East Midlands Gateway
Phase 2 (EMG2)

Document DCO 6.6A/MCO 6.6A (Part 4)

ENVIRONMENTAL STATEMENT

Technical Appendices

Appendix 6A

Transport Assessment

October 2025

06

The East Midlands Gateway Phase 2
and Highway Order 202X and The East Midlands Gateway
Rail Freight and Highway (Amendment) Order 202X

SEGRO.COM/SLPEMG2

SEGRO

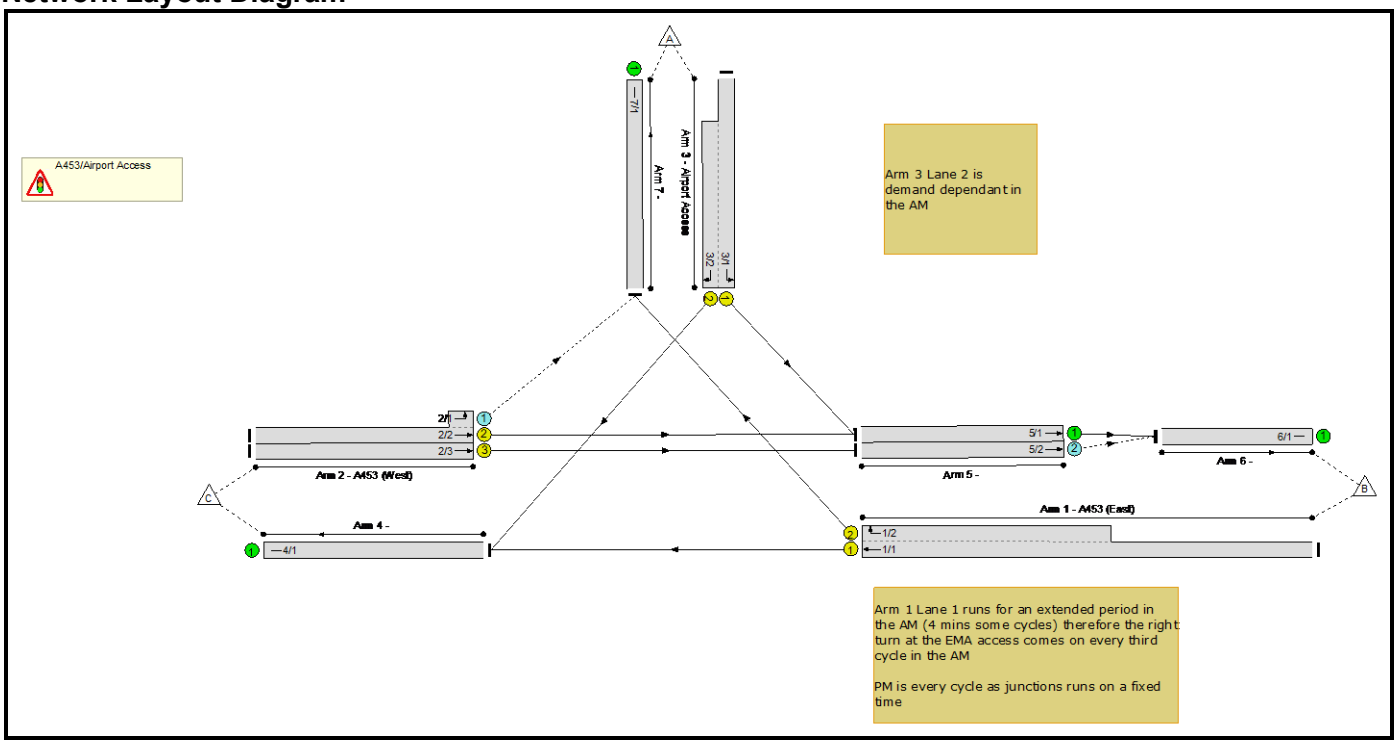
APPENDIX 51: Junction 6: A453/East Midlands Airport Signal Controlled Junction Stage 1A/2A Modelling Results

Full Input Data And Results

User and Project Details

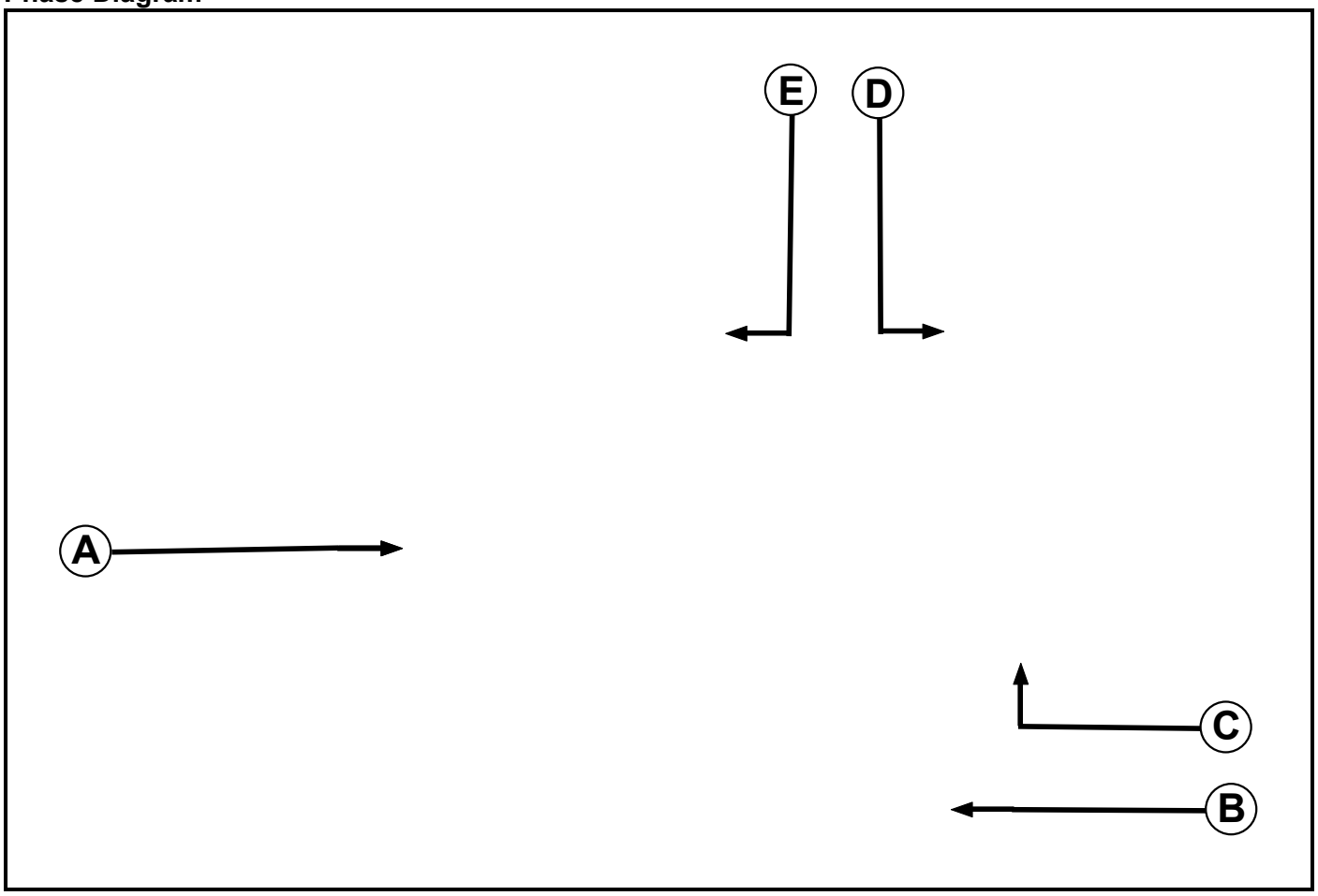
Project:	**East Midlands Gateway Phase 2**
Title:	**A453/EMA Junction**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 6
Checked By:	Vibeeshan Devaharan
Checked By Date:	27/03/24
Additional detail:	
File name:	250619_A453_Airport Access Signal Junction_Stage 1a+2a.lsg3x
Author:	Charlie Cresswell
Company:	BWB
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		6	6
C	Traffic		7	7
D	Traffic		6	6
E	Traffic		7	7

Full Input Data And Results

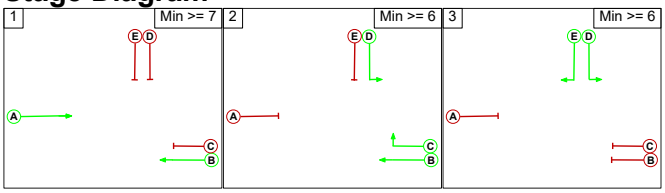
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		-	6	7	6
	B	-		-	-	5
	C	7	-		-	6
	D	5	-	-		-
	E	6	6	6	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	B C D
3	D E

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	7
	2	7		6
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A453/Airport Access											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
2/1 (A453 (West))	7/1 (Left)	715	0	1/2	0.22	All	-	-	-	-	-
5/2	6/1 (Ahead)	715	0	5/1	0.22	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: A453/Airport Access

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A453 (East))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
1/2 (A453 (East))	U	C	2	3	23.5	Geom	-	3.50	0.00	Y	Arm 7 Right	25.00
2/1 (A453 (West))	O		2	3	2.3	User	1439	-	-	-	-	-
2/2 (A453 (West))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
2/3 (A453 (West))	U	A	2	3	13.0	Geom	-	3.50	0.00	N	Arm 5 Ahead	Inf
3/1 (Airport Access)	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Left	20.00
3/2 (Airport Access)	U	E	2	3	15.7	Geom	-	3.25	0.00	Y	Arm 4 Right	25.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	9.6	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
5/2	O		2	3	9.6	Geom	-	3.50	0.00	N	Arm 6 Ahead	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Observed (AM)'	07:45	08:45	01:00	
2: '2022 Observed (PM)'	17:00	18:00	01:00	
3: '1a 2028 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
4: '1a 2028 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
5: '1a 2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
6: '1a 2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
7: '1a 2038 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
8: '1a 2038 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
9: '1a 2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
10: '1a 2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	
11: '2a 2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
12: '2a 2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
13: '2a 2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
14: '2a 2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	114	39	153
	B	241	0	390	631
	C	129	460	0	589
	Tot.	370	574	429	1373

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2022 Observed (AM)
Junction: A453/Airport Access	
1/1 (with short)	631(In) 390(Out)
1/2 (short)	241
2/1 (short)	129
2/2 (with short)	476(In) 347(Out)
2/3	113
3/1 (with short)	153(In) 114(Out)
3/2 (short)	39
4/1	429
5/1	461
5/2	113
6/1	574
7/1	370

Lane Saturation Flows

Junction: A453/Airport Access

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	224	65	289
	B	133	0	443	576
	C	41	347	0	388
	Tot.	174	571	508	1253

Traffic Lane Flows

Lane	Scenario 2: 2022 Observed (PM)
Junction: A453/Airport Access	
1/1 (with short)	576(In) 443(Out)
1/2 (short)	133
2/1 (short)	41
2/2 (with short)	314(In) 273(Out)
2/3	74
3/1 (with short)	289(In) 224(Out)
3/2 (short)	65
4/1	508
5/1	497
5/2	74
6/1	571
7/1	174

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '1a 2028 Forecast Year Without Development (AM)' (FG3: '1a 2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	167	75	242
	B	276	0	394	670
	C	252	535	0	787
	Tot.	528	702	469	1699

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 1a 2028 Forecast Year Without Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	670(In) 394(Out)
1/2 (short)	276
2/1 (short)	252
2/2 (with short)	628(In) 376(Out)
2/3	159
3/1 (with short)	242(In) 167(Out)
3/2 (short)	75
4/1	469
5/1	543
5/2	159
6/1	702
7/1	528

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '1a 2028 Forecast Year Without Development (PM)' (FG4: '1a 2028 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	324	143	467
	B	147	0	461	608
	C	78	426	0	504
	Tot.	225	750	604	1579

Traffic Lane Flows

Lane	Scenario 4: 1a 2028 Forecast Year Without Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	608(In) 461(Out)
1/2 (short)	147
2/1 (short)	78
2/2 (with short)	402(In) 324(Out)
2/3	102
3/1 (with short)	467(In) 324(Out)
3/2 (short)	143
4/1	604
5/1	648
5/2	102
6/1	750
7/1	225

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '1a 2028 Forecast Year With Development (AM)' (FG5: '1a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	176	83	259
	B	272	0	319	591
	C	412	645	0	1057
	Tot.	684	821	402	1907

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 1a 2028 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	591(In) 319(Out)
1/2 (short)	272
2/1 (short)	412
2/2 (with short)	828(In) 416(Out)
2/3	229
3/1 (with short)	259(In) 176(Out)
3/2 (short)	83
4/1	402
5/1	592
5/2	229
6/1	821
7/1	684

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '1a 2028 Forecast Year With Development (PM)' (FG6: '1a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	286	204	490
	B	134	0	569	703
	C	82	397	0	479
	Tot.	216	683	773	1672

Traffic Lane Flows

Lane	Scenario 6: 1a 2028 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	703(In) 569(Out)
1/2 (short)	134
2/1 (short)	82
2/2 (with short)	379(In) 297(Out)
2/3	100
3/1 (with short)	490(In) 286(Out)
3/2 (short)	204
4/1	773
5/1	583
5/2	100
6/1	683
7/1	216

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '1a 2038 Forecast Year Without Development (AM)' (FG7: '1a 2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	170	161	331
	B	295	0	426	721
	C	369	484	0	853
	Tot.	664	654	587	1905

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 1a 2038 Forecast Year Without Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	721(In) 426(Out)
1/2 (short)	295
2/1 (short)	369
2/2 (with short)	663(In) 294(Out)
2/3	190
3/1 (with short)	331(In) 170(Out)
3/2 (short)	161
4/1	587
5/1	464
5/2	190
6/1	654
7/1	664

Lane Saturation Flows

Junction: A453/Airport Access

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 8: '1a 2038 Forecast Year Without Development (PM)' (FG8: '1a 2038 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	388	215	603
	B	152	0	486	638
	C	126	588	0	714
	Tot.	278	976	701	1955

Traffic Lane Flows

Lane	Scenario 8: 1a 2038 Forecast Year Without Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	638(In) 486(Out)
1/2 (short)	152
2/1 (short)	126
2/2 (with short)	566(In) 440(Out)
2/3	148
3/1 (with short)	603(In) 388(Out)
3/2 (short)	215
4/1	701
5/1	828
5/2	148
6/1	976
7/1	278

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 9: '1a 2038 Forecast Year With Development (AM)' (FG9: '1a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	169	165	334
	B	278	0	331	609
	C	544	566	0	1110
	Tot.	822	735	496	2053

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 1a 2038 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	609(In) 331(Out)
1/2 (short)	278
2/1 (short)	544
2/2 (with short)	759(In) 215(Out)
2/3	351
3/1 (with short)	334(In) 169(Out)
3/2 (short)	165
4/1	496
5/1	384
5/2	351
6/1	735
7/1	822

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 10: '1a 2038 Forecast Year With Development (PM)' (FG10: '1a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	365	320	685
	B	169	0	651	820
	C	134	476	0	610
	Tot.	303	841	971	2115

Traffic Lane Flows

Lane	Scenario 10: 1a 2038 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	820(In) 651(Out)
1/2 (short)	169
2/1 (short)	134
2/2 (with short)	469(In) 335(Out)
2/3	141
3/1 (with short)	685(In) 365(Out)
3/2 (short)	320
4/1	971
5/1	700
5/2	141
6/1	841
7/1	303

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2a 2028 Forecast Year With Development (AM)' (FG11: '2a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	178	68	246
	B	267	0	361	628
	C	291	691	0	982
	Tot.	558	869	429	1856

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2a 2028 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	628(In) 361(Out)
1/2 (short)	267
2/1 (short)	291
2/2 (with short)	774(In) 483(Out)
2/3	208
3/1 (with short)	246(In) 178(Out)
3/2 (short)	68
4/1	429
5/1	661
5/2	208
6/1	869
7/1	558

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 12: '2a 2028 Forecast Year With Development (PM)' (FG12: '2a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	287	224	511
	B	122	0	573	695
	C	82	413	0	495
	Tot.	204	700	797	1701

Traffic Lane Flows

Lane	Scenario 12: 2a 2028 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	695(In) 573(Out)
1/2 (short)	122
2/1 (short)	82
2/2 (with short)	385(In) 303(Out)
2/3	110
3/1 (with short)	511(In) 287(Out)
3/2 (short)	224
4/1	797
5/1	590
5/2	110
6/1	700
7/1	204

Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 13: '2a 2038 Forecast Year With Development (AM)' (FG13: '2a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	209	121	330
	B	281	0	361	642
	C	374	734	0	1108
	Tot.	655	943	482	2080

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2a 2038 Forecast Year With Development (AM)
Junction: A453/Airport Access	
1/1 (with short)	642(In) 361(Out)
1/2 (short)	281
2/1 (short)	374
2/2 (with short)	865(In) 491(Out)
2/3	243
3/1 (with short)	330(In) 209(Out)
3/2 (short)	121
4/1	482
5/1	700
5/2	243
6/1	943
7/1	655

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 14: '2a 2038 Forecast Year With Development (PM)' (FG14: '2a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	365	316	681
	B	157	0	680	837
	C	117	484	0	601
	Tot.	274	849	996	2119

Traffic Lane Flows

Lane	Scenario 14: 2a 2038 Forecast Year With Development (PM)
Junction: A453/Airport Access	
1/1 (with short)	837(In) 680(Out)
1/2 (short)	157
2/1 (short)	117
2/2 (with short)	477(In) 360(Out)
2/3	124
3/1 (with short)	681(In) 365(Out)
3/2 (short)	316
4/1	996
5/1	725
5/2	124
6/1	849
7/1	274

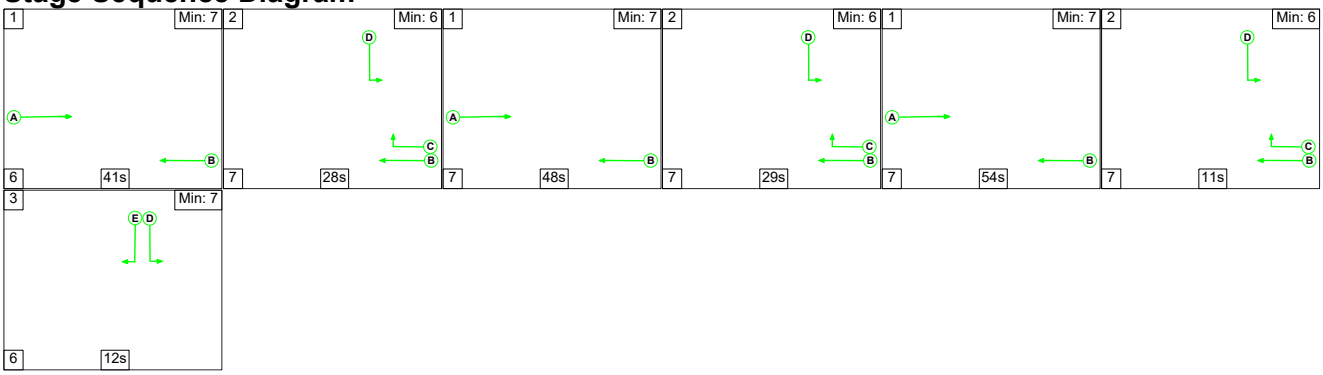
Full Input Data And Results

Lane Saturation Flows

Junction: A453/Airport Access								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 7 Right	25.00	100.0 %	1854	1854
2/1 (A453 (West) Lane 1)	This lane uses a directly entered Saturation Flow						1439	1439
2/2 (A453 (West))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
2/3 (A453 (West))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
3/1 (Airport Access)	3.25	0.00	Y	Arm 5 Left	20.00	100.0 %	1805	1805
3/2 (Airport Access)	3.25	0.00	Y	Arm 4 Right	25.00	100.0 %	1830	1830
4/1	Infinite Saturation Flow						Inf	Inf
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1965	1965
5/2	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

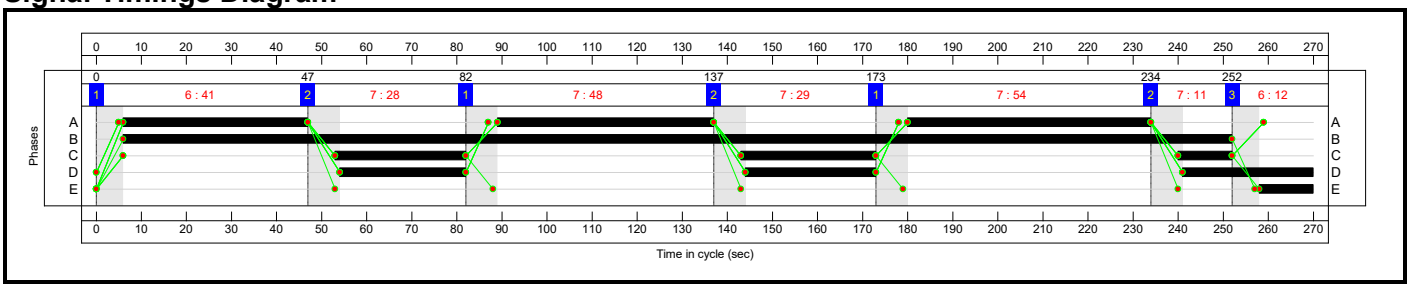


Stage Timings

Stage	1	2	1	2	1	2	3
Duration	41	28	48	29	54	11	12
Change Point	0	47	82	137	173	234	252

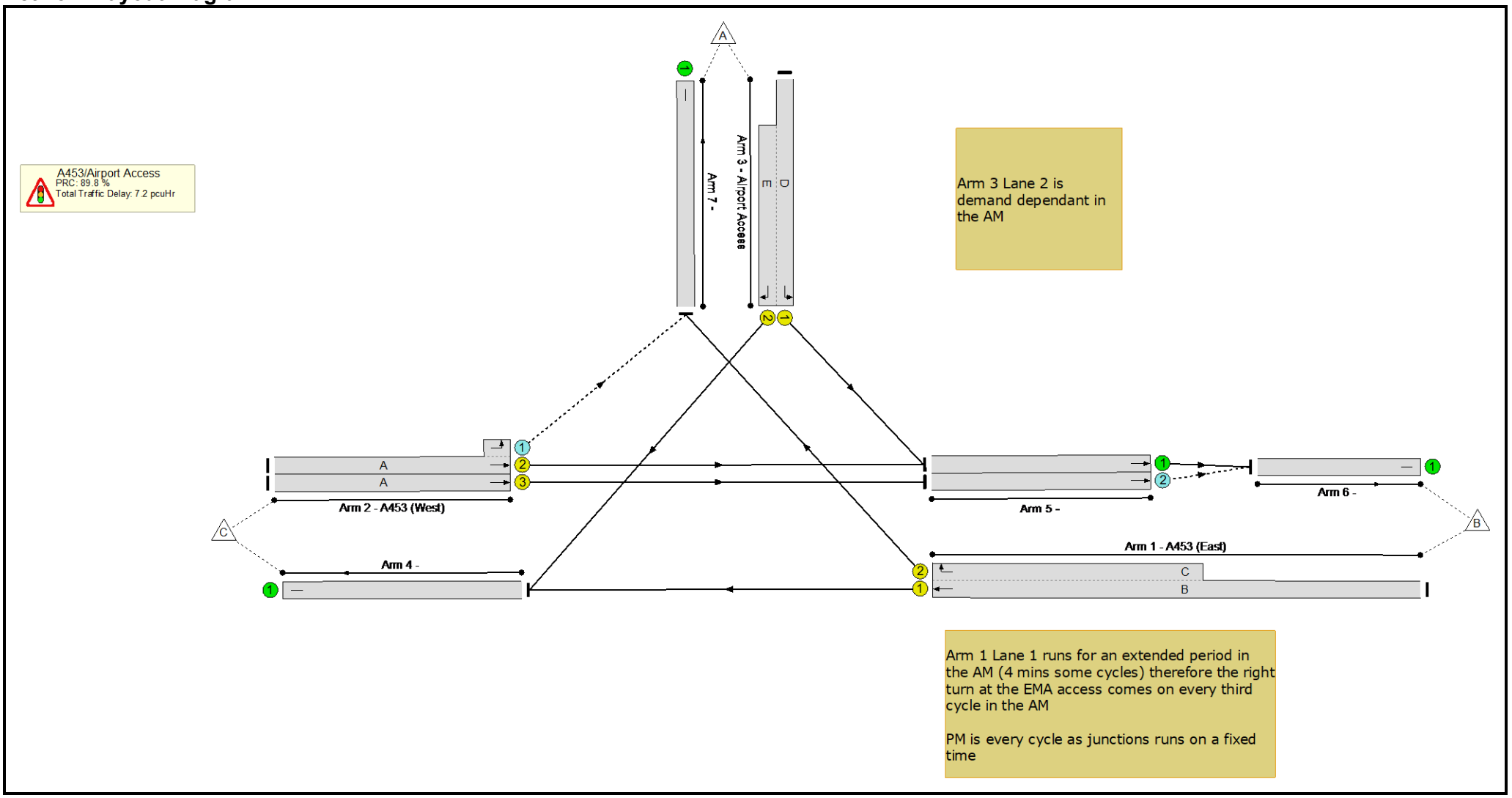
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.4%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.4%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	246:71	-	631	1965:1854	822+508	47.4 : 47.4%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	143	-	476	1965:1439	736+273	47.2 : 47.2%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	143	-	113	2105	1138	9.9%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	86:12	-	153	1805:1830	258+88	44.3 : 44.3%
4/1		U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	461	1965	1965	23.5%
5/2	Ahead	O	N/A	N/A	-		-	-	-	113	2105	614	18.4%
6/1		U	N/A	N/A	-		-	-	-	574	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%

Full Input Data And Results

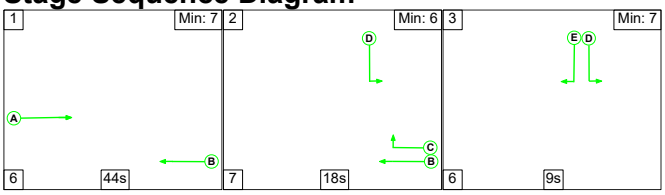
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**135**	**107**	**0**	**5.6**	**1.6**	**0.0**	**7.2**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**135**	**107**	**0**	**5.6**	**1.6**	**0.0**	**7.2**	**-**	**-**	**-**	**-**
1/1+1/2	631	631	-	-	-	2.0	0.5	-	2.4 (0.4+2.0)	13.8 (3.8:29.9)	5.4	0.5	5.8
2/2+2/1	476	476	22	107	0	1.3	0.4	-	1.7 (1.5+0.2)	13.0 (15.3:6.9)	6.4	0.4	6.8
2/3	113	113	-	-	-	0.3	0.1	-	0.4	11.8	1.4	0.1	1.4
3/1+3/2	153	153	-	-	-	2.0	0.4	-	2.4 (1.0+1.5)	57.4 (31.1:134.3)	2.8	0.4	3.2
4/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	461	461	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2	113	113	113	0	0	0.0	0.1	-	0.1	4.7	1.6	0.1	1.7
6/1	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 89.8 Total Delay for Signalled Lanes (pcuHr): 6.95 Cycle Time (s): 270
PRC Over All Lanes (%): 89.8 Total Delay Over All Lanes(pcuHr): 7.25

Full Input Data And Results

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 2: 'Network Control Plan 2')

