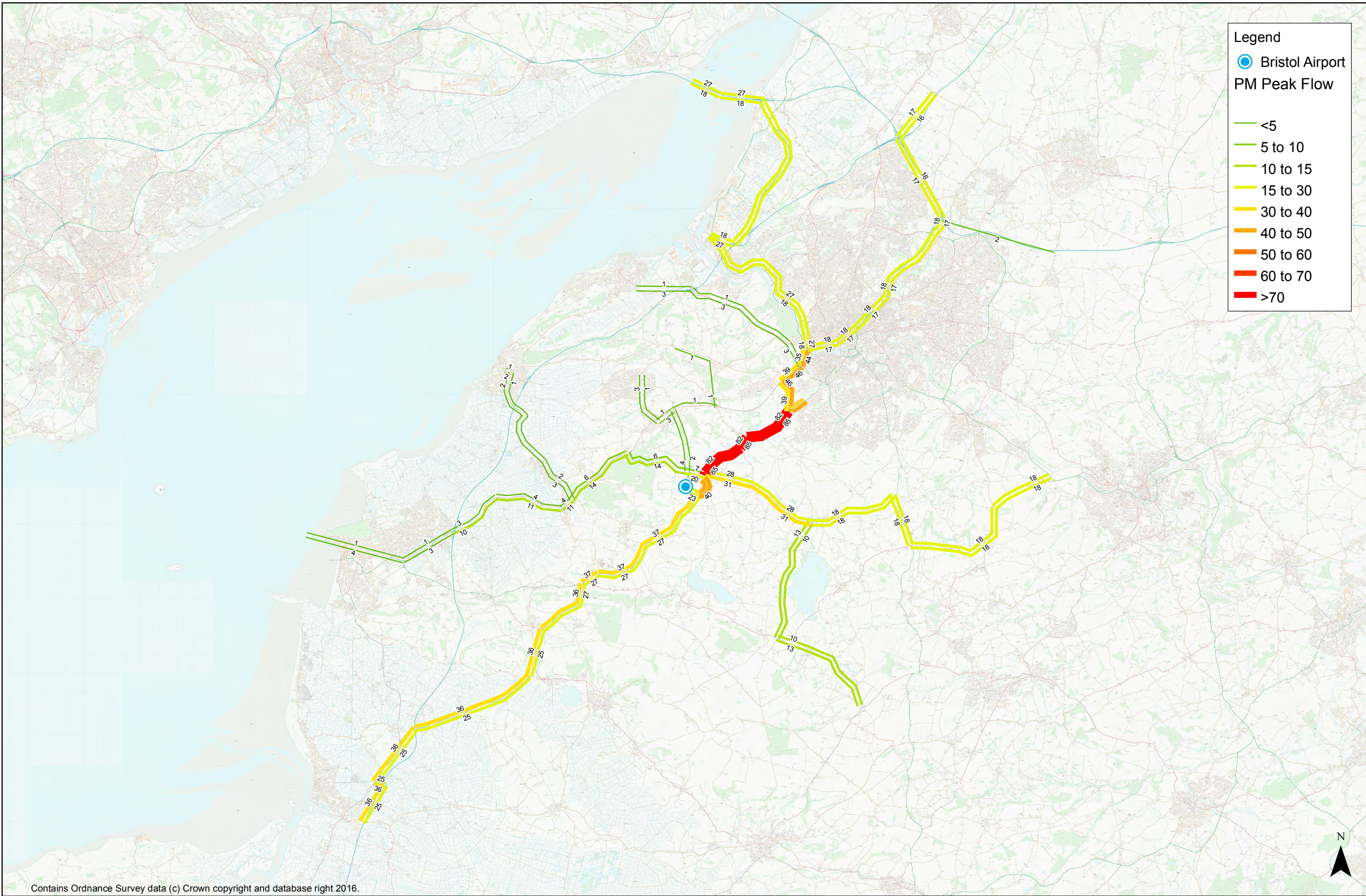
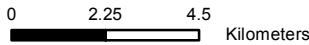




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**Development of Bristol Airport to
Accommodate 12 mppa**



1:181,244 @ A3
20/05/19
Drawn: DC
Checked: DT

**Bristol Airport Assignment Tool
12 MPPA PM Peak Flow**

Rev A

Appendix C Junction Capacity Assessment Results

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.0.2.5947 © Copyright TRL Limited, 2017	
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Filename: J1_J2_North&South Airport Access Roundabouts - Existing.j9

Path: \\pba.int\BRI\Projects\43321 Bristol Airport\Technical\Transport\Junction Assessments\ARCADY

Report generation date: 01/04/2019 11:58:03

-
- »2018 Baseline, AM
 - »2018 Baseline, IP
 - »2018 Baseline, PM
 - »2026 Reference Case, AM
 - »2026 Reference Case, IP
 - »2026 Reference Case, PM
 - »2026 Test Case, AM
 - »2026 Test Case, IP
 - »2026 Test Case, PM

Summary of junction performance

	AM				IP				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2018 Baseline												
Junction 1 - Arm A	2.2	6.91	0.68	A	2.4	7.73	0.70	A	9.6	24.35	0.92	C
Junction 1 - Arm B	0.0	4.48	0.02	A	0.0	4.88	0.02	A	0.0	6.61	0.04	A
Junction 1 - Arm C	1.2	4.41	0.55	A	0.6	3.29	0.37	A	1.1	4.51	0.52	A
Junction 1 - Arm D	0.2	2.65	0.18	A	0.6	2.80	0.36	A	0.6	3.29	0.39	A
Junction 2 - Arm A	0.5	2.57	0.34	A	0.6	2.69	0.36	A	0.8	3.05	0.45	A
Junction 2 - Arm B	0.8	3.05	0.45	A	0.3	2.24	0.23	A	0.5	2.52	0.34	A
Junction 2 - Arm C	0.1	4.28	0.09	A	0.2	3.76	0.19	A	0.2	4.23	0.19	A
2026 Reference Case												
Junction 1 - Arm A	4.6	12.44	0.82	B	15.5	40.05	0.96	E	127.2	247.94	1.14	F
Junction 1 - Arm B	0.0	5.52	0.02	A	0.0	7.59	0.04	A	0.1	8.03	0.05	A
Junction 1 - Arm C	2.1	6.39	0.67	A	1.1	4.79	0.52	A	1.9	6.41	0.65	A
Junction 1 - Arm D	0.4	3.10	0.26	A	1.3	4.34	0.57	A	1.2	4.68	0.55	A
Junction 2 - Arm A	0.7	2.74	0.40	A	0.9	3.15	0.46	A	0.9	3.22	0.48	A
Junction 2 - Arm B	1.2	3.59	0.53	A	0.4	2.43	0.30	A	0.7	2.75	0.41	A
Junction 2 - Arm C	0.1	4.97	0.12	A	0.4	4.57	0.28	A	0.4	5.11	0.26	A
2026 Test Case												
Junction 1 - Arm A	7.6	19.61	0.89	C	107.1	207.80	1.13	F	196.3	428.28	1.22	F
Junction 1 - Arm B	0.0	6.20	0.03	A	0.0	8.69	0.04	A	0.1	8.15	0.05	A
Junction 1 - Arm C	2.5	7.68	0.72	A	1.5	5.88	0.60	A	2.2	7.30	0.69	A
Junction 1 - Arm D	0.4	3.32	0.31	A	2.6	6.81	0.73	A	1.7	5.72	0.63	A
Junction 2 - Arm A	0.7	2.81	0.41	A	0.9	3.23	0.47	A	0.9	3.20	0.47	A
Junction 2 - Arm B	1.2	3.73	0.55	A	0.5	2.55	0.33	A	0.7	2.85	0.43	A
Junction 2 - Arm C	0.2	5.15	0.14	A	0.5	5.06	0.33	A	0.4	5.44	0.29	A

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

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

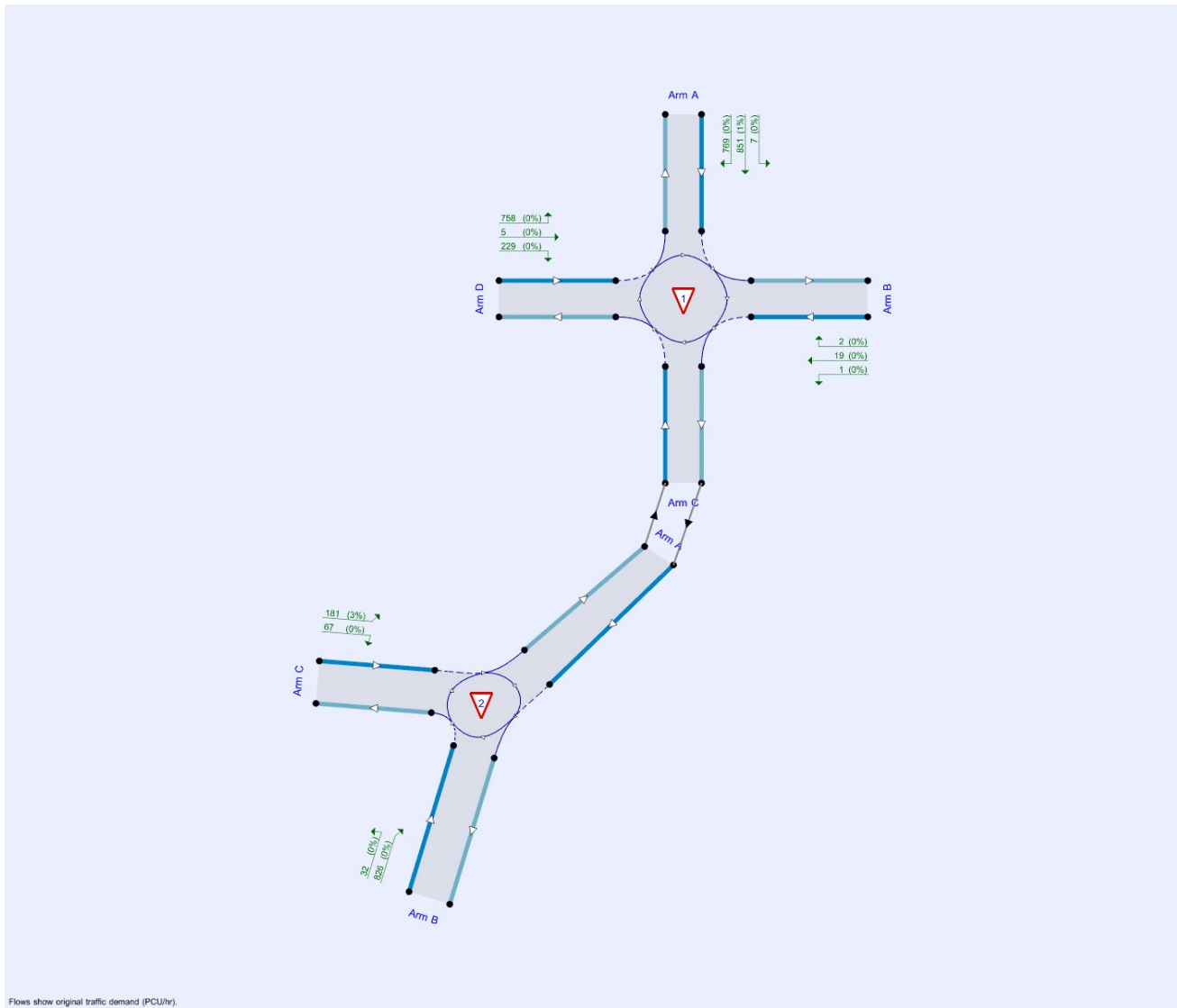
File summary

File Description

Title	North & South Airport Access Roundabouts
Location	Bristol
Site number	1/2
Date	20/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	43321
Enumerator	PBA\proose
Description	

Units

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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018 Baseline	IP	ONE HOUR	12:45	14:15	15	✓
D3	2018 Baseline	PM	ONE HOUR	16:45	18:15	15	✓
D4	2026 Reference Case	AM	ONE HOUR	07:45	09:15	15	✓
D5	2026 Reference Case	IP	ONE HOUR	12:45	14:15	15	✓
D6	2026 Reference Case	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 Test Case	AM	ONE HOUR	07:45	09:15	15	✓
D8	2026 Test Case	IP	ONE HOUR	12:45	14:15	15	✓
D9	2026 Test Case	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	5.34	A
2	untitled	Standard Roundabout	A, B, C	2.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description
1	A	A38 North	
	B	Easirent Car Hire Access	
	C	A38 South	
	D	Bristol Airport Access	
2	A	A38 North	
	B	A38 South	
	C	Bristol Airport Access	

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	A	6.20	6.50	13.0	5.7	48.0	37.0	
	B	3.90	5.60	13.3	16.6	48.0	24.0	
	C	4.08	7.70	92.6	20.0	48.0	28.0	
	D	7.40	9.50	11.3	20.0	48.0	47.0	
2	A	4.30	7.10	87.9	40.1	40.0	19.0	
	B	5.00	7.90	36.3	20.0	40.0	18.0	
	C	4.50	5.30	4.0	12.0	40.0	24.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	A	0.569	1675
	B	0.594	1564
	C	0.720	2226
	D	0.750	2485
2	A	0.761	2203
	B	0.776	2307
	C	0.597	1494

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

Arm Capacity Adjustments

Junction	Arm	Type	Reason	Percentage capacity adjustment (%)
1	A	Percentage		105.00

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1035	100.000
	B		ONE HOUR	✓	12	100.000
	C	✓				
	D		ONE HOUR	✓	283	100.000
2	A	✓				
	B		ONE HOUR	✓	902	100.000
	C		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	201	4	558	272
	B	2	0	4	6
	C	766	1	0	151
	D	166	5	111	1

Demand (PCU/hr)

Junction 2

	To			
		A	B	C
From	A	0	553	118
	B	845	1	56
	C	69	4	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To				
		A	B	C	D
From	A	1	0	5	4
	B	0	0	0	0
	C	3	0	0	1
	D	1	0	2	0

Heavy Vehicle Percentages

Junction 2

	To			
From		A	B	C
	A	0	5	0
	B	3	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	0.68	6.91	2.2	A	950	1425
	B	0.02	4.48	0.0	A	11	17
	C	0.55	4.41	1.2	A	838	1258
	D	0.18	2.65	0.2	A	260	390
2	A	0.34	2.57	0.5	A	617	926
	B	0.45	3.05	0.8	A	828	1242
	C	0.09	4.28	0.1	A	67	100

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	779	195	89	1705	0.457	776	848	0.0	0.9	4.010	A
	B	9	2	857	1055	0.009	9	7	0.0	0.0	3.440	A
	C	686	172	361	1966	0.349	684	505	0.0	0.5	2.877	A
	D	213	53	724	1942	0.110	213	322	0.0	0.1	2.109	A
2	A	505	126	4	2200	0.229	503	686	0.0	0.3	2.208	A
	B	679	170	89	2238	0.303	677	419	0.0	0.4	2.369	A
	C	55	14	635	1114	0.049	55	131	0.0	0.1	3.462	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	930	233	106	1695	0.549	929	1016	0.9	1.2	4.873	A
	B	11	3	1026	955	0.011	11	9	0.0	0.0	3.813	A
	C	821	205	433	1915	0.429	820	604	0.5	0.8	3.372	A
	D	254	64	867	1834	0.139	254	385	0.1	0.2	2.309	A
2	A	604	151	4	2199	0.275	604	821	0.3	0.4	2.348	A
	B	811	203	106	2225	0.365	810	502	0.4	0.6	2.615	A
	C	66	16	760	1040	0.063	66	156	0.1	0.1	3.764	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1140	285	130	1681	0.678	1136	1243	1.2	2.1	6.821	A
	B	13	3	1255	819	0.016	13	11	0.0	0.0	4.468	A
	C	1005	251	529	1846	0.545	1003	739	0.8	1.2	4.380	A
	D	312	78	1061	1689	0.184	311	471	0.2	0.2	2.648	A
2	A	739	185	5	2199	0.336	738	1005	0.4	0.5	2.566	A
	B	993	248	130	2206	0.450	992	614	0.6	0.8	3.045	A
	C	80	20	931	938	0.086	80	191	0.1	0.1	4.277	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1140	285	130	1681	0.678	1139	1246	2.1	2.2	6.908	A
	B	13	3	1258	817	0.016	13	11	0.0	0.0	4.480	A
	C	1006	252	531	1844	0.546	1006	741	1.2	1.2	4.409	A
	D	312	78	1064	1687	0.185	312	473	0.2	0.2	2.653	A
2	A	741	185	6	2199	0.337	741	1006	0.5	0.5	2.570	A
	B	993	248	130	2206	0.450	993	616	0.8	0.8	3.050	A
	C	80	20	931	937	0.086	80	192	0.1	0.1	4.279	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	930	233	106	1695	0.549	934	1021	2.2	1.3	4.938	A
	B	11	3	1031	952	0.011	11	9	0.0	0.0	3.828	A
	C	823	206	435	1913	0.430	824	607	1.2	0.8	3.398	A
	D	254	64	872	1831	0.139	255	387	0.2	0.2	2.316	A
2	A	607	152	5	2199	0.276	608	823	0.5	0.4	2.356	A
	B	811	203	107	2224	0.365	812	505	0.8	0.6	2.621	A
	C	66	16	761	1039	0.063	66	157	0.1	0.1	3.768	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	779	195	89	1705	0.457	781	854	1.3	0.9	4.054	A
	B	9	2	862	1052	0.009	9	8	0.0	0.0	3.451	A
	C	689	172	364	1965	0.351	690	508	0.8	0.6	2.902	A
	D	213	53	729	1938	0.110	213	324	0.2	0.1	2.117	A
2	A	508	127	4	2200	0.231	508	689	0.4	0.3	2.216	A
	B	679	170	89	2238	0.303	680	422	0.6	0.4	2.377	A
	C	55	14	637	1113	0.049	55	132	0.1	0.1	3.466	A

2018 Baseline, IP

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	5.13	A
2	untitled	Standard Roundabout	A, B, C	2.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018 Baseline	IP	ONE HOUR	12:45	14:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1022	100.000
	B		ONE HOUR	✓	14	100.000
	C	✓				
	D		ONE HOUR	✓	670	100.000
2	A	✓				
	B		ONE HOUR	✓	465	100.000
	C		ONE HOUR	✓	210	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	136	10	477	399
	B	4	0	0	10
	C	430	4	0	184
	D	438	3	227	2

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	2	582	128
	B	440	0	25
	C	156	54	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	0
	D	0	0	0	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	4	1
	B	5	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	0.70	7.73	2.4	A	938	1407
	B	0.02	4.88	0.0	A	13	19
	C	0.37	3.29	0.6	A	549	823
	D	0.36	2.80	0.6	A	615	922
2	A	0.36	2.69	0.6	A	646	968
	B	0.23	2.24	0.3	A	427	640
	C	0.19	3.76	0.2	A	193	289

Main Results for each time segment

12:45 - 13:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	769	192	177	1653	0.466	766	745	0.0	0.9	4.153	A
	B	11	3	930	1011	0.010	10	13	0.0	0.0	3.595	A
	C	449	112	413	1929	0.233	448	528	0.0	0.3	2.511	A
	D	504	126	419	2171	0.232	503	441	0.0	0.3	2.158	A
2	A	528	132	41	2172	0.243	527	449	0.0	0.3	2.261	A
	B	350	88	96	2232	0.157	349	471	0.0	0.2	2.000	A
	C	158	40	332	1295	0.122	158	113	0.0	0.1	3.209	A

13:00 - 13:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	919	230	212	1632	0.563	917	893	0.9	1.3	5.161	A
	B	13	3	1114	902	0.014	13	15	0.0	0.0	4.045	A
	C	537	134	494	1871	0.287	537	632	0.3	0.4	2.792	A
	D	602	151	503	2108	0.286	602	529	0.3	0.4	2.390	A
2	A	632	158	49	2166	0.292	632	537	0.3	0.4	2.427	A
	B	418	105	115	2218	0.189	418	565	0.2	0.2	2.094	A
	C	189	47	397	1256	0.150	189	136	0.1	0.2	3.421	A

13:15 - 13:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1125	281	259	1603	0.702	1121	1093	1.3	2.4	7.600	A
	B	15	4	1362	755	0.020	15	19	0.0	0.0	4.866	A
	C	658	164	604	1791	0.367	657	773	0.4	0.6	3.281	A
	D	738	184	615	2024	0.365	737	647	0.4	0.6	2.796	A
2	A	773	193	59	2158	0.358	772	658	0.4	0.6	2.686	A
	B	512	128	141	2198	0.233	512	691	0.2	0.3	2.236	A
	C	231	58	486	1203	0.192	231	166	0.2	0.2	3.757	A

13:30 - 13:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1125	281	260	1603	0.702	1125	1094	2.4	2.4	7.728	A
	B	15	4	1366	753	0.020	15	19	0.0	0.0	4.883	A
	C	658	165	607	1790	0.368	658	775	0.6	0.6	3.290	A
	D	738	184	616	2023	0.365	738	648	0.6	0.6	2.800	A
2	A	775	194	59	2157	0.359	775	658	0.6	0.6	2.693	A
	B	512	128	142	2197	0.233	512	693	0.3	0.3	2.236	A
	C	231	58	487	1203	0.192	231	167	0.2	0.2	3.758	A

13:45 - 14:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	919	230	212	1632	0.563	923	895	2.4	1.3	5.247	A
	B	13	3	1120	899	0.014	13	15	0.0	0.0	4.063	A
	C	538	135	498	1868	0.288	539	635	0.6	0.4	2.803	A
	D	602	151	505	2107	0.286	603	532	0.6	0.4	2.396	A
2	A	635	159	49	2166	0.293	636	538	0.6	0.4	2.436	A
	B	418	105	116	2217	0.189	418	568	0.3	0.2	2.097	A
	C	189	47	398	1256	0.150	189	137	0.2	0.2	3.426	A

14:00 - 14:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	769	192	178	1652	0.466	771	749	1.3	0.9	4.204	A
	B	11	3	936	1008	0.010	11	13	0.0	0.0	3.608	A
	C	450	113	416	1927	0.234	451	531	0.4	0.3	2.524	A
	D	504	126	422	2169	0.233	505	444	0.4	0.3	2.164	A
2	A	531	133	41	2172	0.244	531	450	0.4	0.3	2.271	A
	B	350	88	97	2232	0.157	350	475	0.2	0.2	2.005	A
	C	158	40	333	1295	0.122	158	114	0.2	0.1	3.214	A

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	13.83	B
2	untitled	Standard Roundabout	A, B, C	2.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2018 Baseline	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1371	100.000
	B		ONE HOUR	✓	20	100.000
	C	✓				
	D		ONE HOUR	✓	644	100.000
2	A	✓				
	B		ONE HOUR	✓	692	100.000
	C		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	154	6	716	495
	B	2	0	1	17
	C	663	2	0	133
	D	476	4	163	1

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	2	786	88
	B	672	0	20
	C	130	52	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	0	0	1	0
	B	0	0	0	0
	C	2	0	0	1
	D	0	0	0	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	1	0
	B	3	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	0.92	24.35	9.6	C	1258	1887
	B	0.04	6.61	0.0	A	18	28
	C	0.52	4.51	1.1	A	738	1106
	D	0.39	3.29	0.6	A	591	886
2	A	0.45	3.05	0.8	A	807	1210
	B	0.34	2.52	0.5	A	635	952
	C	0.19	4.23	0.2	A	167	251

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1032	258	128	1682	0.614	1026	974	0.0	1.6	5.464	A
	B	15	4	1145	884	0.017	15	9	0.0	0.0	4.141	A
	C	604	151	501	1866	0.324	602	659	0.0	0.5	2.896	A
	D	485	121	618	2021	0.240	484	484	0.0	0.3	2.338	A
2	A	659	165	39	2173	0.303	657	604	0.0	0.4	2.394	A
	B	521	130	68	2255	0.231	520	629	0.0	0.3	2.134	A
	C	137	34	506	1191	0.115	137	81	0.0	0.1	3.411	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1233	308	153	1667	0.739	1228	1167	1.6	2.8	8.146	A
	B	18	4	1370	750	0.024	18	11	0.0	0.0	4.914	A
	C	722	181	599	1795	0.402	722	789	0.5	0.7	3.413	A
	D	579	145	741	1929	0.300	578	580	0.3	0.4	2.665	A
2	A	789	197	47	2167	0.364	788	722	0.4	0.6	2.632	A
	B	622	156	81	2244	0.277	622	754	0.3	0.4	2.283	A
	C	164	41	606	1132	0.145	163	97	0.1	0.2	3.716	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1509	377	187	1647	0.917	1486	1426	2.8	8.7	20.052	C
	B	22	6	1660	578	0.038	22	13	0.0	0.0	6.470	A
	C	884	221	725	1704	0.519	883	956	0.7	1.1	4.453	A
	D	709	177	905	1806	0.393	708	703	0.4	0.6	3.274	A
2	A	956	239	57	2159	0.443	955	884	0.6	0.8	3.016	A
	B	762	190	98	2231	0.342	761	914	0.4	0.5	2.521	A
	C	200	50	742	1051	0.191	200	118	0.2	0.2	4.231	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1509	377	187	1647	0.917	1506	1431	8.7	9.6	24.352	C
	B	22	6	1680	566	0.039	22	13	0.0	0.0	6.613	A
	C	885	221	735	1697	0.522	885	967	1.1	1.1	4.512	A
	D	709	177	909	1803	0.393	709	711	0.6	0.6	3.289	A
2	A	967	242	57	2159	0.448	967	885	0.8	0.8	3.046	A
	B	762	190	99	2230	0.342	762	925	0.5	0.5	2.523	A
	C	200	50	742	1050	0.191	200	119	0.2	0.2	4.234	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1233	308	153	1667	0.739	1259	1174	9.6	3.0	9.413	A
	B	18	4	1401	732	0.025	18	11	0.0	0.0	5.046	A
	C	724	181	614	1784	0.405	725	805	1.1	0.7	3.467	A
	D	579	145	748	1924	0.301	580	592	0.6	0.4	2.680	A
2	A	805	201	47	2167	0.372	806	724	0.8	0.6	2.672	A
	B	622	156	83	2243	0.277	623	770	0.5	0.4	2.287	A
	C	164	41	606	1131	0.145	164	99	0.2	0.2	3.723	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1032	258	128	1682	0.614	1037	981	3.0	1.6	5.660	A
	B	15	4	1157	877	0.017	15	9	0.0	0.0	4.176	A
	C	606	151	506	1862	0.325	607	665	0.7	0.5	2.921	A
	D	485	121	624	2017	0.240	485	489	0.4	0.3	2.349	A
2	A	665	166	39	2173	0.306	666	606	0.6	0.4	2.412	A
	B	521	130	68	2254	0.231	521	637	0.4	0.3	2.138	A
	C	137	34	508	1190	0.115	137	82	0.2	0.1	3.418	A

2026 Reference Case, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	8.70	A
2	untitled	Standard Roundabout	A, B, C	3.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Reference Case	AM	ONE HOUR	07:45	09:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1239	100.000
	B		ONE HOUR	✓	14	100.000
	C	✓				
	D		ONE HOUR	✓	379	100.000
2	A	✓				
	B		ONE HOUR	✓	1054	100.000
	C		ONE HOUR	✓	91	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	201	5	649	384
	B	2	0	5	7
	C	881	1	0	193
	D	235	6	138	0

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	0	644	147
	B	985	1	68
	C	85	6	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	1	0	5	4
	B	0	0	0	0
	C	3	0	0	1
	D	1	0	2	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	0	5
	B	2	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	0.82	12.44	4.6	B	1137	1705
	B	0.02	5.52	0.0	A	13	19
	C	0.67	6.39	2.1	A	981	1472
	D	0.26	3.10	0.4	A	348	522
2	A	0.40	2.74	0.7	A	726	1089
	B	0.53	3.59	1.2	A	967	1451
	C	0.12	4.97	0.1	A	84	125

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	933	233	109	1693	0.551	928	984	0.0	1.3	4.858	A
	B	11	3	1028	954	0.011	10	9	0.0	0.0	3.816	A
	C	803	201	445	1906	0.421	800	593	0.0	0.7	3.332	A
	D	285	71	809	1879	0.152	285	436	0.0	0.2	2.287	A
2	A	593	148	5	2199	0.270	592	803	0.0	0.4	2.258	A
	B	794	198	110	2222	0.357	791	487	0.0	0.6	2.556	A
	C	69	17	740	1052	0.065	68	161	0.0	0.1	3.763	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1114	278	130	1681	0.663	1111	1180	1.3	2.0	6.538	A
	B	13	3	1230	833	0.015	13	11	0.0	0.0	4.386	A
	C	961	240	533	1843	0.521	960	710	0.7	1.1	4.175	A
	D	341	85	969	1758	0.194	340	523	0.2	0.2	2.573	A
2	A	710	178	6	2198	0.323	710	961	0.4	0.5	2.441	A
	B	948	237	132	2205	0.430	947	584	0.6	0.8	2.914	A
	C	82	20	886	965	0.085	82	193	0.1	0.1	4.191	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1364	341	159	1663	0.820	1354	1442	2.0	4.4	11.769	B
	B	15	4	1501	673	0.023	15	13	0.0	0.0	5.476	A
	C	1176	294	649	1759	0.669	1173	867	1.1	2.0	6.263	A
	D	417	104	1184	1597	0.261	417	638	0.2	0.4	3.092	A
2	A	867	217	8	2197	0.395	866	1176	0.5	0.7	2.727	A
	B	1160	290	161	2182	0.532	1159	713	0.8	1.1	3.579	A
	C	100	25	1084	846	0.118	100	236	0.1	0.1	4.958	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1364	341	160	1663	0.820	1364	1447	4.4	4.6	12.436	B
	B	15	4	1510	667	0.023	15	13	0.0	0.0	5.523	A
	C	1178	295	654	1756	0.671	1178	872	2.0	2.1	6.389	A
	D	417	104	1190	1592	0.262	417	642	0.4	0.4	3.103	A
2	A	872	218	8	2197	0.397	872	1178	0.7	0.7	2.740	A
	B	1160	290	162	2181	0.532	1160	717	1.1	1.2	3.591	A
	C	100	25	1086	845	0.119	100	237	0.1	0.1	4.966	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1114	278	131	1680	0.663	1124	1188	4.6	2.1	6.841	A
	B	13	3	1243	825	0.015	13	11	0.0	0.0	4.430	A
	C	963	241	539	1839	0.524	967	717	2.1	1.1	4.257	A
	D	341	85	978	1752	0.195	341	528	0.4	0.2	2.588	A
2	A	717	179	6	2198	0.326	718	963	0.7	0.5	2.455	A
	B	948	237	133	2204	0.430	949	591	1.2	0.8	2.928	A
	C	82	20	888	963	0.085	82	195	0.1	0.1	4.199	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	933	233	109	1693	0.551	936	993	2.1	1.3	4.966	A
	B	11	3	1036	949	0.011	11	9	0.0	0.0	3.836	A
	C	806	202	449	1903	0.424	808	598	1.1	0.8	3.376	A
	D	285	71	816	1873	0.152	286	440	0.2	0.2	2.300	A
2	A	598	150	5	2199	0.272	598	806	0.5	0.4	2.271	A
	B	794	198	111	2221	0.357	794	493	0.8	0.6	2.573	A
	C	69	17	743	1050	0.065	69	162	0.1	0.1	3.773	A

2026 Reference Case, IP

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	19.77	C
2	untitled	Standard Roundabout	A, B, C	3.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Reference Case	IP	ONE HOUR	12:45	14:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1345	100.000
	B		ONE HOUR	✓	17	100.000
	C	✓				
	D		ONE HOUR	✓	1010	100.000
2	A	✓				
	B		ONE HOUR	✓	589	100.000
	C		ONE HOUR	✓	284	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	136	12	580	617
	B	5	0	0	12
	C	530	5	0	256
	D	692	3	315	0

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	2	728	174
	B	553	0	36
	C	212	72	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	0
	D	0	0	0	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	1	4
	B	2	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	0.96	40.05	15.5	E	1234	1851
	B	0.04	7.59	0.0	A	16	23
	C	0.52	4.79	1.1	A	704	1055
	D	0.57	4.34	1.3	A	927	1390
2	A	0.46	3.15	0.9	A	821	1231
	B	0.30	2.43	0.4	A	540	811
	C	0.28	4.57	0.4	A	261	391

Main Results for each time segment

12:45 - 13:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1013	253	242	1614	0.628	1006	1009	0.0	1.7	6.007	A
	B	13	3	1233	832	0.015	13	15	0.0	0.0	4.396	A
	C	576	144	576	1812	0.318	574	670	0.0	0.5	3.000	A
	D	760	190	494	2115	0.360	758	656	0.0	0.6	2.648	A
2	A	670	168	54	2162	0.310	668	576	0.0	0.5	2.445	A
	B	443	111	130	2206	0.201	442	592	0.0	0.3	2.078	A
	C	214	53	417	1245	0.172	213	156	0.0	0.2	3.614	A

13:00 - 13:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1209	302	290	1585	0.763	1203	1209	1.7	3.2	9.516	A
	B	15	4	1475	688	0.022	15	18	0.0	0.0	5.353	A
	C	689	172	689	1731	0.398	688	802	0.5	0.7	3.566	A
	D	908	227	592	2041	0.445	907	785	0.6	0.8	3.170	A
2	A	802	200	65	2154	0.372	801	689	0.5	0.6	2.702	A
	B	529	132	156	2186	0.242	529	710	0.3	0.3	2.213	A
	C	255	64	499	1196	0.214	255	187	0.2	0.3	3.967	A

13:15 - 13:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1481	370	355	1546	0.958	1442	1476	3.2	12.8	28.440	D
	B	19	5	1776	509	0.037	19	21	0.0	0.0	7.335	A
	C	844	211	826	1632	0.517	842	968	0.7	1.1	4.699	A
	D	1112	278	721	1944	0.572	1110	947	0.8	1.3	4.304	A
2	A	968	242	79	2142	0.452	967	844	0.6	0.8	3.107	A
	B	649	162	188	2161	0.300	648	858	0.3	0.4	2.424	A
	C	313	78	611	1129	0.277	312	226	0.3	0.4	4.569	A

13:30 - 13:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1481	370	355	1546	0.958	1470	1482	12.8	15.5	40.051	E
	B	19	5	1804	493	0.038	19	22	0.0	0.0	7.592	A
	C	844	211	842	1621	0.521	844	981	1.1	1.1	4.790	A
	D	1112	278	725	1941	0.573	1112	961	1.3	1.3	4.341	A
2	A	981	245	79	2142	0.458	981	844	0.8	0.9	3.146	A
	B	649	162	191	2159	0.300	648	869	0.4	0.4	2.427	A
	C	313	78	611	1129	0.277	313	228	0.4	0.4	4.574	A

13:45 - 14:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1209	302	291	1585	0.763	1257	1219	15.5	3.5	12.810	B
	B	15	4	1530	655	0.023	15	18	0.0	0.0	5.625	A
	C	690	173	719	1709	0.404	692	826	1.1	0.7	3.665	A
	D	908	227	600	2035	0.446	910	812	1.3	0.8	3.204	A
2	A	826	207	65	2153	0.384	827	690	0.9	0.6	2.759	A
	B	529	132	161	2182	0.243	530	731	0.4	0.3	2.220	A
	C	255	64	499	1195	0.214	256	192	0.4	0.3	3.974	A

14:00 - 14:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1013	253	243	1613	0.628	1019	1016	3.5	1.8	6.287	A
	B	13	3	1248	823	0.016	13	15	0.0	0.0	4.443	A
	C	578	144	584	1806	0.320	579	677	0.7	0.5	3.030	A
	D	760	190	498	2111	0.360	761	664	0.8	0.6	2.669	A
2	A	677	169	54	2161	0.313	678	578	0.6	0.5	2.464	A
	B	443	111	132	2205	0.201	444	600	0.3	0.3	2.082	A
	C	214	53	418	1244	0.172	214	158	0.3	0.2	3.624	A

2026 Reference Case, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	121.25	F
2	untitled	Standard Roundabout	A, B, C	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Reference Case	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1679	100.000
	B		ONE HOUR	✓	22	100.000
	C	✓				
	D		ONE HOUR	✓	857	100.000
2	A	✓				
	B		ONE HOUR	✓	822	100.000
	C		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	176	7	834	662
	B	2	0	1	19
	C	774	2	0	180
	D	645	5	207	0

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	2	918	116
	B	795	0	27
	C	164	63	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	0	0	1	0
	B	0	0	0	0
	C	2	0	0	1
	D	0	0	0	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	1.14	247.94	127.2	F	1541	2311
	B	0.05	8.03	0.1	A	20	30
	C	0.65	6.41	1.9	A	881	1322
	D	0.55	4.68	1.2	A	786	1180
2	A	0.48	3.22	0.9	A	955	1432
	B	0.41	2.75	0.7	A	754	1131
	C	0.26	5.11	0.4	A	208	312

