	2242.16	148.97	3.99	1.66	148.98	3.99
Industrial Estate	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A39 Bristol Road north	0.65	6.45	1.88	A	881.09	1321.63	110.96	5.04	1.23	110.97	5.04

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	374.65	93.66	373.77	396.59	604.25	0.00	2233.94	1753.80	0.168	0.00	0.22	2.111	A
A39 Bristol Road south	1226.37	306.59	1222.50	844.31	133.71	0.00	2540.25	2229.17	0.483	0.00	0.97	2.844	A
Industrial Estate	0.00	0.00	0.00	0.00	1356.21	0.00	929.11	261.38	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	722.88	180.72	719.84	1075.21	281.00	0.00	1704.43	1488.25	0.424	0.00	0.76	3.797	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	447.37	111.84	447.11	474.58	723.46	0.00	2159.84	1753.80	0.207	0.22	0.28	2.293	A
A39 Bristol Road south	1464.41	366.10	1462.56	1010.60	159.97	0.00	2523.72	2229.17	0.580	0.97	1.43	3.536	A
Industrial Estate	0.00	0.00	0.00	0.00	1622.53	0.00	805.22	261.38	0.000	0.00	0.00	0.000	A

A39 Bristol Road north	863.19	215.80	861.86	1286.35	336.18	0.00	1676.52	1488.25	0.515	0.76	1.09	4.594	A
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Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	547.91	136.98	547.47	580.47	884.85	0.00	2059.52	1753.80	0.266	0.28	0.39	2.598	A
A39 Bristol Road south	1793.53	448.38	1788.87	1236.49	195.84	0.00	2501.13	2229.17	0.717	1.43	2.59	5.243	A
Industrial Estate	0.00	0.00	0.00	0.00	1984.71	0.00	636.74	261.38	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1057.19	264.30	1054.14	1573.53	411.19	0.00	1638.59	1488.25	0.645	1.09	1.86	6.382	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	547.91	136.98	547.91	582.00	887.35	0.00	2057.97	1753.80	0.266	0.39	0.40	2.601	A
A39 Bristol Road south	1793.53	448.38	1793.43	1239.19	196.07	0.00	2500.99	2229.17	0.717	2.59	2.62	5.310	A
Industrial Estate	0.00	0.00	0.00	0.00	1989.49	0.00	634.52	261.38	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	1057.19	264.30	1057.11	1577.26	412.23	0.00	1638.06	1488.25	0.645	1.86	1.88	6.451	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	447.37	111.84	447.80	476.79	727.11	0.00	2157.57	1753.80	0.207	0.40	0.29	2.298	A
A39 Bristol Road south	1464.41	366.10	1469.06	1014.59	160.32	0.00	2523.49	2229.17	0.580	2.62	1.46	3.579	A
Industrial Estate	0.00	0.00	0.00	0.00	1629.38	0.00	802.04	261.38	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	863.19	215.80	866.23	1291.71	337.67	0.00	1675.77	1488.25	0.515	1.88	1.12	4.647	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
A39	374.65	93.66	374.91	398.64	607.94	0.00	2231.64	1753.80	0.168	0.29	0.22	2.115	A
A39 Bristol Road south	1226.37	306.59	1228.28	848.66	134.19	0.00	2539.95	2229.17	0.483	1.46	0.98	2.871	A
Industrial Estate	0.00	0.00	0.00	0.00	1362.47	0.00	926.20	261.38	0.000	0.00	0.00	0.000	A
A39 Bristol Road north	722.88	180.72	724.26	1080.14	282.33	0.00	1703.76	1488.25	0.424	1.12	0.77	3.834	A

Queueing Delay Results for each time segment

Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	3.24	0.22	2.111	A	A
A39 Bristol Road south	14.18	0.95	2.844	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	11.11	0.74	3.797	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	4.22	0.28	2.293	A	A
A39 Bristol Road south	20.93	1.40	3.536	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	15.98	1.07	4.594	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	5.83	0.39	2.598	A	A

A39 Bristol Road south	37.16	2.48	5.243	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	26.66	1.78	6.382	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	5.92	0.39	2.601	A	A
A39 Bristol Road south	39.15	2.61	5.310	A	A
Industrial Estate	0.00	0.00	0.000	A	A
A39 Bristol Road north	28.03	1.87	6.451	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
A39	4.35	0.29	2.298	A	A
A39 Bristol Road south	22.53	1.50	3.579	A	A
Industrial Estate	0.00	0.00	0.000	A	A