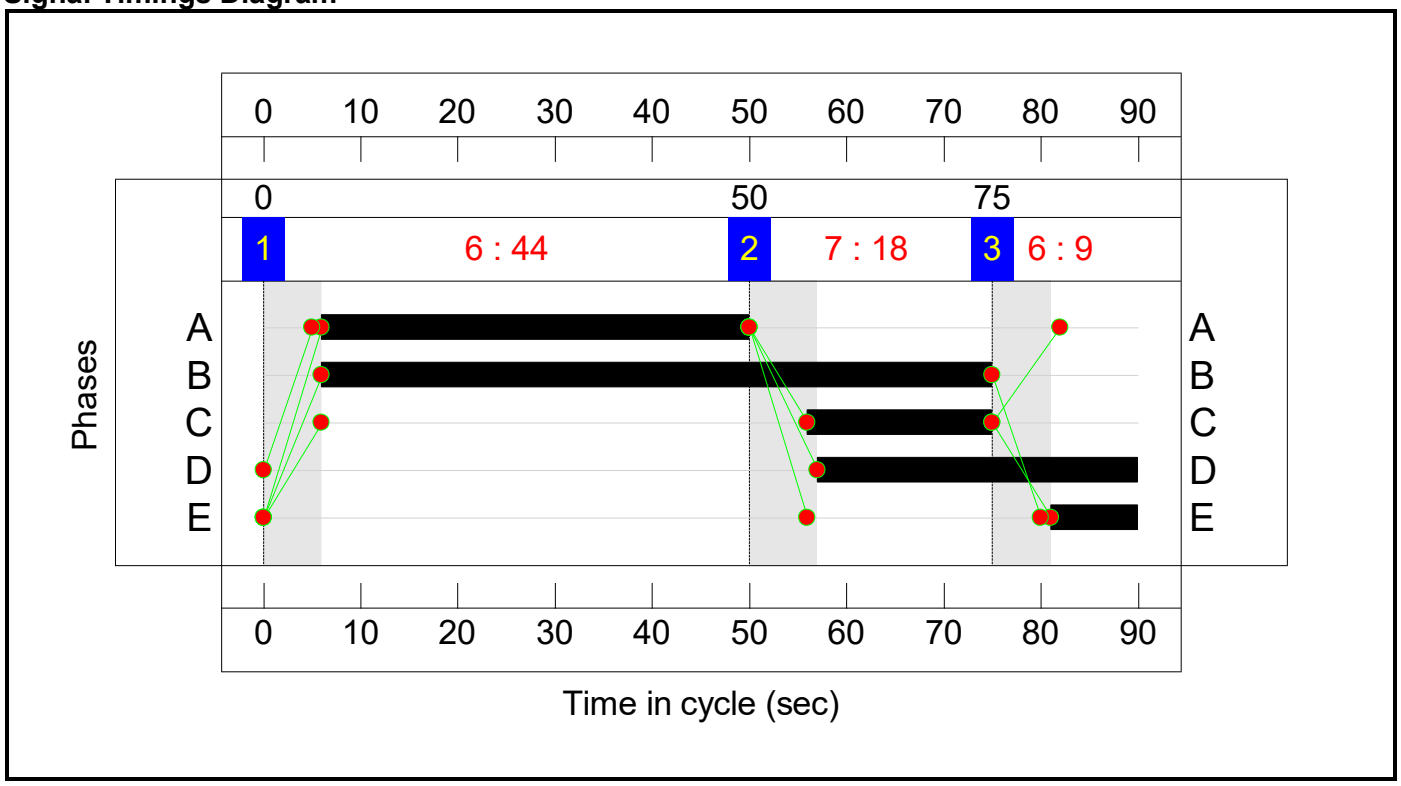
Stage Sequence Diagram



Stage Timings

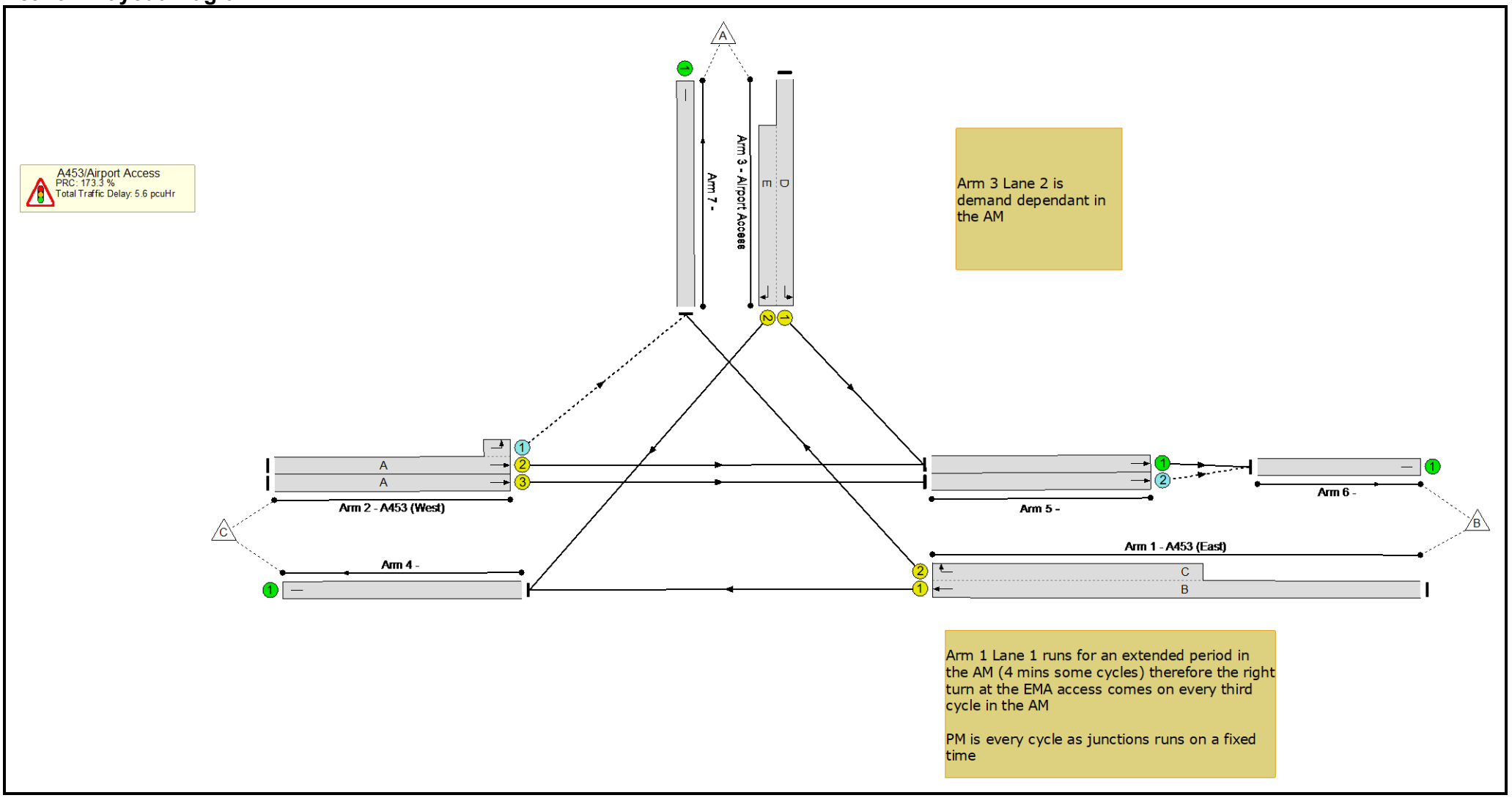
Stage	1	2	3
Duration	44	18	9
Change Point	0	50	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**32.9%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**32.9%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	69:19	-	576	1965:1854	1397+412	31.7 : 32.3%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	44	-	314	1965:1439	830+125	32.9 : 32.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	44	-	74	2105	1052	7.0%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	33:9	-	289	1805:1830	680+197	32.9 : 32.9%
4/1		U	N/A	N/A	-		-	-	-	508	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	497	1965	1965	25.3%
5/2	Ahead	O	N/A	N/A	-		-	-	-	74	2105	606	12.2%
6/1		U	N/A	N/A	-		-	-	-	571	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	174	Inf	Inf	0.0%

Full Input Data And Results

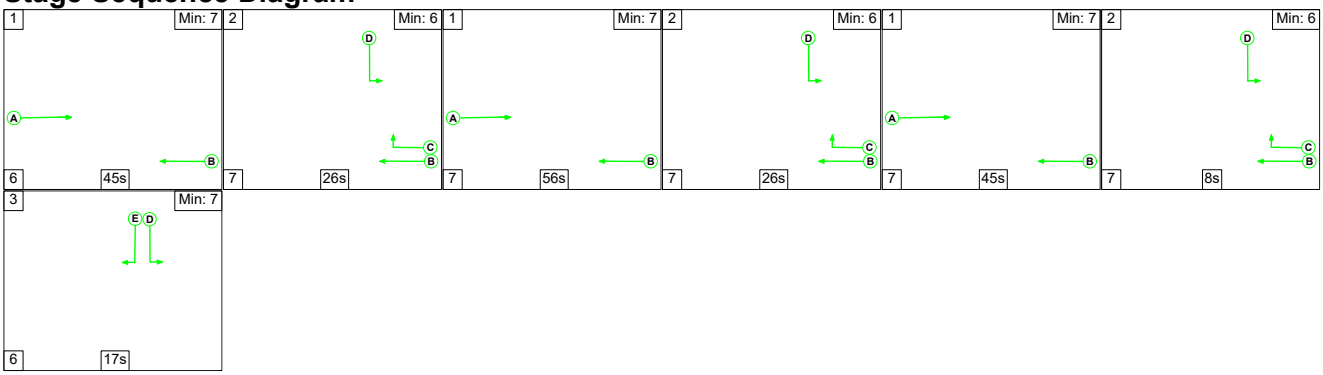
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**83**	**32**	**0**	**4.6**	**1.0**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**83**	**32**	**0**	**4.6**	**1.0**	**0.0**	**5.6**	**-**	**-**	**-**	**-**
1/1+1/2	576	576	-	-	-	1.4	0.2	-	1.7 (0.5+1.1)	10.4 (4.3:30.8)	3.1	0.2	3.3
2/2+2/1	314	314	9	32	0	1.0	0.2	-	1.3 (1.2+0.1)	14.6 (16.0:5.2)	4.3	0.2	4.6
2/3	74	74	-	-	-	0.2	0.0	-	0.3	13.5	0.9	0.0	1.0
3/1+3/2	289	289	-	-	-	1.9	0.2	-	2.1 (1.4+0.7)	26.8 (22.9:39.9)	3.9	0.2	4.2
4/1	508	508	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	497	497	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2	74	74	74	0	0	0.0	0.1	-	0.1	3.6	1.0	0.1	1.1
6/1	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 173.3 Total Delay for Signalled Lanes (pcuHr): 5.37 Cycle Time (s): 90
PRC Over All Lanes (%): 173.3 Total Delay Over All Lanes(pcuHr): 5.61

Full Input Data And Results

Scenario 3: '1a 2028 Forecast Year Without Development (AM)' (FG3: '1a 2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

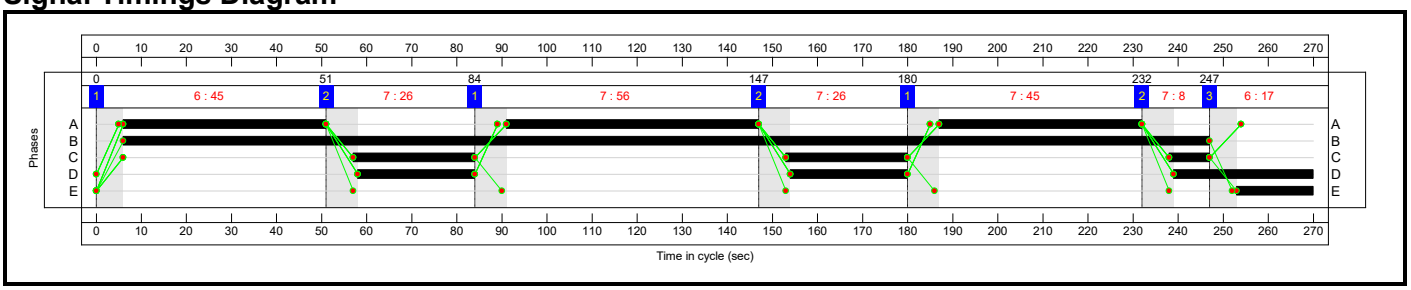
Stage Sequence Diagram



Stage Timings

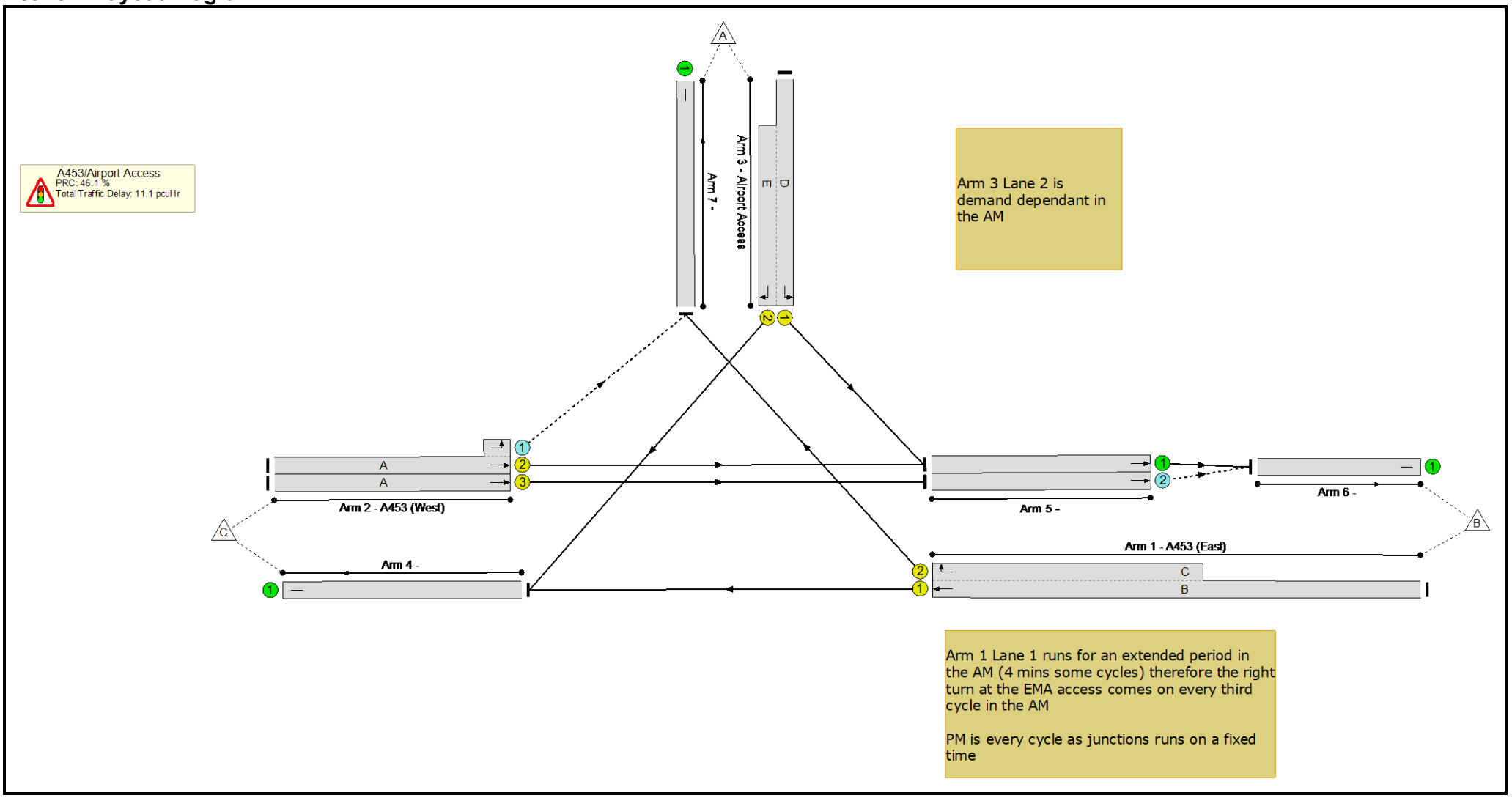
Stage	1	2	1	2	1	2	3
Duration	45	26	56	26	45	8	17
Change Point	0	51	84	147	180	232	247

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.6%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.6%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	241:63	-	670	1965:1854	647+453	60.9 : 60.9%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	146	-	628	1965:1439	611+409	61.6 : 61.6%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	146	-	159	2105	1162	13.7%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	83:17	-	242	1805:1830	272+122	61.5 : 61.5%
4/1		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	543	1965	1965	27.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	159	2105	595	26.7%
6/1		U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%

Full Input Data And Results

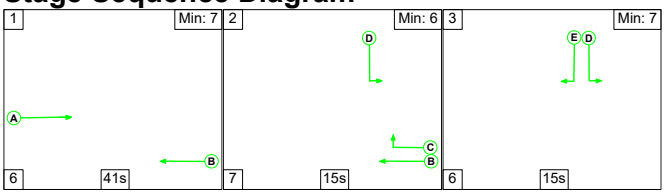
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**196**	**215**	**0**	**8.3**	**2.8**	**0.0**	**11.1**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**196**	**215**	**0**	**8.3**	**2.8**	**0.0**	**11.1**	**-**	**-**	**-**	**-**
1/1+1/2	670	670	-	-	-	2.6	0.8	-	3.3 (0.7+2.7)	17.9 (6.0:34.9)	7.1	0.8	7.8
2/2+2/1	628	628	37	215	0	1.6	0.8	-	2.4 (1.7+0.6)	13.7 (16.7:9.0)	9.3	0.8	10.1
2/3	159	159	-	-	-	0.4	0.1	-	0.5	11.6	2.0	0.1	2.1
3/1+3/2	242	242	-	-	-	3.6	0.8	-	4.4 (1.6+2.8)	65.8 (35.0:134.4)	5.5	0.8	6.2
4/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	543	543	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	159	159	159	0	0	0.1	0.2	-	0.3	6.5	2.7	0.2	2.8
6/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 46.1 Total Delay for Signalled Lanes (pcuHr): 10.64 Cycle Time (s): 270
PRC Over All Lanes (%): 46.1 Total Delay Over All Lanes(pcuHr): 11.12

Full Input Data And Results

Scenario 4: '1a 2028 Forecast Year Without Development (PM)' (FG4: '1a 2028 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