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1264	316	161	1662	0.760	1252	1199	0.0	3.1	8.573	A
	B	17	4	1402	731	0.023	16	10	0.0	0.0	5.036	A
	C	721	180	640	1765	0.409	719	778	0.0	0.7	3.493	A
	D	645	161	716	1948	0.331	643	643	0.0	0.5	2.756	A
2	A	778	194	47	2167	0.359	776	721	0.0	0.6	2.586	A
	B	619	155	88	2238	0.276	617	735	0.0	0.4	2.218	A
	C	171	43	599	1136	0.150	170	107	0.0	0.2	3.805	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1509	377	192	1644	0.918	1486	1435	3.1	8.8	20.498	C
	B	20	5	1666	574	0.034	20	12	0.0	0.0	6.488	A
	C	863	216	761	1679	0.514	862	925	0.7	1.1	4.477	A
	D	770	193	857	1842	0.418	770	765	0.5	0.7	3.352	A
2	A	925	231	57	2160	0.428	924	863	0.6	0.7	2.916	A
	B	739	185	105	2225	0.332	739	876	0.4	0.5	2.421	A
	C	204	51	716	1066	0.191	204	128	0.2	0.2	4.264	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1849	462	235	1618	1.143	1607	1732	8.8	69.1	96.483	F
	B	24	6	1828	478	0.051	24	14	0.0	0.1	7.927	A
	C	1057	264	825	1632	0.647	1054	1027	1.1	1.8	6.300	A
	D	944	236	1026	1715	0.550	942	853	0.7	1.2	4.639	A
2	A	1027	257	69	2150	0.478	1026	1057	0.7	0.9	3.205	A
	B	905	226	117	2216	0.408	904	979	0.5	0.7	2.742	A
	C	250	62	877	970	0.258	249	145	0.2	0.4	5.099	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1849	462	236	1618	1.143	1616	1738	69.1	127.2	224.206	F
	B	24	6	1838	473	0.051	24	14	0.1	0.1	8.027	A
	C	1058	264	830	1629	0.649	1058	1032	1.8	1.9	6.413	A
	D	944	236	1030	1712	0.551	944	857	1.2	1.2	4.682	A
2	A	1032	258	69	2150	0.480	1032	1058	0.9	0.9	3.222	A
	B	905	226	118	2216	0.408	905	984	0.7	0.7	2.745	A
	C	250	62	877	970	0.258	250	145	0.4	0.4	5.108	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1509	377	193	1643	0.919	1630	1457	127.2	97.0	247.941	F
	B	20	5	1810	489	0.040	20	13	0.1	0.0	7.676	A
	C	865	216	833	1627	0.532	868	997	1.9	1.2	4.844	A
	D	770	193	877	1827	0.422	772	823	1.2	0.7	3.418	A
2	A	997	249	57	2160	0.462	997	865	0.9	0.9	3.103	A
	B	739	185	114	2219	0.333	740	941	0.7	0.5	2.434	A
	C	204	51	717	1065	0.192	205	136	0.4	0.2	4.276	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1264	316	161	1662	0.761	1634	1247	97.0	4.4	113.152	F
	B	17	4	1784	505	0.033	17	12	0.0	0.0	7.375	A
	C	724	181	832	1628	0.445	726	969	1.2	0.8	4.070	A
	D	645	161	762	1914	0.337	646	795	0.7	0.5	2.841	A
2	A	969	242	47	2167	0.447	969	724	0.9	0.8	3.008	A
	B	619	155	110	2221	0.279	619	906	0.5	0.4	2.247	A
	C	171	43	601	1135	0.151	171	129	0.2	0.2	3.816	A

2026 Test Case, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	12.51	B
2	untitled	Standard Roundabout	A, B, C	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Test Case	AM	ONE HOUR	07:45	09:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1335	100.000
	B		ONE HOUR	✓	14	100.000
	C	✓				
	D		ONE HOUR	✓	443	100.000
2	A	✓				
	B		ONE HOUR	✓	1079	100.000
	C		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	201	5	663	466
	B	2	0	5	7
	C	889	1	0	215
	D	285	6	152	0

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	0	658	161
	B	1007	1	71
	C	93	9	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	1	0	5	4
	B	0	0	0	0
	C	3	0	0	1
	D	1	0	2	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	0	5
	B	2	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	0.89	19.61	7.6	C	1225	1838
	B	0.03	6.20	0.0	A	13	19
	C	0.72	7.68	2.5	A	1009	1513
	D	0.31	3.32	0.4	A	407	610
2	A	0.41	2.81	0.7	A	752	1128
	B	0.55	3.73	1.2	A	990	1485
	C	0.14	5.15	0.2	A	94	140

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1005	251	119	1687	0.596	999	1028	0.0	1.5	5.397	A
	B	11	3	1109	905	0.012	10	9	0.0	0.0	4.024	A
	C	826	206	506	1862	0.443	822	614	0.0	0.8	3.542	A
	D	334	83	814	1874	0.178	333	514	0.0	0.2	2.365	A
2	A	614	154	7	2197	0.279	612	826	0.0	0.4	2.291	A
	B	812	203	120	2214	0.367	810	500	0.0	0.6	2.608	A
	C	77	19	757	1042	0.074	76	174	0.0	0.1	3.831	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1200	300	143	1673	0.717	1196	1231	1.5	2.6	7.777	A
	B	13	3	1328	775	0.016	13	11	0.0	0.0	4.719	A
	C	988	247	606	1791	0.552	986	735	0.8	1.2	4.582	A
	D	398	100	976	1753	0.227	398	616	0.2	0.3	2.692	A
2	A	735	184	9	2196	0.335	734	988	0.4	0.5	2.486	A
	B	970	242	144	2195	0.442	969	599	0.6	0.8	2.990	A
	C	92	23	905	953	0.096	92	208	0.1	0.1	4.293	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1470	367	175	1654	0.889	1452	1503	2.6	7.1	17.153	C
	B	15	4	1613	606	0.025	15	13	0.0	0.0	6.097	A
	C	1209	302	735	1697	0.713	1204	894	1.2	2.5	7.423	A
	D	488	122	1191	1592	0.306	487	749	0.3	0.4	3.300	A
2	A	894	223	11	2194	0.407	893	1209	0.5	0.7	2.790	A
	B	1188	297	176	2171	0.547	1186	728	0.8	1.2	3.718	A
	C	112	28	1108	832	0.135	112	254	0.1	0.2	5.137	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1470	367	175	1654	0.889	1468	1511	7.1	7.6	19.610	C
	B	15	4	1630	596	0.026	15	13	0.0	0.0	6.199	A
	C	1211	303	743	1691	0.716	1211	902	2.5	2.5	7.676	A
	D	488	122	1198	1586	0.308	488	756	0.4	0.4	3.320	A
2	A	902	225	11	2194	0.411	902	1211	0.7	0.7	2.810	A
	B	1188	297	177	2170	0.548	1188	736	1.2	1.2	3.735	A
	C	112	28	1110	831	0.135	112	255	0.2	0.2	5.146	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1200	300	143	1673	0.717	1220	1243	7.6	2.7	8.598	A
	B	13	3	1352	761	0.017	13	11	0.0	0.0	4.811	A
	C	991	248	617	1782	0.556	996	747	2.5	1.3	4.725	A
	D	398	100	987	1744	0.228	399	626	0.4	0.3	2.713	A
2	A	747	187	9	2196	0.340	748	991	0.7	0.5	2.512	A
	B	970	242	147	2193	0.442	972	610	1.2	0.8	3.005	A
	C	92	23	908	951	0.096	92	211	0.2	0.1	4.304	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1005	251	120	1687	0.596	1010	1037	2.7	1.6	5.566	A
	B	11	3	1120	899	0.012	11	9	0.0	0.0	4.054	A
	C	829	207	511	1858	0.446	831	620	1.3	0.8	3.603	A
	D	334	83	823	1868	0.179	334	519	0.3	0.2	2.379	A
2	A	620	155	8	2197	0.282	620	829	0.5	0.4	2.305	A
	B	812	203	122	2212	0.367	813	506	0.8	0.6	2.623	A
	C	77	19	760	1040	0.074	77	175	0.1	0.1	3.840	A

2026 Test Case, IP

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	91.04	F
2	untitled	Standard Roundabout	A, B, C	3.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Test Case	IP	ONE HOUR	12:45	14:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1545	100.000
	B		ONE HOUR	✓	17	100.000
	C	✓				
	D		ONE HOUR	✓	1269	100.000
2	A	✓				
	B		ONE HOUR	✓	644	100.000
	C		ONE HOUR	✓	327	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	136	12	608	789
	B	5	0	0	12
	C	563	5	0	303
	D	894	3	372	0

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	2	785	202
	B	600	0	44
	C	245	82	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	0
	D	0	0	0	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	1	4
	B	2	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	1.13	207.80	107.1	F	1418	2127
	B	0.04	8.69	0.0	A	16	23
	C	0.60	5.88	1.5	A	777	1165
	D	0.73	6.81	2.6	A	1164	1747
2	A	0.47	3.23	0.9	A	898	1347
	B	0.33	2.55	0.5	A	591	886
	C	0.33	5.06	0.5	A	300	450

Main Results for each time segment

12:45 - 13:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1163	291	285	1588	0.732	1152	1185	0.0	2.7	8.258	A
	B	13	3	1422	719	0.018	13	15	0.0	0.0	5.096	A
	C	636	159	703	1721	0.370	633	733	0.0	0.6	3.409	A
	D	955	239	518	2097	0.456	952	818	0.0	0.8	3.136	A
2	A	733	183	61	2156	0.340	730	636	0.0	0.5	2.563	A
	B	485	121	151	2190	0.221	484	641	0.0	0.3	2.148	A
	C	246	62	452	1224	0.201	245	182	0.0	0.3	3.812	A

13:00 - 13:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1389	347	341	1555	0.893	1371	1419	2.7	7.2	18.444	C
	B	15	4	1694	558	0.027	15	18	0.0	0.0	6.635	A
	C	761	190	836	1625	0.468	760	873	0.6	0.9	4.288	A
	D	1141	285	621	2020	0.565	1139	975	0.8	1.3	4.079	A
2	A	873	218	74	2147	0.407	873	761	0.5	0.7	2.869	A
	B	579	145	180	2167	0.267	579	766	0.3	0.4	2.308	A
	C	294	73	541	1171	0.251	294	218	0.3	0.3	4.254	A

13:15 - 13:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1701	425	417	1509	1.127	1496	1718	7.2	58.5	89.100	F
	B	19	5	1892	440	0.043	19	20	0.0	0.0	8.539	A
	C	931	233	914	1568	0.594	929	997	0.9	1.5	5.789	A
	D	1397	349	743	1928	0.725	1392	1100	1.3	2.6	6.656	A
2	A	997	249	90	2134	0.467	996	931	0.7	0.9	3.212	A
	B	709	177	205	2148	0.330	709	881	0.4	0.5	2.548	A
	C	360	90	662	1098	0.328	359	252	0.3	0.5	5.049	A

13:30 - 13:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1701	425	418	1508	1.128	1507	1725	58.5	107.1	203.981	F
	B	19	5	1905	433	0.043	19	20	0.0	0.0	8.692	A
	C	932	233	921	1564	0.596	932	1002	1.5	1.5	5.881	A
	D	1397	349	746	1926	0.726	1397	1107	2.6	2.6	6.808	A
2	A	1002	251	90	2134	0.470	1002	932	0.9	0.9	3.231	A
	B	709	177	207	2147	0.330	709	886	0.5	0.5	2.550	A
	C	360	90	663	1098	0.328	360	253	0.5	0.5	5.059	A

13:45 - 14:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1389	347	343	1553	0.894	1539	1441	107.1	69.7	207.795	F
	B	15	4	1863	458	0.033	15	19	0.0	0.0	8.140	A
	C	762	191	937	1552	0.491	764	941	1.5	1.0	4.728	A
	D	1141	285	638	2006	0.569	1146	1063	2.6	1.3	4.210	A
2	A	941	235	74	2147	0.439	942	762	0.9	0.8	3.036	A
	B	579	145	194	2156	0.268	579	821	0.5	0.4	2.327	A
	C	294	73	542	1170	0.251	295	232	0.5	0.4	4.268	A

14:00 - 14:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1163	291	287	1587	0.733	1430	1218	69.7	3.0	58.139	F
	B	13	3	1699	555	0.023	13	17	0.0	0.0	6.645	A
	C	638	160	869	1601	0.399	640	843	1.0	0.7	3.870	A
	D	955	239	547	2075	0.460	957	962	1.3	0.9	3.225	A
2	A	843	211	62	2156	0.391	844	638	0.8	0.7	2.788	A
	B	485	121	174	2172	0.223	485	732	0.4	0.3	2.175	A
	C	246	62	454	1223	0.201	247	205	0.4	0.3	3.825	A

2026 Test Case, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Junction 1 - Arm C - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm A - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Junction 2 - Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Linked Roundabout	Junction 1 - Arm C	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm A	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	204.02	F
2	untitled	Standard Roundabout	A, B, C	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Test Case	PM	ONE HOUR	16:45	18:15	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	C	2	A	Simple (vertical queueing)	Normal	0	100.00	
2	A	1	C	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	A		ONE HOUR	✓	1781	100.000
	B		ONE HOUR	✓	22	100.000
	C	✓				
	D		ONE HOUR	✓	992	100.000
2	A	✓				
	B		ONE HOUR	✓	858	100.000
	C		ONE HOUR	✓	248	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		A	B	C	D
From	A	154	7	851	769
	B	2	0	1	19
	C	791	2	0	211
	D	758	5	229	0

Demand (PCU/hr)

Junction 2

		To		
		A	B	C
From	A	2	940	133
	B	826	0	32
	C	181	67	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To			
		A	B	C	D
From	A	0	0	1	0
	B	0	0	0	0
	C	2	0	0	1
	D	0	0	0	0

Heavy Vehicle Percentages

Junction 2

		To		
		A	B	C
From	A	0	0	1
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	A	1.22	428.28	196.3	F	1634	2451
	B	0.05	8.15	0.1	A	20	30
	C	0.69	7.30	2.2	A	925	1388
	D	0.63	5.72	1.7	A	910	1365
2	A	0.47	3.20	0.9	A	955	1433
	B	0.43	2.85	0.7	A	787	1181
	C	0.29	5.44	0.4	A	228	341

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1341	335	177	1653	0.811	1325	1279	0.0	4.1	10.561	B
	B	17	4	1491	678	0.024	16	10	0.0	0.0	5.439	A
	C	757	189	702	1721	0.440	754	806	0.0	0.8	3.778	A
	D	747	187	712	1951	0.383	744	745	0.0	0.6	2.976	A
2	A	806	201	50	2165	0.372	803	757	0.0	0.6	2.643	A
	B	646	161	101	2229	0.290	644	753	0.0	0.4	2.270	A
	C	187	47	622	1122	0.166	186	123	0.0	0.2	3.925	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1601	400	212	1632	0.981	1551	1529	4.1	16.5	32.960	D
	B	20	5	1751	524	0.038	20	12	0.0	0.0	7.135	A
	C	906	227	823	1634	0.555	905	948	0.8	1.3	5.010	A
	D	892	223	850	1847	0.483	891	877	0.6	0.9	3.757	A
2	A	948	237	60	2157	0.439	947	906	0.6	0.8	2.977	A
	B	771	193	119	2215	0.348	771	888	0.4	0.5	2.493	A
	C	223	56	744	1049	0.212	223	146	0.2	0.3	4.448	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1961	490	259	1604	1.223	1600	1844	16.5	106.8	146.616	F
	B	24	6	1845	468	0.052	24	14	0.0	0.1	8.107	A
	C	1109	277	852	1613	0.688	1106	1017	1.3	2.2	7.170	A
	D	1092	273	1014	1725	0.633	1089	944	0.9	1.7	5.638	A
2	A	1017	254	74	2147	0.474	1017	1109	0.8	0.9	3.187	A
	B	945	236	128	2208	0.428	944	963	0.5	0.7	2.846	A
	C	273	68	911	950	0.287	273	161	0.3	0.4	5.425	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1961	490	260	1603	1.223	1603	1850	106.8	196.3	343.886	F
	B	24	6	1849	466	0.052	24	14	0.1	0.1	8.147	A
	C	1111	278	854	1612	0.689	1110	1019	2.2	2.2	7.303	A
	D	1092	273	1018	1722	0.634	1092	946	1.7	1.7	5.717	A
2	A	1019	255	74	2147	0.475	1019	1111	0.9	0.9	3.195	A
	B	945	236	128	2208	0.428	945	965	0.7	0.7	2.849	A
	C	273	68	911	949	0.288	273	161	0.4	0.4	5.438	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1601	400	213	1631	0.982	1623	1544	196.3	190.9	428.280	F
	B	20	5	1823	481	0.041	20	13	0.1	0.0	7.803	A
	C	908	227	860	1607	0.565	912	983	2.2	1.3	5.294	A
	D	892	223	862	1838	0.485	895	909	1.7	0.9	3.830	A
2	A	983	246	60	2157	0.456	983	908	0.9	0.8	3.071	A
	B	771	193	123	2211	0.349	772	920	0.7	0.5	2.502	A
	C	223	56	745	1049	0.213	223	150	0.4	0.3	4.462	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1	A	1341	335	178	1652	0.812	1643	1316	190.9	115.2	336.310	F
	B	17	4	1810	489	0.034	17	12	0.0	0.0	7.620	A
	C	761	190	868	1602	0.475	762	959	1.3	0.9	4.372	A
	D	747	187	746	1926	0.388	748	884	0.9	0.6	3.059	A
2	A	959	240	51	2164	0.443	959	761	0.8	0.8	2.990	A
	B	646	161	120	2214	0.292	646	889	0.5	0.4	2.297	A
	C	187	47	624	1121	0.167	187	143	0.3	0.2	3.939	A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.2.5947 © Copyright TRL Limited, 2017															
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Filename: J1_North Airport Access Roundabouts - Proposed.j9

Path: \\pba.int\BRI\Projects\43321 Bristol Airport\Technical\Transport\Junction Assessments\ARCADY

Report generation date: 01/04/2019 12:06:46

»2026 Test, AM

»2026 Test, IP

»2026 Test, PM

Summary of junction performance

	AM					IP					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2026 Test														
Arm A	1.7	4.20	0.63	A	11 % [Arm C]	5.5	10.29	0.85	B	-2 % [Arm B]	5.6	10.40	0.85	B	-4 % [Arm B]
Arm B	0.0	9.87	0.04	A		0.2	46.19	0.19	E		0.4	56.67	0.28	F	
Arm C	4.2	12.84	0.81	B		5.1	17.21	0.84	C		5.1	17.41	0.84	C	
Arm D	0.2	4.20	0.17	A		0.3	4.00	0.22	A		0.3	4.03	0.22	A	

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

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

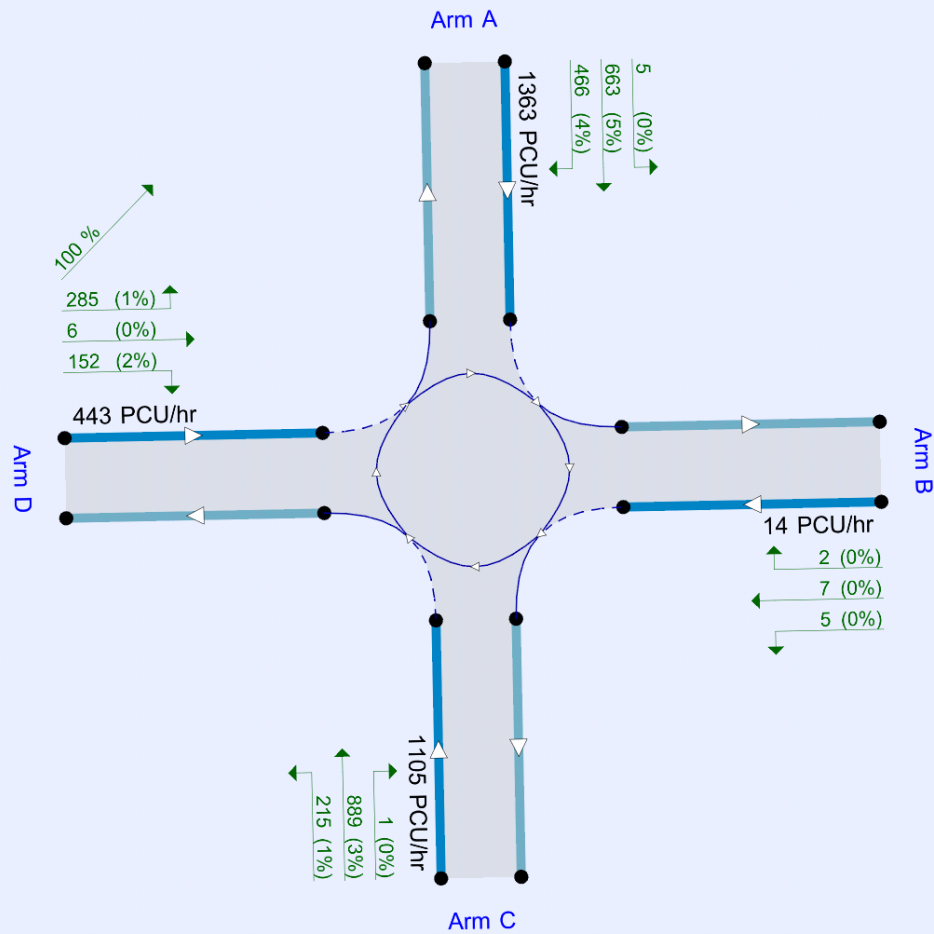
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	13/04/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CTAS\tony
Description	

Units

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



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Test	AM	ONE HOUR	07:45	09:15	15	✓
D8	2026 Test	IP	ONE HOUR	12:45	14:15	15	✓
D9	2026 Test	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2026 Test, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	7.49	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	11	Arm C

Arms

Arms

Arm	Name	Description
A	A38 (North)	
B	Easirent Car Hire	
C	A38 (South)	
D	Bristol Airport	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	7.30	10.30	32.9	8.0	48.0	48.0	
B	3.00	5.82	7.2	18.4	48.0	39.0	
C	4.08	7.20	92.6	29.3	48.0	44.0	
D	3.67	7.70	36.3	12.8	48.0	54.0	

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
A		
B		
C		
D	✓	100

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.735	2520
B	0.519	1242
C	0.669	2021
D	0.602	1789

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Test	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1363	100.000
B		ONE HOUR	✓	14	100.000
C		ONE HOUR	✓	1105	100.000
D		ONE HOUR	✓	443	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	229	5	663	466
	B	2	0	5	7
	C	889	1	0	215
	D	285	6	152	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	0	5	4
	B	0	0	0	0
	C	3	0	0	1
	D	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.63	4.20	1.7	A	1251	1876
B	0.04	9.87	0.0	A	13	19
C	0.81	12.84	4.2	B	1014	1521
D	0.17	4.20	0.2	A	407	217

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1026	1026	257	0	215	119	2432	0.422	1023	839	0.0	0.8	2.650	A
B	11	11	3	0	0	1133	654	0.016	10	9	0.0	0.0	5.589	A
C	832	832	208	0	0	528	1667	0.499	828	615	0.0	1.0	4.380	A
D	334	119	30	215	0	840	1284	0.093	119	516	0.0	0.1	3.149	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1225	1225	306	0	256	143	2415	0.507	1224	1005	0.8	1.1	3.140	A
B	13	13	3	0	0	1356	539	0.023	13	11	0.0	0.0	6.838	A
C	993	993	248	0	0	632	1598	0.622	991	736	1.0	1.7	6.061	A
D	398	142	36	256	0	1005	1184	0.120	142	618	0.1	0.1	3.519	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1501	1501	375	0	314	175	2391	0.628	1498	1225	1.1	1.7	4.176	A
B	15	15	4	0	0	1660	381	0.040	15	13	0.0	0.0	9.828	A
C	1217	1217	304	0	0	774	1503	0.809	1207	901	1.7	4.1	12.095	B
D	488	174	43	314	0	1226	1052	0.165	174	755	0.1	0.2	4.178	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1501	1501	375	0	314	175	2391	0.628	1501	1233	1.7	1.7	4.202	A
B	15	15	4	0	0	1662	380	0.041	15	13	0.0	0.0	9.873	A
C	1217	1217	304	0	0	775	1502	0.810	1216	903	4.1	4.2	12.845	B
D	488	174	43	314	0	1234	1047	0.166	174	757	0.2	0.2	4.202	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1225	1225	306	0	256	143	2414	0.508	1228	1015	1.7	1.1	3.162	A
B	13	13	3	0	0	1360	537	0.023	13	11	0.0	0.0	6.868	A
C	993	993	248	0	0	634	1596	0.622	1003	739	4.2	1.7	6.329	A
D	398	142	36	256	0	1016	1178	0.121	142	621	0.2	0.1	3.545	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1026	1026	257	0	215	120	2432	0.422	1027	846	1.1	0.8	2.666	A
B	11	11	3	0	0	1138	652	0.016	11	9	0.0	0.0	5.614	A
C	832	832	208	0	0	531	1666	0.499	835	618	1.7	1.0	4.459	A
D	334	119	30	215	0	846	1280	0.093	119	519	0.1	0.1	3.162	A

2026 Test, IP

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	10.64	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	Arm B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Test	IP	ONE HOUR	12:45	14:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1790	100.000
B		ONE HOUR	✓	17	100.000
C		ONE HOUR	✓	1007	100.000
D		ONE HOUR	✓	990	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	158	12	851	769
	B	5	0	0	12
	C	791	5	0	211
	D	758	3	229	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
	A	0	0	6	0
	B	0	0	0	0
	C	5	0	0	8
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.85	10.29	5.5	B	1643	2464
B	0.19	46.19	0.2	E	16	23
C	0.84	17.21	5.1	C	924	1386
D	0.22	4.00	0.3	A	908	319

Main Results for each time segment

12:45 - 13:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1348	1348	337	0	571	178	2389	0.564	1342	715	0.0	1.3	3.518	A
B	13	13	3	0	0	1505	462	0.028	13	15	0.0	0.0	8.017	A
C	758	758	190	0	0	708	1547	0.490	754	810	0.0	1.0	4.769	A
D	745	175	44	571	0	718	1357	0.129	174	744	0.0	0.1	3.041	A

13:00 - 13:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1609	1609	402	0	681	213	2363	0.681	1606	855	1.3	2.2	4.863	A
B	15	15	4	0	0	1801	308	0.050	15	18	0.0	0.1	12.278	B
C	905	905	226	0	0	847	1454	0.623	902	969	1.0	1.7	6.852	A
D	890	209	52	681	0	860	1272	0.164	208	890	0.1	0.2	3.383	A

13:15 - 13:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1971	1971	493	0	835	261	2328	0.847	1958	1039	2.2	5.3	9.684	A
B	19	19	5	0	0	2197	103	0.182	18	22	0.1	0.2	42.224	E
C	1109	1109	277	0	0	1032	1330	0.834	1096	1183	1.7	4.8	15.501	C
D	1090	255	64	835	0	1045	1161	0.220	255	1084	0.2	0.3	3.975	A

13:30 - 13:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1971	1971	493	0	835	261	2328	0.847	1970	1049	5.3	5.5	10.287	B
B	19	19	5	0	0	2209	96	0.194	19	22	0.2	0.2	46.191	E
C	1109	1109	277	0	0	1039	1326	0.836	1108	1189	4.8	5.1	17.205	C
D	1090	255	64	835	0	1055	1155	0.221	255	1092	0.3	0.3	4.003	A

13:45 - 14:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1609	1609	402	0	681	213	2363	0.681	1622	869	5.5	2.2	5.079	A
B	15	15	4	0	0	1817	300	0.051	16	18	0.2	0.1	12.722	B
C	905	905	226	0	0	856	1448	0.625	918	977	5.1	1.8	7.349	A
D	890	209	52	681	0	874	1264	0.165	209	901	0.3	0.2	3.416	A

14:00 - 14:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1348	1348	337	0	571	179	2388	0.564	1351	721	2.2	1.3	3.578	A
B	13	13	3	0	0	1515	457	0.028	13	15	0.1	0.0	8.113	A
C	758	758	190	0	0	713	1544	0.491	761	815	1.8	1.0	4.875	A
D	745	175	44	571	0	725	1353	0.129	175	749	0.2	0.1	3.057	A

2026 Test, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, B, C, D	10.84	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-4	Arm B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Test	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1802	100.000
B		ONE HOUR	✓	22	100.000
C		ONE HOUR	✓	1000	100.000
D		ONE HOUR	✓	994	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	A	B	C	D	
From	A	176	7	849	770
	B	2	0	1	19
	C	787	2	0	211
	D	761	5	227	1

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
	A	0	0	1	0
	B	0	0	0	0
	C	2	0	0	1
	D	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.85	10.40	5.6	B	1654	2480
B	0.28	56.67	0.4	F	20	30
C	0.84	17.41	5.1	C	918	1376
D	0.22	4.03	0.3	A	912	321

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1357	1357	339	0	573	176	2390	0.568	1351	723	0.0	1.3	3.471	A
B	17	17	4	0	0	1517	455	0.036	16	10	0.0	0.0	8.198	A
C	753	753	188	0	0	726	1535	0.490	749	808	0.0	1.0	4.654	A
D	748	175	44	573	0	724	1353	0.130	175	750	0.0	0.1	3.052	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1620	1620	405	0	684	211	2365	0.685	1617	865	1.3	2.2	4.820	A
B	20	20	5	0	0	1815	301	0.066	20	13	0.0	0.1	12.797	B
C	899	899	225	0	0	868	1440	0.624	896	966	1.0	1.7	6.726	A
D	894	209	52	684	0	867	1268	0.165	209	898	0.1	0.2	3.400	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1984	1984	496	0	838	258	2330	0.852	1971	1051	2.2	5.4	9.762	A
B	24	24	6	0	0	2214	94	0.258	23	15	0.1	0.3	50.333	F
C	1101	1101	275	0	0	1058	1313	0.839	1089	1179	1.7	4.8	15.583	C
D	1094	257	64	838	0	1053	1155	0.222	256	1093	0.2	0.3	4.003	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1984	1984	496	0	838	259	2330	0.852	1983	1061	5.4	5.6	10.400	B
B	24	24	6	0	0	2227	87	0.277	24	15	0.3	0.4	56.671	F
C	1101	1101	275	0	0	1065	1308	0.842	1100	1185	4.8	5.1	17.406	C
D	1094	257	64	838	0	1064	1149	0.223	257	1101	0.3	0.3	4.031	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1620	1620	405	0	684	212	2364	0.685	1633	879	5.6	2.2	5.043	A
B	20	20	5	0	0	1832	292	0.068	21	13	0.4	0.1	13.337	B
C	899	899	225	0	0	878	1433	0.627	912	975	5.1	1.8	7.231	A
D	894	209	52	684	0	881	1259	0.166	210	909	0.3	0.2	3.433	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A	1357	1357	339	0	573	177	2389	0.568	1360	729	2.2	1.3	3.530	A
B	17	17	4	0	0	1527	450	0.037	17	11	0.1	0.0	8.302	A
C	753	753	188	0	0	731	1532	0.491	756	813	1.8	1.0	4.756	A
D	748	175	44	573	0	731	1350	0.130	176	756	0.2	0.1	3.068	A

Junctions 9			
PICADY 9 - Priority Intersection Module			
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Filename: J3_Downside Road_Emergency Access.j9

Path: \\pba.int\BRI\Projects\43321 Bristol Airport\Technical\Transport\Junction Assessments\PICADY

Report generation date: 07/03/2019 15:20:52

- »2018 Baseline, AM
- »2018 Baseline, IP
- »2018 Baseline, PM
- »2026 Reference Case, AM
- »2026 Reference Case, IP
- »2026 Reference Case, PM
- »2026 Test Case, AM
- »2026 Test Case, IP
- »2026 Test Case, PM

Summary of junction performance

	AM				IP				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2018 Baseline												
Stream B-C	0.1	6.48	0.05	A	0.1	5.86	0.08	A	0.1	6.59	0.12	A
Stream B-A	0.0	10.10	0.03	B	0.1	8.65	0.07	A	0.1	9.52	0.05	A
Stream C-AB	0.2	4.98	0.12	A	0.1	5.02	0.07	A	0.1	5.08	0.08	A
2026 Reference Case												
Stream B-C	0.1	6.70	0.06	A	0.1	6.08	0.09	A	0.2	6.93	0.14	A
Stream B-A	0.0	10.84	0.04	B	0.1	9.13	0.08	A	0.1	10.15	0.06	B
Stream C-AB	0.3	4.99	0.14	A	0.1	5.02	0.08	A	0.2	5.12	0.09	A
2026 Test Case												
Stream B-C	0.1	6.72	0.06	A	0.1	6.13	0.10	A	0.2	6.99	0.14	A
Stream B-A	0.0	10.87	0.04	B	0.1	9.24	0.09	A	0.1	10.29	0.06	B
Stream C-AB	0.3	4.97	0.14	A	0.1	5.01	0.08	A	0.2	5.13	0.09	A

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

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

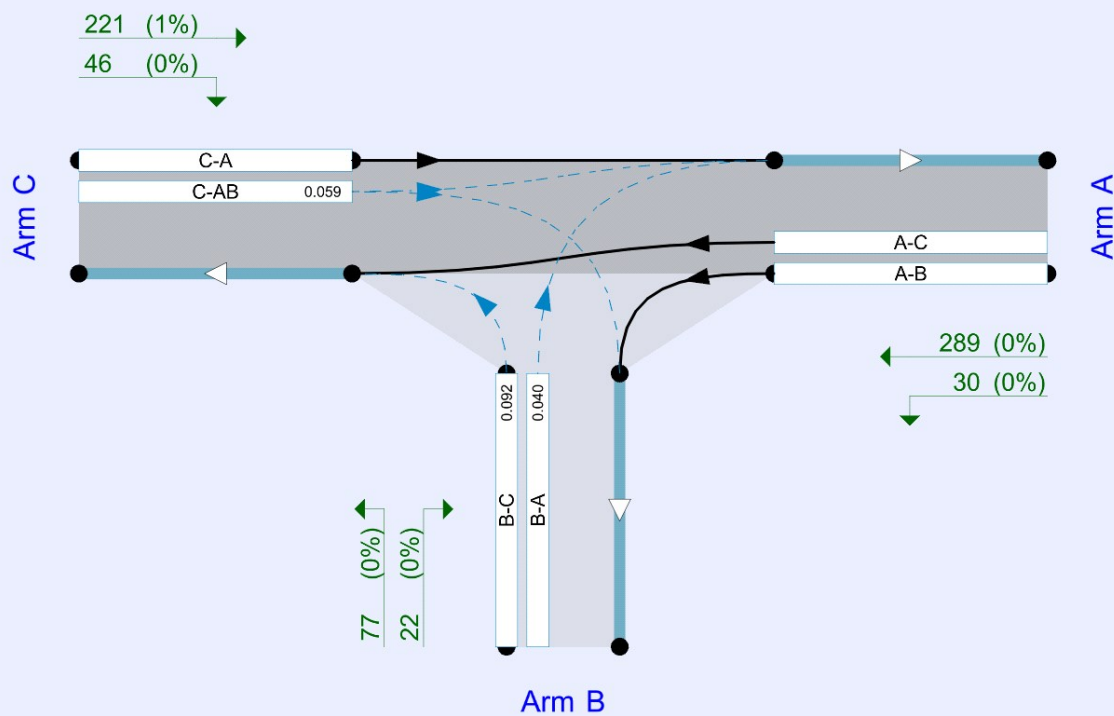
File summary

File Description

Title	Downside Road / Emergency Access
Location	Bristol Airport
Site number	
Date	04/09/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PBA\jchodorowski
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC (l)

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2018 Baseline	IP	ONE HOUR	12:45	14:15	15
D3	2018 Baseline	PM	ONE HOUR	17:00	18:30	15
D4	2026 Reference Case	AM	ONE HOUR	07:45	09:15	15
D5	2026 Reference Case	IP	ONE HOUR	12:45	14:15	15
D6	2026 Reference Case	PM	ONE HOUR	17:00	18:30	15
D7	2026 Test Case	AM	ONE HOUR	07:45	09:15	15
D8	2026 Test Case	IP	ONE HOUR	12:45	14:15	15
D9	2026 Test Case	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Downside Road E		Major
B	Aiport Emergency Access		Minor
C	Downside Road W		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			250.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.40	3.50	3.30	3.30		1.00	26	35