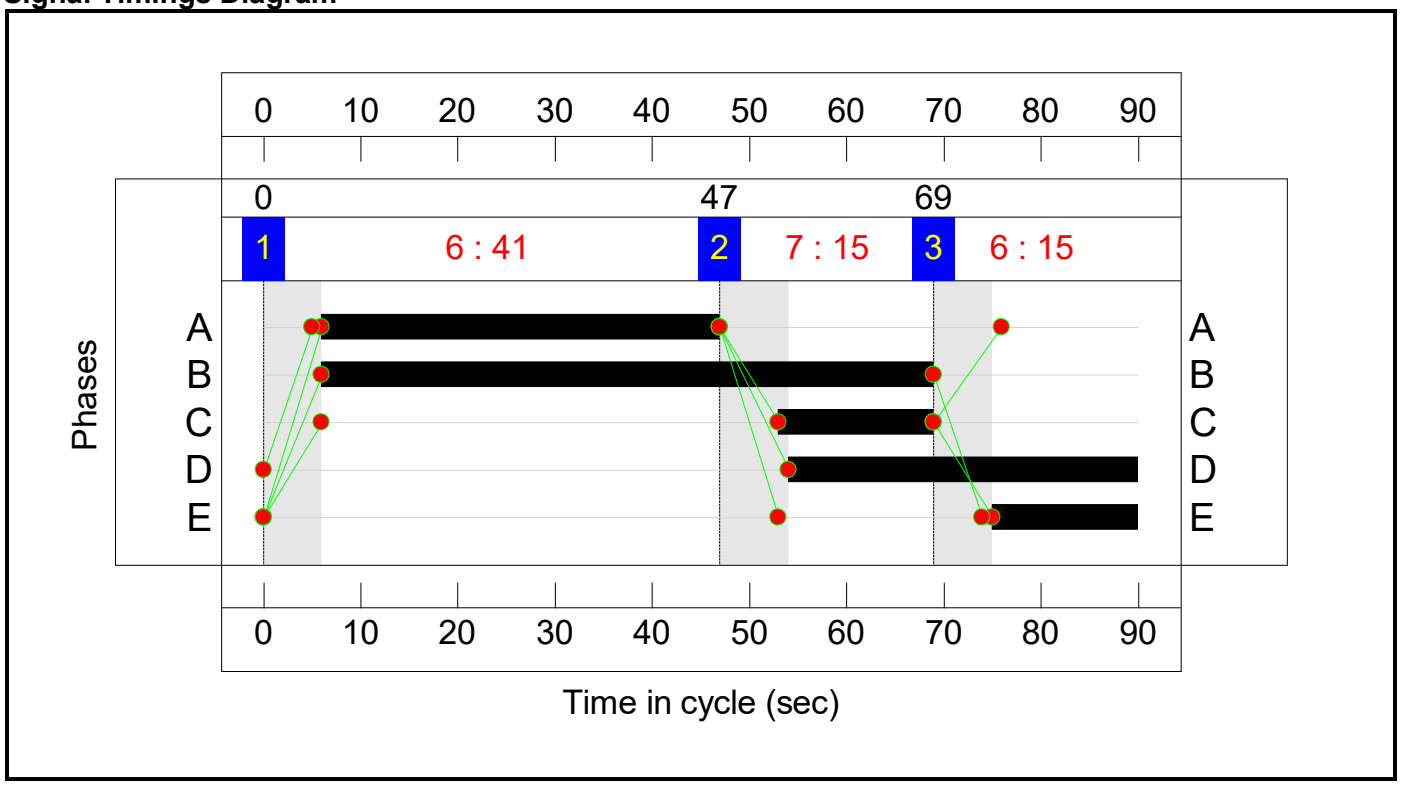
Stage Sequence Diagram



Stage Timings

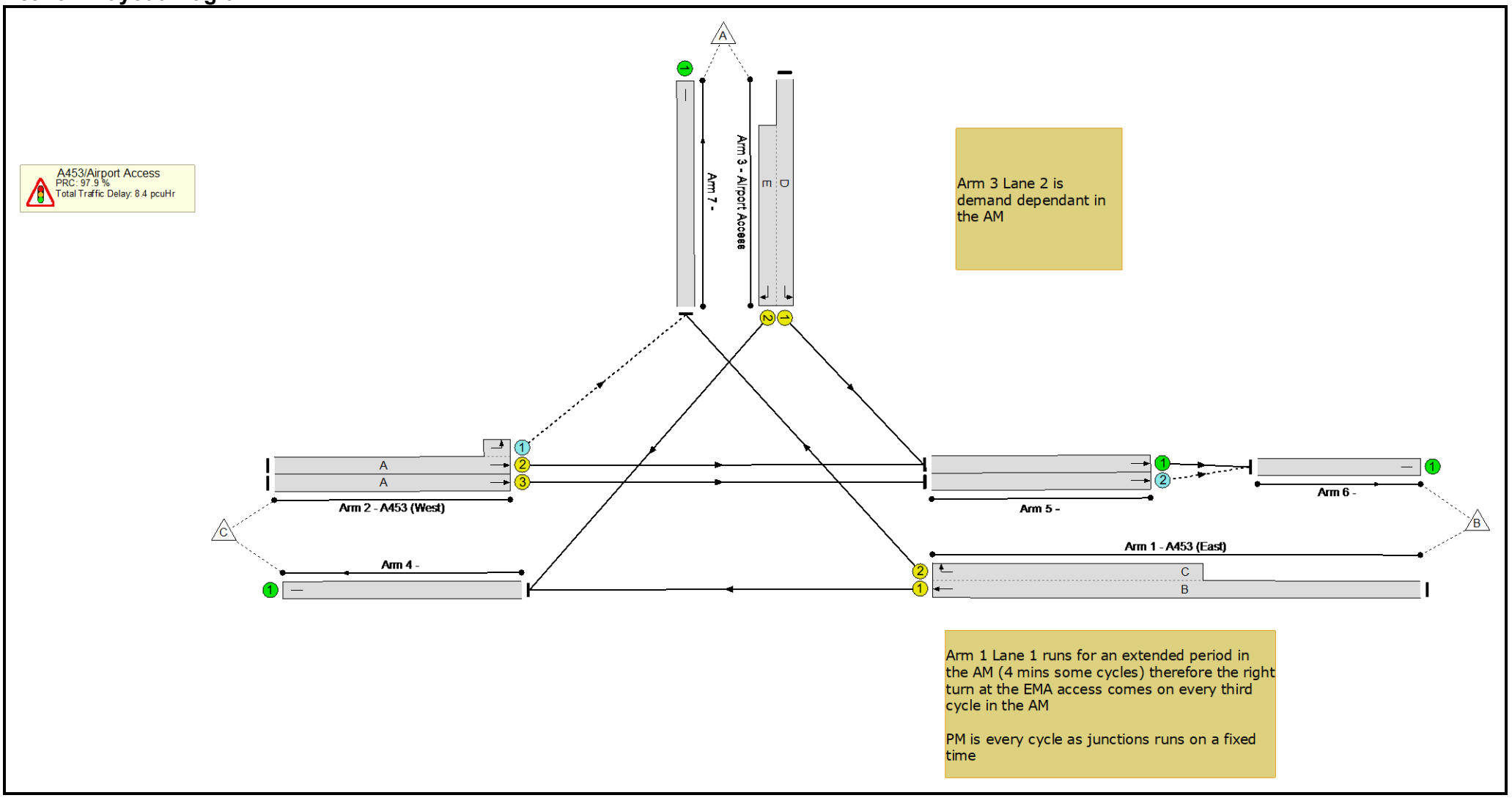
Stage	1	2	3
Duration	41	15	15
Change Point	0	47	69

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.5%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.5%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	63:16	-	608	1965:1854	1292+350	35.7 : 42.0%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	41	-	402	1965:1439	712+172	45.5 : 45.5%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	41	-	102	2105	982	10.4%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	36:15	-	467	1805:1830	717+317	45.2 : 45.2%
4/1		U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	648	1965	1965	33.0%
5/2	Ahead	O	N/A	N/A	-		-	-	-	102	2105	572	17.8%
6/1		U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%

Full Input Data And Results

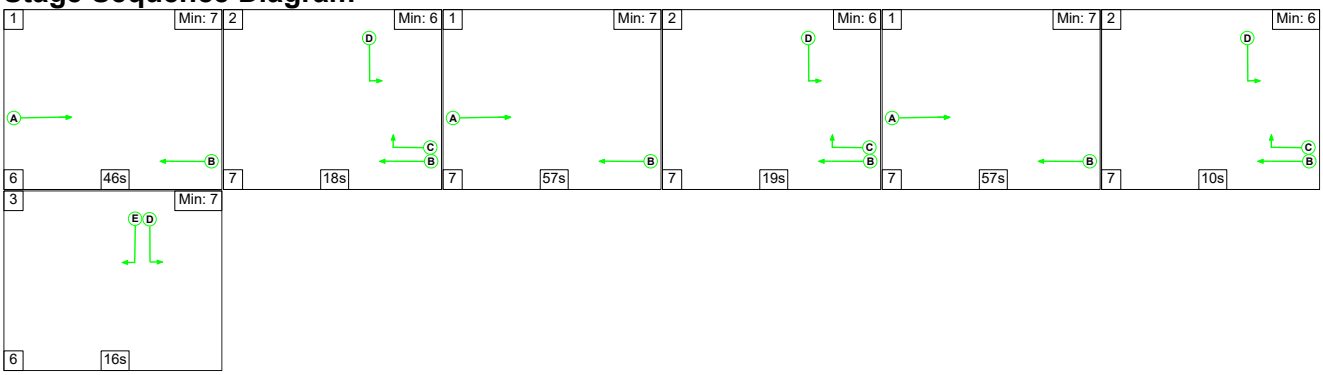
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**117**	**63**	**0**	**6.9**	**1.5**	**0.0**	**8.4**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**117**	**63**	**0**	**6.9**	**1.5**	**0.0**	**8.4**	**-**	**-**	**-**	**-**
1/1+1/2	608	608	-	-	-	1.9	0.3	-	2.2 (0.9+1.4)	13.2 (6.6:33.9)	4.2	0.3	4.5
2/2+2/1	402	402	15	63	0	1.5	0.4	-	1.9 (1.7+0.2)	17.3 (19.4:8.8)	6.1	0.4	6.5
2/3	102	102	-	-	-	0.4	0.1	-	0.4	15.5	1.4	0.1	1.5
3/1+3/2	467	467	-	-	-	3.0	0.4	-	3.4 (2.0+1.4)	26.5 (22.2:36.2)	5.8	0.4	6.2
4/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	648	648	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
5/2	102	102	102	0	0	0.0	0.1	-	0.1	5.3	1.7	0.1	1.8
6/1	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 97.9 Total Delay for Signalled Lanes (pcuHr): 8.05 Cycle Time (s): 90
PRC Over All Lanes (%): 97.9 Total Delay Over All Lanes(pcuHr): 8.44

Full Input Data And Results

Scenario 5: '1a 2028 Forecast Year With Development (AM)' (FG5: '1a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

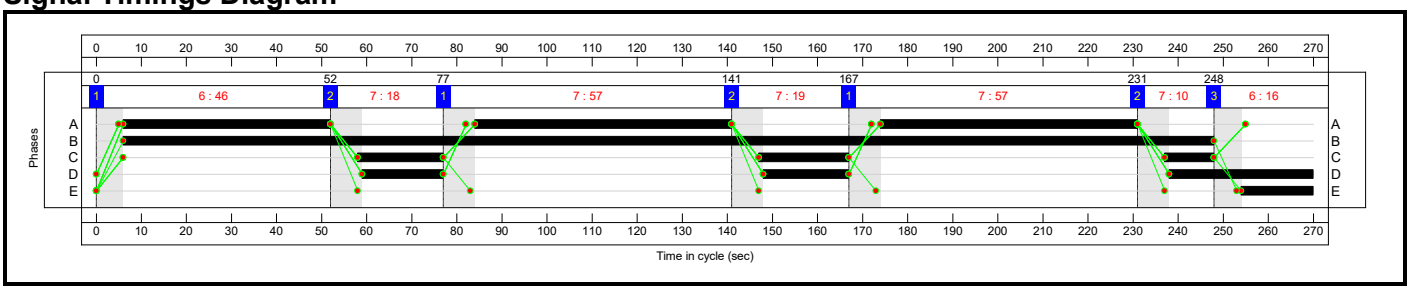
Stage Sequence Diagram



Stage Timings

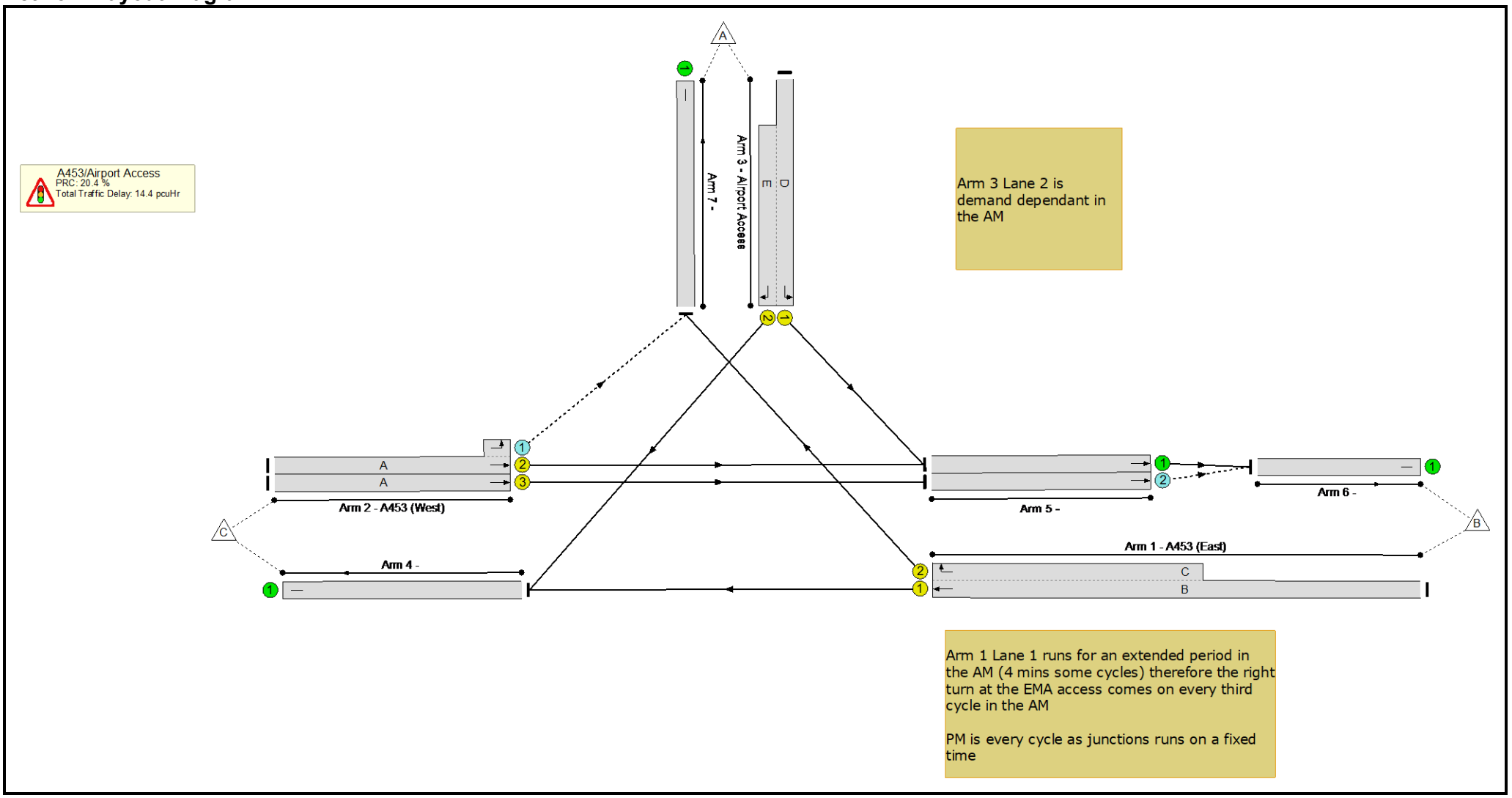
Stage	1	2	1	2	1	2	3
Duration	46	18	57	19	57	10	16
Change Point	0	52	77	141	167	231	248

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.7%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	242:50	-	591	1965:1854	427+364	74.7 : 74.7%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	160	-	828	1965:1439	558+552	74.6 : 74.6%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	160	-	229	2105	1271	18.0%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	69:16	-	259	1805:1830	244+115	72.0 : 72.0%
4/1		U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	592	1965	1965	30.1%
5/2	Ahead	O	N/A	N/A	-		-	-	-	229	2105	585	39.2%
6/1		U	N/A	N/A	-		-	-	-	821	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	684	Inf	Inf	0.0%

Full Input Data And Results

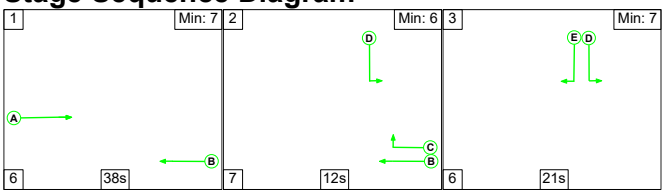
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**282**	**359**	**0**	**9.6**	**4.8**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**282**	**359**	**0**	**9.6**	**4.8**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
1/1+1/2	591	591	-	-	-	2.7	1.5	-	4.2 (0.9+3.3)	25.5 (10.5:43.1)	7.0	1.5	8.4
2/2+2/1	828	828	53	359	0	1.9	1.5	-	3.4 (2.0+1.4)	14.7 (17.2:12.2)	15.4	1.5	16.9
2/3	229	229	-	-	-	0.5	0.1	-	0.6	9.9	3.1	0.1	3.2
3/1+3/2	259	259	-	-	-	4.2	1.3	-	5.4 (2.2+3.3)	75.6 (44.5:141.6)	6.1	1.3	7.4
4/1	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	592	592	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	229	229	229	0	0	0.2	0.3	-	0.6	8.8	4.8	0.3	5.1
6/1	821	821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	684	684	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 20.4 Total Delay for Signalled Lanes (pcuHr): 13.64 Cycle Time (s): 270
PRC Over All Lanes (%): 20.4 Total Delay Over All Lanes(pcuHr): 14.41

Full Input Data And Results

Scenario 6: '1a 2028 Forecast Year With Development (PM)' (FG6: '1a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

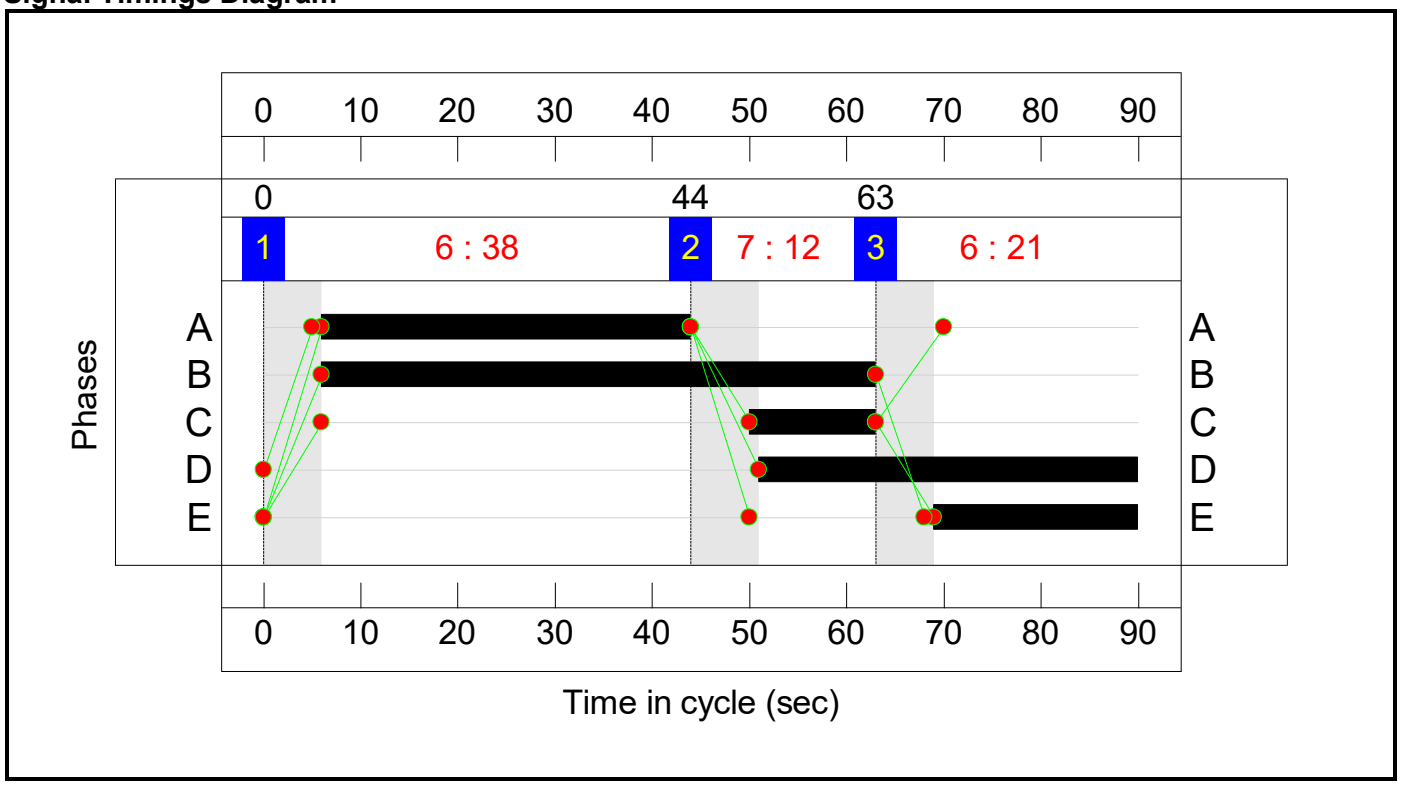
Stage Sequence Diagram



Stage Timings

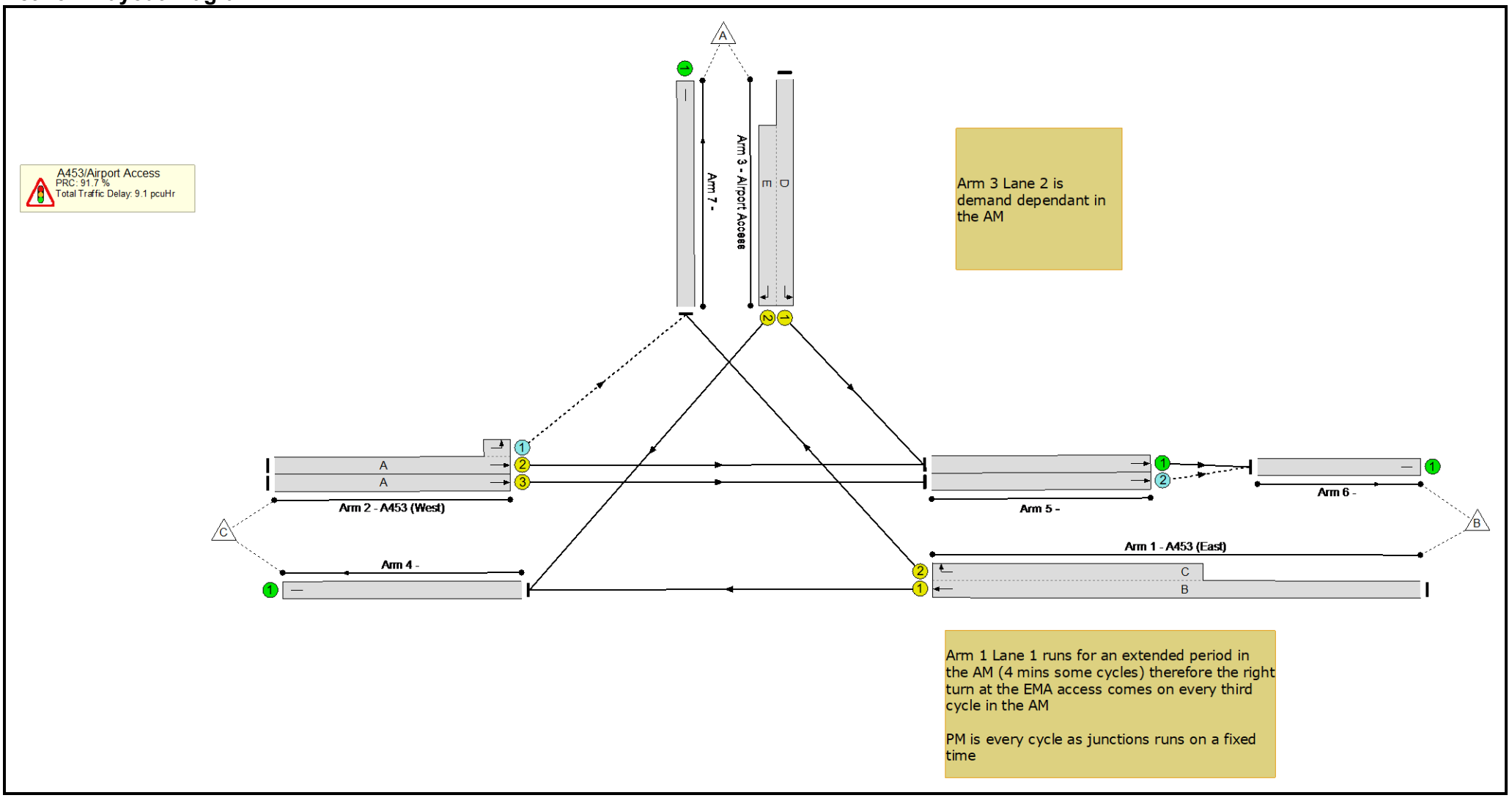
Stage	1	2	3
Duration	38	12	21
Change Point	0	44	63

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.0%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	57:13	-	703	1965:1854	1212+285	47.0 : 47.0%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	38	-	379	1965:1439	643+178	46.2 : 46.2%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	38	-	100	2105	912	11.0%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	39:21	-	490	1805:1830	692+447	41.3 : 45.6%
4/1		U	N/A	N/A	-		-	-	-	773	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	583	1965	1965	29.7%
5/2	Ahead	O	N/A	N/A	-		-	-	-	100	2105	587	17.0%
6/1		U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	216	Inf	Inf	0.0%

Full Input Data And Results

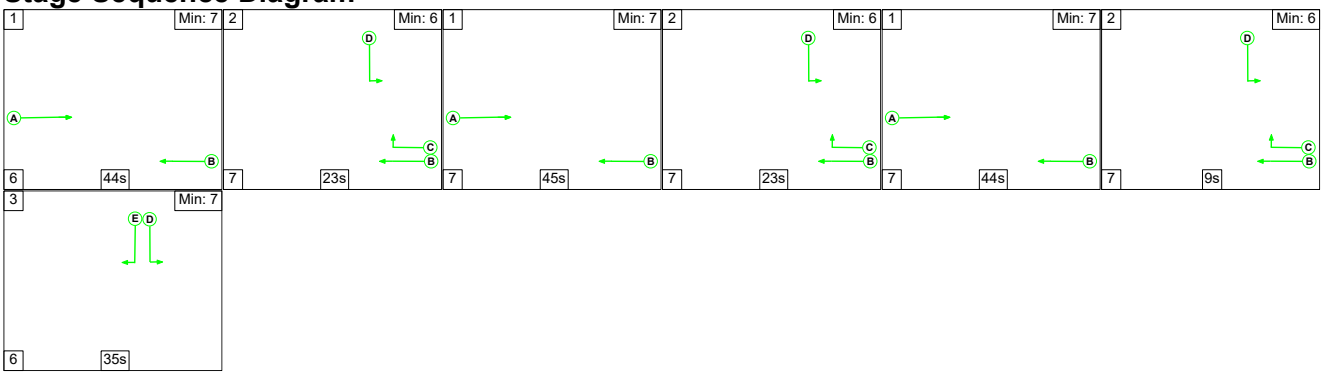
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**113**	**69**	**0**	**7.5**	**1.6**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**113**	**69**	**0**	**7.5**	**1.6**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
1/1+1/2	703	703	-	-	-	2.6	0.4	-	3.0 (1.6+1.4)	15.3 (10.3:36.9)	7.1	0.4	7.6
2/2+2/1	379	379	13	69	0	1.6	0.4	-	2.0 (1.8+0.2)	18.8 (21.5:9.3)	6.0	0.4	6.4
2/3	100	100	-	-	-	0.4	0.1	-	0.5	17.4	1.5	0.1	1.5
3/1+3/2	490	490	-	-	-	3.0	0.4	-	3.3 (1.5+1.8)	24.4 (19.3:31.7)	4.7	0.4	5.1
4/1	773	773	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	583	583	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	100	100	100	0	0	0.0	0.1	-	0.1	5.3	1.7	0.1	1.8
6/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	216	216	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 91.7 Total Delay for Signalled Lanes (pcuHr): 8.79 Cycle Time (s): 90
PRC Over All Lanes (%): 91.7 Total Delay Over All Lanes(pcuHr): 9.15

Full Input Data And Results

Scenario 7: '1a 2038 Forecast Year Without Development (AM)' (FG7: '1a 2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

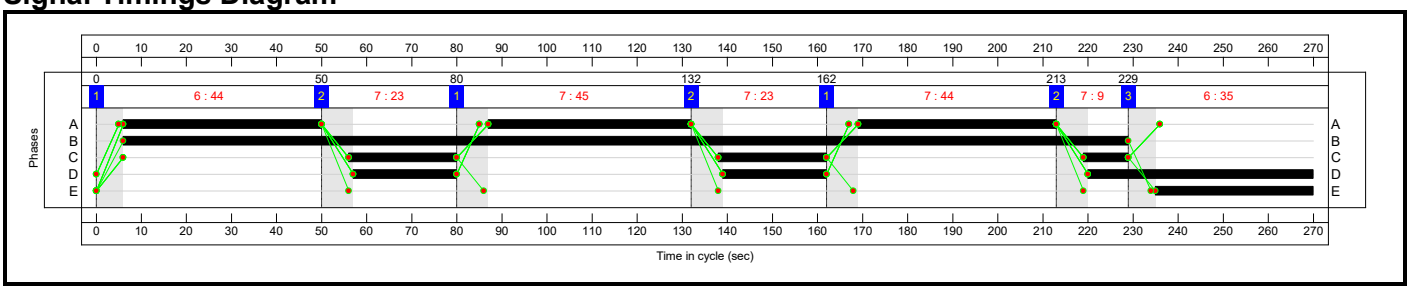
Stage Sequence Diagram



Stage Timings

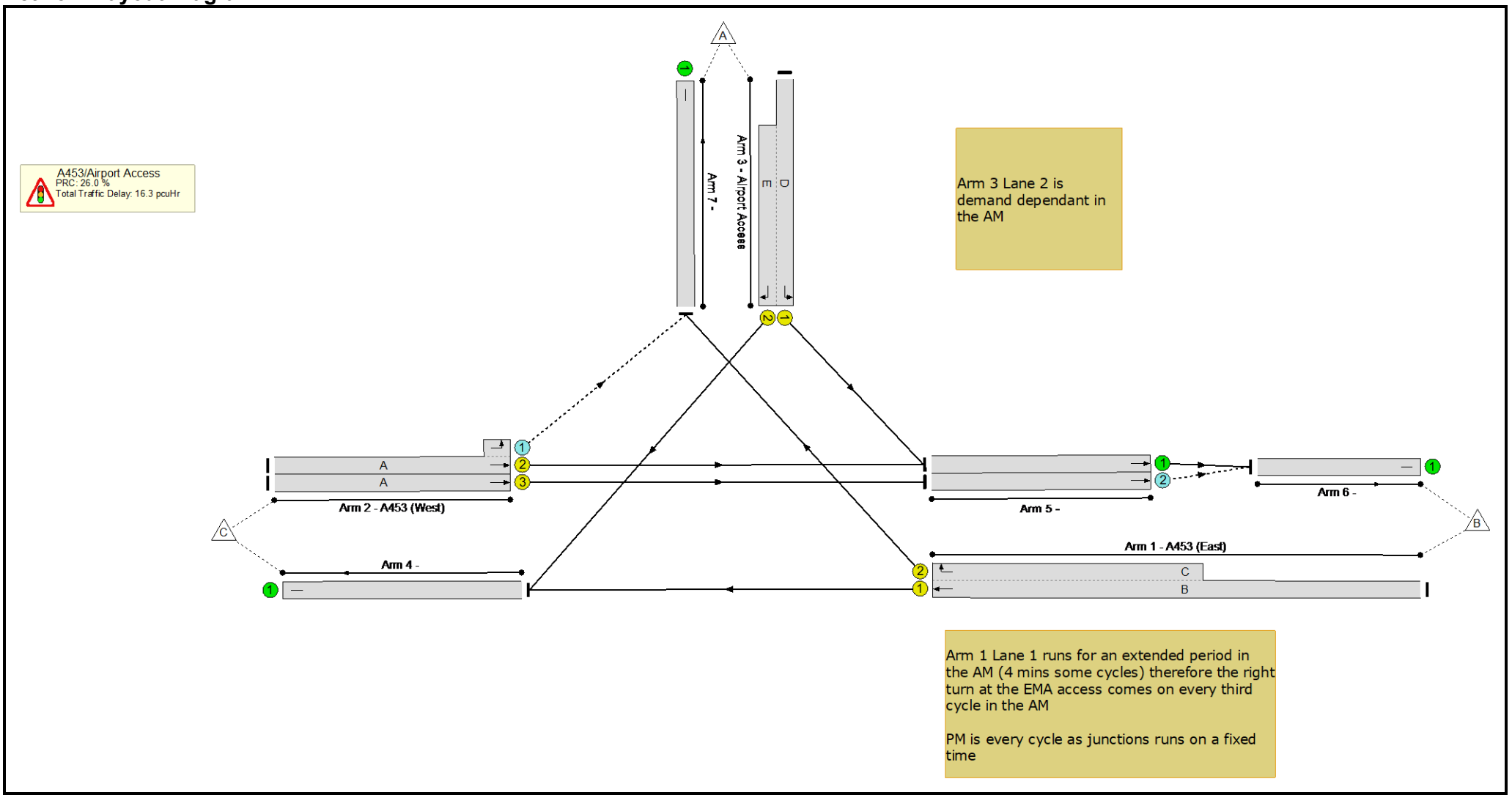
Stage	1	2	1	2	1	2	3
Duration	44	23	45	23	44	9	35
Change Point	0	50	80	132	162	213	229

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.4%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.4%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	223:58	-	721	1965:1854	605+419	70.4 : 70.4%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	133	-	663	1965:1439	412+517	71.4 : 71.4%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	133	-	190	2105	1060	17.9%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	96:35	-	331	1805:1830	240+227	70.9 : 70.9%
4/1		U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	464	1965	1965	23.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	190	2105	613	31.0%
6/1		U	N/A	N/A	-		-	-	-	654	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%

Full Input Data And Results

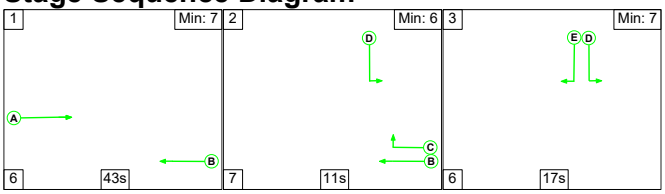
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**261**	**298**	**0**	**12.2**	**4.1**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**261**	**298**	**0**	**12.2**	**4.1**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
1/1+1/2	721	721	-	-	-	3.4	1.2	-	4.6 (1.3+3.3)	22.9 (10.9:40.3)	9.3	1.2	10.5
2/2+2/1	663	663	71	298	0	2.0	1.2	-	3.2 (1.8+1.4)	17.4 (22.3:13.5)	14.3	1.2	15.5
2/3	190	190	-	-	-	0.7	0.1	-	0.8	15.2	3.6	0.1	3.7
3/1+3/2	331	331	-	-	-	5.9	1.2	-	7.1 (1.6+5.6)	77.3 (32.9:124.2)	11.4	1.2	12.6
4/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	464	464	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2	190	190	190	0	0	0.2	0.2	-	0.4	8.4	4.9	0.2	5.1
6/1	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.0 Total Delay for Signalled Lanes (pcuHr): 15.71 Cycle Time (s): 270
PRC Over All Lanes (%): 26.0 Total Delay Over All Lanes(pcuHr): 16.30