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	513	0.095	0.241	0.152	0.345
1	B-C	699	0.110	0.277	-	-
1	C-B	719	0.285	0.285	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 Baseline	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	286	100.000
B		✓	39	100.000
C		✓	354	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	10	276
	B	10	0	29
	C	299	55	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	4
	B	0	0	4
	C	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	6.48	0.1	A
B-A	0.03	10.10	0.0	B
C-AB	0.12	4.98	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	22	638	0.034	22	0.0	6.072	A
B-A	8	414	0.018	7	0.0	8.861	A
C-AB	58	800	0.072	57	0.1	4.966	A
C-A	209			209			
A-B	8			8			
A-C	208			208			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	26	626	0.042	26	0.0	6.240	A
B-A	9	394	0.023	9	0.0	9.342	A
C-AB	74	818	0.090	74	0.2	4.965	A
C-A	244			244			
A-B	9			9			
A-C	248			248			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	32	609	0.052	32	0.1	6.483	A
B-A	11	368	0.030	11	0.0	10.094	B
C-AB	100	843	0.118	99	0.2	4.973	A
C-A	290			290			
A-B	11			11			
A-C	304			304			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	32	609	0.052	32	0.1	6.484	A
B-A	11	368	0.030	11	0.0	10.096	B
C-AB	100	844	0.118	100	0.2	4.978	A
C-A	290			290			
A-B	11			11			
A-C	304			304			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	26	626	0.042	26	0.0	6.243	A
B-A	9	394	0.023	9	0.0	9.346	A
C-AB	74	818	0.090	74	0.2	4.974	A
C-A	244			244			
A-B	9			9			
A-C	248			248			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	22	638	0.034	22	0.0	6.076	A
B-A	8	414	0.018	8	0.0	8.867	A
C-AB	58	800	0.072	58	0.1	4.977	A
C-A	209			209			
A-B	8			8			
A-C	208			208			

2018 Baseline, IP

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2018 Baseline	IP	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	162	100.000
B		✓	77	100.000
C		✓	194	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	34	128
	B	28	0	49
	C	156	38	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	5.86	0.1	A
B-A	0.07	8.65	0.1	A
C-AB	0.07	5.02	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	37	687	0.054	37	0.1	5.538	A
B-A	21	473	0.045	21	0.0	7.965	A
C-AB	34	757	0.045	34	0.1	4.999	A
C-A	112			112			
A-B	26			26			
A-C	96			96			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	44	679	0.065	44	0.1	5.671	A
B-A	25	462	0.055	25	0.1	8.241	A
C-AB	42	765	0.055	42	0.1	5.006	A
C-A	133			133			
A-B	31			31			
A-C	115			115			

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	54	668	0.081	54	0.1	5.861	A
B-A	31	447	0.069	31	0.1	8.647	A
C-AB	54	776	0.069	54	0.1	5.015	A
C-A	160			160			
A-B	37			37			
A-C	141			141			

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	54	668	0.081	54	0.1	5.862	A
B-A	31	447	0.069	31	0.1	8.649	A
C-AB	54	776	0.069	54	0.1	5.019	A
C-A	160			160			
A-B	37			37			
A-C	141			141			

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	44	679	0.065	44	0.1	5.673	A
B-A	25	462	0.055	25	0.1	8.246	A
C-AB	42	765	0.055	42	0.1	5.011	A
C-A	132			132			
A-B	31			31			
A-C	115			115			

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	37	686	0.054	37	0.1	5.545	A
B-A	21	473	0.045	21	0.0	7.973	A
C-AB	34	757	0.045	34	0.1	5.005	A
C-A	112			112			
A-B	26			26			
A-C	96			96			

2018 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2018 Baseline	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	253	100.000
B		✓	86	100.000
C		✓	224	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	23	230
	B	19	0	67
	C	184	40	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.12	6.59	0.1	A
B-A	0.05	9.52	0.1	A
C-AB	0.08	5.08	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	50	646	0.078	50	0.1	6.035	A
B-A	14	434	0.033	14	0.0	8.574	A
C-AB	37	752	0.049	37	0.1	5.041	A
C-A	132			132			
A-B	17			17			
A-C	173			173			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	60	635	0.095	60	0.1	6.258	A
B-A	17	419	0.041	17	0.0	8.949	A
C-AB	46	759	0.061	46	0.1	5.058	A
C-A	155			155			
A-B	21			21			
A-C	207			207			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	74	620	0.119	74	0.1	6.585	A
B-A	21	399	0.052	21	0.1	9.517	A
C-AB	60	770	0.078	60	0.1	5.082	A
C-A	187			187			
A-B	25			25			
A-C	253			253			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	74	620	0.119	74	0.1	6.588	A
B-A	21	399	0.052	21	0.1	9.519	A
C-AB	60	770	0.078	60	0.1	5.085	A
C-A	187			187			
A-B	25			25			
A-C	253			253			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	60	635	0.095	60	0.1	6.261	A
B-A	17	419	0.041	17	0.0	8.954	A
C-AB	46	759	0.061	46	0.1	5.061	A
C-A	155			155			
A-B	21			21			
A-C	207			207			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	50	646	0.078	51	0.1	6.042	A
B-A	14	434	0.033	14	0.0	8.583	A
C-AB	37	752	0.049	37	0.1	5.048	A
C-A	132			132			
A-B	17			17			
A-C	173			173			

2026 Reference Case, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Reference Case	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	329	100.000
B		✓	45	100.000
C		✓	411	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	12	317
	B	11	0	34
	C	348	63	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	4
	B	0	0	4
	C	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	6.70	0.1	A
B-A	0.04	10.84	0.0	B
C-AB	0.14	4.99	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	26	630	0.041	25	0.0	6.194	A
B-A	8	397	0.021	8	0.0	9.253	A
C-AB	70	816	0.086	69	0.1	4.948	A
C-A	240			240			
A-B	9			9			
A-C	239			239			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	31	616	0.050	31	0.1	6.396	A
B-A	10	375	0.026	10	0.0	9.863	A
C-AB	91	837	0.108	90	0.2	4.952	A
C-A	279			279			
A-B	11			11			
A-C	285			285			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	37	597	0.063	37	0.1	6.695	A
B-A	12	344	0.035	12	0.0	10.840	B
C-AB	125	868	0.144	124	0.3	4.979	A
C-A	328			328			
A-B	13			13			
A-C	349			349			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	37	597	0.063	37	0.1	6.695	A
B-A	12	344	0.035	12	0.0	10.844	B
C-AB	125	868	0.144	125	0.3	4.987	A
C-A	328			328			
A-B	13			13			
A-C	349			349			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	31	616	0.050	31	0.1	6.398	A
B-A	10	375	0.026	10	0.0	9.869	A
C-AB	91	837	0.108	91	0.2	4.968	A
C-A	279			279			
A-B	11			11			
A-C	285			285			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	26	630	0.041	26	0.0	6.198	A
B-A	8	397	0.021	8	0.0	9.261	A
C-AB	70	816	0.086	70	0.2	4.961	A
C-A	239			239			
A-B	9			9			
A-C	239			239			

2026 Reference Case, IP

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 Reference Case	IP	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	199	100.000
B		✓	89	100.000
C		✓	233	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	40	159
	B	33	0	56
	C	189	44	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	6.08	0.1	A
B-A	0.08	9.13	0.1	A
C-AB	0.08	5.02	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	42	677	0.062	42	0.1	5.669	A
B-A	25	462	0.054	25	0.1	8.231	A
C-AB	41	765	0.053	40	0.1	4.995	A
C-A	135			135			
A-B	30			30			
A-C	120			120			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	50	667	0.075	50	0.1	5.837	A
B-A	30	449	0.066	30	0.1	8.590	A
C-AB	51	775	0.065	51	0.1	5.001	A
C-A	159			159			
A-B	36			36			
A-C	143			143			

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	62	654	0.094	62	0.1	6.079	A
B-A	36	431	0.084	36	0.1	9.128	A
C-AB	66	789	0.084	66	0.1	5.016	A
C-A	191			191			
A-B	44			44			
A-C	175			175			

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	62	654	0.094	62	0.1	6.080	A
B-A	36	431	0.084	36	0.1	9.132	A
C-AB	66	789	0.084	66	0.1	5.021	A
C-A	191			191			
A-B	44			44			
A-C	175			175			

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	50	667	0.075	50	0.1	5.842	A
B-A	30	449	0.066	30	0.1	8.595	A
C-AB	51	775	0.066	51	0.1	5.013	A
C-A	159			159			
A-B	36			36			
A-C	143			143			

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	42	676	0.062	42	0.1	5.679	A
B-A	25	462	0.054	25	0.1	8.242	A
C-AB	41	765	0.053	41	0.1	5.002	A
C-A	135			135			
A-B	30			30			
A-C	120			120			

2026 Reference Case, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 Reference Case	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	304	100.000
B		✓	99	100.000
C		✓	261	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	29	275
	B	22	0	77
	C	215	46	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.14	6.93	0.2	A
B-A	0.06	10.15	0.1	B
C-AB	0.09	5.12	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	635	0.091	58	0.1	6.226	A
B-A	17	420	0.039	16	0.0	8.905	A
C-AB	44	757	0.058	44	0.1	5.059	A
C-A	152			152			
A-B	22			22			
A-C	207			207			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	622	0.111	69	0.1	6.509	A
B-A	20	403	0.049	20	0.1	9.391	A
C-AB	55	765	0.072	55	0.1	5.083	A
C-A	179			179			
A-B	26			26			
A-C	247			247			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	604	0.140	85	0.2	6.931	A
B-A	24	379	0.064	24	0.1	10.145	B
C-AB	73	778	0.094	73	0.2	5.117	A
C-A	214			214			
A-B	32			32			
A-C	303			303			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	604	0.140	85	0.2	6.934	A
B-A	24	379	0.064	24	0.1	10.147	B
C-AB	73	778	0.094	73	0.2	5.123	A
C-A	214			214			
A-B	32			32			
A-C	303			303			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	622	0.111	69	0.1	6.515	A
B-A	20	403	0.049	20	0.1	9.398	A
C-AB	55	766	0.072	56	0.1	5.089	A
C-A	179			179			
A-B	26			26			
A-C	247			247			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	635	0.091	58	0.1	6.237	A
B-A	17	420	0.039	17	0.0	8.920	A
C-AB	44	757	0.058	44	0.1	5.067	A
C-A	152			152			
A-B	22			22			
A-C	207			207			

2026 Test Case, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2026 Test Case	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	330	100.000
B		✓	46	100.000
C		✓	417	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	12	318
	B	12	0	34
	C	354	63	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	4
	B	0	0	4
	C	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	6.72	0.1	A
B-A	0.04	10.87	0.0	B
C-AB	0.14	4.97	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	26	628	0.041	25	0.0	6.210	A
B-A	9	398	0.023	9	0.0	9.250	A
C-AB	70	819	0.086	70	0.1	4.933	A
C-A	244			244			
A-B	9			9			
A-C	239			239			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	31	614	0.050	31	0.1	6.414	A
B-A	11	375	0.029	11	0.0	9.871	A
C-AB	91	841	0.109	91	0.2	4.935	A
C-A	283			283			
A-B	11			11			
A-C	286			286			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	37	595	0.063	37	0.1	6.716	A
B-A	13	344	0.038	13	0.0	10.869	B
C-AB	126	872	0.144	125	0.3	4.961	A
C-A	333			333			
A-B	13			13			
A-C	350			350			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	37	595	0.063	37	0.1	6.717	A
B-A	13	344	0.038	13	0.0	10.873	B
C-AB	126	872	0.144	126	0.3	4.971	A
C-A	333			333			
A-B	13			13			
A-C	350			350			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	31	614	0.050	31	0.1	6.418	A
B-A	11	375	0.029	11	0.0	9.876	A
C-AB	92	841	0.109	92	0.2	4.951	A
C-A	283			283			
A-B	11			11			
A-C	286			286			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	26	628	0.041	26	0.0	6.214	A
B-A	9	398	0.023	9	0.0	9.260	A
C-AB	71	819	0.086	71	0.2	4.949	A
C-A	243			243			
A-B	9			9			
A-C	239			239			

2026 Test Case, IP

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2026 Test Case	IP	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	210	100.000
B		✓	90	100.000
C		✓	241	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	41	169
	B	34	0	56
	C	197	44	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.10	6.13	0.1	A
B-A	0.09	9.24	0.1	A
C-AB	0.08	5.01	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	42	673	0.063	42	0.1	5.702	A
B-A	26	460	0.056	25	0.1	8.285	A
C-AB	41	767	0.054	41	0.1	4.987	A
C-A	140			140			
A-B	31			31			
A-C	127			127			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	50	663	0.076	50	0.1	5.877	A
B-A	31	446	0.069	31	0.1	8.663	A
C-AB	51	777	0.066	51	0.1	4.993	A
C-A	165			165			
A-B	37			37			
A-C	152			152			

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	62	649	0.095	62	0.1	6.130	A
B-A	37	427	0.088	37	0.1	9.235	A
C-AB	67	791	0.085	67	0.1	5.008	A
C-A	198			198			
A-B	45			45			
A-C	186			186			

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	62	649	0.095	62	0.1	6.131	A
B-A	37	427	0.088	37	0.1	9.239	A
C-AB	67	791	0.085	67	0.1	5.013	A
C-A	198			198			
A-B	45			45			
A-C	186			186			

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	50	663	0.076	50	0.1	5.882	A
B-A	31	446	0.069	31	0.1	8.671	A
C-AB	51	777	0.066	51	0.1	5.002	A
C-A	165			165			
A-B	37			37			
A-C	152			152			

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	42	673	0.063	42	0.1	5.712	A
B-A	26	460	0.056	26	0.1	8.296	A
C-AB	41	767	0.054	41	0.1	4.997	A
C-A	140			140			
A-B	31			31			
A-C	127			127			

2026 Test Case, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2026 Test Case	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	319	100.000
B		✓	99	100.000
C		✓	267	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	30	289
	B	22	0	77
	C	221	46	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.14	6.99	0.2	A
B-A	0.06	10.29	0.1	B
C-AB	0.09	5.13	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	632	0.092	58	0.1	6.259	A
B-A	17	417	0.040	16	0.0	8.981	A
C-AB	44	757	0.059	44	0.1	5.062	A
C-A	157			157			
A-B	23			23			
A-C	218			218			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	619	0.112	69	0.1	6.552	A
B-A	20	399	0.050	20	0.1	9.487	A
C-AB	56	766	0.073	56	0.1	5.087	A
C-A	184			184			
A-B	27			27			
A-C	260			260			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	599	0.141	85	0.2	6.991	A
B-A	24	374	0.065	24	0.1	10.280	B
C-AB	74	779	0.095	74	0.2	5.124	A
C-A	220			220			
A-B	33			33			
A-C	318			318			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	85	599	0.141	85	0.2	6.994	A
B-A	24	374	0.065	24	0.1	10.286	B
C-AB	74	779	0.095	74	0.2	5.126	A
C-A	220			220			
A-B	33			33			
A-C	318			318			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	69	619	0.112	69	0.1	6.556	A
B-A	20	399	0.050	20	0.1	9.494	A
C-AB	56	766	0.073	56	0.1	5.091	A
C-A	184			184			
A-B	27			27			
A-C	260			260			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	58	632	0.092	58	0.1	6.270	A
B-A	17	417	0.040	17	0.0	8.993	A
C-AB	44	757	0.059	45	0.1	5.071	A
C-A	157			157			
A-B	23			23			
A-C	218			218			

Basic Results Summary

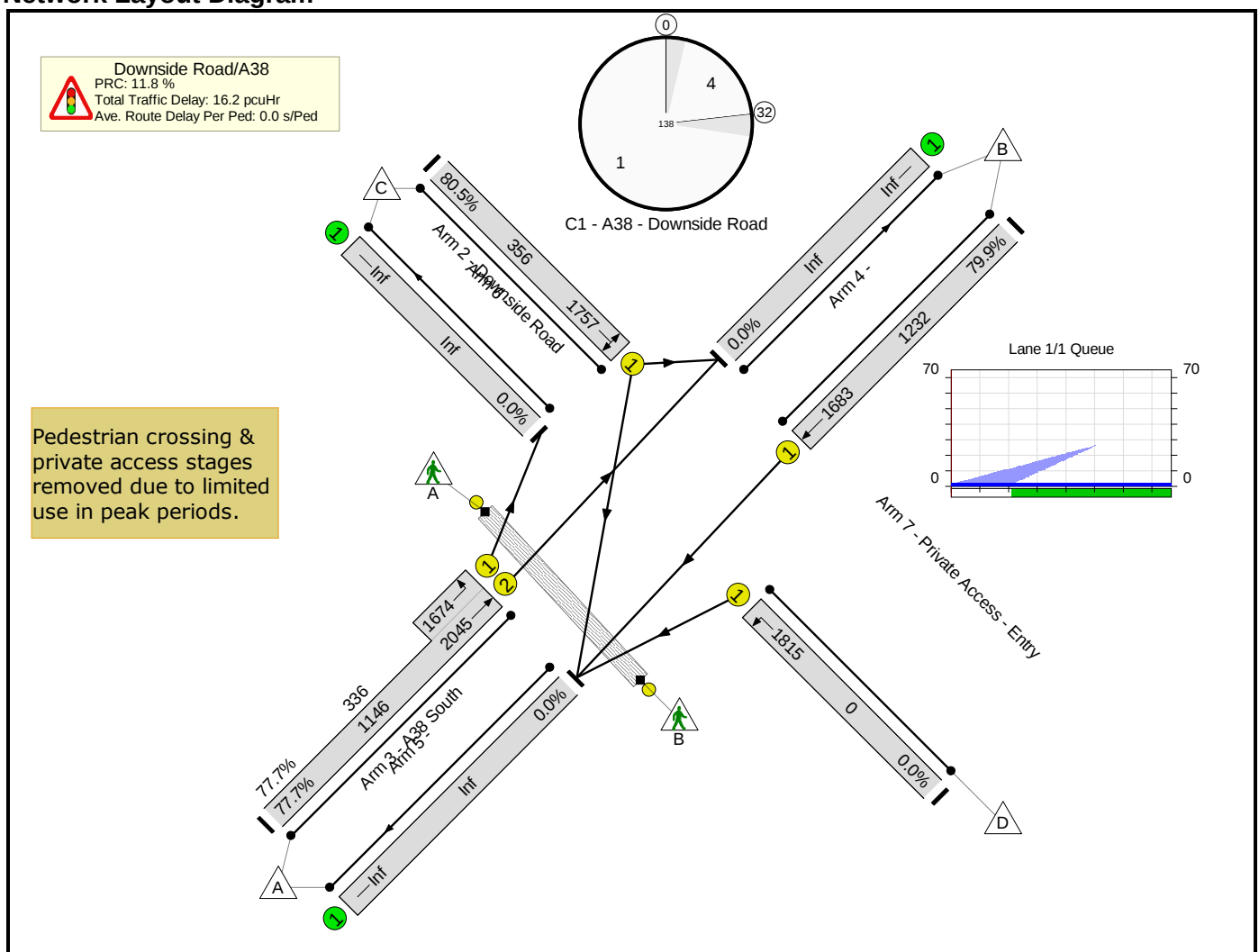
Basic Results Summary

User and Project Details

Project:	Bristol Airport
Title:	A38/Downside Rd Signalised Junction
Location:	Bristol
File name:	J4_A38_Downside_Rd_Signalised_Junction_Existing_RevA.lsg3x
Author:	Sblain
Company:	PBA LLP
Address:	RG1 8DN
Notes:	Base model provided by CTAS.Updated to reflect controller specification received by Jacobs.

Scenario 1: '2018 Baseline AM Peak' (FG1: '2018 Baseline AM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

C1 - A38 - Downside Road	PRC for Signalled Lanes (%):	11.8	Total Delay for Signalled Lanes (pcuHr):	16.22	Cycle Time (s): 138
	PRC Over All Lanes (%):	11.8	Total Delay Over All Lanes(pcuHr):	16.22	

Basic Results Summary

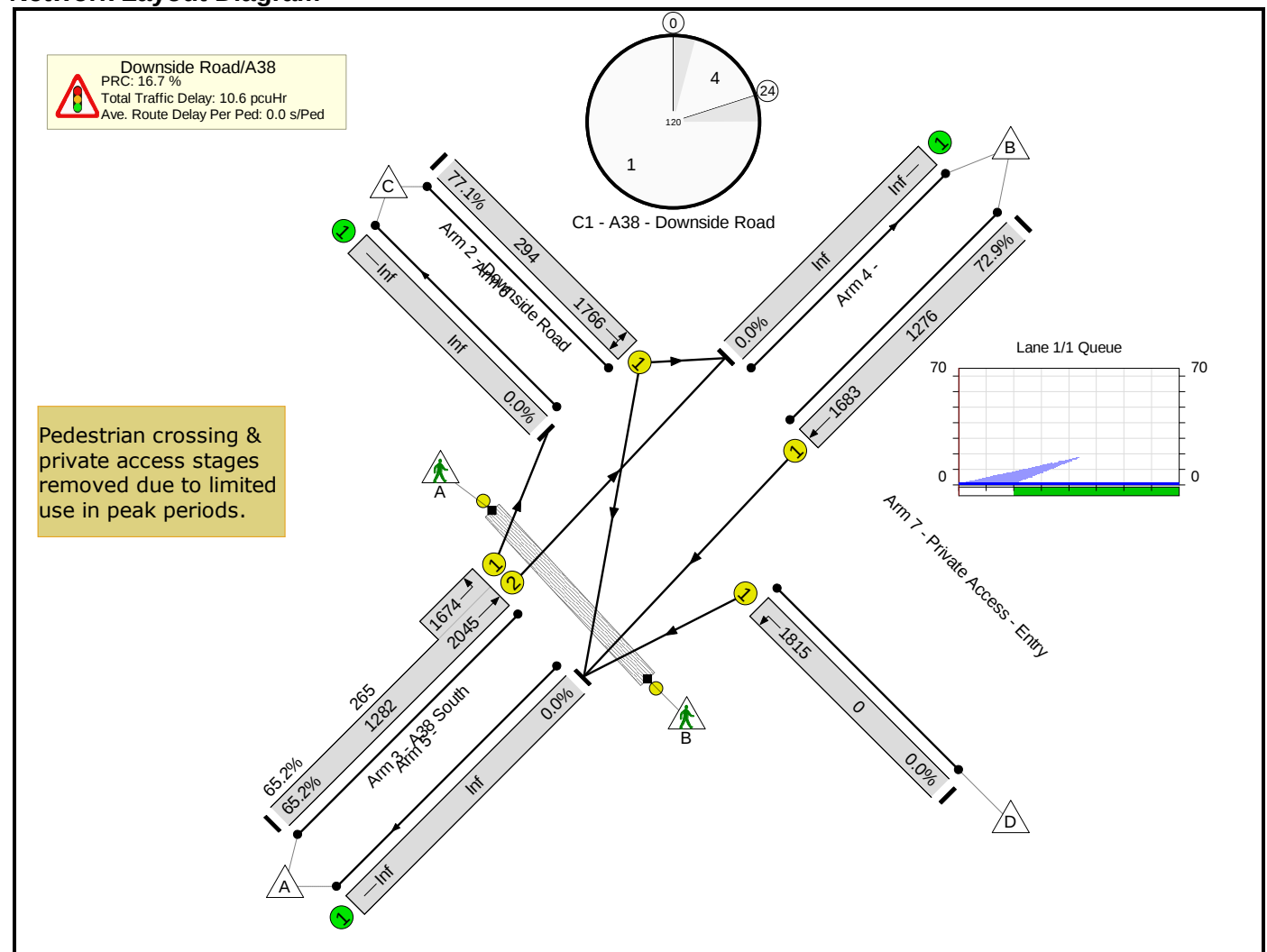
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	890	261	0	1151
	B	984	0	0	0	984
	C	47	240	0	0	287
	D	0	0	0	0	0
	Tot.	1031	1130	261	0	2422

Scenario 2: '2018 Baseline Inter Peak' (FG2: '2018 Baseline Inter Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Basic Results Summary

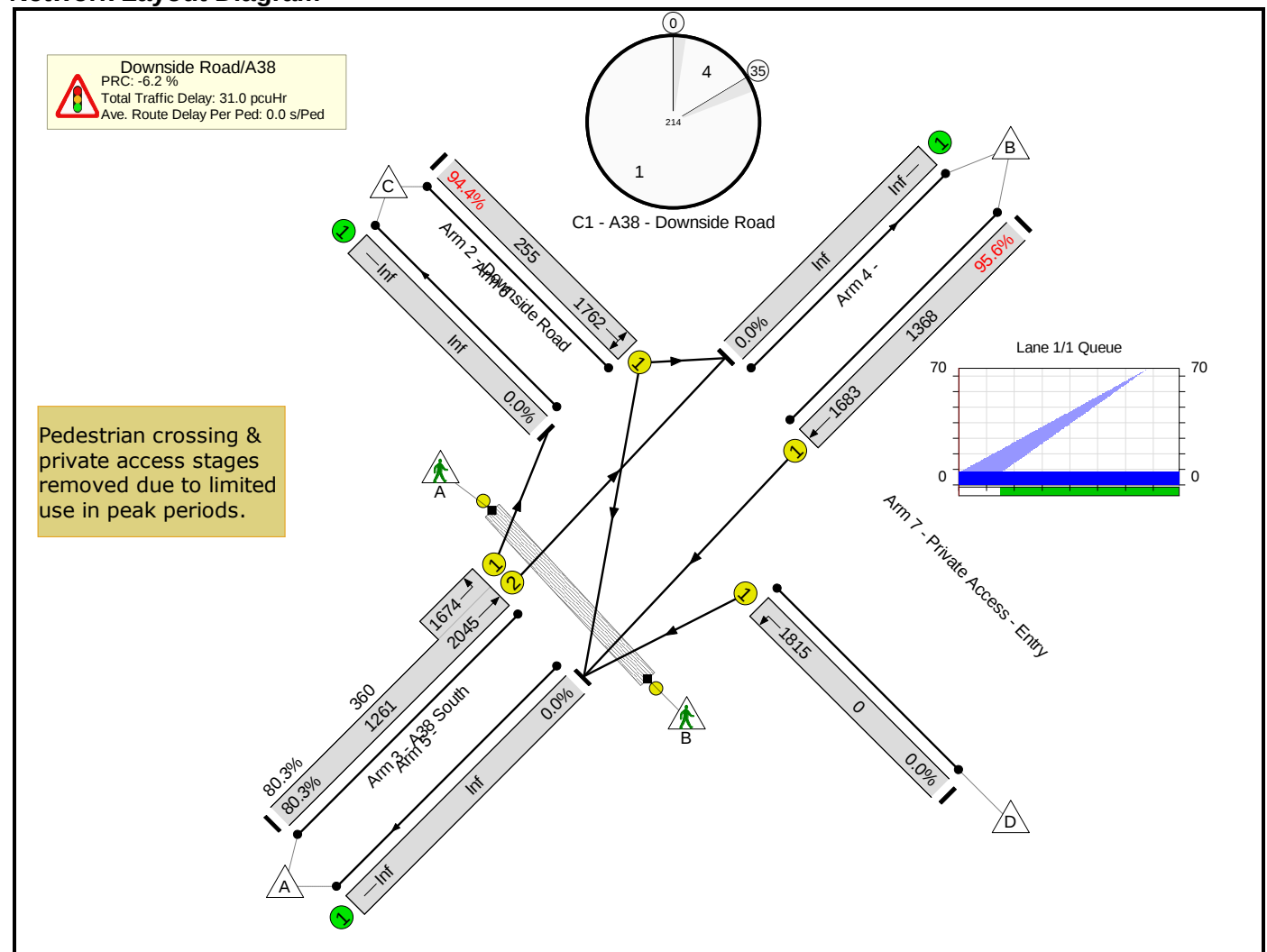
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	836	173	0	1009	
B	931	0	0	0	931	
C	89	138	0	0	227	
D	0	0	0	0	0	
Tot.	1020	974	173	0	2167	

Scenario 3: '2018 Baseline PM Peak' (FG3: '2018 Baseline PM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Basic Results Summary

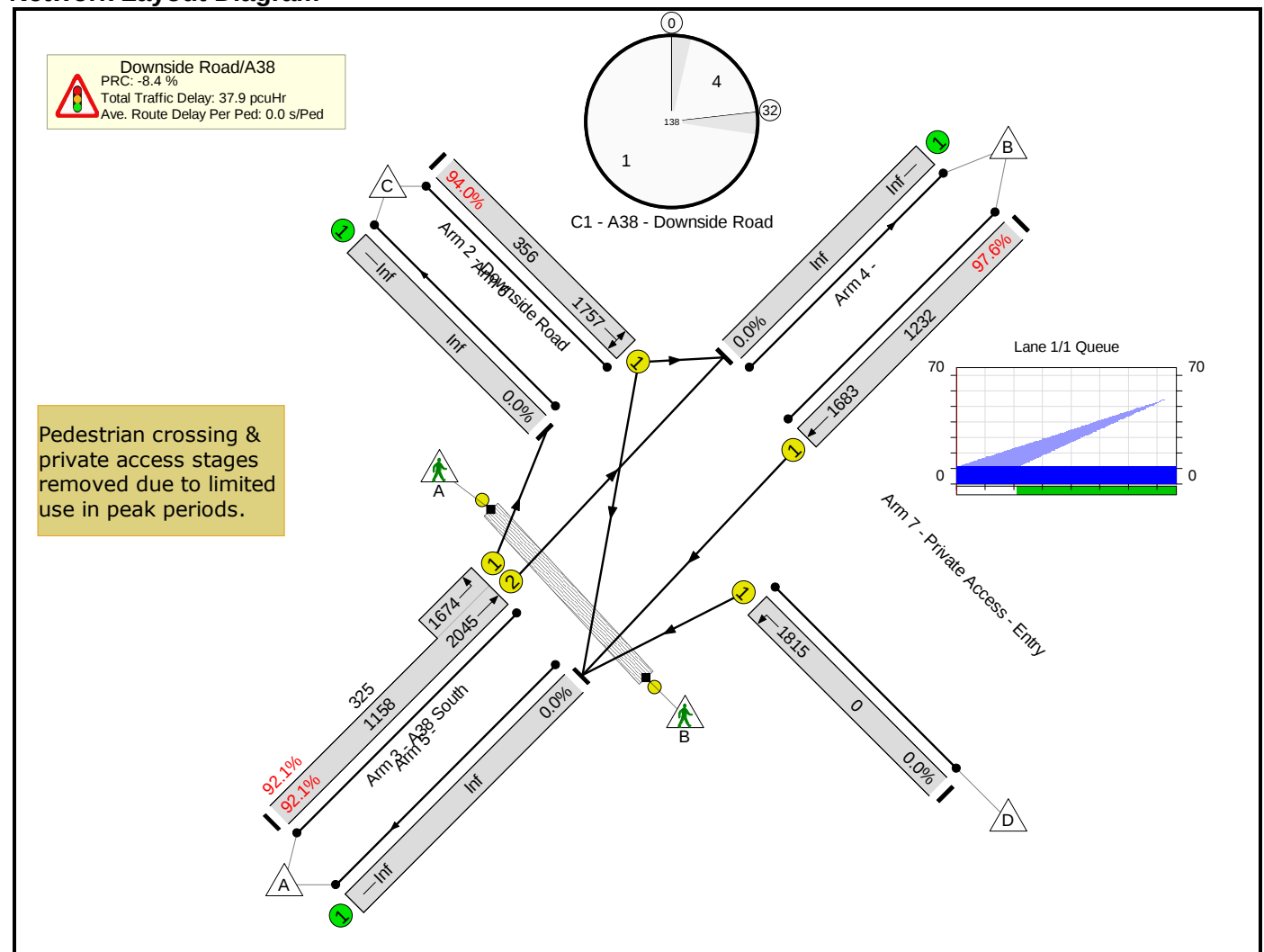
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
A		0	1012	289	0	1301
B		1308	0	0	0	1308
C		73	168	0	0	241
D		0	0	0	0	0
Tot.		1381	1180	289	0	2850

Scenario 4: '2026 Reference AM ' (FG4: '2026 Reference AM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Cycle Time (s): 138

Basic Results Summary

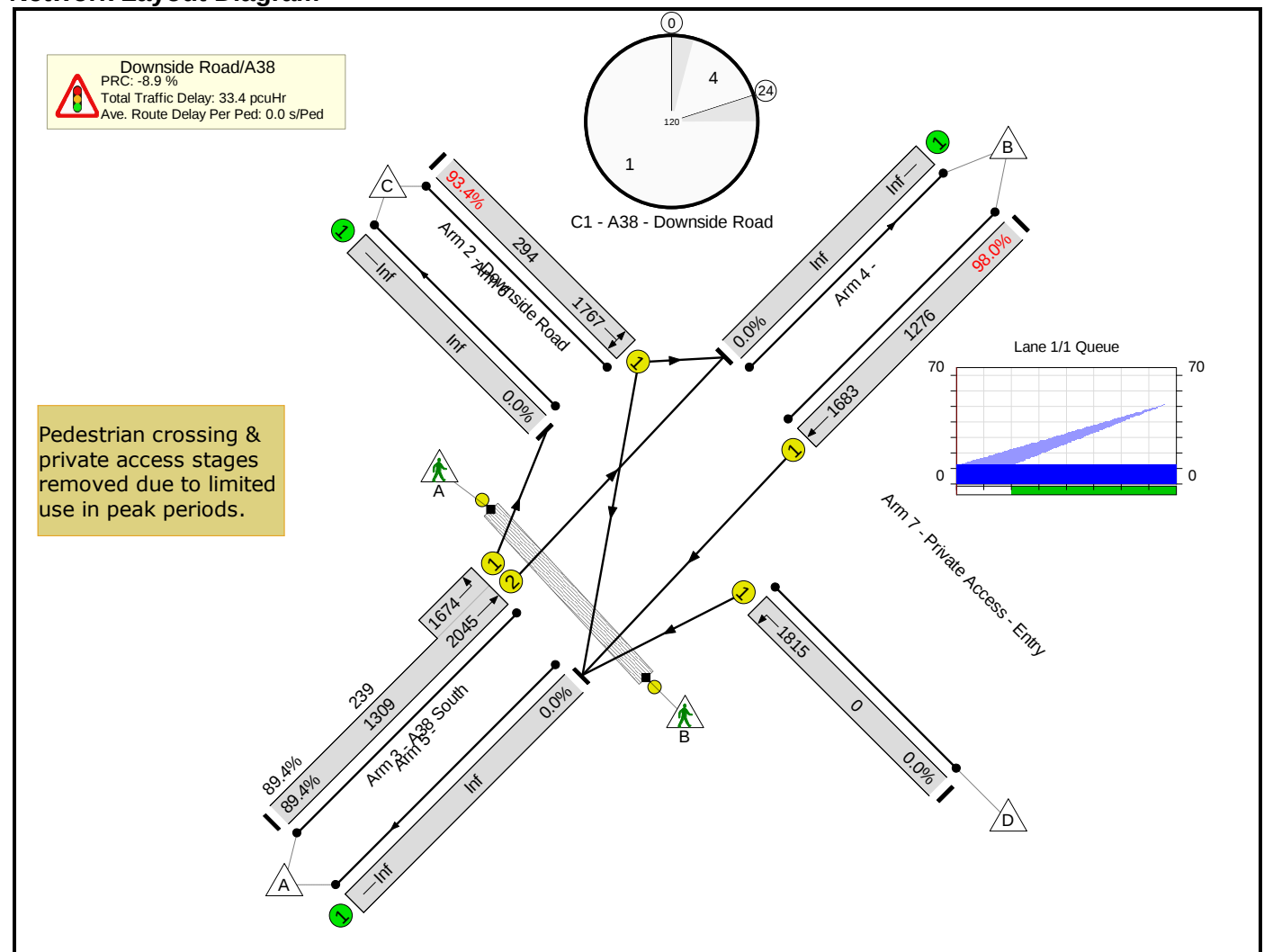
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	1066	299	0	1365
	B	1202	0	0	0	1202
	C	61	274	0	0	335
	D	0	0	0	0	0
	Tot.	1263	1340	299	0	2902

Scenario 5: '2026 Reference Inter Peak' (FG5: '2026 Reference Inter Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Basic Results Summary

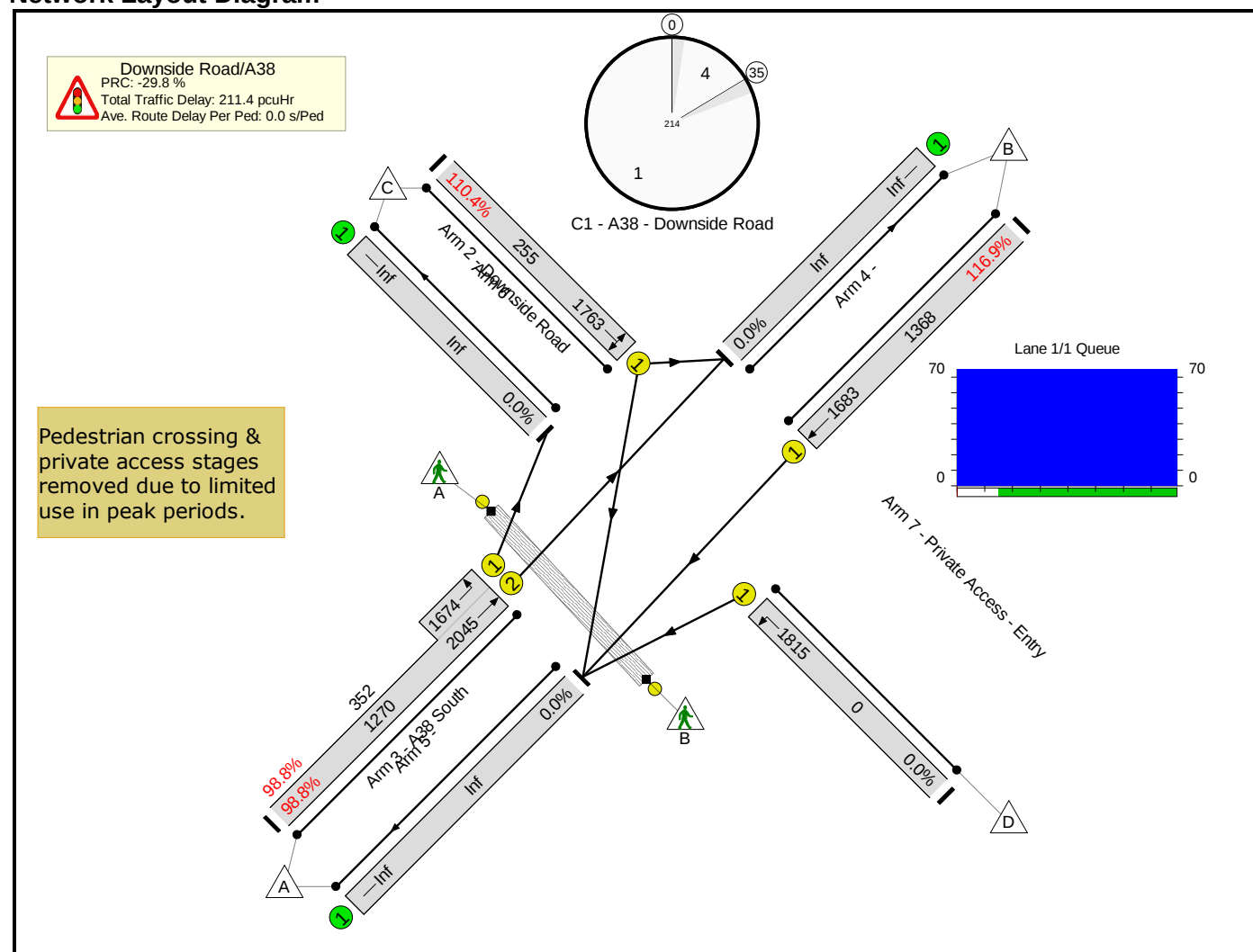
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	1170	214	0	1384
	B	1251	0	0	0	1251
	C	114	161	0	0	275
	D	0	0	0	0	0
	Tot.	1365	1331	214	0	2910

Scenario 6: '2026 Reference PM' (FG6: '2026 Reference PM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Basic Results Summary

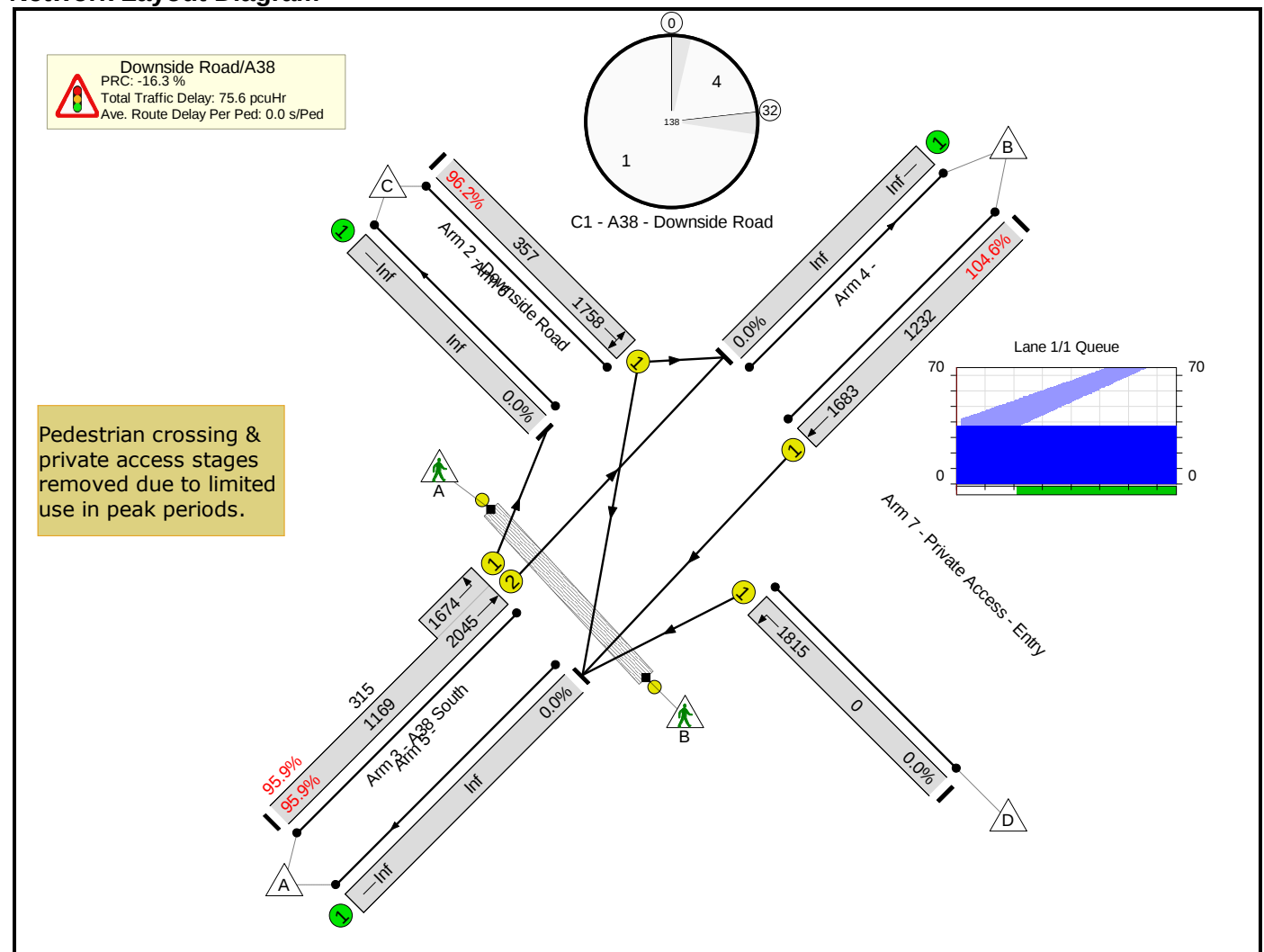
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	1255	348	0	1603
	B	1599	0	0	0	1599
	C	90	192	0	0	282
	D	0	0	0	0	0
	Tot.	1689	1447	348	0	3484

Scenario 7: '2026 Test AM Peak' (FG7: '2026 Test AM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

C1 - A38 - Downside Road	PRC for Signalled Lanes (%):	-16.3	Total Delay for Signalled Lanes (pcuHr):	75.61	Cycle Time (s): 138
	PRC Over All Lanes (%):	-16.3	Total Delay Over All Lanes(pcuHr):	75.61	

Basic Results Summary

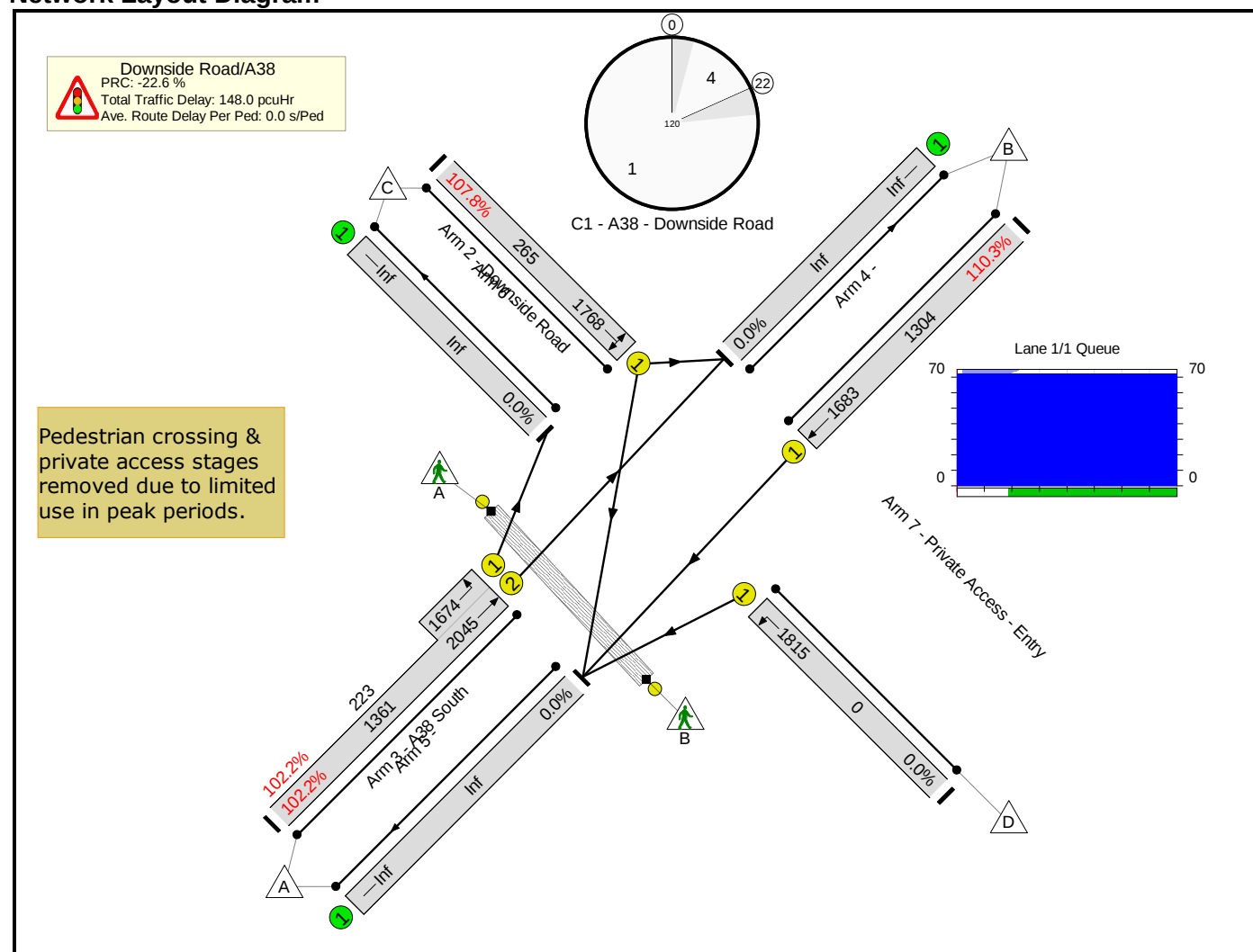
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	1121	302	0	1423
	B	1289	0	0	0	1289
	C	69	274	0	0	343
	D	0	0	0	0	0
	Tot.	1358	1395	302	0	3055

Scenario 8: '2026 Test Inter Peak' (FG8: '2026 Test Inter Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Basic Results Summary

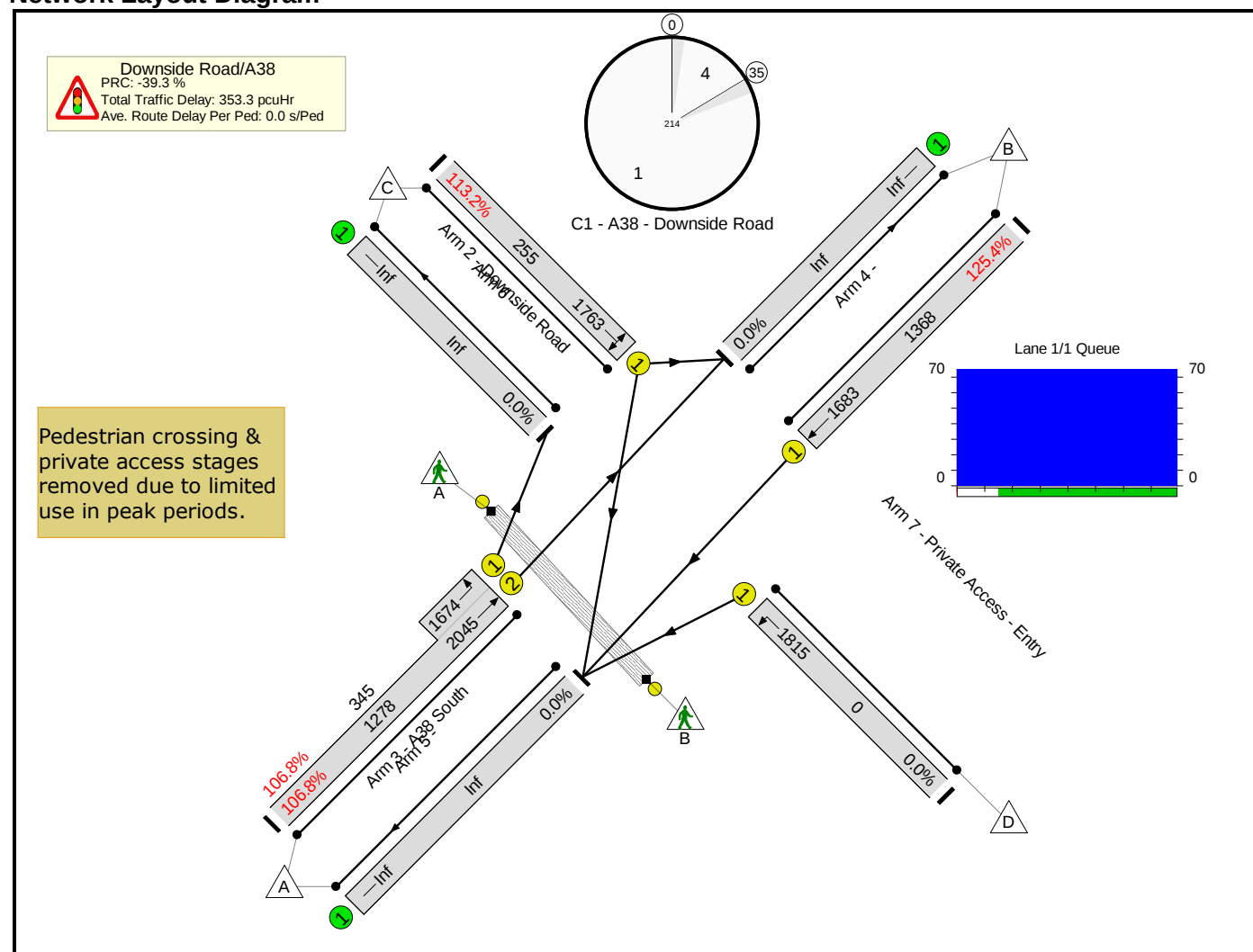
Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
A		0	1391	228	0	1619
B		1439	0	0	0	1439
C		125	161	0	0	286
D		0	0	0	0	0
Tot.		1564	1552	228	0	3344

Scenario 9: '2026 Test PM Peak' (FG9: '2026 Test PM Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

Basic Results Summary

Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	1365	368	0	1733
	B	1716	0	0	0	1716
	C	97	192	0	0	289
	D	0	0	0	0	0
	Tot.	1813	1557	368	0	3738

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.2.5947															
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Filename: A38 - West Lane Junction - 2018 and 2026 - Existing Junction.j9

Path: \\pba.int\BRI\Projects\43321 Bristol Airport\Technical\Transport\Junction Assessments\PICADY

Report generation date: 03-Dec-18 4:12:09 PM

»2018 BASELINE, AM

»2018 BASELINE, IP

»2018 BASELINE, PM

»2026 Reference, AM

»2026 Reference, IP

»2026 Reference, PM

»2026 Test, AM

»2026 Test, IP

»2026 Test, PM

Summary of junction performance

	AM					IP					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
	2018 BASELINE														
Stream B-C	1.1	16.30	0.52	C	-5 %	0.7	12.88	0.40	B	2 %	4.3	57.10	0.84	F	-20 %
Stream B-A	0.2	43.23	0.15	E	[Stream B-A]	0.2	32.91	0.15	D	[Stream B-A]	0.7	287.44	0.47	F	[Stream B-A]
Stream C-AB	0.6	12.25	0.37	B		0.5	11.66	0.33	B		1.4	21.34	0.60	C	
	2026 Reference														
Stream B-C	3.1	42.46	0.78	E	-19 %	3.6	55.65	0.80	F	-23 %	59.5	628.42	1.43	F	-34 %
Stream B-A	0.9	238.38	0.55	F	[Stream B-A]	5.9	1717.83	1.83	F	[Stream B-A]	5.9	1804.55	9999999999.00	F	[Stream B-A]
Stream C-AB	1.0	16.62	0.49	C		1.2	20.01	0.54	C		6.1	46.62	0.86	E	
	2026 Test														
Stream B-C	9.8	121.48	0.97	F	-24 %	14.0	178.43	1.03	F	-33 %	87.4	1039.05	1.60	F	-38 %
Stream B-A	6.2	4413.46	3.48	F	[Stream B-A]	11.7	1794.21	9999999999.00	F	[Stream B-A]	10.1	3265.61	9999999999.00	F	[Stream B-A]
Stream C-AB	1.2	19.29	0.54	C		2.7	34.22	0.72	D		22.5	99.08	1.01	F	

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

File summary

File Description

Title	West Lane / A38 Junction
Location	Bristol Airport
Site number	
Date	23-Aug-18
Version	1.0
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CTAS\Caroline
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 BASELINE	AM	ONE HOUR	07:45	09:15	15
D2	2018 BASELINE	IP	ONE HOUR	12:45	14:15	15
D3	2018 BASELINE	PM	ONE HOUR	16:45	18:15	15
D4	2026 Reference	AM	ONE HOUR	07:45	09:15	15
D5	2026 Reference	IP	ONE HOUR	12:45	14:15	15
D6	2026 Reference	PM	ONE HOUR	16:45	18:15	15
D7	2026 Test	AM	ONE HOUR	07:45	09:15	15
D8	2026 Test	IP	ONE HOUR	12:45	14:15	15
D9	2026 Test	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2018 BASELINE, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.78	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	A38 (North)		Major
B	West Lane		Minor
C	A38 (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.40		✓	3.20	140.0	✓	13.50

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes	3.80	2.20	21	49

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	468	0.080	0.202	0.127	0.289
1	B-C	707	0.102	0.257	-	-
1	C-B	726	0.264	0.264	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2018 BASELINE	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	822	100.000
B		✓	228	100.000
C		✓	1142	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	21	801
	B	13	0	215
	C	977	165	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	4	5
	B	0	0	1
	C	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.52	16.30	1.1	C
B-A	0.15	43.23	0.2	E
C-AB	0.37	12.25	0.6	B
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	162	544	0.298	160	0.4	9.432	A
B-A	10	215	0.046	10	0.0	17.512	C
C-AB	124	563	0.221	123	0.3	8.493	A
C-A	736			736			
A-B	16			16			
A-C	603			603			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	193	511	0.379	193	0.6	11.416	B
B-A	12	166	0.071	12	0.1	23.352	C
C-AB	148	531	0.279	148	0.4	9.761	A
C-A	878			878			
A-B	19			19			
A-C	720			720			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	237	460	0.515	235	1.0	16.038	C
B-A	14	98	0.146	14	0.2	42.798	E
C-AB	182	487	0.373	181	0.6	12.188	B
C-A	1076			1076			
A-B	23			23			
A-C	882			882			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	237	459	0.515	237	1.1	16.303	C
B-A	14	97	0.147	14	0.2	43.234	E
C-AB	182	487	0.373	182	0.6	12.252	B
C-A	1076			1076			
A-B	23			23			
A-C	882			882			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	193	510	0.379	195	0.6	11.599	B
B-A	12	165	0.071	12	0.1	23.549	C
C-AB	148	531	0.279	149	0.4	9.826	A
C-A	878			878			
A-B	19			19			
A-C	720			720			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	162	544	0.298	163	0.4	9.558	A
B-A	10	215	0.046	10	0.0	17.605	C
C-AB	124	563	0.221	125	0.3	8.555	A
C-A	736			736			
A-B	16			16			
A-C	603			603			

2018 BASELINE, IP

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2018 BASELINE	IP	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	801	100.000
B		✓	185	100.000
C		✓	989	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	31	770
	B	17	0	168
	C	841	148	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	4
	B	0	0	1
	C	3	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.40	12.88	0.7	B
B-A	0.15	32.91	0.2	D
C-AB	0.33	11.66	0.5	B
C-A				
A-B				
A-C				

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	126	548	0.231	125	0.3	8.578	A
B-A	13	236	0.054	13	0.1	16.109	C
C-AB	111	567	0.197	110	0.3	8.419	A
C-A	633			633			
A-B	23			23			
A-C	580			580			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	151	515	0.293	151	0.4	9.954	A
B-A	15	191	0.080	15	0.1	20.514	C
C-AB	133	536	0.248	133	0.3	9.541	A
C-A	756			756			
A-B	28			28			
A-C	692			692			

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	185	467	0.396	184	0.6	12.786	B
B-A	19	128	0.146	18	0.2	32.679	D
C-AB	163	493	0.330	162	0.5	11.613	B
C-A	926			926			
A-B	34			34			
A-C	848			848			

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	185	467	0.396	185	0.7	12.882	B
B-A	19	128	0.146	19	0.2	32.912	D
C-AB	163	493	0.330	163	0.5	11.658	B
C-A	926			926			
A-B	34			34			
A-C	848			848			

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	151	515	0.293	152	0.4	10.039	B
B-A	15	190	0.080	16	0.1	20.650	C
C-AB	133	536	0.248	134	0.4	9.591	A
C-A	756			756			
A-B	28			28			
A-C	692			692			

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	126	548	0.231	127	0.3	8.650	A
B-A	13	235	0.054	13	0.1	16.190	C
C-AB	111	567	0.197	112	0.3	8.469	A
C-A	633			633			
A-B	23			23			
A-C	580			580			

2018 BASELINE, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	8.85	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-20	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2018 BASELINE	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1072	100.000
B		✓	274	100.000
C		✓	1198	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	11	1061
	B	9	0	265
	C	974	224	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	7	1
	B	0	0	1
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.84	57.10	4.3	F
B-A	0.47	287.44	0.7	F
C-AB	0.60	21.34	1.4	C
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	200	496	0.403	197	0.7	12.071	B
B-A	7	163	0.041	7	0.0	22.924	C
C-AB	169	513	0.329	167	0.5	10.340	B
C-A	733			733			
A-B	8			8			
A-C	799			799			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	238	451	0.528	237	1.1	16.779	C
B-A	8	104	0.078	8	0.1	37.449	E
C-AB	201	472	0.427	200	0.7	13.222	B
C-A	876			876			
A-B	10			10			
A-C	954			954			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	292	358	0.815	282	3.5	43.253	E
B-A	10	22	0.450	8	0.5	238.164	F
C-AB	247	415	0.595	245	1.4	20.750	C
C-A	1072			1072			
A-B	12			12			
A-C	1168			1168			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	292	348	0.839	289	4.3	57.095	F
B-A	10	21	0.466	9	0.7	287.440	F
C-AB	247	415	0.595	247	1.4	21.340	C
C-A	1072			1072			
A-B	12			12			
A-C	1168			1168			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	238	449	0.531	251	1.2	19.412	C
B-A	8	103	0.079	10	0.1	39.797	E
C-AB	201	472	0.427	204	0.8	13.581	B
C-A	876			876			
A-B	10			10			
A-C	954			954			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	200	495	0.403	201	0.7	12.459	B
B-A	7	163	0.042	7	0.0	23.153	C
C-AB	169	513	0.329	170	0.5	10.519	B
C-A	733			733			
A-B	8			8			
A-C	799			799			

2026 Reference, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	6.87	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-19	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2026 Reference	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	974	100.000
B		✓	272	100.000
C		✓	1340	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	24	950
	B	15	0	257
	C	1142	198	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	4	5
	B	0	0	1
	C	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.78	42.46	3.1	E
B-A	0.55	238.38	0.9	F
C-AB	0.49	16.62	1.0	C
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	193	512	0.378	191	0.6	11.232	B
B-A	11	169	0.067	11	0.1	22.725	C
C-AB	149	533	0.280	147	0.4	9.684	A
C-A	860			860			
A-B	18			18			
A-C	715			715			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	231	470	0.492	230	0.9	15.035	C
B-A	13	111	0.122	13	0.1	36.810	E
C-AB	178	495	0.360	177	0.6	11.761	B
C-A	1027			1027			
A-B	22			22			
A-C	854			854			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	283	374	0.756	276	2.7	34.721	D
B-A	17	31	0.541	14	0.8	196.989	F
C-AB	218	443	0.492	216	1.0	16.405	C
C-A	1257			1257			
A-B	26			26			
A-C	1046			1046			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	283	364	0.777	281	3.1	42.455	E
B-A	17	30	0.550	16	0.9	238.384	F
C-AB	218	443	0.492	218	1.0	16.623	C
C-A	1257			1257			
A-B	26			26			
A-C	1046			1046			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	231	466	0.496	239	1.0	16.593	C
B-A	13	110	0.122	17	0.1	39.669	E
C-AB	178	495	0.360	180	0.6	11.930	B
C-A	1027			1027			
A-B	22			22			
A-C	854			854			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	193	512	0.378	195	0.6	11.529	B
B-A	11	168	0.067	12	0.1	22.987	C
C-AB	149	533	0.280	150	0.4	9.800	A
C-A	860			860			
A-B	18			18			
A-C	715			715			

2026 Reference, IP

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	19.33	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-23	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2026 Reference	IP	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1065	100.000
B		✓	245	100.000
C		✓	1327	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	37	1028
	B	20	0	225
	C	1123	204	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	4
	B	0	0	1
	C	3	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.80	55.65	3.6	F
B-A	1.83	1717.83	5.9	F
C-AB	0.54	20.01	1.2	C
C-A				
A-B				
A-C				

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	169	493	0.344	167	0.5	11.097	B
B-A	15	157	0.096	15	0.1	25.216	D
C-AB	154	514	0.299	152	0.4	10.572	B
C-A	845			845			
A-B	28			28			
A-C	774			774			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	202	444	0.456	201	0.8	14.913	B
B-A	18	96	0.187	18	0.2	45.481	E
C-AB	183	473	0.387	183	0.7	13.207	B
C-A	1010			1010			
A-B	33			33			
A-C	924			924			

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	248	309	0.802	238	3.2	46.455	E
B-A	22	13	1.741	10	3.2	807.821	F
C-AB	225	417	0.539	223	1.2	19.613	C
C-A	1236			1236			
A-B	41			41			
A-C	1132			1132			

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	248	309	0.802	246	3.6	55.654	F
B-A	22	12	1.831	11	5.9	1717.825	F
C-AB	225	417	0.539	225	1.2	20.014	C
C-A	1236			1236			
A-B	41			41			
A-C	1132			1132			

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	202	415	0.487	213	1.0	18.784	C
B-A	18	95	0.189	41	0.3	88.000	F
C-AB	183	473	0.387	186	0.7	13.480	B
C-A	1010			1010			
A-B	33			33			
A-C	924			924			

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	169	492	0.344	171	0.5	11.395	B
B-A	15	156	0.096	16	0.1	25.700	D
C-AB	154	514	0.299	155	0.5	10.730	B
C-A	845			845			
A-B	28			28			
A-C	774			774			

2026 Reference, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	78.31	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-34	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2026 Reference	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1302	100.000
B		✓	342	100.000
C		✓	1445	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	13	1289
	B	10	0	332
	C	1173	272	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	7	1
	B	0	0	1
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	1.43	628.42	59.5	F
B-A	999999999.00	1804.55	5.9	F
C-AB	0.86	46.62	6.1	E
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	250	448	0.558	245	1.2	17.552	C
B-A	8	99	0.076	7	0.1	39.024	E
C-AB	205	467	0.438	202	0.8	13.410	B
C-A	883			883			
A-B	10			10			
A-C	970			970			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	298	372	0.802	290	3.3	40.577	E
B-A	9	27	0.335	8	0.4	180.586	F
C-AB	245	418	0.586	243	1.3	20.277	C
C-A	1054			1054			
A-B	12			12			
A-C	1159			1159			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	366	255	1.432	252	31.8	278.438	F
B-A	11	0	999999999.000	0	3.1	1804.555	F
C-AB	449	520	0.864	434	5.0	37.540	E
C-A	1142			1142			
A-B	14			14			
A-C	1419			1419			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	366	255	1.432	255	59.5	619.602	F
B-A	11	0	999999999.000	0	5.9	-3531.117	?
C-AB	449	521	0.862	445	6.1	46.615	E
C-A	1142			1142			
A-B	14			14			
A-C	1419			1419			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	298	306	0.976	300	59.0	628.421	F
B-A	9	22	0.411	19	3.5	911.067	F
C-AB	245	420	0.584	264	1.5	25.746	D
C-A	1054			1054			
A-B	12			12			
A-C	1159			1159			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	250	431	0.579	424	15.5	323.643	F
B-A	8	97	0.077	21	0.1	54.513	F
C-AB	205	467	0.438	208	0.8	14.006	B
C-A	883			883			
A-B	10			10			
A-C	970			970			

2026 Test, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	37.94	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-24	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2026 Test	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1044	100.000
B		✓	289	100.000
C		✓	1395	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	24	1020
	B	15	0	274
	C	1187	208	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	4	5
	B	0	0	1
	C	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.97	121.48	9.8	F
B-A	3.48	4413.46	6.2	F
C-AB	0.54	19.29	1.2	C
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	206	498	0.414	203	0.7	12.229	B
B-A	11	152	0.074	11	0.1	25.475	D
C-AB	157	519	0.302	155	0.4	10.244	B
C-A	894			894			
A-B	18			18			
A-C	768			768			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	246	451	0.546	244	1.2	17.437	C
B-A	13	90	0.149	13	0.2	46.453	E
C-AB	187	478	0.391	186	0.7	12.774	B
C-A	1067			1067			
A-B	22			22			
A-C	917			917			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	302	312	0.968	277	7.3	78.108	F
B-A	17	5	3.088	4	3.2	1256.678	F
C-AB	229	423	0.542	227	1.2	18.912	C
C-A	1307			1307			
A-B	26			26			
A-C	1123			1123			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	302	312	0.968	292	9.8	121.477	F
B-A	17	5	3.484	5	6.2	4413.463	F
C-AB	229	423	0.542	229	1.2	19.287	C
C-A	1307			1307			
A-B	26			26			
A-C	1123			1123			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	246	419	0.588	279	1.5	31.560	D
B-A	13	89	0.151	38	0.2	96.613	F
C-AB	187	478	0.391	189	0.7	13.034	B
C-A	1067			1067			
A-B	22			22			
A-C	917			917			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	206	498	0.415	210	0.7	12.759	B
B-A	11	151	0.075	12	0.1	25.880	D
C-AB	157	519	0.302	157	0.5	10.393	B
C-A	894			894			
A-B	18			18			
A-C	768			768			

2026 Test, IP

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	29.83	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-33	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2026 Test	IP	ONE HOUR	12:45	14:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1217	100.000
B		✓	279	100.000
C		✓	1542	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	37	1180
	B	20	0	259
	C	1299	243	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	4
	B	0	0	1
	C	3	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	1.03	178.43	14.0	F
B-A	999999999.00	1794.21	11.7	F
C-AB	0.72	34.22	2.7	D
C-A				
A-B				
A-C				

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	195	459	0.425	192	0.7	13.475	B
B-A	15	109	0.139	14	0.2	38.025	E
C-AB	183	484	0.378	180	0.6	12.578	B
C-A	978			978			
A-B	28			28			
A-C	888			888			

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	233	378	0.616	230	1.5	23.971	C
B-A	18	38	0.471	16	0.7	151.411	F
C-AB	219	437	0.500	217	1.0	17.347	C
C-A	1168			1168			
A-B	33			33			
A-C	1061			1061			

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	285	276	1.031	254	9.4	103.937	F
B-A	22	0	999999999.000	0	6.2	1794.213	F
C-AB	284	395	0.718	278	2.5	31.559	D
C-A	1414			1414			
A-B	41			41			
A-C	1299			1299			

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	285	276	1.031	267	14.0	178.434	F
B-A	22	0	999999999.000	0	11.7	-2198.598	?
C-AB	284	394	0.719	283	2.7	34.215	D
C-A	1414			1414			
A-B	41			41			
A-C	1299			1299			

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	233	323	0.721	276	3.2	94.874	F
B-A	18	36	0.501	33	7.9	965.091	F
C-AB	219	437	0.500	225	1.1	18.611	C
C-A	1168			1168			
A-B	33			33			
A-C	1061			1061			

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	195	424	0.460	204	0.9	17.184	C
B-A	15	107	0.140	46	0.2	86.631	F
C-AB	183	484	0.378	185	0.7	12.939	B
C-A	978			978			
A-B	28			28			
A-C	888			888			

2026 Test, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	141.78	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-38	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2026 Test	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	1396	100.000
B		✓	353	100.000
C		✓	1552	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	13	1383
	B	10	0	343
	C	1260	292	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	7	1
	B	0	0	1
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	1.60	1039.05	87.4	F
B-A	999999999.00	3265.61	10.1	F
C-AB	1.01	99.08	22.5	F
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	258	427	0.605	252	1.5	20.241	C
B-A	8	72	0.104	7	0.1	54.626	F
C-AB	220	449	0.490	216	0.9	15.256	C
C-A	949			949			
A-B	10			10			
A-C	1041			1041			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	308	289	1.065	270	11.2	113.650	F
B-A	9	0	999999999.000	0	2.4	3265.609	F
C-AB	266	399	0.665	262	1.8	25.548	D
C-A	1130			1130			
A-B	12			12			
A-C	1243			1243			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	378	235	1.604	234	47.0	472.976	F
B-A	11	0	999999999.000	0	5.1	2495.061	F
C-AB	1709	1698	1.006	1671	11.3	35.391	E
C-A	0			0			
A-B	14			14			
A-C	1523			1523			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	378	235	1.604	235	82.6	904.449	F
B-A	11	0	999999999.000	0	7.9	1737.589	F
C-AB	1709	1702	1.004	1664	22.5	53.457	F
C-A	0			0			
A-B	14			14			
A-C	1523			1523			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	308	289	1.065	289	87.4	1039.047	F
B-A	9	0	999999999.000	0	10.1	967.041	F
C-AB	266	405	0.656	346	2.3	99.082	F
C-A	1130			1130			
A-B	12			12			
A-C	1243			1243			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	258	363	0.712	358	62.4	754.290	F
B-A	8	70	0.108	47	0.1	262.668	F
C-AB	220	449	0.490	225	1.0	16.469	C
C-A	949			949			
A-B	10			10			
A-C	1041			1041			