Full Input Data And Results

Scenario 8: '1a 2038 Forecast Year Without Development (PM)' (FG8: '1a 2038 Forecast Year Without Development (PM)', Plan 2: 'Network Control Plan 2')

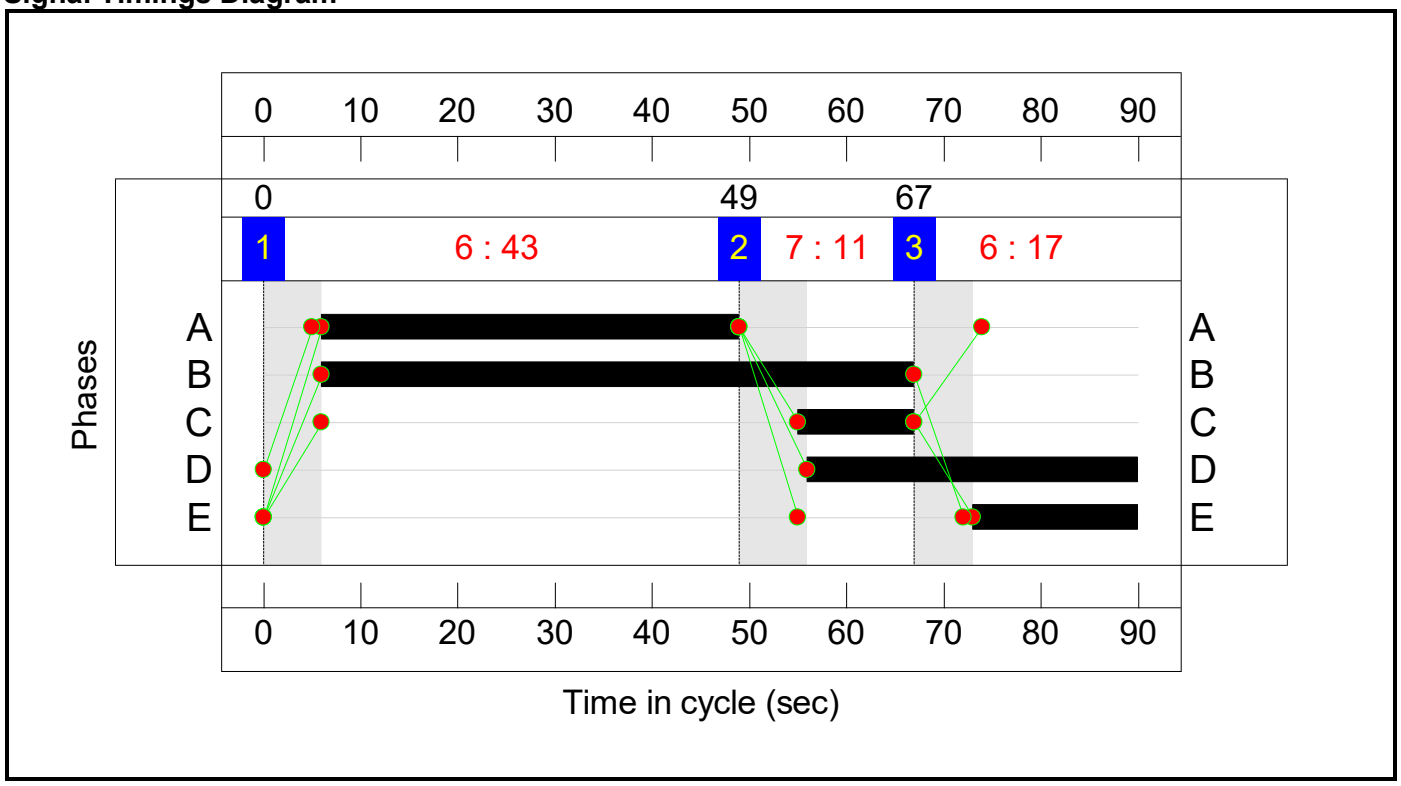
Stage Sequence Diagram



Stage Timings

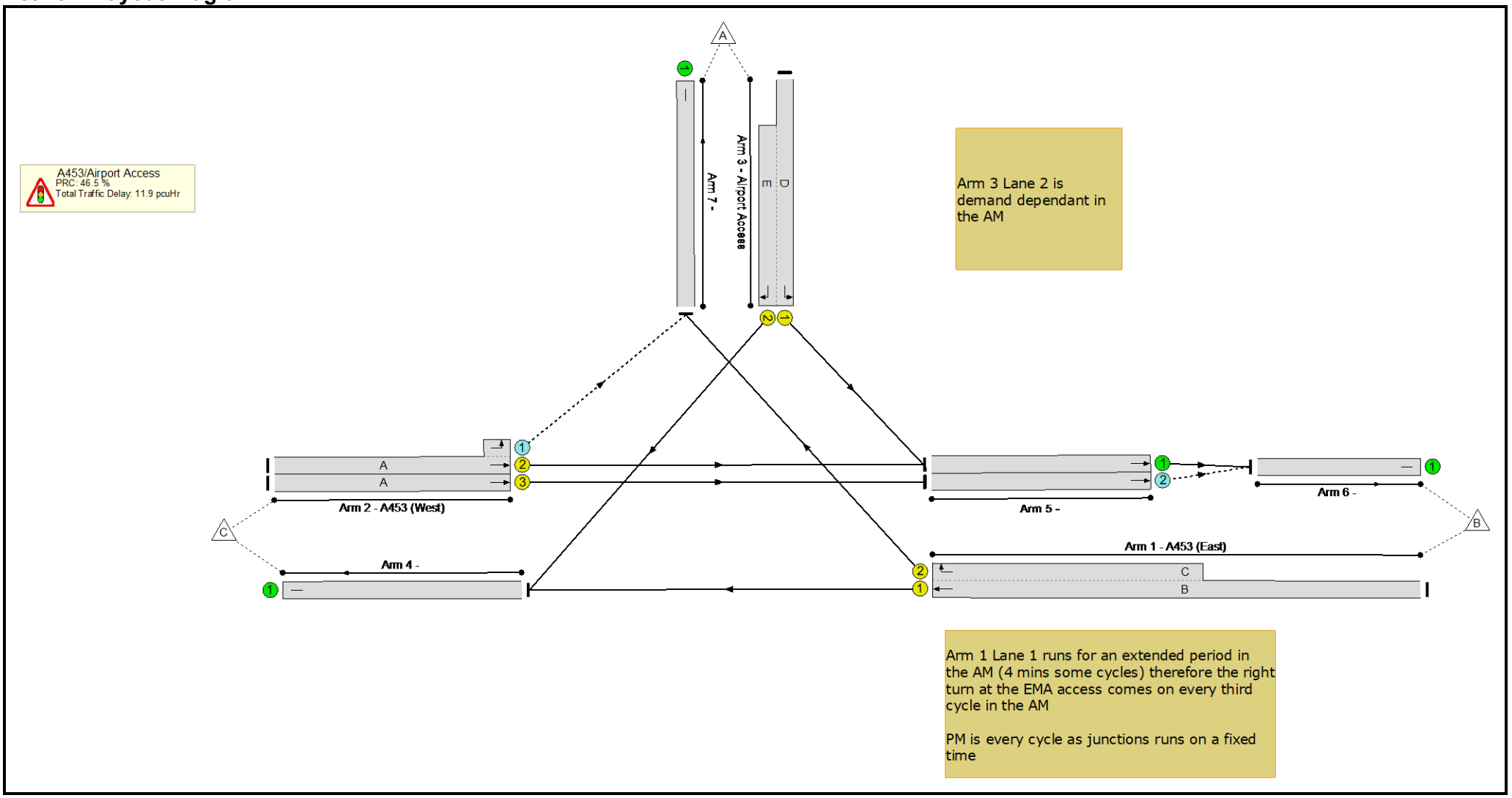
Stage	1	2	3
Duration	43	11	17
Change Point	0	49	67

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.4%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**61.4%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	61:12	-	638	1965:1854	1261+268	38.5 : 56.8%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	43	-	566	1965:1439	716+205	61.4 : 61.4%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	43	-	148	2105	1029	14.4%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	34:17	-	603	1805:1830	685+366	56.6 : 58.7%
4/1		U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	828	1965	1965	42.1%
5/2	Ahead	O	N/A	N/A	-		-	-	-	148	2105	533	27.8%
6/1		U	N/A	N/A	-		-	-	-	976	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%

Full Input Data And Results

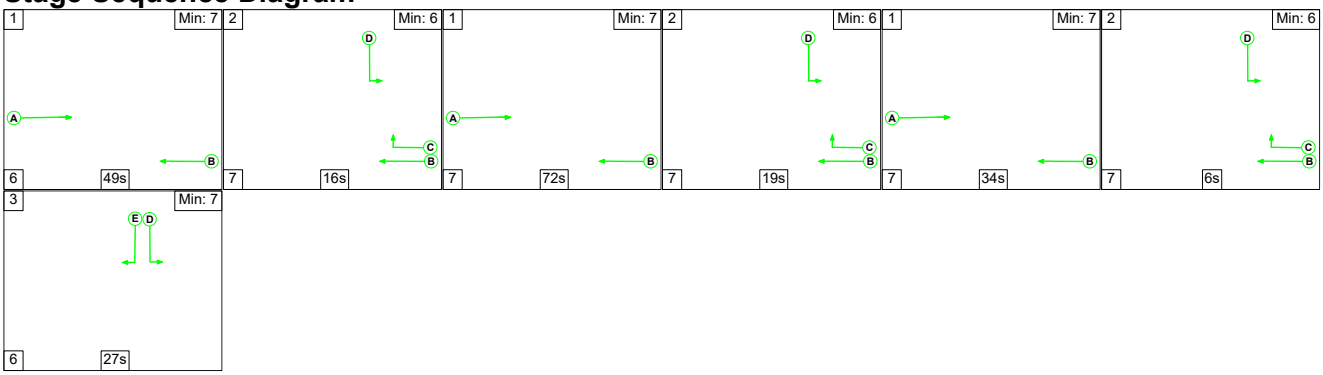
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**165**	**109**	**0**	**9.5**	**2.5**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**165**	**109**	**0**	**9.5**	**2.5**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
1/1+1/2	638	638	-	-	-	2.3	0.4	-	2.7 (1.1+1.6)	15.0 (7.8:37.9)	5.0	0.4	5.4
2/2+2/1	566	566	17	109	0	2.2	0.8	-	3.0 (2.6+0.5)	19.3 (21.1:13.0)	9.5	0.8	10.3
2/3	148	148	-	-	-	0.5	0.1	-	0.6	14.7	2.0	0.1	2.1
3/1+3/2	603	603	-	-	-	4.3	0.7	-	4.9 (2.7+2.2)	29.4 (25.4:36.6)	7.5	0.7	8.2
4/1	701	701	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	828	828	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
5/2	148	148	148	0	0	0.1	0.2	-	0.3	8.0	2.7	0.2	2.9
6/1	976	976	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 46.5 Total Delay for Signalled Lanes (pcuHr): 11.22 Cycle Time (s): 90
PRC Over All Lanes (%): 46.5 Total Delay Over All Lanes(pcuHr): 11.91

Full Input Data And Results

Scenario 9: '1a 2038 Forecast Year With Development (AM)' (FG9: '1a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

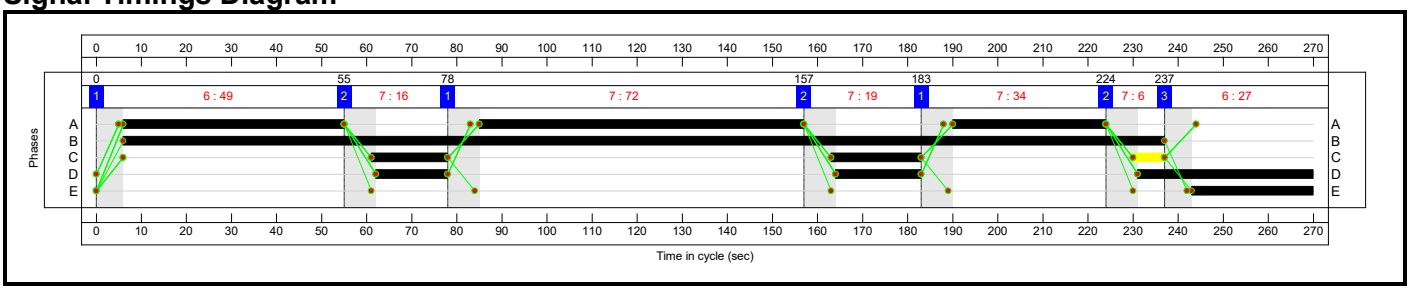
Stage Sequence Diagram



Stage Timings

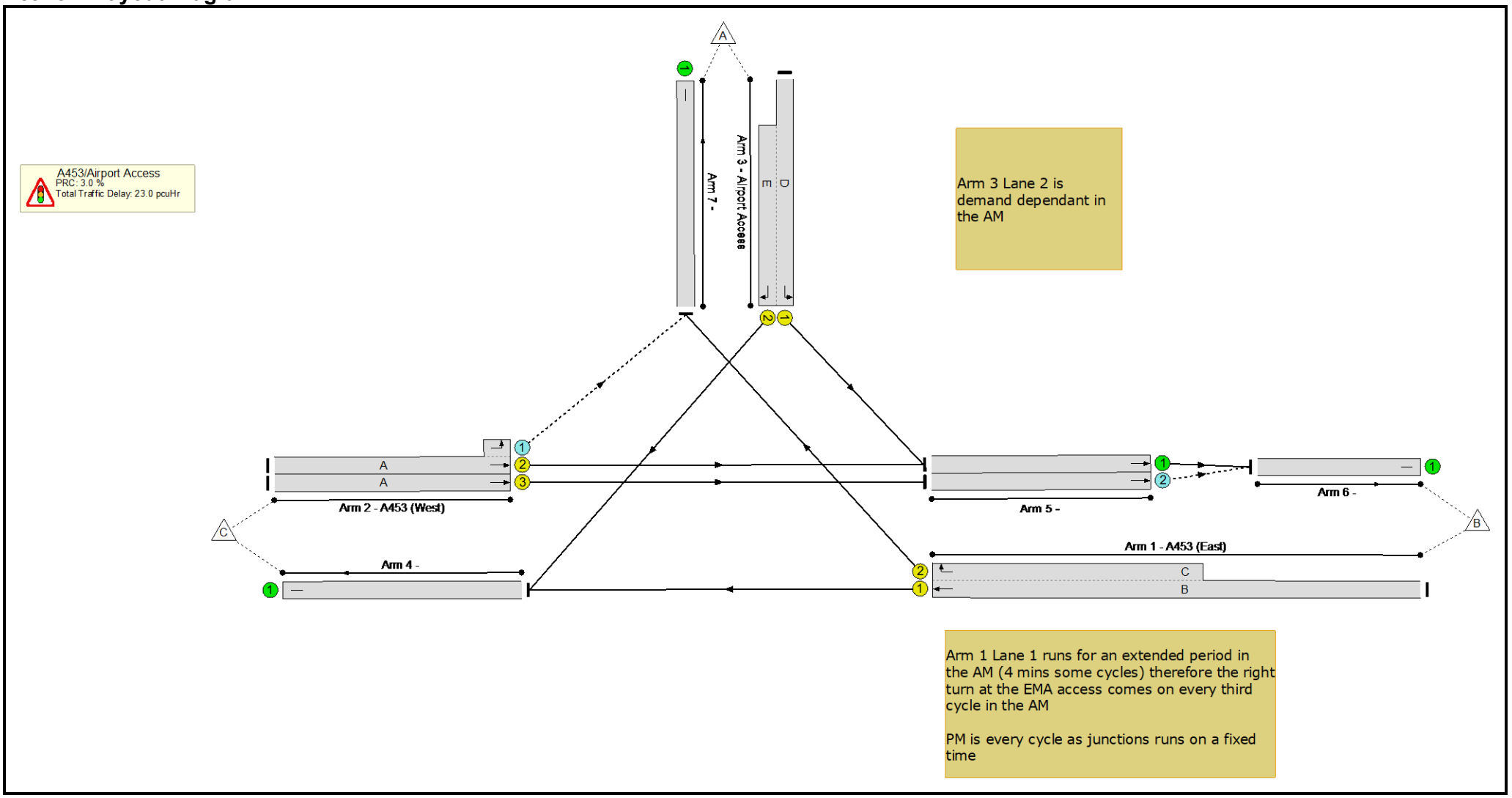
Stage	1	2	1	2	1	2	3
Duration	49	16	72	19	34	6	27
Change Point	0	55	78	157	183	224	237