Basic Results Summary

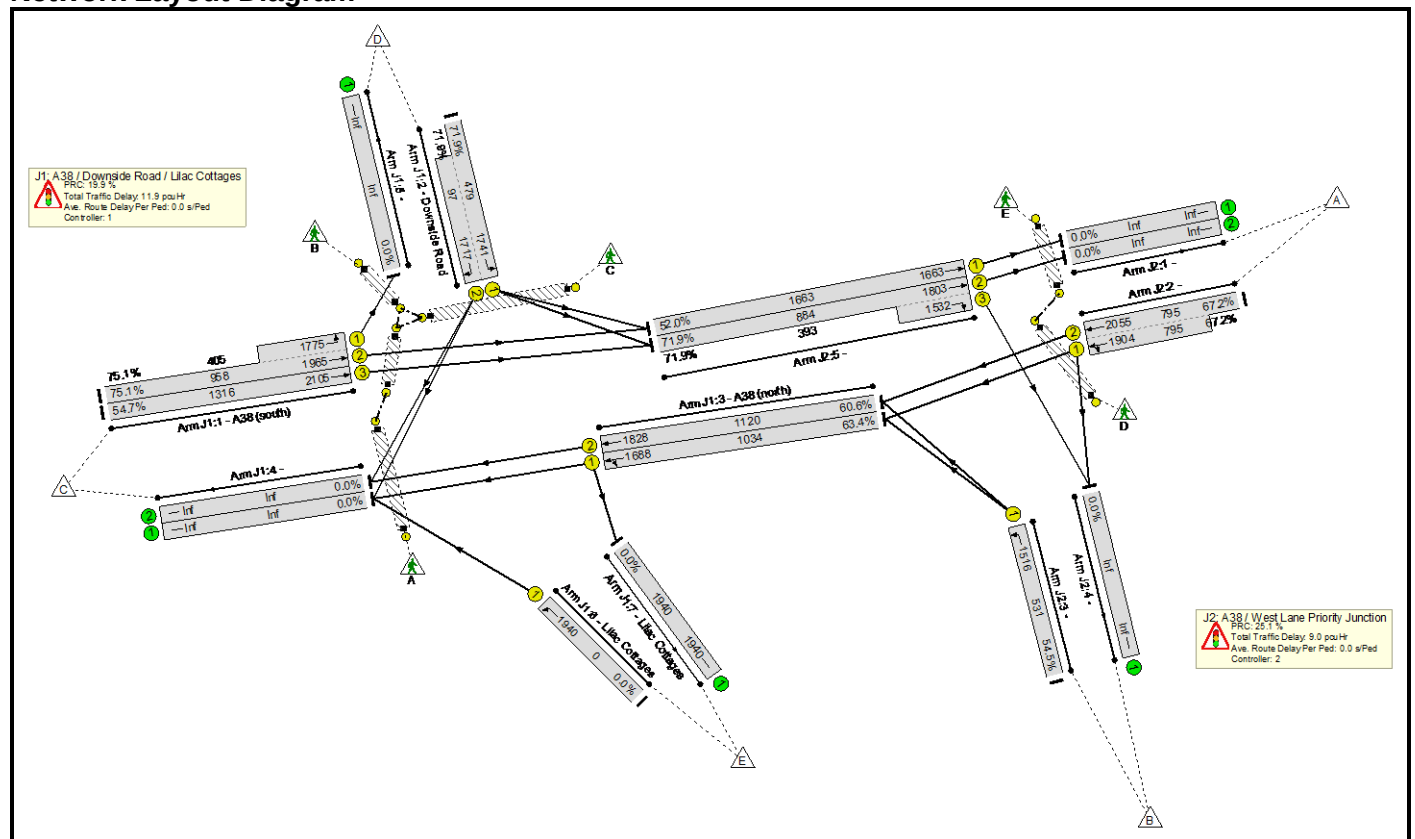
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J4_Downside Road_A38_West Lane_Signalised Junction Proposed.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2026 Test Case - AM' (FG1: '2026 Test AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	20.9	-	-
J1: A38 / Downside Road / Lilac Cottages	-	-	-		-	-	-	-	-	-	75.1%	0	0	0	11.9	-	-
1/2+1/1	A38 (south) Left Ahead	U	C1:A C1:E		1	49:80	-	1023	1965:1775	958+405	75.1 : 75.1%	-	-	-	3.3	11.6	12.4
1/3	A38 (south) Ahead	U	C1:A		1	49	-	720	2105	1316	54.7%	-	-	-	2.3	11.6	9.6
2/1+2/2	Downside Road Right Left	U	C1:D C1:C		1	21	-	414	1741:1717	479+97	71.9 : 71.9%	-	-	-	4.2	36.4	8.1
3/1	A38 (north) Ahead Left	U	C1:B		1	48	-	655	1688	1034	63.4%	-	-	-	1.0	5.7	4.3
3/2	A38 (north) Ahead	U	C1:B		1	48	-	678	1828	1120	60.6%	-	-	-	1.0	5.4	4.1
6/1	Lilac Cottages Left	U	C1:J		0	0	-	0	1940	0	0.0%	-	-	-	0.0	0.0	0.0
7/1	Lilac Cottages	U	-		-	-	-	0	1940	1940	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C1:F		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-	C1:G		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-	C1:H		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-	C1:I		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
J2: A38 / West Lane Priority Junction	-	-	-		-	-	-	-	-	-	71.9%	0	0	0	9.0	-	-
2/2+2/1	Ahead Left	U	C2:B		1	42	-	1068	2055:1904	795+795	67.2 : 67.2%	-	-	-	4.5	15.2	8.6
3/1	Left	U	C2:C		1	27	-	289	1516	531	54.5%	-	-	-	2.3	28.3	5.7

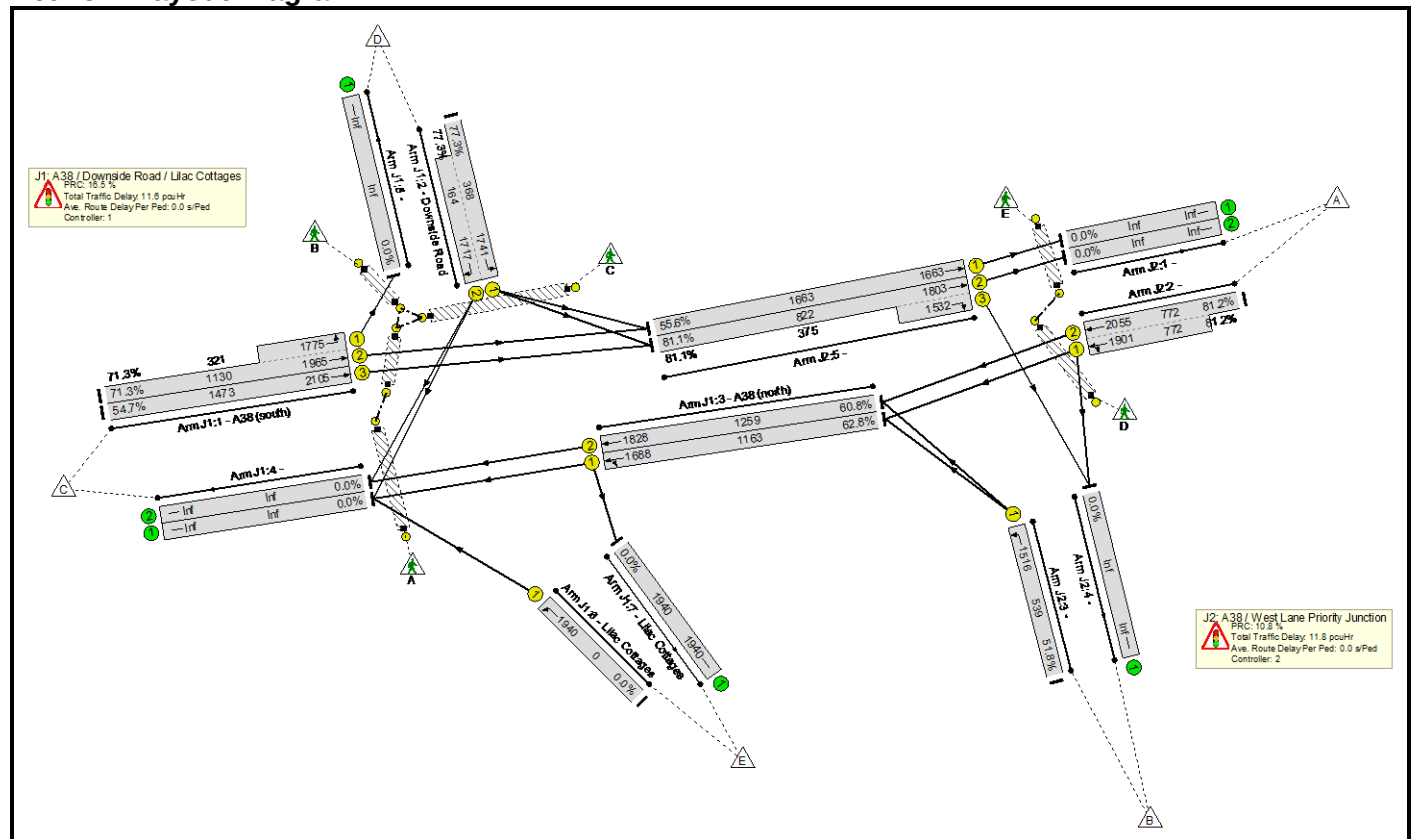
Basic Results Summary

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Basic Results Summary

Scenario 2: '2026 Test Case - Inter Peak' (FG2: '2026 Test Inter Peak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	81.2%	0	0	0	23.3	-	-
J1: A38 / Downside Road / Lilac Cottages	-	-	-		-	-	-	-	-	-	77.3%	0	0	0	11.6	-	-
1/2+1/1	A38 (south) Left Ahead	U	C1:A C1:E		1	62:90	-	1034	1965:1775	1130+321	71.3 : 71.3%	-	-	-	2.8	9.8	12.8
1/3	A38 (south) Ahead	U	C1:A		1	62	-	806	2105	1473	54.7%	-	-	-	2.1	9.3	10.2
2/1+2/2	Downside Road Right Left	U	C1:D C1:C		1	18	-	411	1741:1717	368+164	77.3 : 77.3%	-	-	-	5.4	47.0	8.3
3/1	A38 (north) Ahead Left	U	C1:B		1	61	-	730	1688	1163	62.8%	-	-	-	0.7	3.3	3.8
3/2	A38 (north) Ahead	U	C1:B		1	61	-	766	1828	1259	60.8%	-	-	-	0.7	3.2	5.1
6/1	Lilac Cottages Left	U	C1:J		0	0	-	0	1940	0	0.0%	-	-	-	0.0	0.0	0.0
7/1	Lilac Cottages	U	-		-	-	-	0	1940	1940	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C1:F		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-	C1:G		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-	C1:H		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-	C1:I		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
J2: A38 / West Lane Priority Junction	-	-	-		-	-	-	-	-	-	81.2%	0	0	0	11.8	-	-
2/2+2/1	Ahead Left	U	C2:B		1	48	-	1254	2055:1901	772+772	81.2 : 81.2%	-	-	-	6.9	19.8	12.8
3/1	Left	U	C2:C		1	31	-	279	1516	539	51.8%	-	-	-	2.3	29.8	6.0

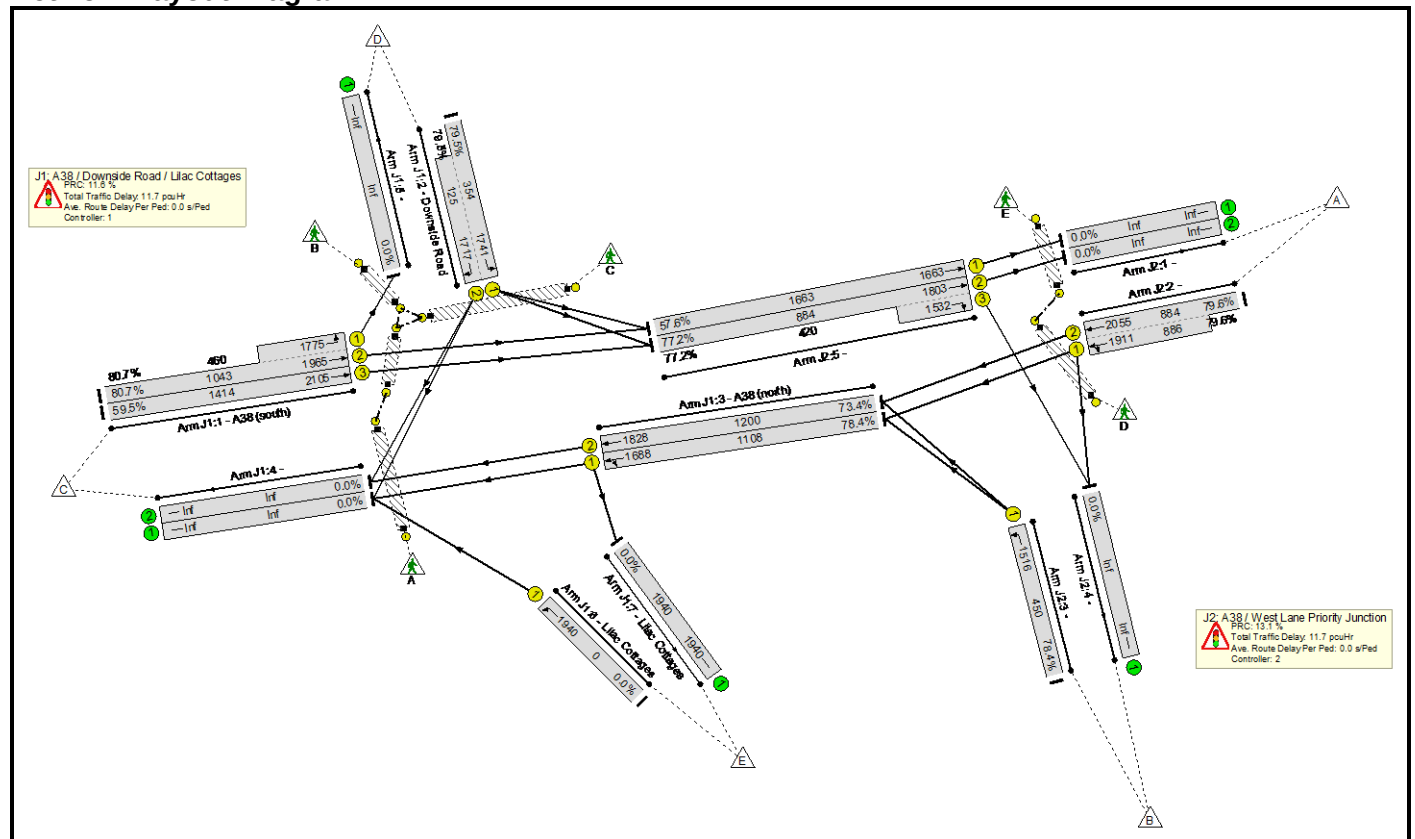
Basic Results Summary

5/1	Ahead	U	C2:A		1	90	-	924	1663	1663	55.6%	-	-	-	0.7	2.6	7.6
5/2+5/3	Ahead Right	U	C2:A C2:D		1	90:32	-	971	1803:1532	822+375	81.1 : 81.1%	-	-	-	1.9	7.0	15.7
Ped Link: P1	Unnamed Ped Link	-	C2:E		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-	C2:F		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
			C1	PRC for Signalled Lanes (%):			16.5	Total Delay for Signalled Lanes (pcuHr):				11.58	Cycle Time (s):		90		
			C2	PRC for Signalised Lanes (%):			10.8	Total Delay for Signalised Lanes (pcuHr):				11.75	Cycle Time (s):		90		
				PRC Over All Lanes (%):			10.8	Total Delay Over All Lanes(pcuHr):				23.34					

Basic Results Summary

Scenario 3: '2026 Test Case - PM' (FG3: '2026 Test PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	80.7%	0	0	0	23.4	-	-
J1: A38 / Downside Road / Lilac Cottages	-	-	-		-	-	-	-	-	-	80.7%	0	0	0	11.7	-	-
1/2+1/1	A38 (south) Left Ahead	U	C1:A C1:E		1	42:64	-	1212	1965:1775	1043+460	80.7 : 80.7%	-	-	-	3.5	10.3	11.2
1/3	A38 (south) Ahead	U	C1:A		1	42	-	842	2105	1414	59.5%	-	-	-	2.1	8.9	8.7
2/1+2/2	Downside Road Right Left	U	C1:D C1:C		1	12	-	380	1741:1717	354+125	79.5 : 79.5%	-	-	-	4.3	41.2	6.5
3/1	A38 (north) Ahead Left	U	C1:B		1	41	-	869	1688	1108	78.4%	-	-	-	0.9	3.7	4.8
3/2	A38 (north) Ahead	U	C1:B		1	41	-	880	1828	1200	73.4%	-	-	-	0.9	3.6	4.3
6/1	Lilac Cottages Left	U	C1:J		0	0	-	0	1940	0	0.0%	-	-	-	0.0	0.0	0.0
7/1	Lilac Cottages	U	-		-	-	-	0	1940	1940	0.0%	-	-	-	0.0	0.0	0.0
Ped Link: P1	Unnamed Ped Link	-	C1:F		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-	C1:G		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-	C1:H		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-	C1:I		0	0	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
J2: A38 / West Lane Priority Junction	-	-	-		-	-	-	-	-	-	79.6%	0	0	0	11.7	-	-
2/2+2/1	Ahead Left	U	C2:B		1	35	-	1409	2055:1911	884+886	79.6 : 79.6%	-	-	-	5.7	14.4	10.5
3/1	Left	U	C2:C		1	18	-	353	1516	450	78.4%	-	-	-	3.8	38.5	7.4

Basic Results Summary

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Basic Results Summary

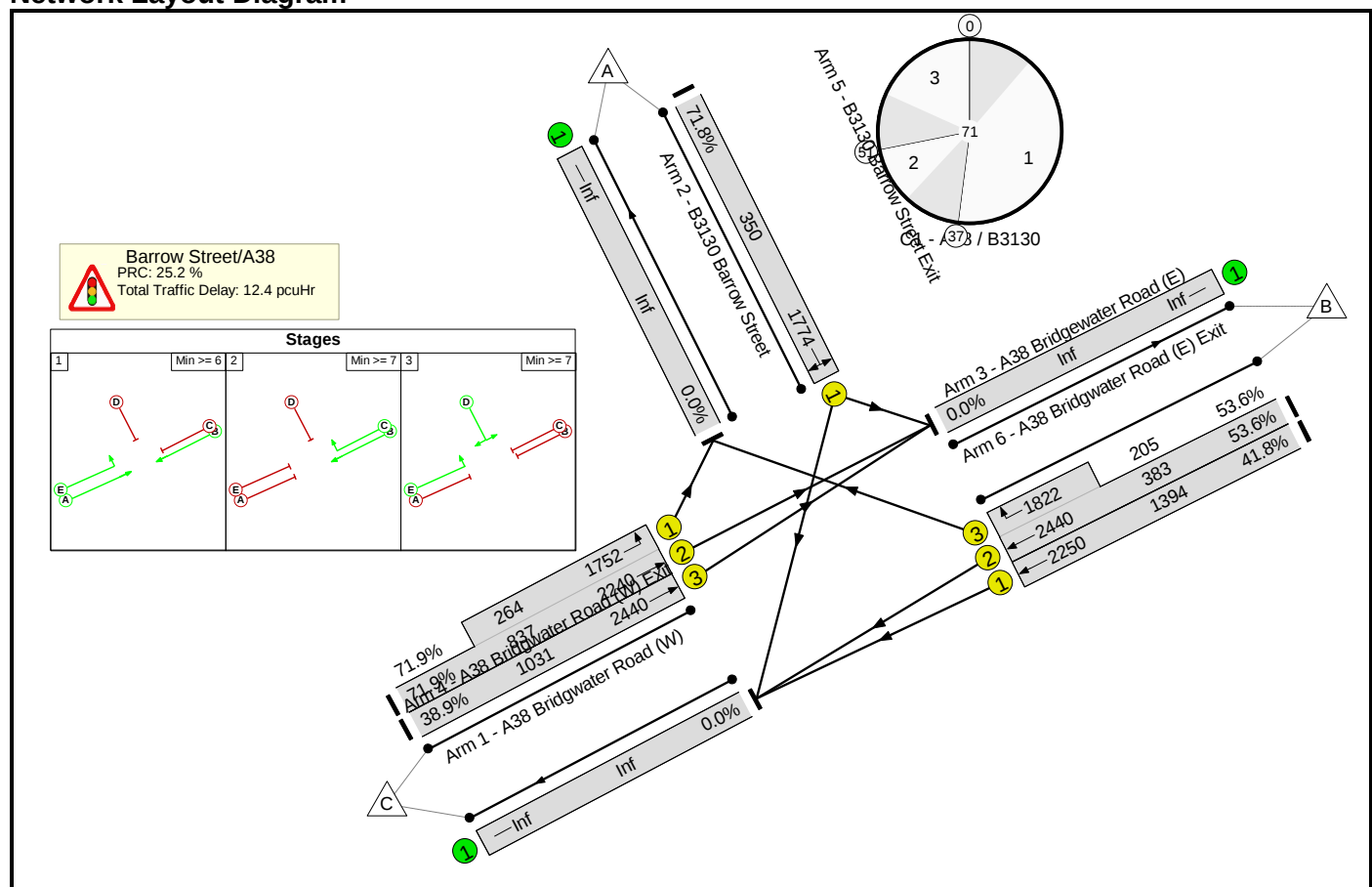
Basic Results Summary

User and Project Details

Project:	Bristol Airport
Title:	A38/Barrow Street/A38/Barrow Lane
Location:	Bristol
Additional detail:	
File name:	J5_A38_Barrow Street.lsg3x
Author:	sblain
Company:	PBA LLP
Address:	RG1 8DN

Scenario 1: '2018 Baseline AM' (FG1: '2018 Baseline AM', Plan 1: 'Network Control Plan 1')

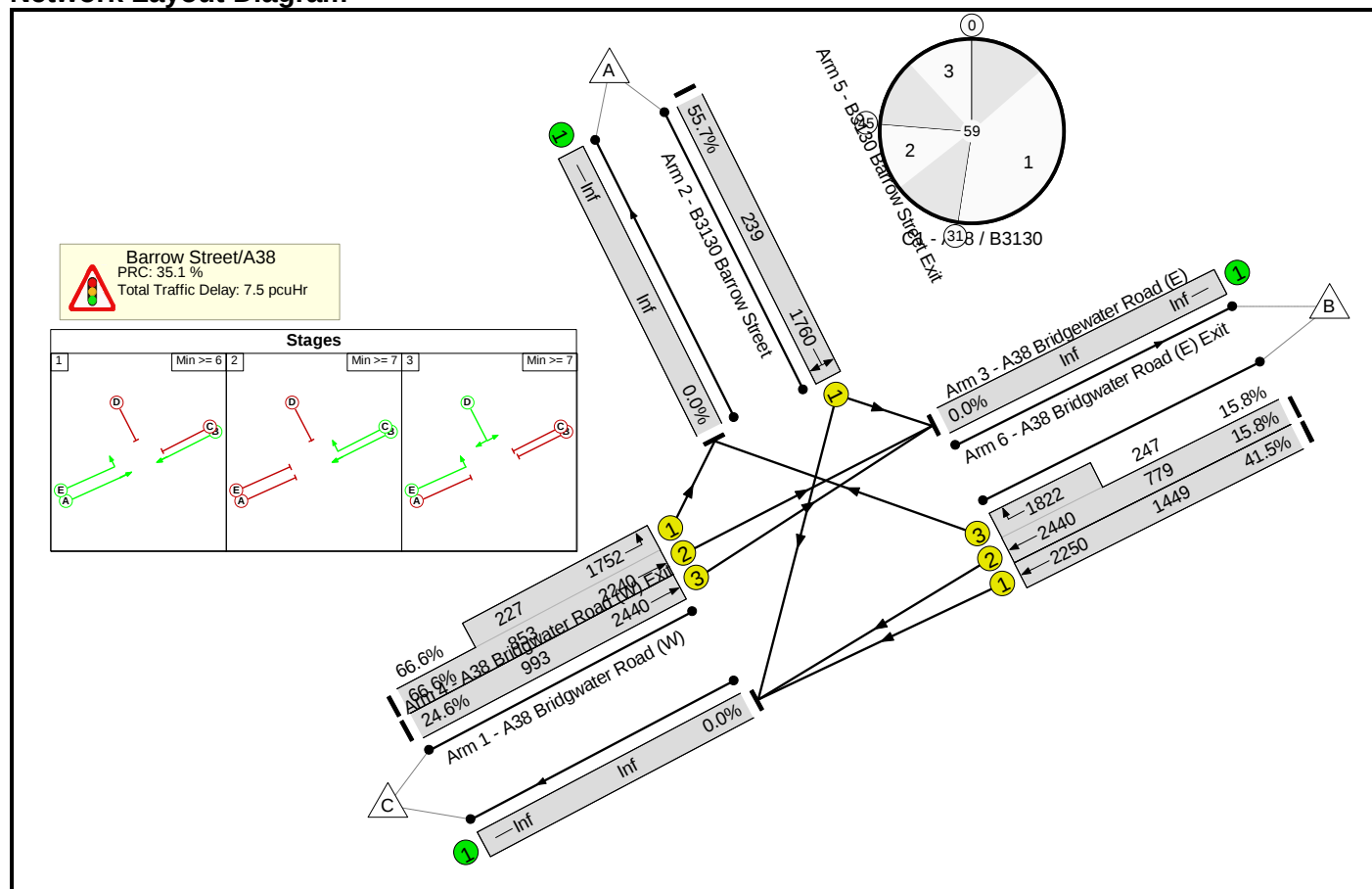
Network Layout Diagram



Network Results

C1 - A38 / B3130	PRC for Signalled Lanes (%):	25.2	Total Delay for Signalled Lanes (pcuHr):	12.41	Cycle Time (s):	71
	PRC Over All Lanes (%):	25.2	Total Delay Over All Lanes(pcuHr):	12.41		

Network Layout Diagram



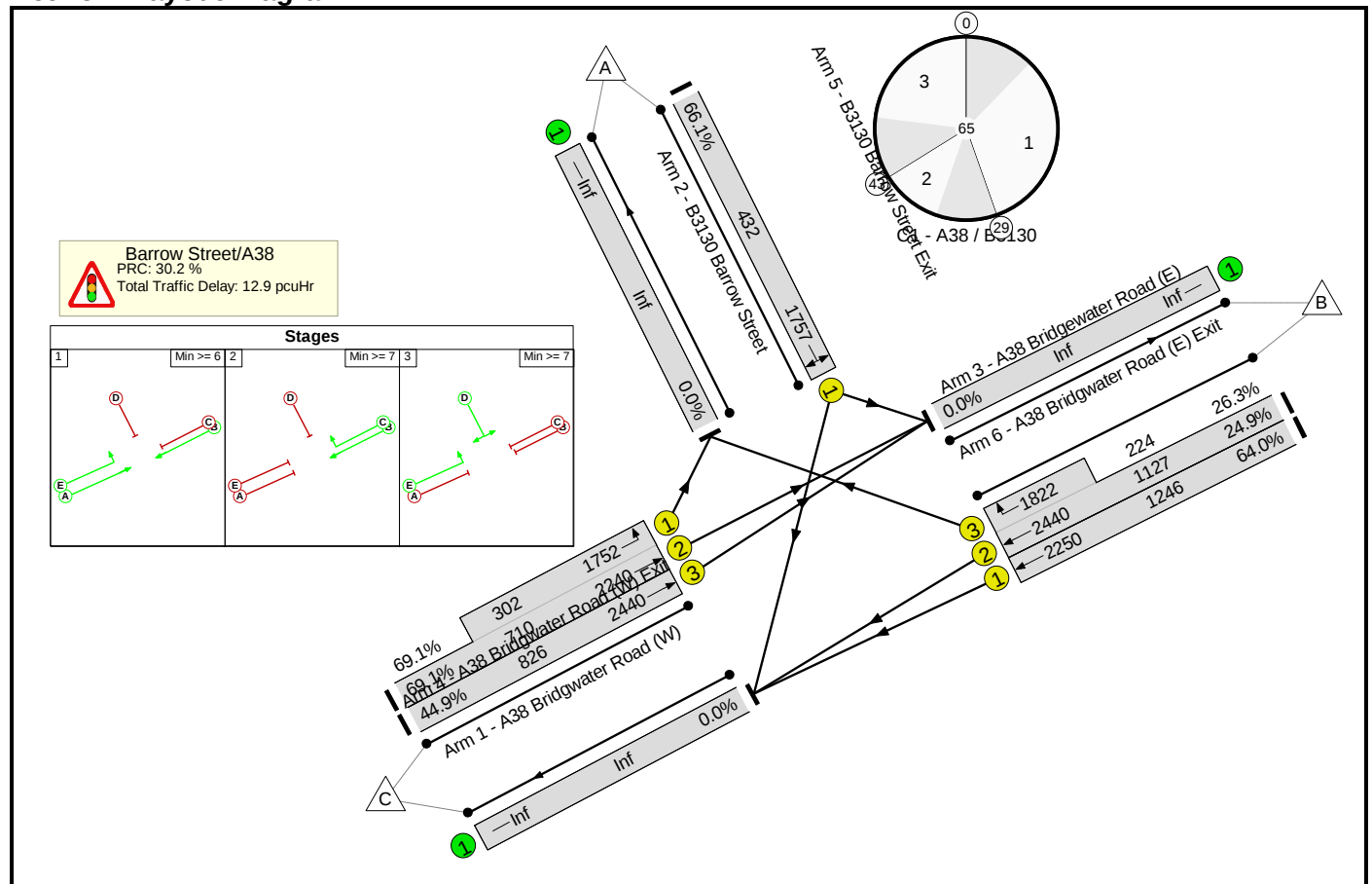
Network Results

C1 - A38 / B3130	PRC for Signalled Lanes (%):	35.1	Total Delay for Signalled Lanes (pcuHr):	7.46	Cycle Time (s):	59
	PRC Over All Lanes (%):	35.1	Total Delay Over All Lanes(pcuHr):	7.46		

Basic Results Summary

Scenario 3: '2018 Baseline PM' (FG3: '2018 Baseline PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

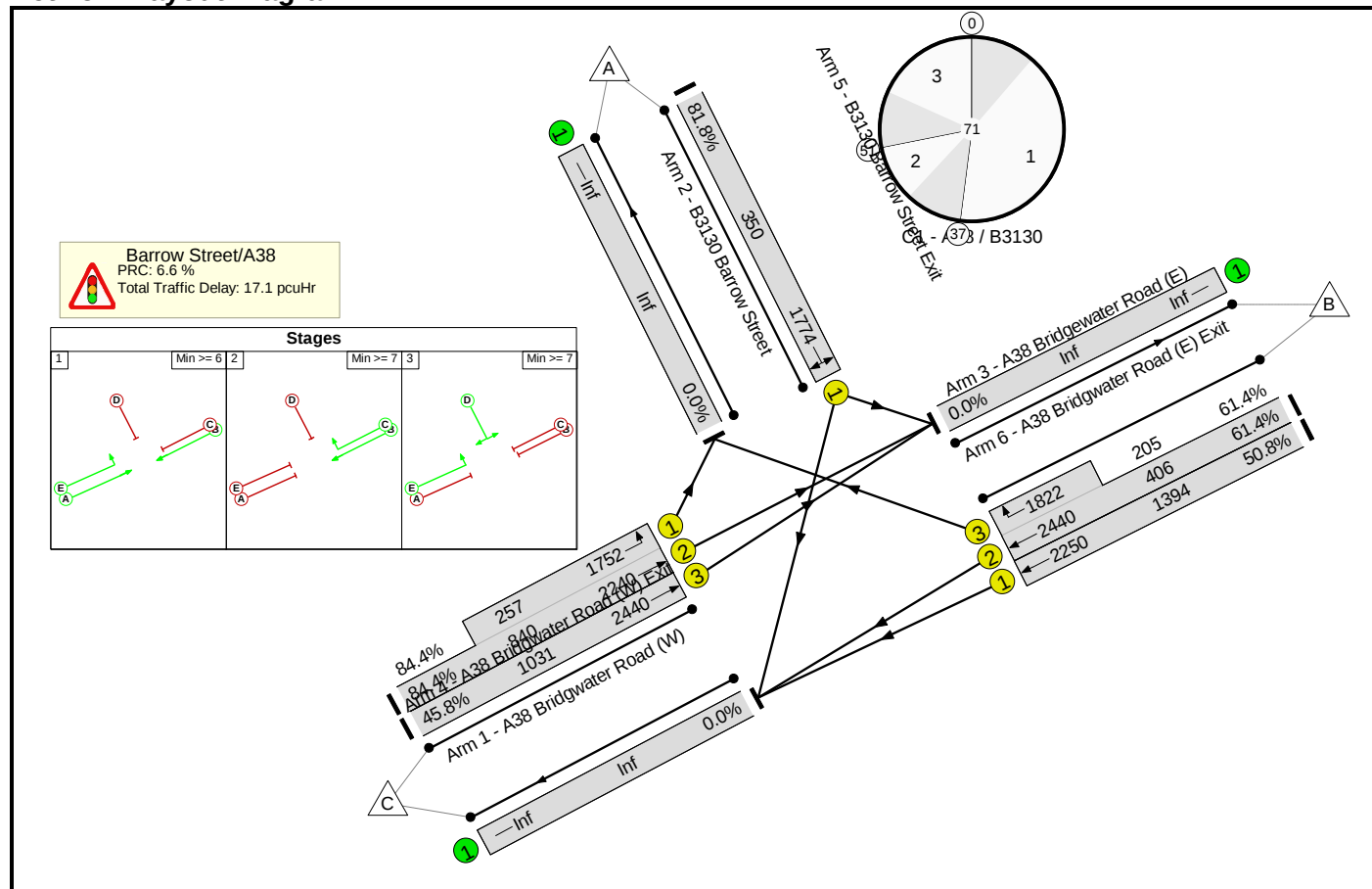
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Barrow Street/A38/Barrow Lane	-	-	-		-	-	-	-	-	-	69.1%	0	0	0	12.9	-	-
Barrow Street/A38	-	-	-		-	-	-	-	-	-	69.1%	0	0	0	12.9	-	-
1/2+1/1	A38 Bridgwater Road (W) Left Ahead	U	A E		1	21:45	-	700	2240:1752	710+302	69.1 : 69.1%	-	-	-	3.8 (3.3+0.5)	19.4 (23.9:8.9)	8.6
1/3	A38 Bridgwater Road (W) Ahead	U	A		1	21	-	371	2440	826	44.9%	-	-	-	2.1	20.7	5.6
2/1	B3130 Barrow Street Right Left	U	D		1	15	-	286	1757	432	66.1%	-	-	-	2.7	34.2	5.6
3/1	A38 Bridgwater Road (E) Ahead	U	B		1	35	-	798	2250	1246	64.0%	-	-	-	3.1	14.0	10.6
3/2+3/3	A38 Bridgwater Road (E) Ahead Right	U	B C		1	35:7	-	340	2440:1822	1127+224	24.9 : 26.3%	-	-	-	1.2 (0.7+0.5)	12.3 (9.1:27.6)	2.7
C1 - A38 / B3130				PRC for Signalled Lanes (%):		30.2	Total Delay for Signalled Lanes (pcuHr):				12.91	Cycle Time (s): 65					
				PRC Over All Lanes (%):		30.2	Total Delay Over All Lanes(pcuHr):				12.91						

Basic Results Summary

Scenario 4: '2026 Ref Case AM' (FG4: '2026 Ref Case AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

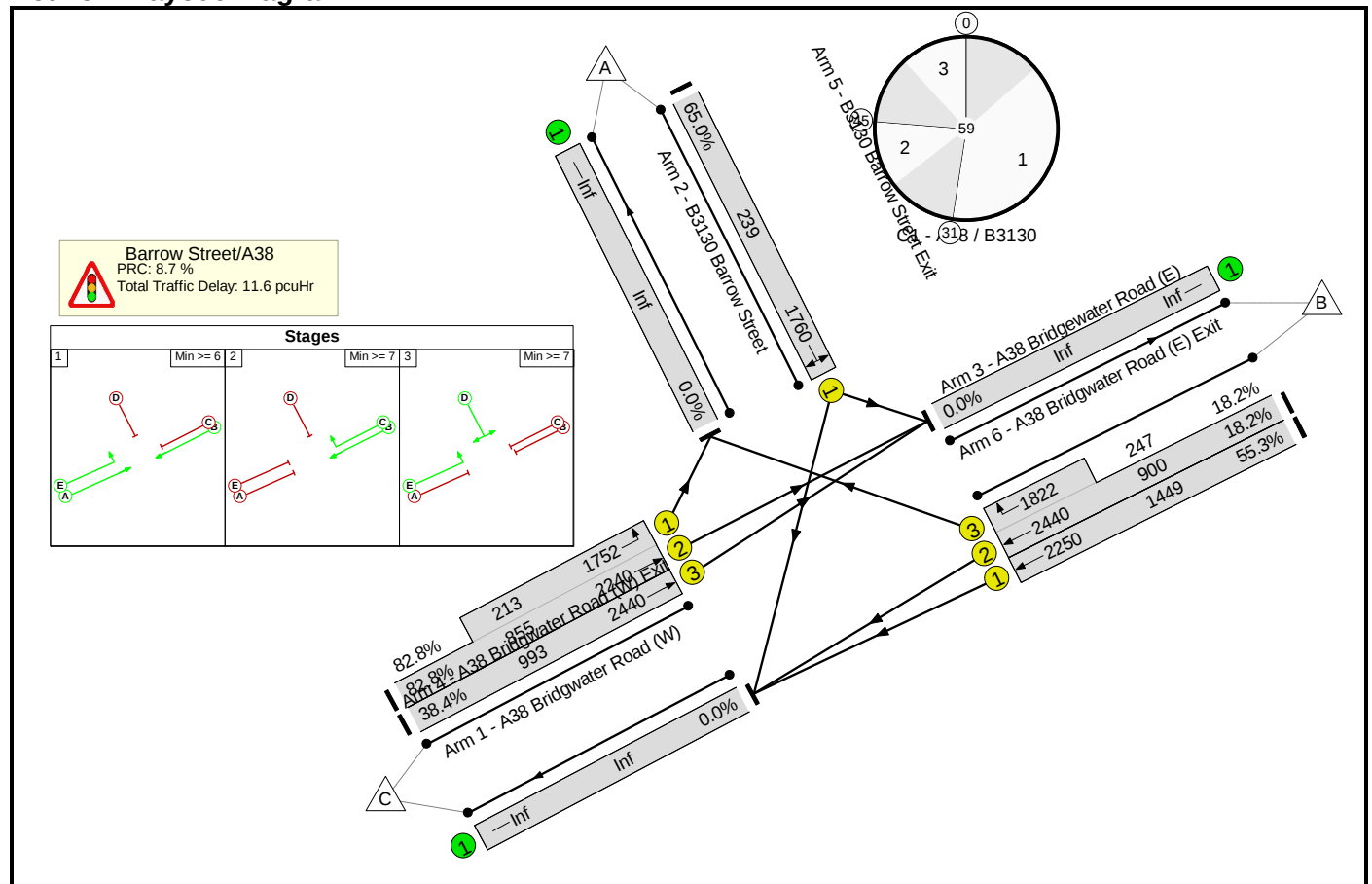
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Barrow Street/A38/Barrow Lane	-	-	-		-	-	-	-	-	-	84.4%	0	0	0	17.1	-	-
Barrow Street/A38	-	-	-		-	-	-	-	-	-	84.4%	0	0	0	17.1	-	-
1/2+1/1	A38 Bridgwater Road (W) Left Ahead	U	A E		1	29:51	-	926	2240:1752	840+257	84.4 : 84.4%	-	-	-	6.2 (5.4+0.8)	24.2 (27.6:13.2)	14.7
1/3	A38 Bridgwater Road (W) Ahead	U	A		1	29	-	472	2440	1031	45.8%	-	-	-	2.3	17.9	7.0
2/1	B3130 Barrow Street Right Left	U	D		1	13	-	286	1774	350	81.8%	-	-	-	4.3	53.7	7.4
3/1	A38 Bridgewater Road (E) Ahead	U	B		1	43	-	709	2250	1394	50.8%	-	-	-	2.0	10.1	8.2
3/2+3/3	A38 Bridgewater Road (E) Ahead Right	U	B C		1	43:7	-	375	2440:1822	406+205	61.4 : 61.4%	-	-	-	2.2 (0.9+1.3)	21.5 (13.3:37.6)	3.1
C1 - A38 / B3130																	
PRC for Signalled Lanes (%):							6.6	Total Delay for Signalled Lanes (pcuHr):					17.07	Cycle Time (s): 71			
PRC Over All Lanes (%):							6.6	Total Delay Over All Lanes(pcuHr):					17.07				

Basic Results Summary

Scenario 5: '2026 Ref Case Interpeak' (FG5: '2026 Ref Case Interpeak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

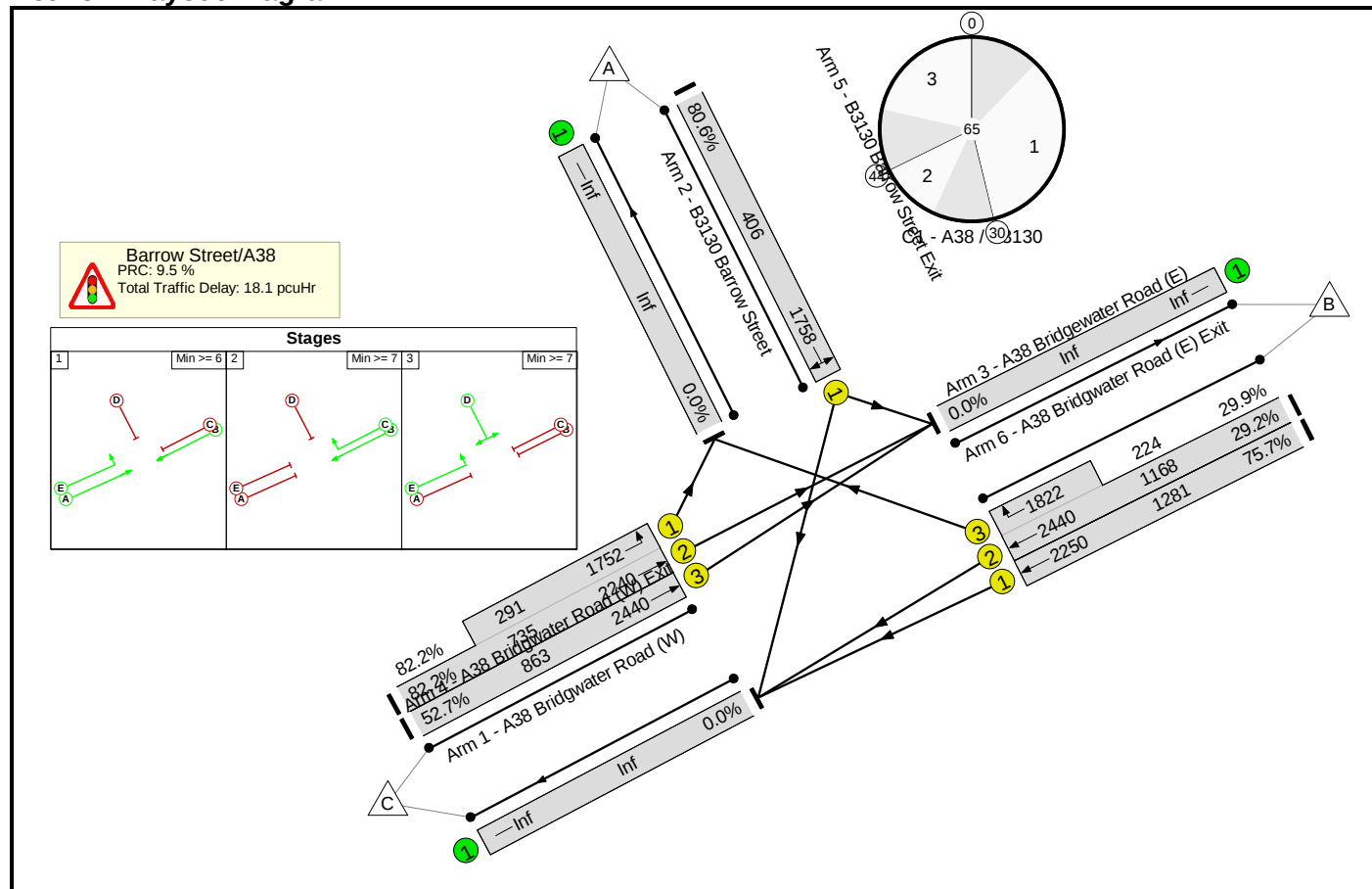
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Barrow Street/A38/Barrow Lane	-	-	-		-	-	-	-	-	-	82.8%	0	0	0	11.6	-	-
Barrow Street/A38	-	-	-		-	-	-	-	-	-	82.8%	0	0	0	11.6	-	-
1/2+1/1	A38 Bridgwater Road (W) Left Ahead	U	A E		1	23:39	-	884	2240:1752	855+213	82.8 : 82.8%	-	-	-	5.5 (4.9+0.6)	22.4 (24.7:13.0)	12.4
1/3	A38 Bridgwater Road (W) Ahead	U	A		1	23	-	381	2440	993	38.4%	-	-	-	1.6	15.3	4.7
2/1	B3130 Barrow Street Right Left	U	D		1	7	-	155	1760	239	65.0%	-	-	-	1.9	45.2	3.3
3/1	A38 Bridgwater Road (E) Ahead	U	B		1	37	-	802	2250	1449	55.3%	-	-	-	1.9	8.6	7.7
3/2+3/3	A38 Bridgwater Road (E) Ahead Right	U	B C		1	37:7	-	209	2440:1822	900+247	18.2 : 18.2%	-	-	-	0.6 (0.3+0.3)	10.0 (6.0:24.6)	1.1
C1 - A38 / B3130				PRC for Signalled Lanes (%):		8.7	Total Delay for Signalled Lanes (pcuHr):				11.55	Cycle Time (s): 59					
				PRC Over All Lanes (%):		8.7	Total Delay Over All Lanes(pcuHr):				11.55						

Basic Results Summary

Scenario 6: '2026 Ref Case PM' (FG6: '2026 Ref Case PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

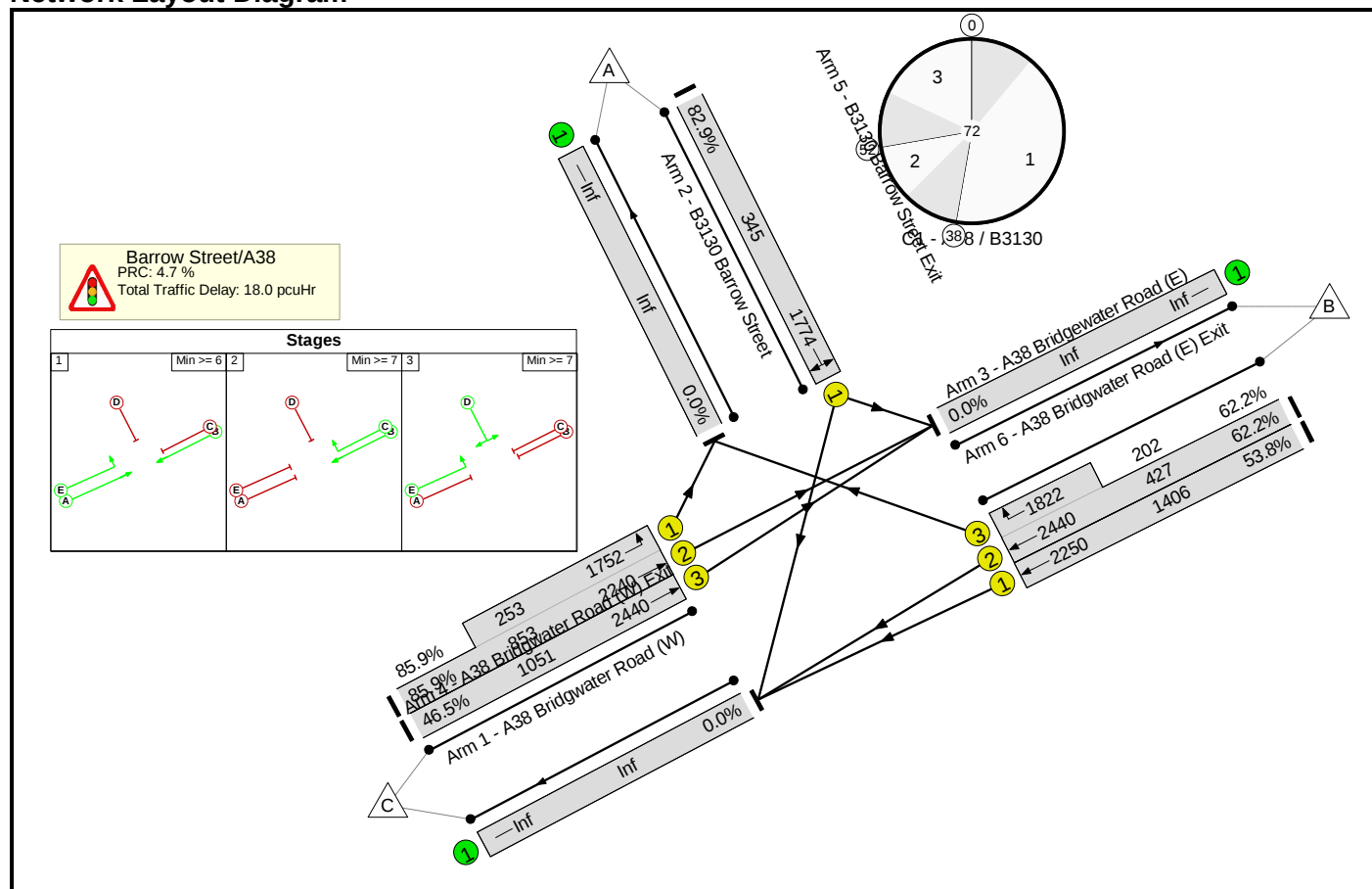
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Barrow Street/A38/Barrow Lane	-	-	-		-	-	-	-	-	-	82.2%	0	0	0	18.1	-	-
Barrow Street/A38	-	-	-		-	-	-	-	-	-	82.2%	0	0	0	18.1	-	-
1/2+1/1	A38 Bridgwater Road (W) Left Ahead	U	A E		1	22:45	-	843	2240:1752	735+291	82.2 : 82.2%	-	-	-	5.6 (4.7+0.9)	23.8 (28.2:12.8)	11.8
1/3	A38 Bridgwater Road (W) Ahead	U	A		1	22	-	455	2440	863	52.7%	-	-	-	2.7	21.1	7.0
2/1	B3130 Barrow Street Right Left	U	D		1	14	-	327	1758	406	80.6%	-	-	-	4.1	45.4	7.5
3/1	A38 Bridgewater Road (E) Ahead	U	B		1	36	-	969	2250	1281	75.7%	-	-	-	4.4	16.3	14.7
3/2+3/3	A38 Bridgewater Road (E) Ahead Right	U	B C		1	36:7	-	408	2440:1822	1168+224	29.2 : 29.9%	-	-	-	1.4 (0.8+0.5)	12.0 (8.9:27.8)	3.2
C1 - A38 / B3130																	
PRC for Signalled Lanes (%):							9.5	Total Delay for Signalled Lanes (pcuHr):					18.11	Cycle Time (s): 65			
PRC Over All Lanes (%):							9.5	Total Delay Over All Lanes(pcuHr):					18.11				

Basic Results Summary

Scenario 7: '2026 Test Case AM' (FG7: '2026 Test Case AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

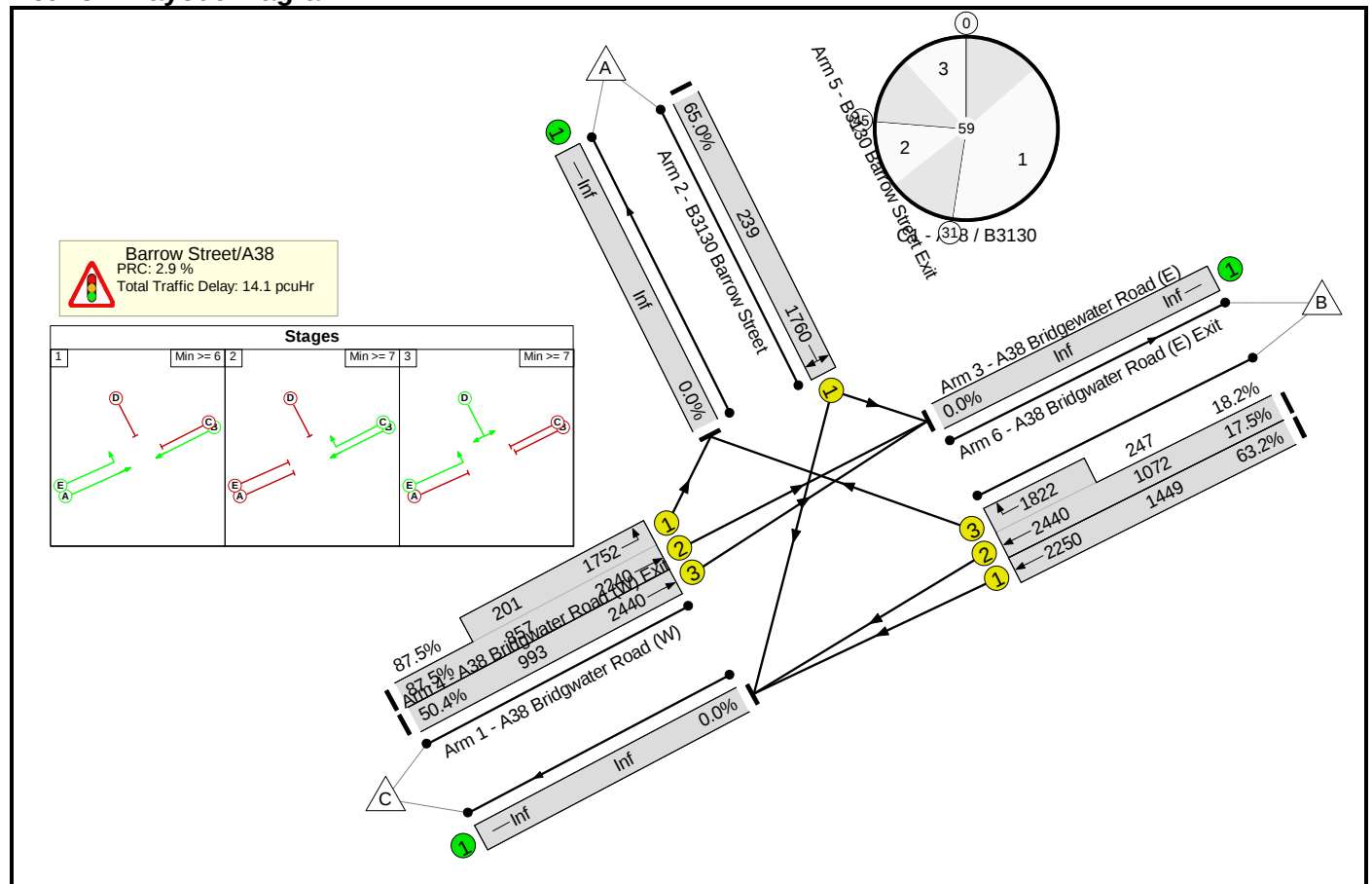
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Barrow Street/A38/Barrow Lane	-	-	-		-	-	-	-	-	-	85.9%	0	0	0	18.0	-	-
Barrow Street/A38	-	-	-		-	-	-	-	-	-	85.9%	0	0	0	18.0	-	-
1/2+1/1	A38 Bridgwater Road (W) Left Ahead	U	A E		1	30:52	-	950	2240:1752	853+253	85.9 : 85.9%	-	-	-	6.7 (5.8+0.9)	25.3 (28.5:14.2)	16.1
1/3	A38 Bridgwater Road (W) Ahead	U	A		1	30	-	489	2440	1051	46.5%	-	-	-	2.4	17.8	7.4
2/1	B3130 Barrow Street Right Left	U	D		1	13	-	286	1774	345	82.9%	-	-	-	4.5	56.2	7.7
3/1	A38 Bridgewater Road (E) Ahead	U	B		1	44	-	756	2250	1406	53.8%	-	-	-	2.2	10.4	9.0
3/2+3/3	A38 Bridgewater Road (E) Ahead Right	U	B C		1	44:7	-	392	2440:1822	427+202	62.2 : 62.2%	-	-	-	2.3 (1.0+1.3)	21.2 (13.2:38.1)	3.2
C1 - A38 / B3130 PRC for Signalled Lanes (%): 4.7 Total Delay for Signalled Lanes (pcuHr): 18.04 Cycle Time (s): 72 																	

Basic Results Summary

Scenario 8: '2026 Test Case Interpeak' (FG8: '2026 Test Case Interpeak', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

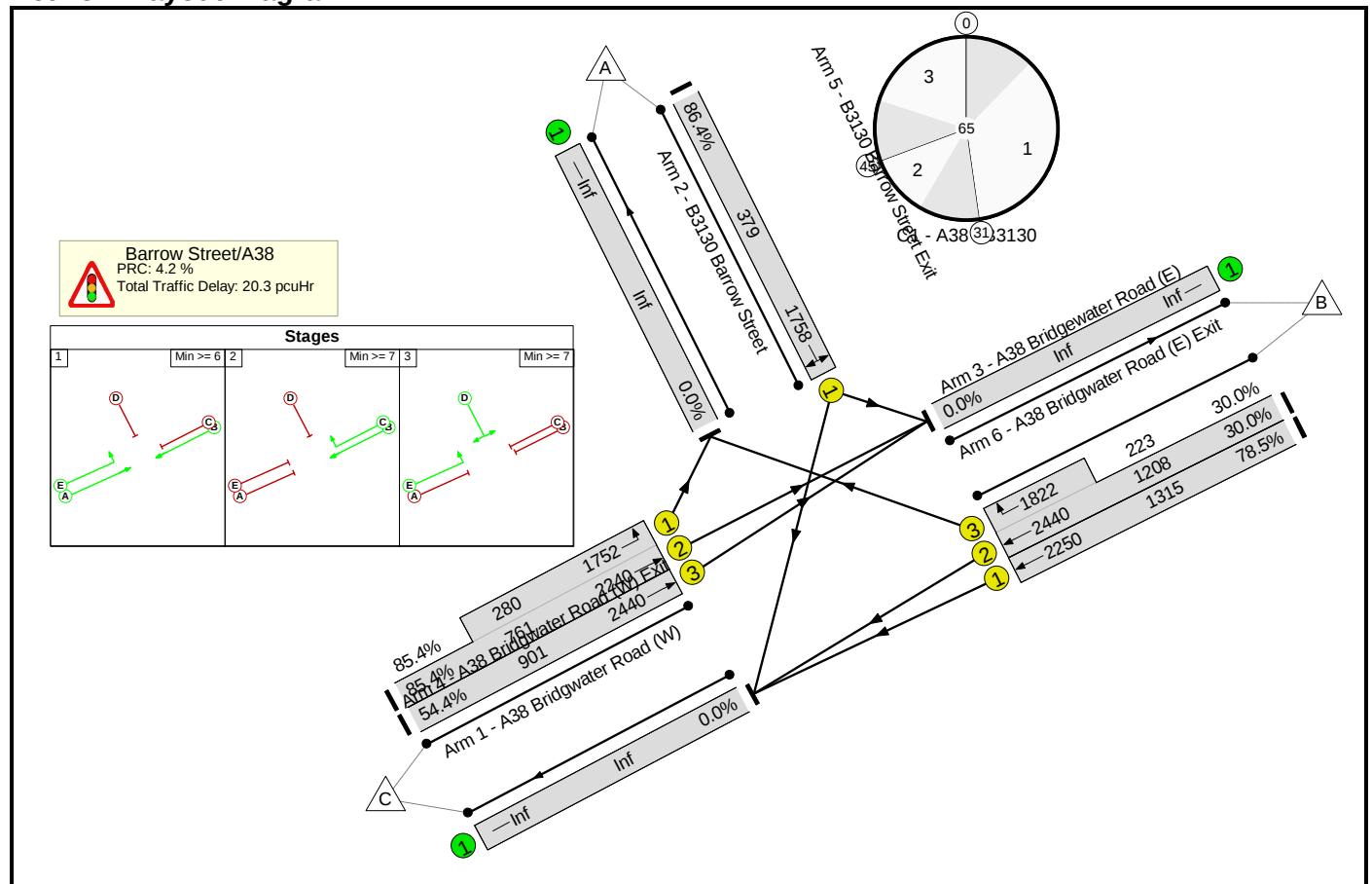
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Barrow Street/A38/Barrow Lane	-	-	-		-	-	-	-	-	-	87.5%	0	0	0	14.1	-	-
Barrow Street/A38	-	-	-		-	-	-	-	-	-	87.5%	0	0	0	14.1	-	-
1/2+1/1	A38 Bridgwater Road (W) Left Ahead	U	A E		1	23:39	-	926	2240:1752	857+201	87.5 : 87.5%	-	-	-	6.7 (5.9+0.8)	26.2 (28.5:16.3)	14.2
1/3	A38 Bridgwater Road (W) Ahead	U	A		1	23	-	500	2440	993	50.4%	-	-	-	2.3	16.7	6.6
2/1	B3130 Barrow Street Right Left	U	D		1	7	-	155	1760	239	65.0%	-	-	-	1.9	45.2	3.3
3/1	A38 Bridgwater Road (E) Ahead	U	B		1	37	-	916	2250	1449	63.2%	-	-	-	2.5	9.7	9.8
3/2+3/3	A38 Bridgwater Road (E) Ahead Right	U	B C		1	37:7	-	233	2440:1822	1072+247	17.5 : 18.2%	-	-	-	0.6 (0.3+0.3)	9.3 (5.7:24.3)	1.3
C1 - A38 / B3130				PRC for Signalled Lanes (%):		2.9	Total Delay for Signalled Lanes (pcuHr):				14.07	Cycle Time (s): 59					
				PRC Over All Lanes (%):		2.9	Total Delay Over All Lanes(pcuHr):				14.07						

Basic Results Summary

Scenario 9: '2026 Test Case PM' (FG9: '2026 Test Case PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Network Results

C1 - A38 / B3130	PRC for Signalled Lanes (%):	4.2	Total Delay for Signalled Lanes (pcuHr):	20.33	Cycle Time (s): 65
	PRC Over All Lanes (%):	4.2	Total Delay Over All Lanes(pcuHr):	20.33	

Junctions 9			
PICADY 9 - Priority Intersection Module			
Version: 9.5.0.6896 © Copyright TRL Limited, 2018			
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Filename: J5_A38_Barrow Lane.j9

Path: \\pba.int\BRI\Projects\43321 Bristol Airport\Technical\Transport\Junction Assessments\PICADY

Report generation date: 09/05/2019 16:57:16

- »2018, AM
- »2018, IP
- »2018, PM
- »2026 Reference Case, AM
- »2026 Reference Case, IP
- »2026 Reference Case, PM
- »2026 Test Case, AM
- »2026 Test Case, IP
- »2026 Test Case, PM

Summary of junction performance

	AM				IP				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2018												
Stream B-AC	2.1	59.92	0.69	F	1.0	26.55	0.48	D	4.3	139.43	0.87	F
Stream C-AB	0.0	7.50	0.02	A	0.0	6.69	0.01	A	0.0	9.68	0.02	A
2026 Reference Case												
Stream B-AC	26.8	573.61	1.44	F	9.5	222.58	1.02	F	47.1	2673.91	2.77	F
Stream C-AB	0.0	8.67	0.03	A	0.0	7.97	0.01	A	0.0	12.68	0.03	B
2026 Test Case												
Stream B-AC	39.8	1385.89	1.90	F	40.2	1449.30	1.95	F	50.5	2864.00	2.77	F
Stream C-AB	0.0	9.14	0.03	A	0.0	8.87	0.01	A	0.0	14.08	0.03	B

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

File summary

File Description

Title	J6_Barrow Lane T-Junction
Location	Bristol
Site number	6
Date	09/05/2019
Version	
Status	(new file)
Identifier	sblain
Client	
Jobnumber	43321
Enumerator	CORP\sblain
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓
D2	2018	IP	ONE HOUR	12:45	14:15	15	✓
D3	2018	PM	ONE HOUR	16:45	18:15	15	✓
D4	2026 Reference Case	AM	ONE HOUR	07:45	09:15	15	✓
D5	2026 Reference Case	IP	ONE HOUR	12:45	14:15	15	✓
D6	2026 Reference Case	PM	ONE HOUR	16:45	18:15	15	✓
D7	2026 Test Case	AM	ONE HOUR	07:45	09:15	15	✓
D8	2026 Test Case	IP	ONE HOUR	12:45	14:15	15	✓
D9	2026 Test Case	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A38 (N)		Major
B	Barrow Lane		Minor
C	A38 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.90		✓	3.40	250.0	✓	16.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	5.00	35	22

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	Video Observations	50

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	600	0.105	0.265	0.167	0.379
1	B-C	765	0.113	0.285	-	-
1	C-B	813	0.303	0.303	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2018	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	952	100.000
B		ONE HOUR	✓	125	100.000
C		ONE HOUR	✓	1085	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	146	806
	B	121	0	4
	C	1075	10	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	2	4
	B	6	0	0
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.69	59.92	2.1	F	115	172
C-AB	0.02	7.50	0.0	A	9	14
C-A					986	1480
A-B					134	201
A-C					740	1109

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	24	344	0.274	93	0.0	0.4	15.056	C
C-AB	8	2	596	0.013	7	0.0	0.0	6.180	A
C-A	809	202			809				
A-B	110	27			110				
A-C	607	152			607				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	283	0.397	111	0.4	0.7	21.983	C
C-AB	9	2	554	0.016	9	0.0	0.0	6.674	A
C-A	966	242			966				
A-B	131	33			131				
A-C	725	181			725				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	34	199	0.691	132	0.7	2.0	53.436	F
C-AB	11	3	496	0.022	11	0.0	0.0	7.503	A
C-A	1184	296			1184				
A-B	161	40			161				
A-C	887	222			887				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	138	34	199	0.691	137	2.0	2.1	59.922	F
C-AB	11	3	496	0.022	11	0.0	0.0	7.503	A
C-A	1184	296			1184				
A-B	161	40			161				
A-C	887	222			887				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	112	28	283	0.397	118	2.1	0.7	23.762	C
C-AB	9	2	554	0.016	9	0.0	0.0	6.677	A
C-A	966	242			966				
A-B	131	33			131				
A-C	725	181			725				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	94	24	344	0.274	95	0.7	0.4	15.394	C
C-AB	8	2	596	0.013	8	0.0	0.0	6.180	A
C-A	809	202			809				
A-B	110	27			110				
A-C	607	152			607				

2018, IP

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		1.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2018	IP	ONE HOUR	12:45	14:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	812	100.000
B		ONE HOUR	✓	121	100.000
C		ONE HOUR	✓	851	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	97	715
	B	115	0	6
	C	847	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	4	3
	B	7	0	25
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.48	26.55	1.0	D	111	167
C-AB	0.01	6.69	0.0	A	4	6
C-A					777	1166
A-B					89	134
A-C					656	984

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	399	0.228	90	0.0	0.3	12.490	B
C-AB	3	0.75	628	0.005	3	0.0	0.0	5.762	A
C-A	638	159			638				
A-B	73	18			73				
A-C	538	135			538				

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	349	0.312	108	0.3	0.5	16.067	C
C-AB	4	0.90	592	0.006	4	0.0	0.0	6.119	A
C-A	761	190			761				
A-B	87	22			87				
A-C	643	161			643				

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	33	279	0.478	131	0.5	0.9	25.967	D
C-AB	4	1	542	0.008	4	0.0	0.0	6.693	A
C-A	933	233			933				
A-B	107	27			107				
A-C	787	197			787				

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	133	33	279	0.478	133	0.9	1.0	26.555	D
C-AB	4	1	542	0.008	4	0.0	0.0	6.693	A
C-A	933	233			933				
A-B	107	27			107				
A-C	787	197			787				

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	109	27	349	0.312	111	1.0	0.5	16.400	C
C-AB	4	0.90	592	0.006	4	0.0	0.0	6.122	A
C-A	761	190			761				
A-B	87	22			87				
A-C	643	161			643				

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	91	23	399	0.228	92	0.5	0.3	12.647	B
C-AB	3	0.75	628	0.005	3	0.0	0.0	5.764	A
C-A	638	159			638				
A-B	73	18			73				
A-C	538	135			538				

2018, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		6.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2018	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1303	100.000
B		ONE HOUR	✓	110	100.000
C		ONE HOUR	✓	978	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	265	1038
	B	103	0	7
	C	972	6	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.87	139.43	4.3	F	101	151
C-AB	0.02	9.68	0.0	A	6	8
C-A					892	1338
A-B					243	365
A-C					952	1429

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	83	21	306	0.270	81	0.0	0.4	15.813	C
C-AB	5	1	516	0.009	4	0.0	0.0	7.039	A
C-A	732	183			732				
A-B	200	50			200				
A-C	781	195			781				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	99	25	237	0.418	98	0.4	0.7	25.643	D
C-AB	5	1	458	0.012	5	0.0	0.0	7.949	A
C-A	874	218			874				
A-B	238	60			238				
A-C	933	233			933				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	121	30	139	0.869	110	0.7	3.4	100.515	F
C-AB	7	2	379	0.017	7	0.0	0.0	9.676	A
C-A	1070	268			1070				
A-B	292	73			292				
A-C	1143	286			1143				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	121	30	139	0.870	118	3.4	4.3	139.429	F
C-AB	7	2	379	0.017	7	0.0	0.0	9.676	A
C-A	1070	268			1070				
A-B	292	73			292				
A-C	1143	286			1143				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	99	25	237	0.418	113	4.3	0.8	31.984	D
C-AB	5	1	458	0.012	5	0.0	0.0	7.951	A
C-A	874	218			874				
A-B	238	60			238				
A-C	933	233			933				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	83	21	306	0.270	84	0.8	0.4	16.330	C
C-AB	5	1	516	0.009	5	0.0	0.0	7.042	A
C-A	732	183			732				
A-B	200	50			200				
A-C	781	195			781				

2026 Reference Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		32.04	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2026 Reference Case	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1145	100.000
B		ONE HOUR	✓	143	100.000
C		ONE HOUR	✓	1275	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From	A	B	C	
	0	167	978	
	138	0	5	
	1264	11	0	

Vehicle Mix

Heavy Vehicle Percentages

	To			
From	A	B	C	
	0	2	4	
	6	0	0	
	3	1	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.44	573.61	26.8	F	131	197
C-AB	0.03	8.67	0.0	A	10	15
C-A					1160	1740
A-B					153	230
A-C					897	1346

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	27	284	0.379	105	0.0	0.6	21.023	C
C-AB	8	2	552	0.015	8	0.0	0.0	6.688	A
C-A	952	238			952				
A-B	126	31			126				
A-C	736	184			736				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	32	211	0.609	125	0.6	1.5	42.680	E
C-AB	10	2	501	0.020	10	0.0	0.0	7.399	A
C-A	1136	284			1136				
A-B	150	38			150				
A-C	879	220			879				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	39	110	1.435	105	1.5	14.7	326.749	F
C-AB	12	3	431	0.028	12	0.0	0.0	8.674	A
C-A	1392	348			1392				
A-B	184	46			184				
A-C	1077	269			1077				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	39	110	1.435	109	14.7	26.8	573.615	F
C-AB	12	3	431	0.028	12	0.0	0.0	8.674	A
C-A	1392	348			1392				
A-B	184	46			184				
A-C	1077	269			1077				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	32	211	0.609	203	26.8	8.1	317.609	F
C-AB	10	2	501	0.020	10	0.0	0.0	7.400	A
C-A	1136	284			1136				
A-B	150	38			150				
A-C	879	220			879				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	27	284	0.379	137	8.1	0.7	31.108	D
C-AB	8	2	552	0.015	8	0.0	0.0	6.689	A
C-A	952	238			952				
A-B	126	31			126				
A-C	736	184			736				

2026 Reference Case, IP

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		13.41	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2026 Reference Case	IP	ONE HOUR	12:45	14:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1067	100.000
B		ONE HOUR	✓	141	100.000
C		ONE HOUR	✓	1135	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	113	954
	B	134	0	7
	C	1130	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	4	3
	B	7	0	25
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.02	222.58	9.5	F	129	194
C-AB	0.01	7.97	0.0	A	5	7
C-A					1037	1555
A-B					104	156
A-C					875	1313

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	27	314	0.338	104	0.0	0.5	18.311	C
C-AB	4	0.94	570	0.007	4	0.0	0.0	6.361	A
C-A	851	213			851				
A-B	85	21			85				
A-C	718	180			718				

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	127	32	246	0.514	125	0.5	1.1	31.308	D
C-AB	4	1	522	0.009	4	0.0	0.0	6.949	A
C-A	1016	254			1016				
A-B	102	25			102				
A-C	858	214			858				

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	39	152	1.020	134	1.1	6.5	140.924	F
C-AB	6	1	457	0.012	5	0.0	0.0	7.969	A
C-A	1244	311			1244				
A-B	124	31			124				
A-C	1050	263			1050				

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	39	152	1.020	143	6.5	9.5	222.580	F
C-AB	6	1	457	0.012	6	0.0	0.0	7.969	A
C-A	1244	311			1244				
A-B	124	31			124				
A-C	1050	263			1050				

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	127	32	246	0.514	160	9.5	1.2	58.048	F
C-AB	4	1	522	0.009	5	0.0	0.0	6.950	A
C-A	1016	254			1016				
A-B	102	25			102				
A-C	858	214			858				

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	27	314	0.338	109	1.2	0.6	19.162	C
C-AB	4	0.94	570	0.007	4	0.0	0.0	6.361	A
C-A	851	213			851				
A-B	85	21			85				
A-C	718	180			718				

2026 Reference Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		116.97	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2026 Reference Case	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1564	100.000
B		ONE HOUR	✓	126	100.000
C		ONE HOUR	✓	1191	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	302	1262
	B	118	0	8
	C	1184	7	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	2.77	2673.91	47.1	F	116	173
C-AB	0.03	12.68	0.0	B	6	10
C-A					1086	1630
A-B					277	416
A-C					1158	1737