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.3%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	231:44	-	609	1965:1854	384+323	86.1 : 86.1%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	155	-	759	1965:1439	246+623	87.3 : 87.3%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	155	-	351	2105	1232	28.5%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	74:27	-	334	1805:1830	194+190	86.9 : 86.9%
4/1		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	384	1965	1965	19.5%
5/2	Ahead	O	N/A	N/A	-		-	-	-	351	2105	630	55.7%
6/1		U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	822	Inf	Inf	0.0%

Full Input Data And Results

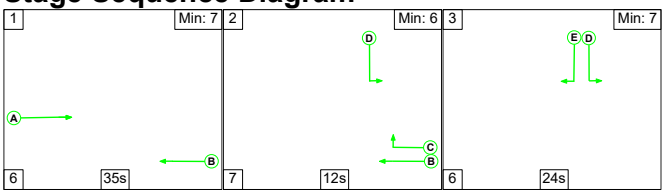
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**414**	**481**	**0**	**12.8**	**10.1**	**0.0**	**23.0**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**414**	**481**	**0**	**12.8**	**10.1**	**0.0**	**23.0**	**-**	**-**	**-**	**-**
1/1+1/2	609	609	-	-	-	3.3	2.9	-	6.2 (1.9+4.4)	36.9 (20.5:56.4)	8.5	2.9	11.4
2/2+2/1	759	759	63	481	0	1.1	3.3	-	4.3 (1.5+2.8)	20.5 (25.2:18.7)	10.3	3.3	13.6
2/3	351	351	-	-	-	1.0	0.2	-	1.2	12.0	5.9	0.2	6.1
3/1+3/2	334	334	-	-	-	6.7	3.0	-	9.7 (2.8+6.9)	104.6 (59.0:151.3)	12.1	3.0	15.1
4/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	384	384	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
5/2	351	351	351	0	0	0.8	0.6	-	1.4	14.2	9.8	0.6	10.5
6/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 3.0 Total Delay for Signalled Lanes (pcuHr): 21.44 Cycle Time (s): 270
PRC Over All Lanes (%): 3.0 Total Delay Over All Lanes(pcuHr): 22.95

Full Input Data And Results

Scenario 10: '1a 2038 Forecast Year With Development (PM)' (FG10: '1a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

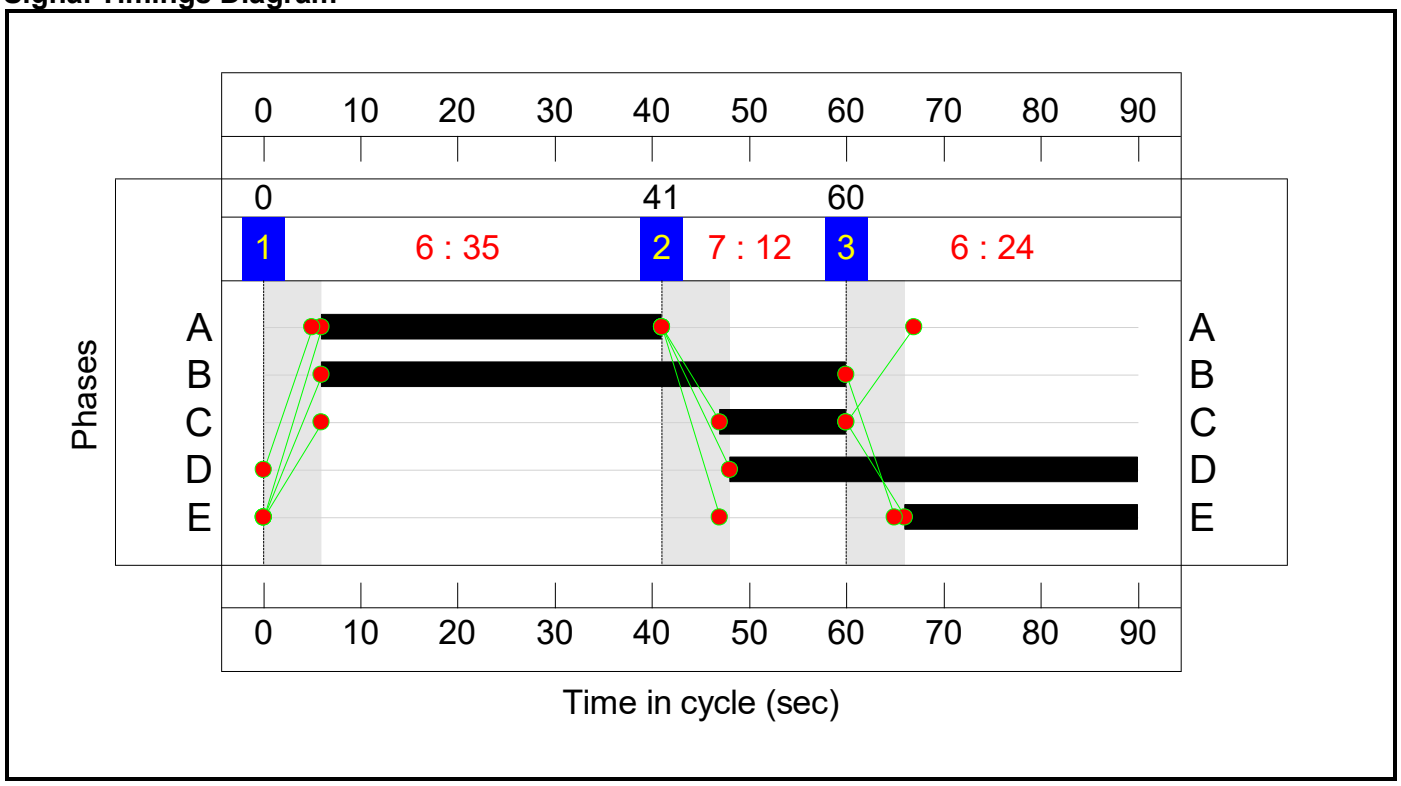
Stage Sequence Diagram



Stage Timings

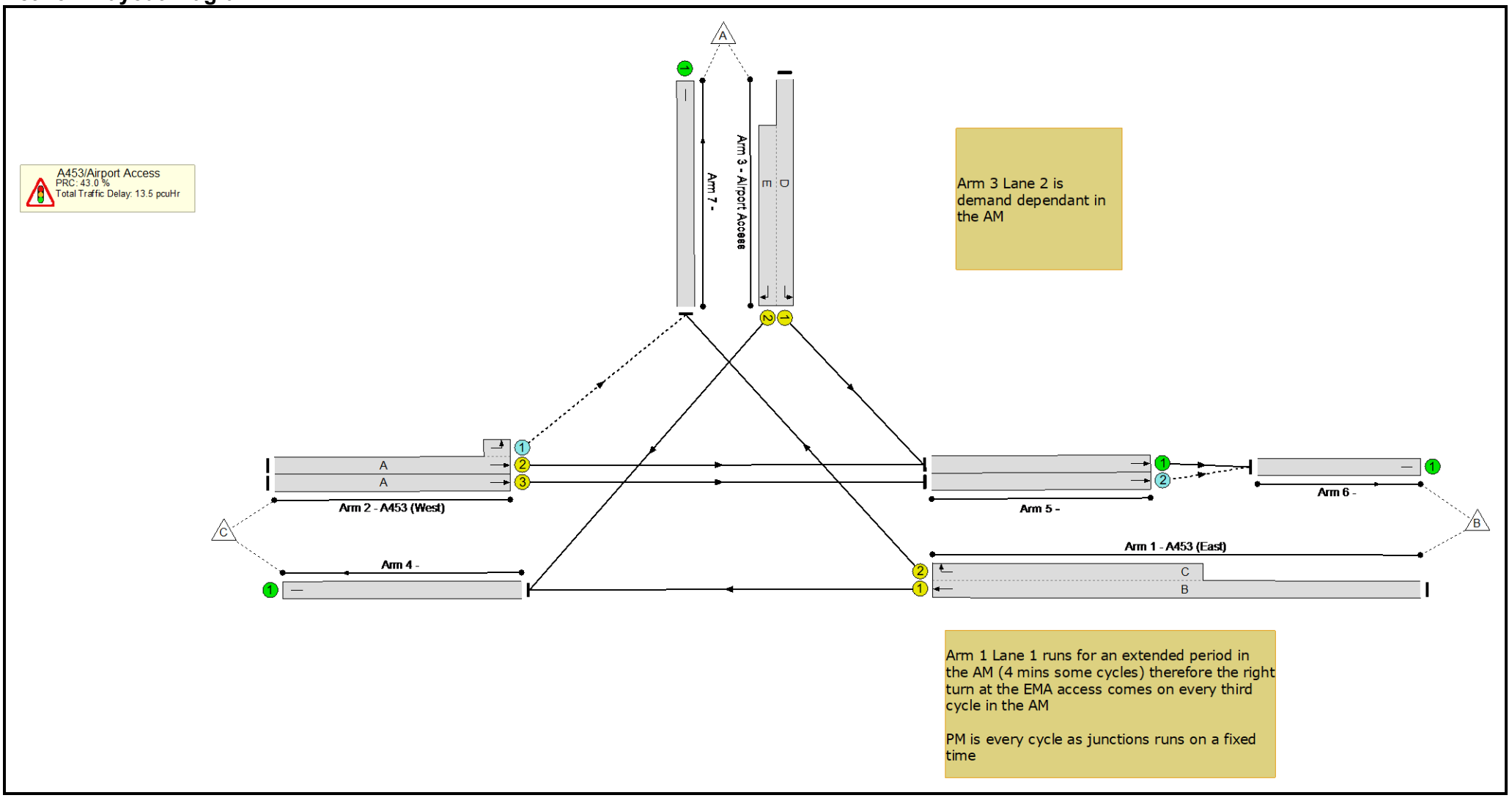
Stage	1	2	3
Duration	35	12	24
Change Point	0	41	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**63.0%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**63.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	54:13	-	820	1965:1854	1155+288	56.4 : 58.6%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	35	-	469	1965:1439	541+216	61.9 : 61.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	35	-	141	2105	842	16.7%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	42:24	-	685	1805:1830	580+508	63.0 : 63.0%
4/1		U	N/A	N/A	-		-	-	-	971	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	700	1965	1965	35.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	141	2105	561	25.1%
6/1		U	N/A	N/A	-		-	-	-	841	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%

Full Input Data And Results

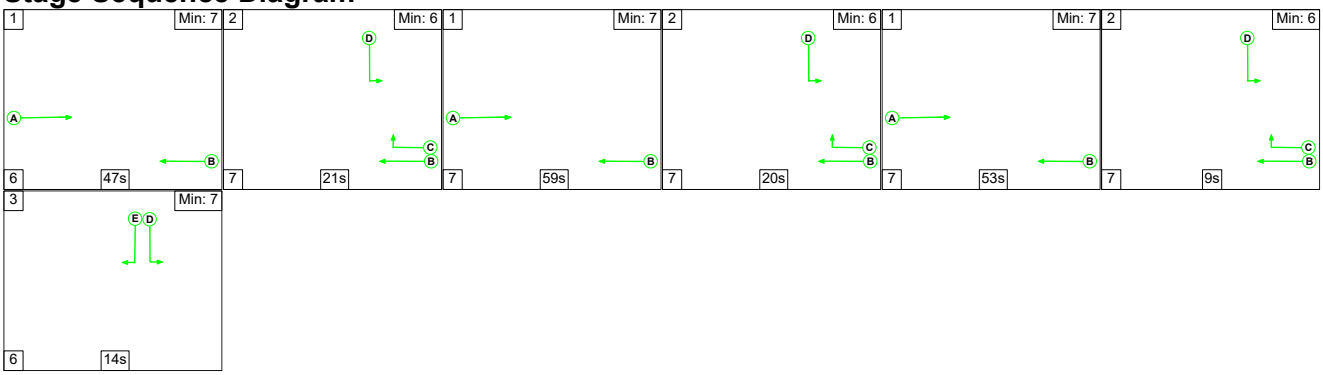
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**162**	**113**	**0**	**10.7**	**2.9**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**162**	**113**	**0**	**10.7**	**2.9**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
1/1+1/2	820	820	-	-	-	3.5	0.7	-	4.2 (2.4+1.8)	18.2 (13.1:38.2)	9.4	0.7	10.1
2/2+2/1	469	469	21	113	0	2.2	0.8	-	3.0 (2.5+0.5)	23.3 (26.7:14.7)	8.3	0.8	9.1
2/3	141	141	-	-	-	0.7	0.1	-	0.8	19.9	2.2	0.1	2.3
3/1+3/2	685	685	-	-	-	4.1	0.8	-	4.9 (2.0+2.9)	25.9 (19.8:32.9)	6.9	0.8	7.8
4/1	971	971	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	700	700	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/2	141	141	141	0	0	0.2	0.2	-	0.3	8.4	2.9	0.2	3.1
6/1	841	841	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	303	303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 43.0 Total Delay for Signalled Lanes (pcuHr): 12.90 Cycle Time (s): 90
PRC Over All Lanes (%): 43.0 Total Delay Over All Lanes(pcuHr): 13.51

Full Input Data And Results

Scenario 11: '2a 2028 Forecast Year With Development (AM)' (FG11: '2a 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

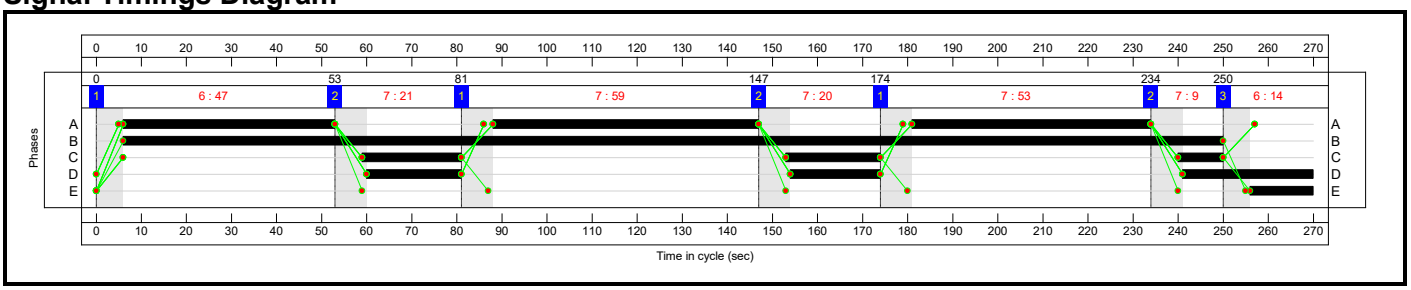
Stage Sequence Diagram



Stage Timings

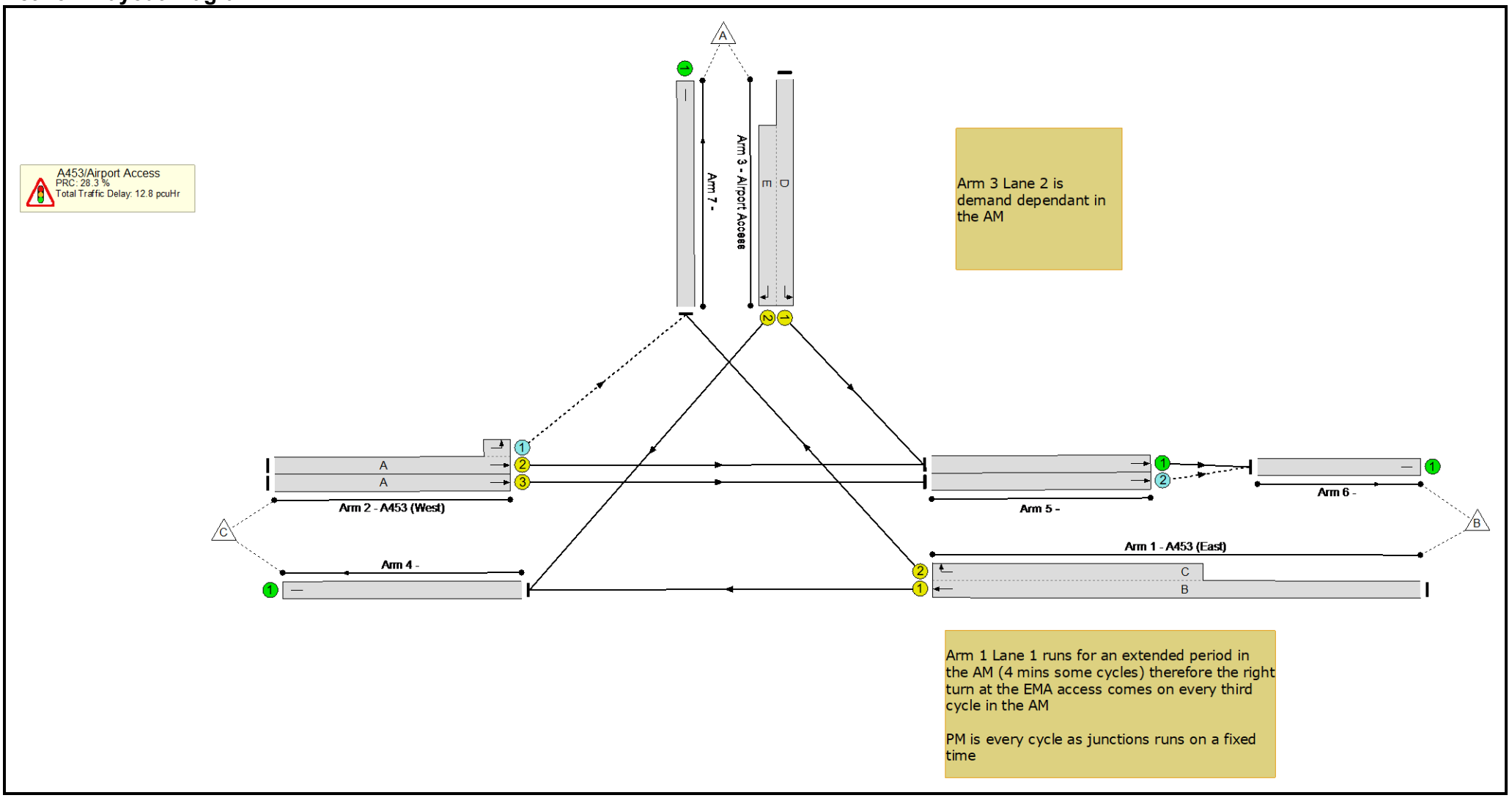
Stage	1	2	1	2	1	2	3
Duration	47	21	59	20	53	9	14
Change Point	0	53	81	147	174	234	250