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	230	0.412	92	0.0	0.7	25.614	D
C-AB	5	1	456	0.012	5	0.0	0.0	7.978	A
C-A	891	223			891				
A-B	227	57			227				
A-C	950	238			950				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	113	28	145	0.782	106	0.7	2.5	81.038	F
C-AB	6	2	387	0.016	6	0.0	0.0	9.449	A
C-A	1064	266			1064				
A-B	271	68			271				
A-C	1135	284			1135				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	35	50	2.775	49	2.5	24.9	953.187	F
C-AB	8	2	292	0.026	8	0.0	0.0	12.674	B
C-A	1304	326			1304				
A-B	333	83			333				
A-C	1389	347			1389				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	35	50	2.775	50	24.9	47.1	2673.909	F
C-AB	8	2	292	0.026	8	0.0	0.0	12.676	B
C-A	1304	326			1304				
A-B	333	83			333				
A-C	1389	347			1389				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	113	28	145	0.782	142	47.1	39.9	1030.227	F
C-AB	6	2	387	0.016	6	0.0	0.0	9.452	A
C-A	1064	266			1064				
A-B	271	68			271				
A-C	1135	284			1135				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	230	0.412	225	39.9	7.5	393.002	F
C-AB	5	1	456	0.012	5	0.0	0.0	7.981	A
C-A	891	223			891				
A-B	227	57			227				
A-C	950	238			950				

2026 Test Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		74.32	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2026 Test Case	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1209	100.000
B		ONE HOUR	✓	143	100.000
C		ONE HOUR	✓	1316	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	167	1042
	B	138	0	5
	C	1305	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	2	4
	B	6	0	0
	C	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.90	1385.89	39.8	F	131	197
C-AB	0.03	9.14	0.0	A	10	15
C-A					1197	1796
A-B					153	230
A-C					956	1434

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	27	266	0.405	105	0.0	0.7	23.291	C
C-AB	8	2	537	0.015	8	0.0	0.0	6.872	A
C-A	982	246			982				
A-B	126	31			126				
A-C	784	196			784				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	32	189	0.679	124	0.7	1.9	54.529	F
C-AB	10	2	484	0.020	10	0.0	0.0	7.671	A
C-A	1173	293			1173				
A-B	150	38			150				
A-C	937	234			937				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	39	83	1.904	81	1.9	21.1	569.129	F
C-AB	12	3	410	0.030	12	0.0	0.0	9.139	A
C-A	1437	359			1437				
A-B	184	46			184				
A-C	1147	287			1147				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	157	39	83	1.904	82	21.1	39.8	1385.886	F
C-AB	12	3	410	0.030	12	0.0	0.0	9.139	A
C-A	1437	359			1437				
A-B	184	46			184				
A-C	1147	287			1147				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	129	32	189	0.679	184	39.8	25.8	587.704	F
C-AB	10	2	484	0.020	10	0.0	0.0	7.675	A
C-A	1173	293			1173				
A-B	150	38			150				
A-C	937	234			937				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	108	27	266	0.405	208	25.8	0.8	141.972	F
C-AB	8	2	537	0.015	8	0.0	0.0	6.873	A
C-A	982	246			982				
A-B	126	31			126				
A-C	784	196			784				

2026 Test Case, IP

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		77.36	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2026 Test Case	IP	ONE HOUR	12:45	14:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1205	100.000
B		ONE HOUR	✓	141	100.000
C		ONE HOUR	✓	1296	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	113	1092
	B	134	0	7
	C	1291	5	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	4	3
	B	7	0	25
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	1.95	1449.30	40.2	F	129	194
C-AB	0.01	8.87	0.0	A	5	7
C-A					1185	1777
A-B					104	156
A-C					1002	1503

Main Results for each time segment

12:45 - 13:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	27	265	0.400	103	0.0	0.7	23.567	C
C-AB	4	0.94	538	0.007	4	0.0	0.0	6.735	A
C-A	972	243			972				
A-B	85	21			85				
A-C	822	206			822				

13:00 - 13:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	127	32	188	0.674	122	0.7	1.9	55.144	F
C-AB	4	1	485	0.009	4	0.0	0.0	7.492	A
C-A	1161	290			1161				
A-B	102	25			102				
A-C	982	245			982				

13:15 - 13:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	39	80	1.946	78	1.9	21.3	592.331	F
C-AB	6	1	411	0.013	5	0.0	0.0	8.872	A
C-A	1421	355			1421				
A-B	124	31			124				
A-C	1202	301			1202				

13:30 - 13:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	155	39	80	1.947	80	21.3	40.2	1449.303	F
C-AB	6	1	411	0.013	6	0.0	0.0	8.872	A
C-A	1421	355			1421				
A-B	124	31			124				
A-C	1202	301			1202				

13:45 - 14:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	127	32	188	0.674	183	40.2	26.1	594.685	F
C-AB	4	1	485	0.009	5	0.0	0.0	7.493	A
C-A	1161	290			1161				
A-B	102	25			102				
A-C	982	245			982				

14:00 - 14:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	106	27	265	0.400	207	26.1	0.8	143.650	F
C-AB	4	0.94	538	0.007	4	0.0	0.0	6.735	A
C-A	972	243			972				
A-B	85	21			85				
A-C	822	206			822				

2026 Test Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Barrow Lane T-Junction	T-Junction	Two-way		118.46	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2026 Test Case	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1649	100.000
B		ONE HOUR	✓	126	100.000
C		ONE HOUR	✓	1272	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
	A	0	302	1347
	B	118	0	8
	C	1265	7	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	2.77	2864.00	50.5	F	116	173
C-AB	0.03	14.08	0.0	B	6	10
C-A					1161	1741
A-B					277	416
A-C					1236	1854

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	202	0.469	92	0.0	0.8	31.626	D
C-AB	5	1	437	0.012	5	0.0	0.0	8.335	A
C-A	952	238			952				
A-B	227	57			227				
A-C	1014	254			1014				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	113	28	111	1.020	96	0.8	5.2	180.715	F
C-AB	6	2	364	0.017	6	0.0	0.0	10.059	B
C-A	1137	284			1137				
A-B	271	68			271				
A-C	1211	303			1211				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	35	50	2.775	50	5.2	27.5	1121.144	F
C-AB	8	2	263	0.029	8	0.0	0.0	14.079	B
C-A	1393	348			1393				
A-B	333	83			333				
A-C	1483	371			1483				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	139	35	50	2.775	50	27.5	49.7	2864.002	F
C-AB	8	2	263	0.029	8	0.0	0.0	14.080	B
C-A	1393	348			1393				
A-B	333	83			333				
A-C	1483	371			1483				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	113	28	111	1.020	110	49.7	50.5	1319.182	F
C-AB	6	2	364	0.017	6	0.0	0.0	10.064	B
C-A	1137	284			1137				
A-B	271	68			271				
A-C	1211	303			1211				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	202	0.469	199	50.5	24.5	687.626	F
C-AB	5	1	437	0.012	5	0.0	0.0	8.338	A
C-A	952	238			952				
A-B	227	57			227				
A-C	1014	254			1014				

Basic Results Summary

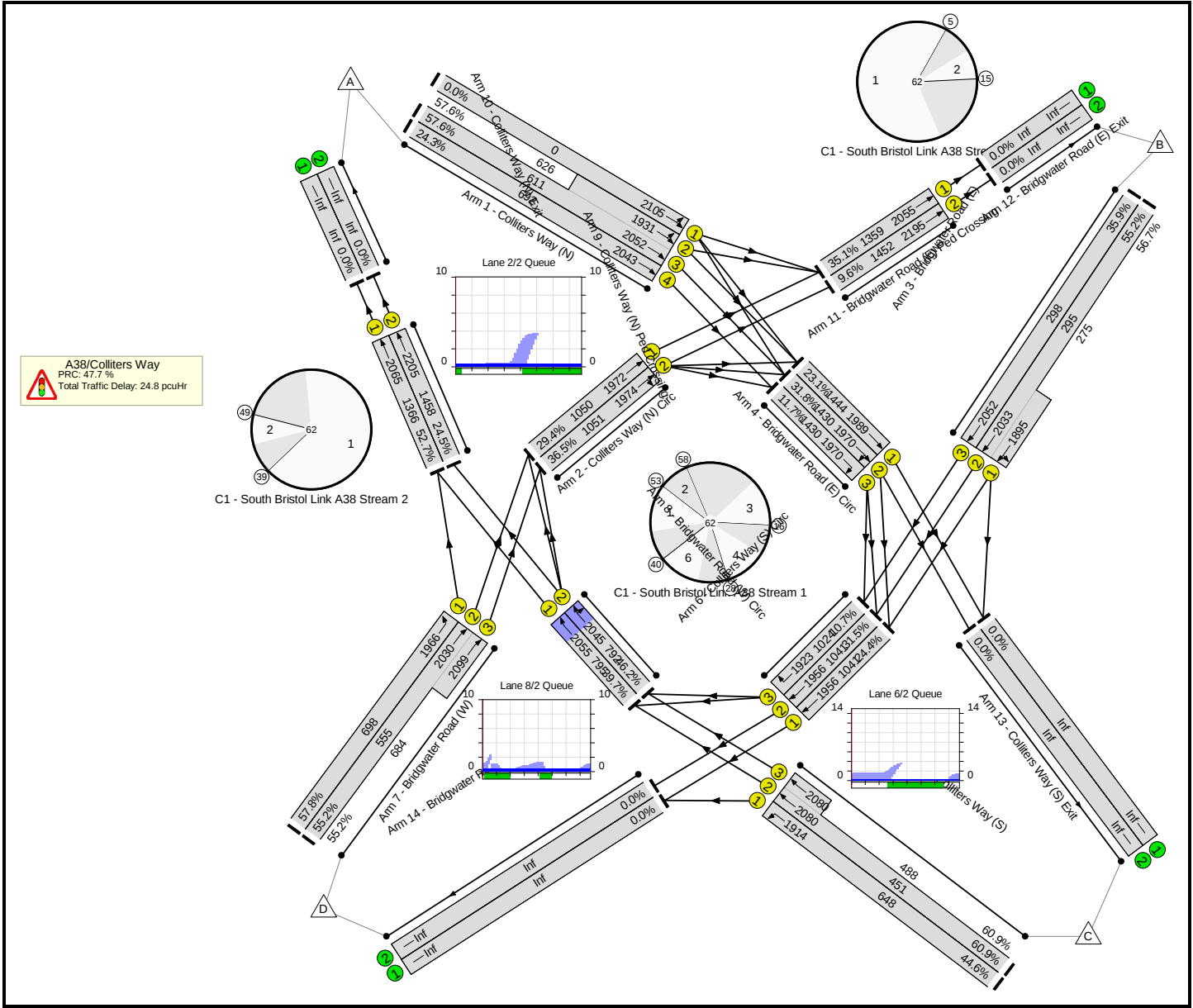
User and Project Details

Project:	Bristol Airport
Title:	A38/Colliters Way
Location:	Bristol
File name:	J7_A38_Colliters Way_Signalised Roundabout_REVISED.lsg3x
Author:	sblain
Company:	PBA LLP
Address:	RG1 8DN
Notes:	Updated model based on controller specification obtained from jacobs

Basic Results Summary

Scenario 1: '2018 Baseline AM' (FG9: '2026 Test Case PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

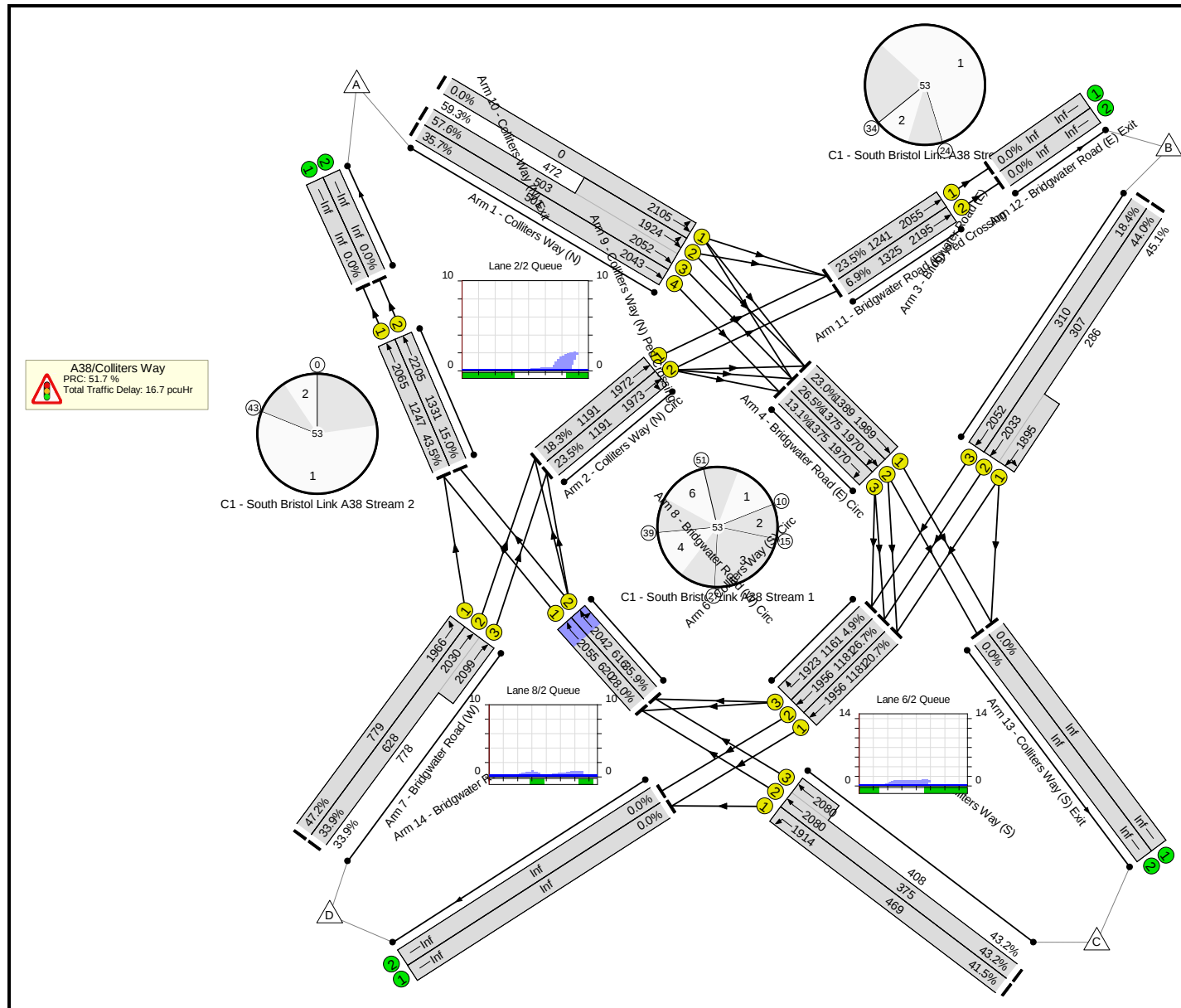
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	60.9%	0	0	0	24.8	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	60.9%	0	0	0	24.8	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	20	-	713	2052:1931	611+626	57.6 : 57.6%	-	-	-	4.0 (1.9+2.0)	20.0 (19.8:20.1)	5.7
1/4	Colliters Way (N) Ahead	U	A		1	20	-	168	2043	692	24.3%	-	-	-	0.9	18.2	2.2
2/1	Colliters Way (N) Circ Ahead	U	B		1	32	-	309	1972	1050	29.4%	-	-	-	0.5	6.1	3.0
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	32	-	383	1974	1051	36.5%	-	-	-	0.7	6.6	3.8
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	8	-	319	2033:1895	295+275	55.2 : 56.7%	-	-	-	2.8 (1.4+1.4)	31.8 (31.8:31.8)	3.2
3/3	Bridgwater Road (E) Ahead	U	D		1	8	-	107	2052	298	35.9%	-	-	-	1.0	33.3	1.9
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	44	-	333	1989	1444	23.1%	-	-	-	0.4	3.9	1.6
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	44	-	455	1970	1430	31.8%	-	-	-	0.4	3.1	1.9
4/3	Bridgwater Road (E) Circ Right	U	E		1	44	-	168	1970	1430	11.7%	-	-	-	0.1	1.4	0.1
5/1	Colliters Way (S) Left	U	F		1	20	-	289	1914	648	44.6%	-	-	-	1.7	21.0	4.3
5/2+5/3	Colliters Way (S) Ahead	U	F		1	20	-	572	2080:2080	451+488	60.9 : 60.9%	-	-	-	3.3 (1.6+1.7)	20.6 (20.5:20.7)	4.7

Basic Results Summary

6/1	Colliters Way (S) Circ Ahead	U	G		1	32	-	254	1956	1041	24.4%	-	-	-	0.7	10.2	2.1
6/2	Colliters Way (S) Circ Ahead	U	G		1	32	-	328	1956	1041	31.5%	-	-	-	1.0	10.6	3.7
6/3	Colliters Way (S) Circ Right	U	G		1	32	-	110	1923	1024	10.7%	-	-	-	0.3	10.8	0.7
7/1	Bridgwater Road (W) Left	U	H		2	20	-	403	1966	698	57.8%	-	-	-	1.6	14.5	4.0
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	20	-	683	2030:2099	555+684	55.2 : 55.2%	-	-	-	2.1 (0.9+1.2)	11.3 (11.1:11.4)	3.7
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	22	-	316	2055	795	39.7%	-	-	-	0.5	6.0	1.0
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	22	-	366	2045	792	46.2%	-	-	-	0.7	7.1	2.3
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	40	-	719	2065	1366	52.7%	-	-	-	1.1	5.6	4.1
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	40	-	357	2205	1458	24.5%	-	-	-	0.2	2.3	0.4
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	40	-	477	2055	1359	35.1%	-	-	-	0.7	5.4	3.1
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	40	-	140	2195	1452	9.6%	-	-	-	0.1	1.9	0.1
C1 - South Bristol Link A38 C1 - South Bristol Link A38 C1 - South Bristol Link A38 Stream: 1 PRC for Signalled Lanes (%): 47.7 Stream: 2 PRC for Signalled Lanes (%): 70.9 Stream: 3 PRC for Signalled Lanes (%): 156.4 PRC Over All Lanes (%): 47.7 Total Delay for Signalled Lanes (pcuHr): 22.66 Total Delay for Signalled Lanes (pcuHr): 1.34 Total Delay for Signalled Lanes (pcuHr): 0.79 Total Delay Over All Lanes(pcuHr): 24.79 Cycle Time (s): 62 Cycle Time (s): 62 Cycle Time (s): 62																	

Scenario 2: '2018 Baseline Interpeak' (FG2: '2018 Baseline Interpeak', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

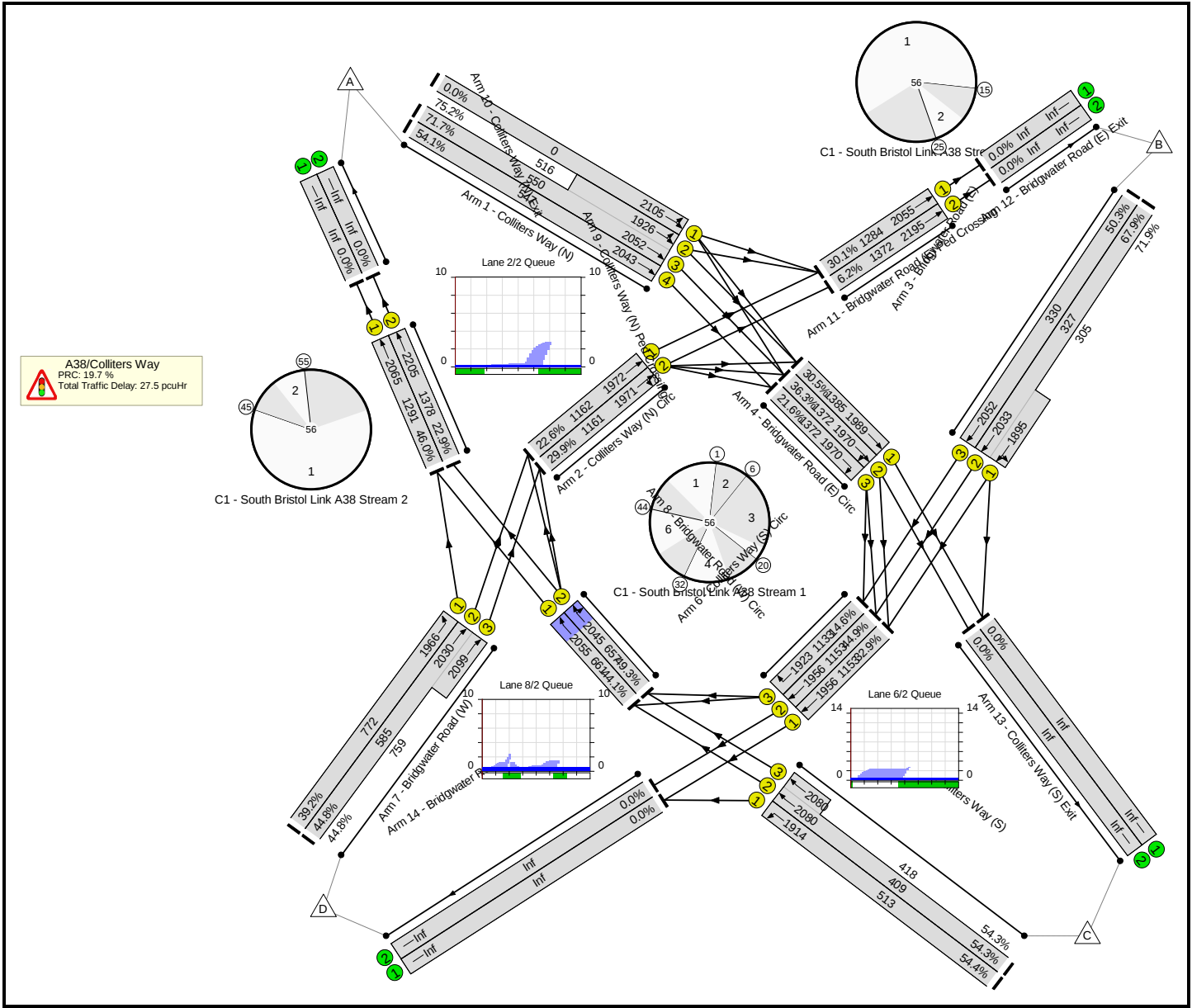
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	59.3%	0	0	0	16.7	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	59.3%	0	0	0	16.7	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	12	-	570	2052:1924	503+472	57.6 : 59.3%	-	-	-	3.5 (1.8+1.7)	22.1 (22.0:22.1)	4.4
1/4	Colliters Way (N) Ahead	U	A		1	12	-	179	2043	501	35.7%	-	-	-	1.1	22.1	2.4
2/1	Colliters Way (N) Circ Ahead	U	B		1	31	-	218	1972	1191	18.3%	-	-	-	0.3	5.0	1.6
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	31	-	280	1973	1191	23.5%	-	-	-	0.4	5.7	2.1
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	7	-	264	2033:1895	307+286	44.0 : 45.1%	-	-	-	1.9 (1.0+0.9)	26.0 (25.9:26.0)	2.2
3/3	Bridgwater Road (E) Ahead	U	D		1	7	-	57	2052	310	18.4%	-	-	-	0.4	26.8	0.8
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	36	-	319	1989	1389	23.0%	-	-	-	0.2	2.6	0.8
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	36	-	365	1970	1375	26.5%	-	-	-	0.2	2.3	0.7
4/3	Bridgwater Road (E) Circ Right	U	E		1	36	-	180	1970	1375	13.1%	-	-	-	0.1	1.5	0.1
5/1	Colliters Way (S) Left	U	F		1	12	-	195	1914	469	41.5%	-	-	-	1.3	23.4	2.7
5/2+5/3	Colliters Way (S) Ahead	U	F		1	12	-	338	2080:2080	375+408	43.2 : 43.2%	-	-	-	1.9 (0.9+1.0)	20.5 (20.4:20.5)	2.5

Basic Results Summary

[illegible]

Basic Results Summary

Scenario 3: '2018 Baseline PM' (FG3: '2018 Baseline PM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

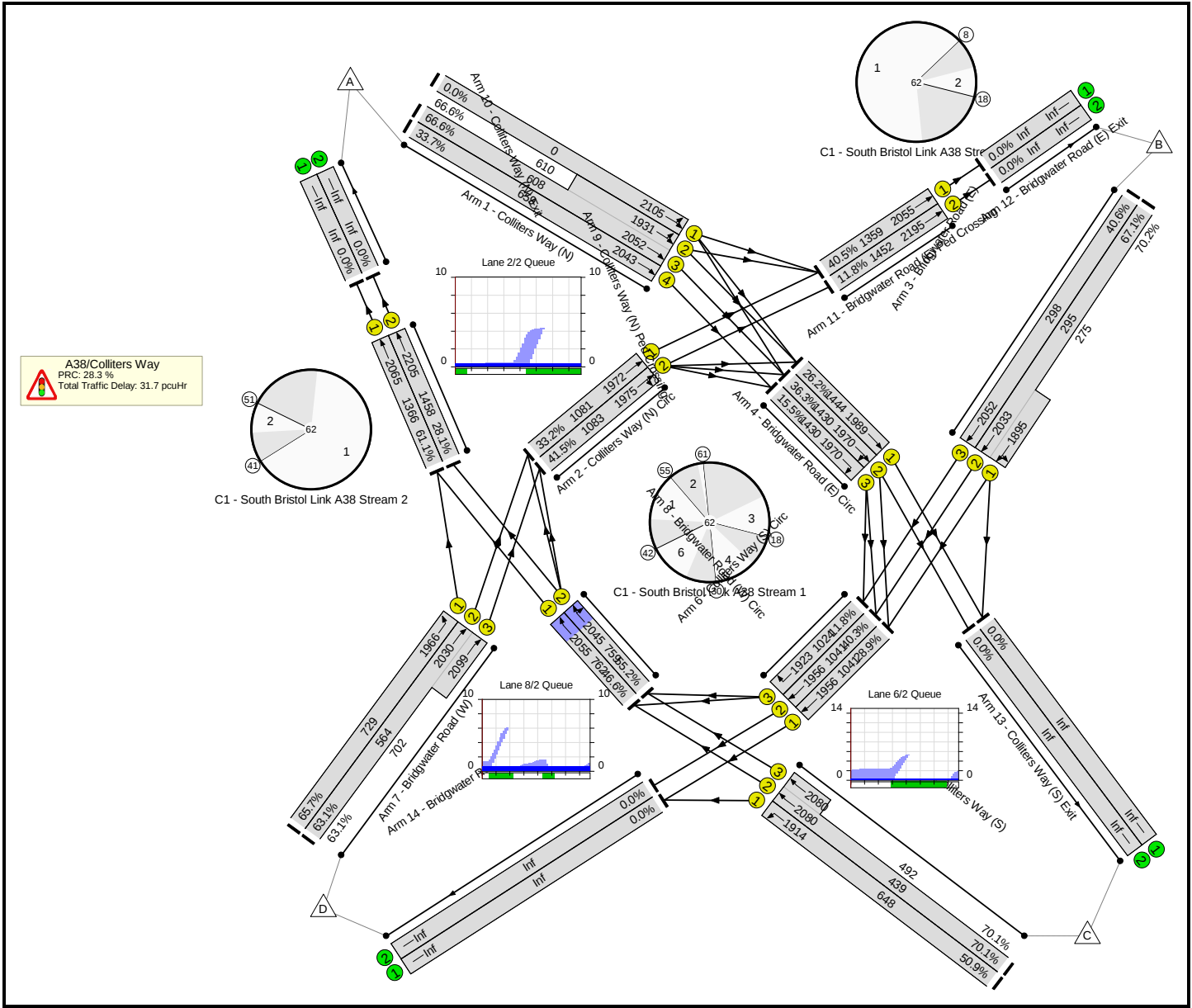
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	75.2%	0	0	0	27.5	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	75.2%	0	0	0	27.5	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	14	-	782	2052:1926	550+516	71.7 : 75.2%	-	-	-	5.4 (2.7+2.7)	25.0 (24.9:25.1)	6.9
1/4	Colliters Way (N) Ahead	U	A		1	14	-	296	2043	547	54.1%	-	-	-	2.0	24.7	4.5
2/1	Colliters Way (N) Circ Ahead	U	B		1	32	-	263	1972	1162	22.6%	-	-	-	0.4	5.1	2.0
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	32	-	347	1971	1161	29.9%	-	-	-	0.5	5.6	2.8
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	8	-	441	2033:1895	327+305	67.9 : 71.9%	-	-	-	3.9 (1.9+1.9)	31.6 (31.5:31.7)	4.4
3/3	Bridgwater Road (E) Ahead	U	D		1	8	-	166	2052	330	50.3%	-	-	-	1.5	32.4	2.9
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	38	-	423	1989	1385	30.5%	-	-	-	0.4	3.4	1.5
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	38	-	498	1970	1372	36.3%	-	-	-	0.4	2.9	3.0
4/3	Bridgwater Road (E) Circ Right	U	E		1	38	-	296	1970	1372	21.6%	-	-	-	0.1	1.7	0.1
5/1	Colliters Way (S) Left	U	F		1	14	-	279	1914	513	54.4%	-	-	-	2.0	25.2	4.2
5/2+5/3	Colliters Way (S) Ahead	U	F		1	14	-	449	2080:2080	409+418	54.3 : 54.3%	-	-	-	2.7 (1.3+1.4)	21.6 (21.5:21.6)	3.5

Basic Results Summary

6/1	Colliters Way (S) Circ Ahead	U	G		1	32	-	379	1956	1153	32.9%	-	-	-	1.0	9.4	2.2
6/2	Colliters Way (S) Circ Ahead	U	G		1	32	-	518	1956	1153	44.9%	-	-	-	1.2	8.4	2.7
6/3	Colliters Way (S) Circ Right	U	G		1	32	-	166	1923	1133	14.6%	-	-	-	0.5	11.3	1.2
7/1	Bridgwater Road (W) Left	U	H		2	20	-	303	1966	772	39.2%	-	-	-	0.8	10.0	2.1
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	20	-	602	2030:2099	585+759	44.8 : 44.8%	-	-	-	1.4 (0.6+0.8)	8.5 (8.4:8.6)	2.4
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	16	-	291	2055	661	44.1%	-	-	-	0.6	8.0	1.2
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	16	-	324	2045	657	49.3%	-	-	-	0.8	9.0	2.4
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	34	-	594	2065	1291	46.0%	-	-	-	0.9	5.7	3.0
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	34	-	316	2205	1378	22.9%	-	-	-	0.2	2.1	0.2
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	34	-	386	2055	1284	30.1%	-	-	-	0.5	5.1	2.2
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	34	-	85	2195	1372	6.2%	-	-	-	0.0	2.0	0.1
C1 - South Bristol Link A38 C1 - South Bristol Link A38 C1 - South Bristol Link A38 Stream: 1 PRC for Signalled Lanes (%): 19.7 Stream: 2 PRC for Signalled Lanes (%): 95.5 Stream: 3 PRC for Signalled Lanes (%): 199.5 PRC Over All Lanes (%): 19.7 Total Delay for Signalled Lanes (pcuHr): 25.75 Total Delay for Signalled Lanes (pcuHr): 1.12 Total Delay for Signalled Lanes (pcuHr): 0.59 Total Delay Over All Lanes(pcuHr): 27.46 Cycle Time (s): 56 Cycle Time (s): 56 Cycle Time (s): 56																	

Basic Results Summary

Scenario 4: '2026 Ref Case AM' (FG4: '2026 Ref Case AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

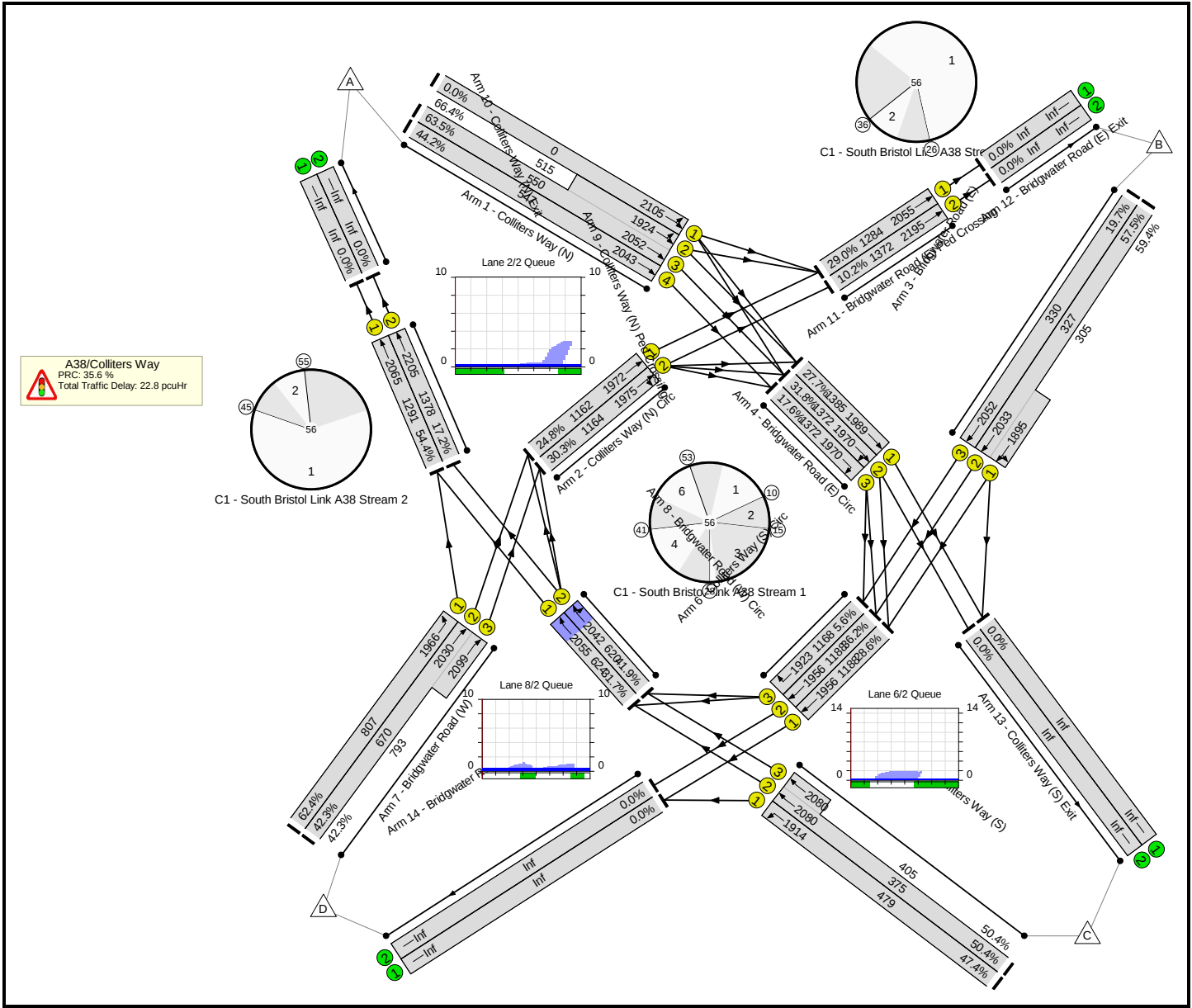
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	70.2%	0	0	0	31.7	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	70.2%	0	0	0	31.7	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	19	-	811	2052:1931	608+610	66.6 : 66.6%	-	-	-	5.0 (2.5+2.5)	22.3 (22.1:22.4)	7.0
1/4	Colliters Way (N) Ahead	U	A		1	19	-	222	2043	659	33.7%	-	-	-	1.2	20.1	3.2
2/1	Colliters Way (N) Circ Ahead	U	B		1	33	-	359	1972	1081	33.2%	-	-	-	0.6	6.1	3.4
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	33	-	449	1975	1083	41.5%	-	-	-	0.8	6.6	4.3
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	8	-	391	2033:1895	295+275	67.1 : 70.2%	-	-	-	3.8 (1.9+1.9)	35.1 (35.0:35.1)	4.3
3/3	Bridgwater Road (E) Ahead	U	D		1	8	-	121	2052	298	40.6%	-	-	-	1.2	34.2	2.2
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	44	-	378	1989	1444	26.2%	-	-	-	0.4	4.2	1.9
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	44	-	519	1970	1430	36.3%	-	-	-	0.5	3.2	3.1
4/3	Bridgwater Road (E) Circ Right	U	E		1	44	-	222	1970	1430	15.5%	-	-	-	0.1	1.5	0.1
5/1	Colliters Way (S) Left	U	F		1	20	-	330	1914	648	50.9%	-	-	-	2.0	22.0	5.0
5/2+5/3	Colliters Way (S) Ahead	U	F		1	20	-	653	2080:2080	439+492	70.1 : 70.1%	-	-	-	4.1 (1.9+2.2)	22.6 (22.4:22.7)	6.7

Basic Results Summary

6/1	Colliters Way (S) Circ Ahead	U	G		1	32	-	301	1956	1041	28.9%	-	-	-	1.0	12.3	2.7
6/2	Colliters Way (S) Circ Ahead	U	G		1	32	-	420	1956	1041	40.3%	-	-	-	1.4	12.2	5.3
6/3	Colliters Way (S) Circ Right	U	G		1	32	-	121	1923	1024	11.8%	-	-	-	0.4	12.0	0.8
7/1	Bridgwater Road (W) Left	U	H		2	21	-	479	1966	729	65.7%	-	-	-	2.1	15.5	4.9
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	21	-	799	2030:2099	564+702	63.1 : 63.1%	-	-	-	2.6 (1.1+1.5)	11.7 (11.5:11.9)	4.4
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	21	-	355	2055	762	46.6%	-	-	-	0.7	7.4	3.1
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	21	-	419	2045	759	55.2%	-	-	-	1.0	8.9	6.1
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	40	-	834	2065	1366	61.1%	-	-	-	1.5	6.4	5.1
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	40	-	410	2205	1458	28.1%	-	-	-	0.3	2.4	0.5
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	40	-	551	2055	1359	40.5%	-	-	-	0.8	5.5	3.7
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	40	-	171	2195	1452	11.8%	-	-	-	0.1	1.9	0.1
C1 - South Bristol Link A38 C1 - South Bristol Link A38 C1 - South Bristol Link A38 Stream: 1 PRC for Signalled Lanes (%): 28.3 Stream: 2 PRC for Signalled Lanes (%): 47.4 Stream: 3 PRC for Signalled Lanes (%): 122.0 PRC Over All Lanes (%): 28.3 Total Delay for Signalled Lanes (pcuHr): 29.04 Total Delay for Signalled Lanes (pcuHr): 1.76 Total Delay for Signalled Lanes (pcuHr): 0.94 Total Delay Over All Lanes(pcuHr): 31.74 Cycle Time (s): 62 Cycle Time (s): 62 Cycle Time (s): 62																	

Basic Results Summary

Scenario 5: '2026 Ref Case Interpeak' (FG5: '2026 Ref Case Interpeak', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	66.4%	0	0	0	22.8	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	66.4%	0	0	0	22.8	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	14	-	691	2052:1924	550+515	63.5 : 66.4%	-	-	-	4.4 (2.2+2.2)	23.0 (22.9:23.0)	5.7
1/4	Colliters Way (N) Ahead	U	A		1	14	-	242	2043	547	44.2%	-	-	-	1.5	22.9	3.5
2/1	Colliters Way (N) Circ Ahead	U	B		1	32	-	288	1972	1162	24.8%	-	-	-	0.5	5.7	2.3
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	32	-	353	1975	1164	30.3%	-	-	-	0.6	6.5	2.9
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	8	-	369	2033:1895	327+305	57.5 : 59.4%	-	-	-	2.9 (1.5+1.4)	28.6 (28.6:28.6)	3.4
3/3	Bridgwater Road (E) Ahead	U	D		1	8	-	65	2052	330	19.7%	-	-	-	0.5	27.2	1.0
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	38	-	384	1989	1385	27.7%	-	-	-	0.3	3.2	1.2
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	38	-	436	1970	1372	31.8%	-	-	-	0.3	2.8	1.9
4/3	Bridgwater Road (E) Circ Right	U	E		1	38	-	242	1970	1372	17.6%	-	-	-	0.1	1.6	0.1
5/1	Colliters Way (S) Left	U	F		1	13	-	227	1914	479	47.4%	-	-	-	1.6	25.0	3.4
5/2+5/3	Colliters Way (S) Ahead	U	F		1	13	-	393	2080:2080	375+405	50.4 : 50.4%	-	-	-	2.4 (1.2+1.3)	22.1 (22.0:22.1)	3.1

6/1	Colliters Way (S) Circ Ahead	U	G		1	33	-	340	1956	1188	28.6%	-	-	-	0.7	7.3	1.5
6/2	Colliters Way (S) Circ Ahead	U	G		1	33	-	430	1956	1188	36.2%	-	-	-	0.8	7.0	1.8
6/3	Colliters Way (S) Circ Right	U	G		1	33	-	65	1923	1168	5.6%	-	-	-	0.1	7.1	0.3
7/1	Bridgwater Road (W) Left	U	H		2	21	-	504	1966	807	62.4%	-	-	-	1.7	12.5	3.9
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	21	-	618	2030:2099	670+793	42.3 : 42.3%	-	-	-	1.4 (0.6+0.7)	7.9 (7.8:7.9)	2.2
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	15	-	198	2055	624	31.7%	-	-	-	0.3	6.2	0.6
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	15	-	260	2042	620	41.9%	-	-	-	0.6	8.3	1.2
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	34	-	702	2065	1291	54.4%	-	-	-	1.1	5.6	5.0
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	34	-	237	2205	1378	17.2%	-	-	-	0.3	3.9	0.7
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	34	-	372	2055	1284	29.0%	-	-	-	0.5	4.5	1.5
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	34	-	140	2195	1372	10.2%	-	-	-	0.1	1.7	0.1
C1 - South Bristol Link A38 Stream: 1 PRC for Signalled Lanes (%): 35.6 C1 - South Bristol Link A38 Stream: 2 PRC for Signalled Lanes (%): 65.5 C1 - South Bristol Link A38 Stream: 3 PRC for Signalled Lanes (%): 210.7 PRC Over All Lanes (%): 35.6 Total Delay for Signalled Lanes (pcuHr): 20.92 Total Delay for Signalled Lanes (pcuHr): 1.34 Total Delay for Signalled Lanes (pcuHr): 0.53 Total Delay Over All Lanes(pcuHr): 22.79 Cycle Time (s): 56 Cycle Time (s): 56 Cycle Time (s): 56																	

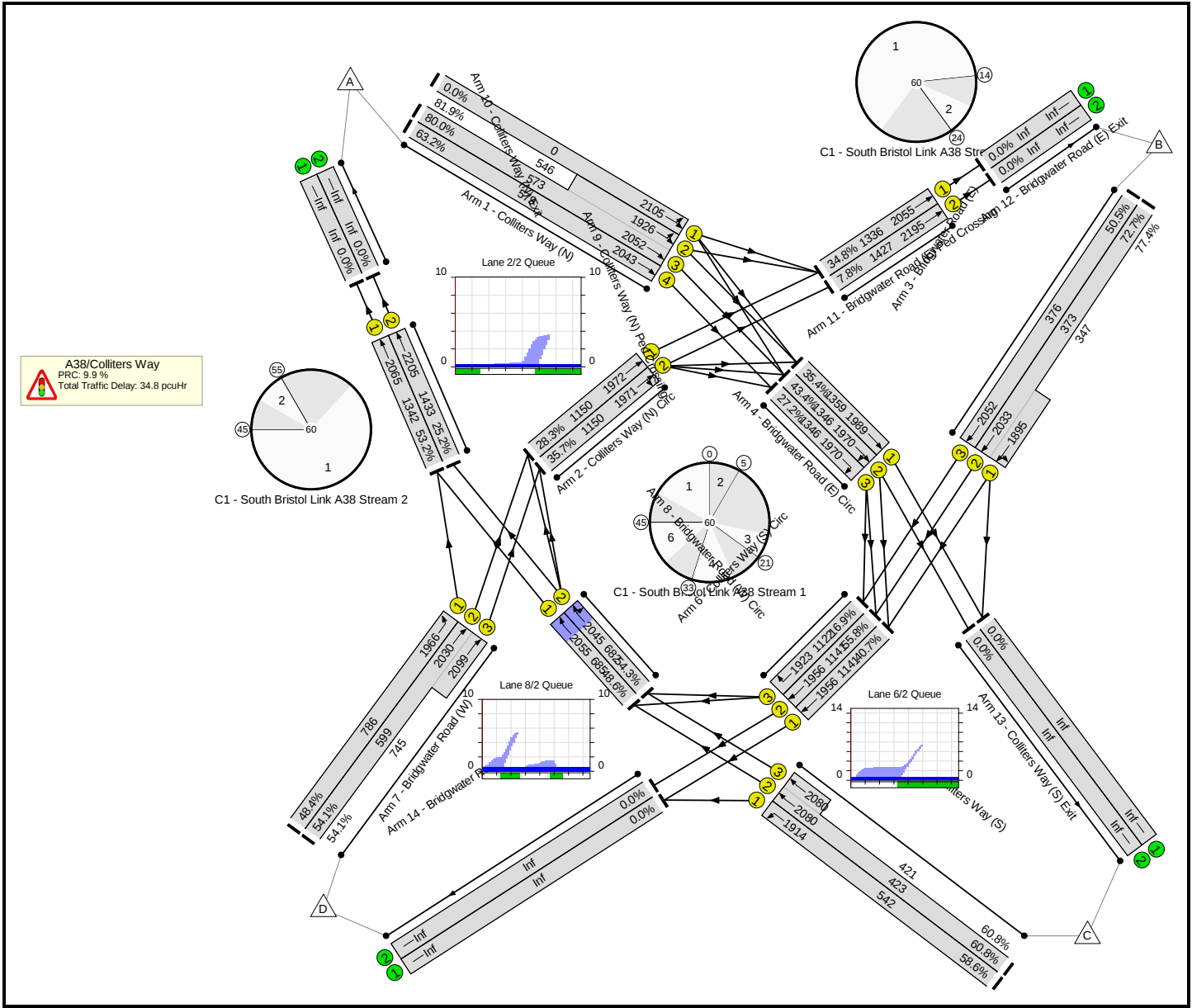
Stream: 1 PRC for Signalled Lanes (%):	35.6
Stream: 2 PRC for Signalled Lanes (%):	65.5
Stream: 3 PRC for Signalled Lanes (%):	210.7
PRC Over All Lanes (%):	35.6

Total Delay for Signalled Lanes (pcuHr):	20.92
Total Delay for Signalled Lanes (pcuHr):	1.34
Total Delay for Signalled Lanes (pcuHr):	0.53
Total Delay Over All Lanes(pcuHr):	22.79

Cycle Time (s): 56
Cycle Time (s): 56
Cycle Time (s): 56

Basic Results Summary

Scenario 6: '2026 Ref Case PM' (FG6: '2026 Ref Case PM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

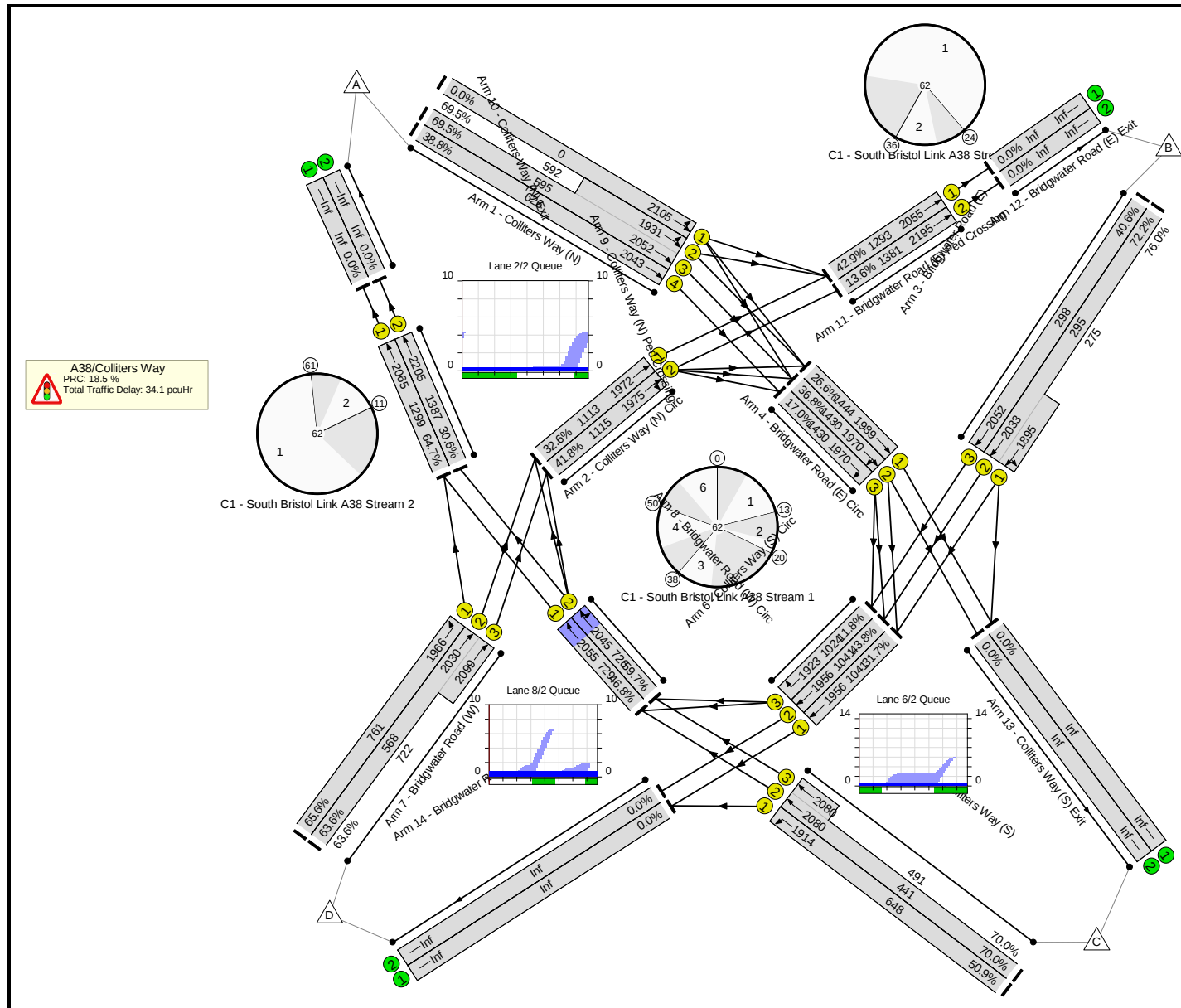
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	81.9%	0	0	0	34.8	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	81.9%	0	0	0	34.8	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	16	-	905	2052:1926	573+546	80.0 : 81.9%	-	-	-	7.1 (3.6+3.5)	28.2 (28.1:28.3)	9.1
1/4	Colliters Way (N) Ahead	U	A		1	16	-	366	2043	579	63.2%	-	-	-	2.8	27.2	6.1
2/1	Colliters Way (N) Circ Ahead	U	B		1	34	-	325	1972	1150	28.3%	-	-	-	0.5	5.4	2.7
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	34	-	411	1971	1150	35.7%	-	-	-	0.7	6.0	3.6
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	10	-	540	2033:1895	373+347	72.7 : 77.4%	-	-	-	5.0 (2.5+2.5)	33.0 (32.9:33.2)	5.7
3/3	Bridgwater Road (E) Ahead	U	D		1	10	-	190	2052	376	50.5%	-	-	-	1.7	31.7	3.4
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	40	-	481	1989	1359	35.4%	-	-	-	0.6	4.3	2.1
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	40	-	584	1970	1346	43.4%	-	-	-	0.6	3.7	4.8
4/3	Bridgwater Road (E) Circ Right	U	E		1	40	-	366	1970	1346	27.2%	-	-	-	0.2	1.9	1.9
5/1	Colliters Way (S) Left	U	F		1	16	-	318	1914	542	58.6%	-	-	-	2.3	26.5	5.2
5/2+5/3	Colliters Way (S) Ahead	U	F		1	16	-	513	2080:2080	423+421	60.8 : 60.8%	-	-	-	3.3 (1.6+1.6)	23.0 (23.0:23.0)	4.3

Basic Results Summary

6/1	Colliters Way (S) Circ Ahead	U	G		1	34	-	464	1956	1141	40.7%	-	-	-	1.2	9.0	2.8
6/2	Colliters Way (S) Circ Ahead	U	G		1	34	-	637	1956	1141	55.8%	-	-	-	1.6	8.8	7.3
6/3	Colliters Way (S) Circ Right	U	G		1	34	-	190	1923	1122	16.9%	-	-	-	0.4	8.2	1.0
7/1	Bridgwater Road (W) Left	U	H		2	22	-	381	1966	786	48.4%	-	-	-	1.2	11.2	3.0
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	22	-	727	2030:2099	599+745	54.1 : 54.1%	-	-	-	1.9 (0.8+1.1)	9.6 (9.4:9.7)	3.3
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	18	-	333	2055	685	48.6%	-	-	-	0.8	8.6	2.5
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	18	-	370	2045	682	54.3%	-	-	-	1.0	10.2	5.4
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	38	-	714	2065	1342	53.2%	-	-	-	1.2	5.8	4.0
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	38	-	361	2205	1433	25.2%	-	-	-	0.2	2.1	0.3
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	38	-	465	2055	1336	34.8%	-	-	-	0.6	4.7	2.7
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	38	-	111	2195	1427	7.8%	-	-	-	0.1	1.9	0.1
C1 - South Bristol Link A38 C1 - South Bristol Link A38 C1 - South Bristol Link A38 Stream: 1 PRC for Signalled Lanes (%): 9.9 Stream: 2 PRC for Signalled Lanes (%): 69.2 Stream: 3 PRC for Signalled Lanes (%): 158.5 PRC Over All Lanes (%): 9.9 Total Delay for Signalled Lanes (pcuHr): 32.74 Total Delay for Signalled Lanes (pcuHr): 1.37 Total Delay for Signalled Lanes (pcuHr): 0.67 Total Delay Over All Lanes(pcuHr): 34.77 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60																	

Scenario 7: '2026 Test Case AM' (FG7: '2026 Test Case AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

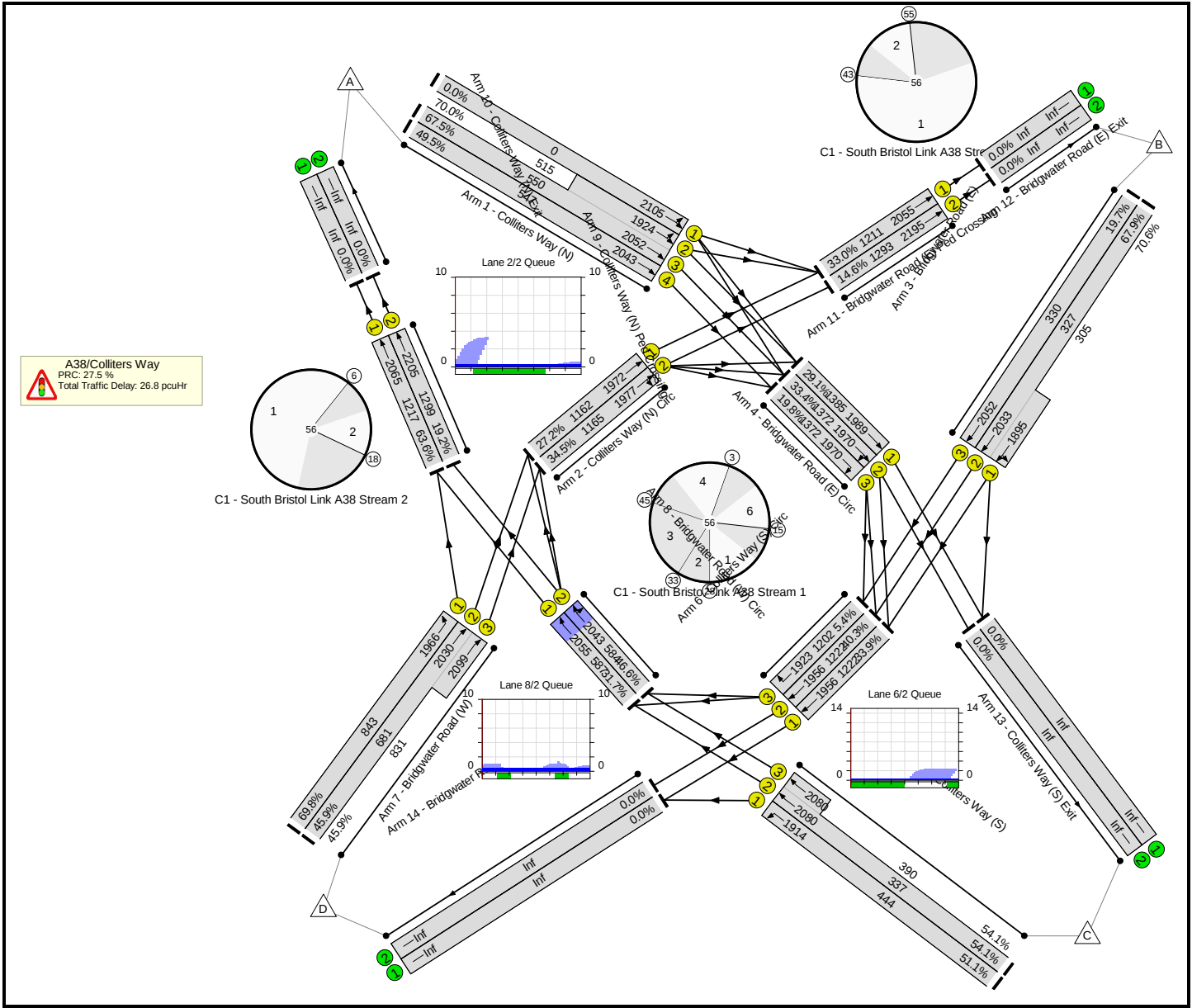
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	76.0%	0	0	0	34.1	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	76.0%	0	0	0	34.1	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	18	-	824	2052:1931	595+592	69.5 : 69.5%	-	-	-	5.4 (2.7+2.7)	23.7 (23.6:23.9)	7.3
1/4	Colliters Way (N) Ahead	U	A		1	18	-	243	2043	626	38.8%	-	-	-	1.5	21.6	3.6
2/1	Colliters Way (N) Circ Ahead	U	B		1	34	-	363	1972	1113	32.6%	-	-	-	0.6	5.8	3.3
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	34	-	466	1975	1115	41.8%	-	-	-	0.8	6.5	4.3
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	8	-	422	2033:1895	295+275	72.2 : 76.0%	-	-	-	4.4 (2.2+2.2)	37.3 (37.2:37.4)	4.9
3/3	Bridgwater Road (E) Ahead	U	D		1	8	-	121	2052	298	40.6%	-	-	-	1.2	34.2	2.2
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	44	-	384	1989	1444	26.6%	-	-	-	0.4	4.1	1.9
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	44	-	526	1970	1430	36.8%	-	-	-	0.5	3.2	3.6
4/3	Bridgwater Road (E) Circ Right	U	E		1	44	-	243	1970	1430	17.0%	-	-	-	0.1	1.5	0.1
5/1	Colliters Way (S) Left	U	F		1	20	-	330	1914	648	50.9%	-	-	-	2.0	22.0	5.0
5/2+5/3	Colliters Way (S) Ahead	U	F		1	20	-	653	2080:2080	441+491	70.0 : 70.0%	-	-	-	4.1 (1.9+2.2)	22.5 (22.4:22.6)	6.6

Basic Results Summary

6/1	Colliters Way (S) Circ Ahead	U	G		1	32	-	330	1956	1041	31.7%	-	-	-	1.2	12.8	3.1
6/2	Colliters Way (S) Circ Ahead	U	G		1	32	-	456	1956	1041	43.8%	-	-	-	1.6	12.5	6.0
6/3	Colliters Way (S) Circ Right	U	G		1	32	-	121	1923	1024	11.8%	-	-	-	0.4	12.0	0.8
7/1	Bridgwater Road (W) Left	U	H		2	22	-	499	1966	761	65.6%	-	-	-	2.1	14.8	5.0
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	22	-	820	2030:2099	568+722	63.6 : 63.6%	-	-	-	2.6 (1.1+1.5)	11.3 (11.1:11.5)	4.4
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	20	-	341	2055	729	46.8%	-	-	-	0.8	8.0	4.9
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	20	-	433	2045	726	59.7%	-	-	-	1.3	10.9	6.7
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	38	-	840	2065	1299	64.7%	-	-	-	1.8	7.9	9.7
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	38	-	424	2205	1387	30.6%	-	-	-	0.3	2.7	0.5
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	38	-	555	2055	1293	42.9%	-	-	-	0.9	6.1	4.1
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	38	-	188	2195	1381	13.6%	-	-	-	0.2	3.6	0.4

Basic Results Summary

Scenario 8: '2026 Test Case Interpeak' (FG8: '2026 Test Case Interpeak', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	70.6%	0	0	0	26.8	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	70.6%	0	0	0	26.8	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	14	-	732	2052:1924	550+515	67.5 : 70.0%	-	-	-	4.8 (2.4+2.4)	23.8 (23.7:23.9)	6.2
1/4	Colliters Way (N) Ahead	U	A		1	14	-	271	2043	547	49.5%	-	-	-	1.8	23.8	4.0
2/1	Colliters Way (N) Circ Ahead	U	B		1	32	-	316	1972	1162	27.2%	-	-	-	0.5	6.0	2.5
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	32	-	402	1977	1165	34.5%	-	-	-	0.8	7.0	3.3
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	8	-	437	2033:1895	327+305	67.9 : 70.6%	-	-	-	3.8 (1.9+1.9)	31.4 (31.3:31.4)	4.3
3/3	Bridgwater Road (E) Ahead	U	D		1	8	-	65	2052	330	19.7%	-	-	-	0.5	27.2	1.0
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	38	-	403	1989	1385	29.1%	-	-	-	0.4	3.3	1.3
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	38	-	458	1970	1372	33.4%	-	-	-	0.4	2.9	2.5
4/3	Bridgwater Road (E) Circ Right	U	E		1	38	-	271	1970	1372	19.8%	-	-	-	0.1	1.6	0.1
5/1	Colliters Way (S) Left	U	F		1	12	-	227	1914	444	51.1%	-	-	-	1.7	27.0	3.5
5/2+5/3	Colliters Way (S) Ahead	U	F		1	12	-	393	2080:2080	337+390	54.1 : 54.1%	-	-	-	2.6 (1.2+1.4)	23.6 (23.5:23.8)	3.3

6/1	Colliters Way (S) Circ Ahead	U	G		1	34	-	415	1956	1222	33.9%	-	-	-	0.9	7.9	2.1
6/2	Colliters Way (S) Circ Ahead	U	G		1	34	-	493	1956	1222	40.3%	-	-	-	1.1	7.8	2.4
6/3	Colliters Way (S) Circ Right	U	G		1	34	-	65	1923	1202	5.4%	-	-	-	0.1	6.8	0.3
7/1	Bridgwater Road (W) Left	U	H		2	22	-	588	1966	843	69.8%	-	-	-	2.2	13.5	4.7
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	22	-	695	2030:2099	681+831	45.9 : 45.9%	-	-	-	1.5 (0.7+0.8)	7.7 (7.6:7.8)	2.4
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	14	-	186	2055	587	31.7%	-	-	-	0.3	6.5	0.6
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	14	-	272	2043	584	46.6%	-	-	-	0.7	9.5	1.3
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	32	-	774	2065	1217	63.6%	-	-	-	1.7	7.7	6.5
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	32	-	249	2205	1299	19.2%	-	-	-	0.3	4.3	0.7
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	32	-	400	2055	1211	33.0%	-	-	-	0.6	5.0	3.2
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	32	-	189	2195	1293	14.6%	-	-	-	0.1	2.0	0.1
C1 - South Bristol Link A38 Stream: 1 PRC for Signalled Lanes (%): 27.5 C1 - South Bristol Link A38 Stream: 2 PRC for Signalled Lanes (%): 41.5 C1 - South Bristol Link A38 Stream: 3 PRC for Signalled Lanes (%): 172.5 PRC Over All Lanes (%): 27.5 Total Delay for Signalled Lanes (pcuHr): 24.23 Total Delay for Signalled Lanes (pcuHr): 1.96 Total Delay for Signalled Lanes (pcuHr): 0.66 Total Delay Over All Lanes(pcuHr): 26.85 Cycle Time (s): 56 Cycle Time (s): 56 Cycle Time (s): 56																	

Stream: 1 PRC for Signalled Lanes (%):	27.5
Stream: 2 PRC for Signalled Lanes (%):	41.5
Stream: 3 PRC for Signalled Lanes (%):	172.5
PRC Over All Lanes (%):	27.5

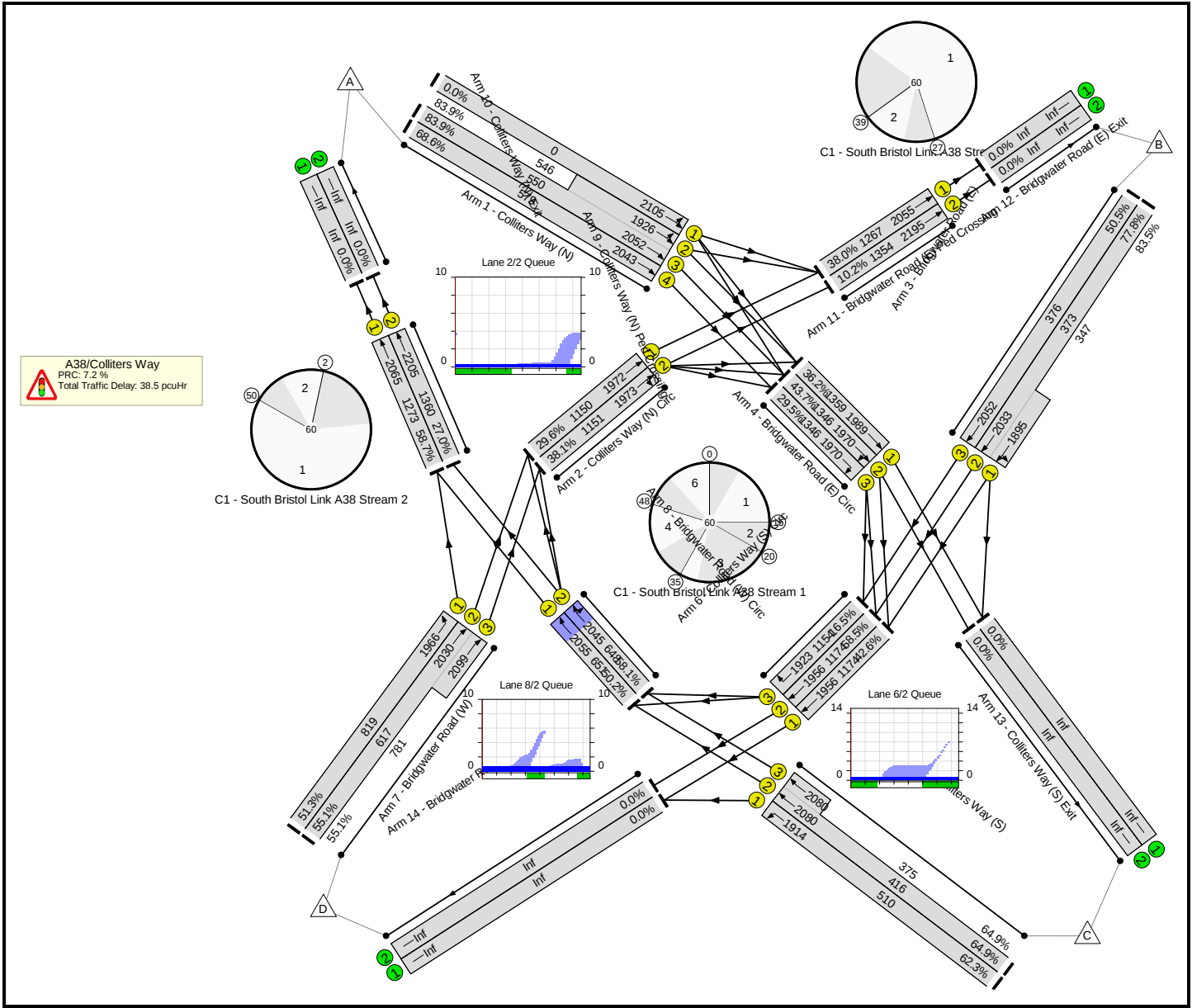
Total Delay for Signalled Lanes (pcuHr):	24.23
Total Delay for Signalled Lanes (pcuHr):	1.96
Total Delay for Signalled Lanes (pcuHr):	0.66
Total Delay Over All Lanes(pcuHr):	26.85

Cycle Time (s): 56
Cycle Time (s): 56
Cycle Time (s): 56

Basic Results Summary

Scenario 9: '2026 Test Case PM' (FG9: '2026 Test Case PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A38/Colliters Way	-	-	-		-	-	-	-	-	-	83.9%	0	0	0	38.5	-	-
A38/Colliters Way	-	-	-		-	-	-	-	-	-	83.9%	0	0	0	38.5	-	-
1/1	Colliters Way (N) Ahead Left	U	C		0	0	-	0	2105	0	0.0%	-	-	-	0.0	0.0	0.0
1/3+1/2	Colliters Way (N) Ahead Left	U	A		1	16	-	920	2052:1926	550+546	83.9 : 83.9%	-	-	-	7.7 (3.8+3.8)	30.0 (29.8:30.2)	9.7
1/4	Colliters Way (N) Ahead	U	A		1	16	-	397	2043	579	68.6%	-	-	-	3.2	28.9	6.9
2/1	Colliters Way (N) Circ Ahead	U	B		1	34	-	341	1972	1150	29.6%	-	-	-	0.5	5.8	2.9
2/2	Colliters Way (N) Circ Right Ahead	U	B		1	34	-	438	1973	1151	38.1%	-	-	-	0.8	6.5	3.8
3/2+3/1	Bridgwater Road (E) Ahead Left	U	D		1	10	-	580	2033:1895	373+347	77.8 : 83.5%	-	-	-	5.8 (2.9+2.9)	36.0 (35.8:36.1)	6.6
3/3	Bridgwater Road (E) Ahead	U	D		1	10	-	190	2052	376	50.5%	-	-	-	1.7	31.7	3.4
4/1	Bridgwater Road (E) Circ Ahead	U	E		1	40	-	492	1989	1359	36.2%	-	-	-	0.6	4.4	2.2
4/2	Bridgwater Road (E) Circ Right Ahead	U	E		1	40	-	588	1970	1346	43.7%	-	-	-	0.6	3.7	4.8
4/3	Bridgwater Road (E) Circ Right	U	E		1	40	-	397	1970	1346	29.5%	-	-	-	0.2	1.9	2.5
5/1	Colliters Way (S) Left	U	F		1	15	-	318	1914	510	62.3%	-	-	-	2.5	28.6	5.4
5/2+5/3	Colliters Way (S) Ahead	U	F		1	15	-	513	2080:2080	416+375	64.9 : 64.9%	-	-	-	3.5 (1.9+1.7)	24.9 (25.0:24.7)	4.7

Basic Results Summary

6/1	Colliters Way (S) Circ Ahead	U	G		1	35	-	500	1956	1174	42.6%	-	-	-	1.3	9.2	3.2
6/2	Colliters Way (S) Circ Ahead	U	G		1	35	-	687	1956	1174	58.5%	-	-	-	1.7	8.9	7.9
6/3	Colliters Way (S) Circ Right	U	G		1	35	-	190	1923	1154	16.5%	-	-	-	0.4	7.9	1.0
7/1	Bridgwater Road (W) Left	U	H		2	23	-	420	1966	819	51.3%	-	-	-	1.3	11.0	3.3
7/2+7/3	Bridgwater Road (W) Ahead	U	H		2	23	-	770	2030:2099	617+781	55.1 : 55.1%	-	-	-	2.0 (0.9+1.1)	9.2 (9.0:9.3)	3.4
8/1	Bridgwater Road (W) Circ Ahead	U	I		2	17	-	327	2055	651	50.2%	-	-	-	0.8	8.7	1.4
8/2	Bridgwater Road (W) Circ Right Ahead	U	I		2	17	-	376	2045	648	58.1%	-	-	-	1.2	11.7	5.7
9/1	Colliters Way (N) Ped Crossing Ahead	U	J		1	36	-	747	2065	1273	58.7%	-	-	-	1.4	6.7	5.1
9/2	Colliters Way (N) Ped Crossing Ahead	U	J		1	36	-	367	2205	1360	27.0%	-	-	-	0.4	4.3	1.2
11/1	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	36	-	481	2055	1267	38.0%	-	-	-	0.7	5.4	2.9
11/2	Bridgwater Road (E) Ped Crossing Ahead	U	N		1	36	-	138	2195	1354	10.2%	-	-	-	0.1	2.7	0.2
C1 - South Bristol Link A38 C1 - South Bristol Link A38 C1 - South Bristol Link A38 Stream: 1 PRC for Signalled Lanes (%) : 7.2 Stream: 2 PRC for Signalled Lanes (%) : 53.4 Stream: 3 PRC for Signalled Lanes (%) : 137.1 PRC Over All Lanes (%) : 7.2 Total Delay for Signalled Lanes (pcuHr): 35.81 Total Delay for Signalled Lanes (pcuHr): 1.83 Total Delay for Signalled Lanes (pcuHr): 0.83 Total Delay Over All Lanes(pcuHr): 38.46 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60																	