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.1%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.1%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	244:53	-	628	1965:1854	520+385	69.4 : 69.4%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	159	-	774	1965:1439	689+415	70.1 : 70.1%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	159	-	208	2105	1263	16.5%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	70:14	-	246	1805:1830	266+102	66.9 : 66.9%
4/1		U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	661	1965	1965	33.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	208	2105	570	36.5%
6/1		U	N/A	N/A	-		-	-	-	869	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%

Full Input Data And Results

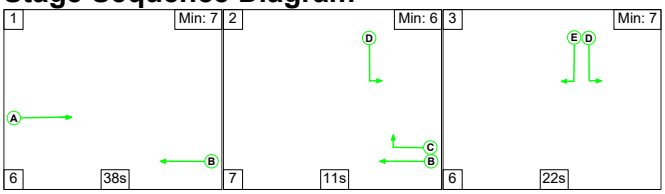
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**241**	**258**	**0**	**8.9**	**3.9**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**241**	**258**	**0**	**8.9**	**3.9**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
1/1+1/2	628	628	-	-	-	2.6	1.1	-	3.7 (0.8+2.9)	21.4 (7.9:39.7)	6.7	1.1	7.9
2/2+2/1	774	774	33	258	0	1.9	1.2	-	3.1 (2.2+0.9)	14.4 (16.5:10.9)	13.3	1.2	14.4
2/3	208	208	-	-	-	0.5	0.1	-	0.6	9.8	2.6	0.1	2.7
3/1+3/2	246	246	-	-	-	3.7	1.0	-	4.7 (2.0+2.6)	68.5 (41.3:139.6)	5.0	1.0	6.0
4/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	661	661	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/2	208	208	208	0	0	0.2	0.3	-	0.5	8.4	3.9	0.3	4.2
6/1	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 28.3 Total Delay for Signalled Lanes (pcuHr): 12.08 Cycle Time (s): 270
PRC Over All Lanes (%): 28.3 Total Delay Over All Lanes(pcuHr): 12.81

Full Input Data And Results

Scenario 12: '2a 2028 Forecast Year With Development (PM)' (FG12: '2a 2028 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

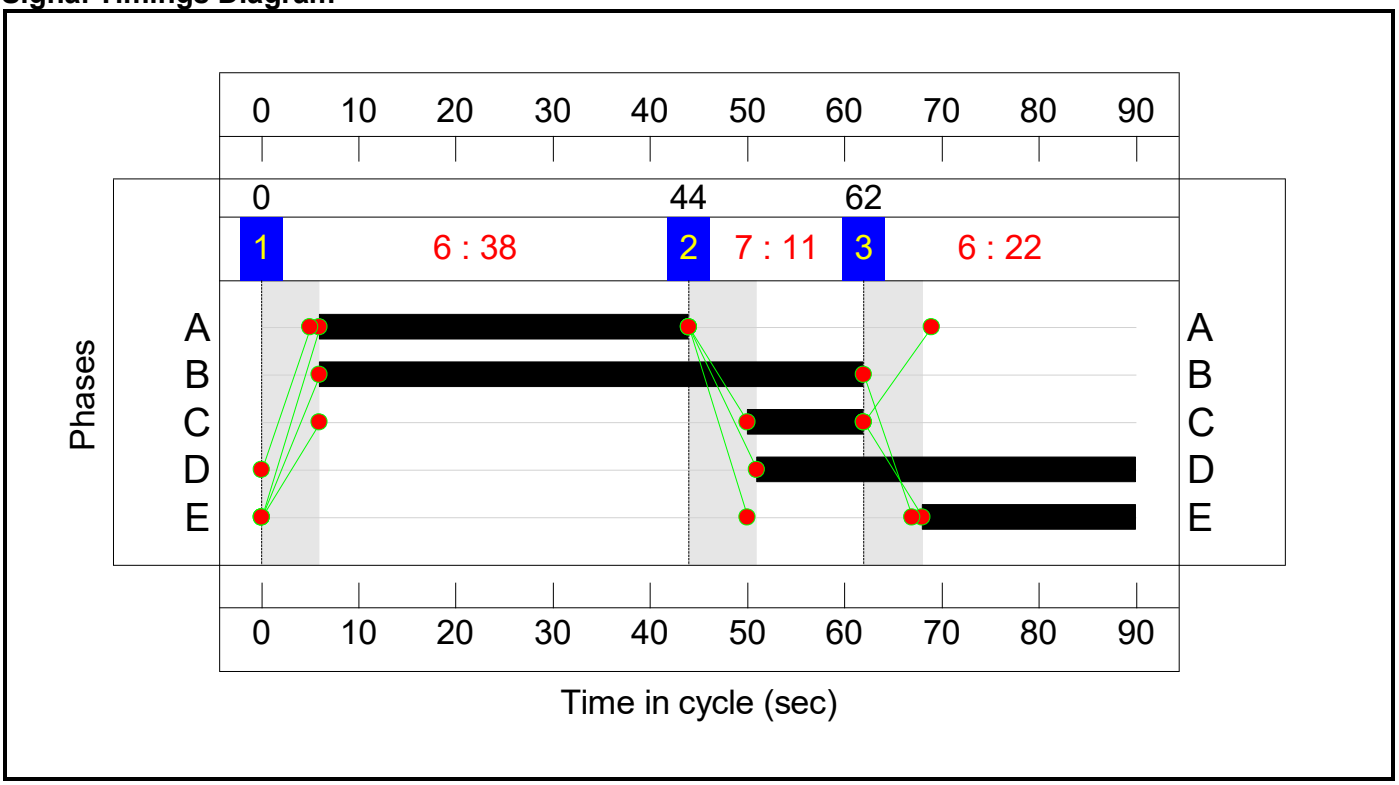
Stage Sequence Diagram



Stage Timings

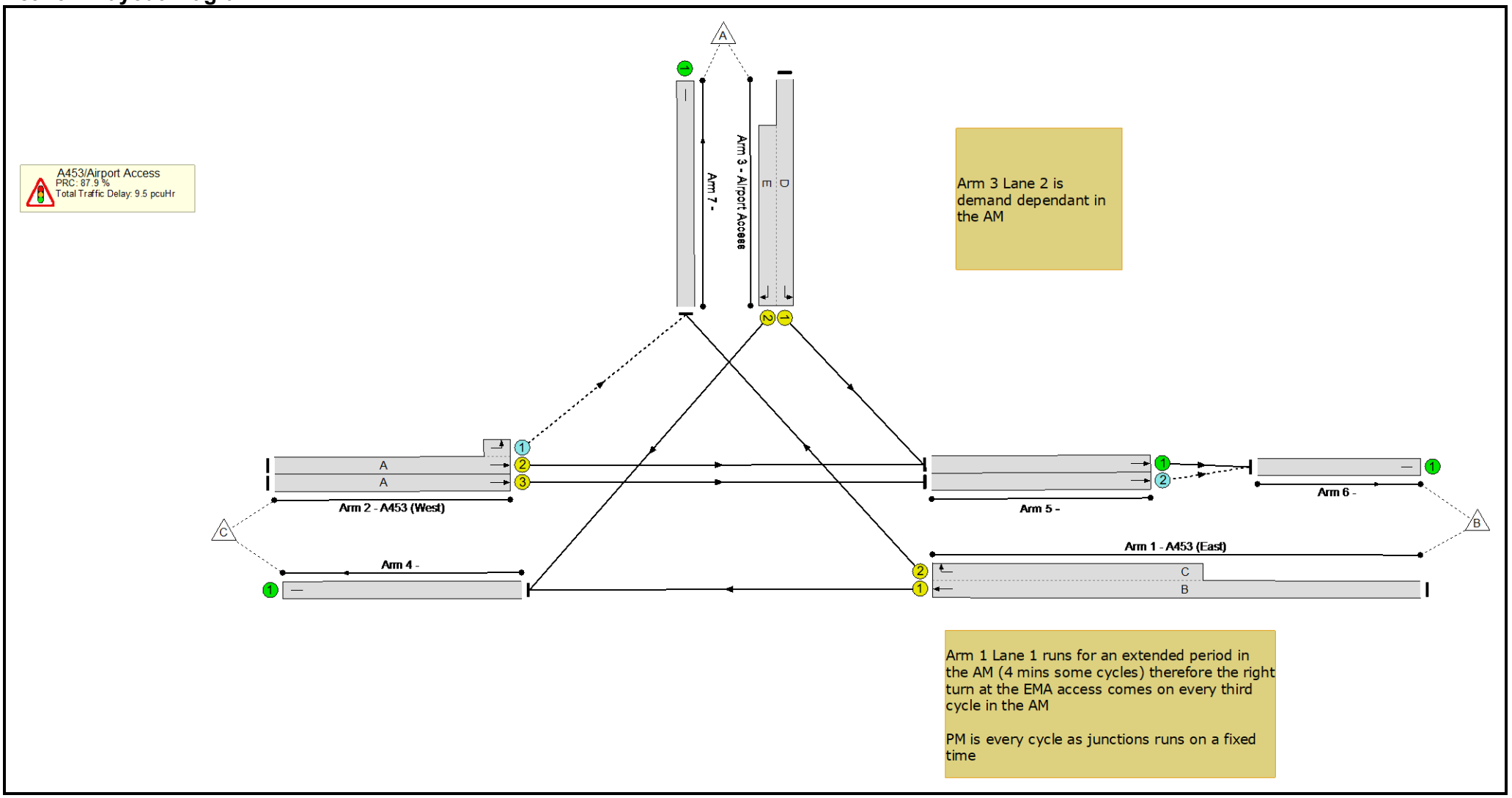
Stage	1	2	3
Duration	38	11	22
Change Point	0	44	62

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.9%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**47.9%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	56:12	-	695	1965:1854	1199+255	47.8 : 47.8%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	38	-	385	1965:1439	646+175	46.9 : 46.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	38	-	110	2105	912	12.1%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	39:22	-	511	1805:1830	599+468	47.9 : 47.9%
4/1		U	N/A	N/A	-		-	-	-	797	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	590	1965	1965	30.0%
5/2	Ahead	O	N/A	N/A	-		-	-	-	110	2105	585	18.8%
6/1		U	N/A	N/A	-		-	-	-	700	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%

Full Input Data And Results

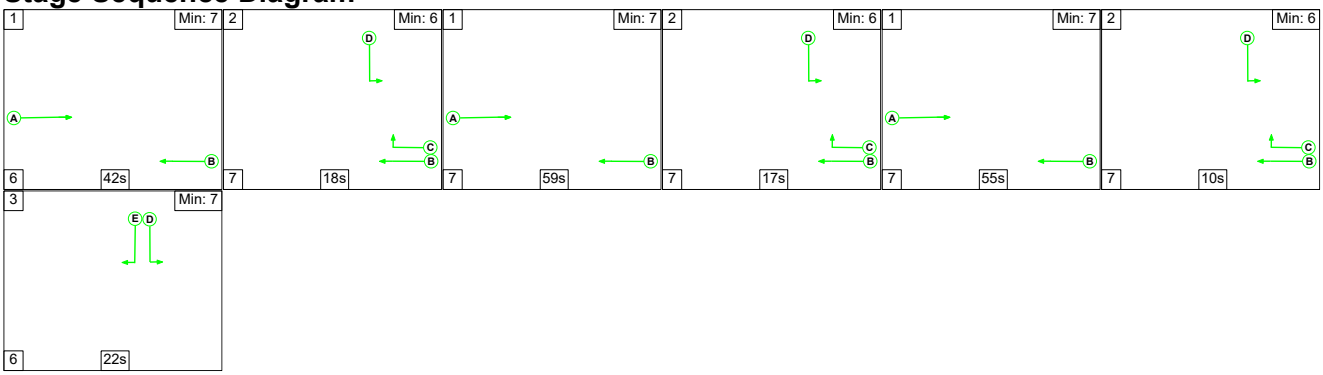
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**122**	**70**	**0**	**7.8**	**1.8**	**0.0**	**9.5**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**122**	**70**	**0**	**7.8**	**1.8**	**0.0**	**9.5**	**-**	**-**	**-**	**-**
1/1+1/2	695	695	-	-	-	2.6	0.5	-	3.0 (1.7+1.3)	15.6 (10.9:37.6)	7.3	0.5	7.8
2/2+2/1	385	385	12	70	0	1.6	0.4	-	2.0 (1.8+0.2)	19.0 (21.6:9.6)	6.0	0.4	6.5
2/3	110	110	-	-	-	0.5	0.1	-	0.5	17.5	1.6	0.1	1.7
3/1+3/2	511	511	-	-	-	3.1	0.5	-	3.5 (1.6+2.0)	25.0 (19.8:31.7)	4.7	0.5	5.2
4/1	797	797	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	590	590	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	110	110	110	0	0	0.1	0.1	-	0.2	5.9	2.0	0.1	2.1
6/1	700	700	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 87.9 Total Delay for Signalled Lanes (pcuHr): 9.13 Cycle Time (s): 90
PRC Over All Lanes (%): 87.9 Total Delay Over All Lanes(pcuHr): 9.52

Full Input Data And Results

Scenario 13: '2a 2038 Forecast Year With Development (AM)' (FG13: '2a 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

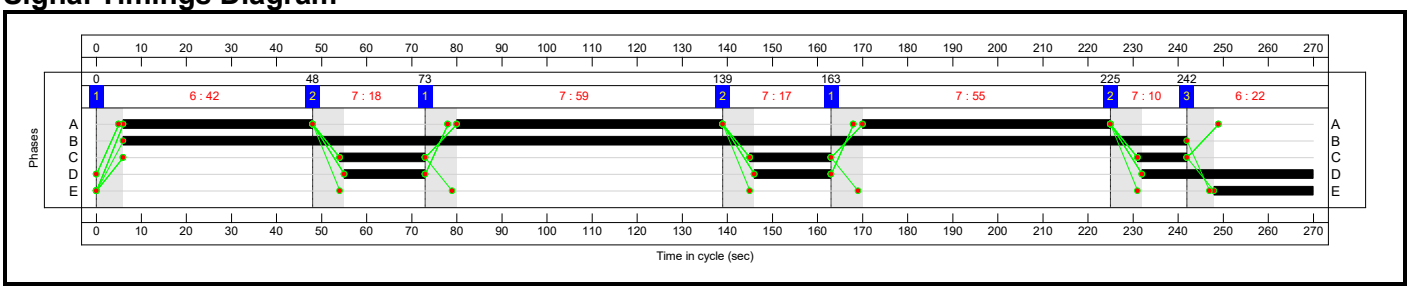
Stage Sequence Diagram



Stage Timings

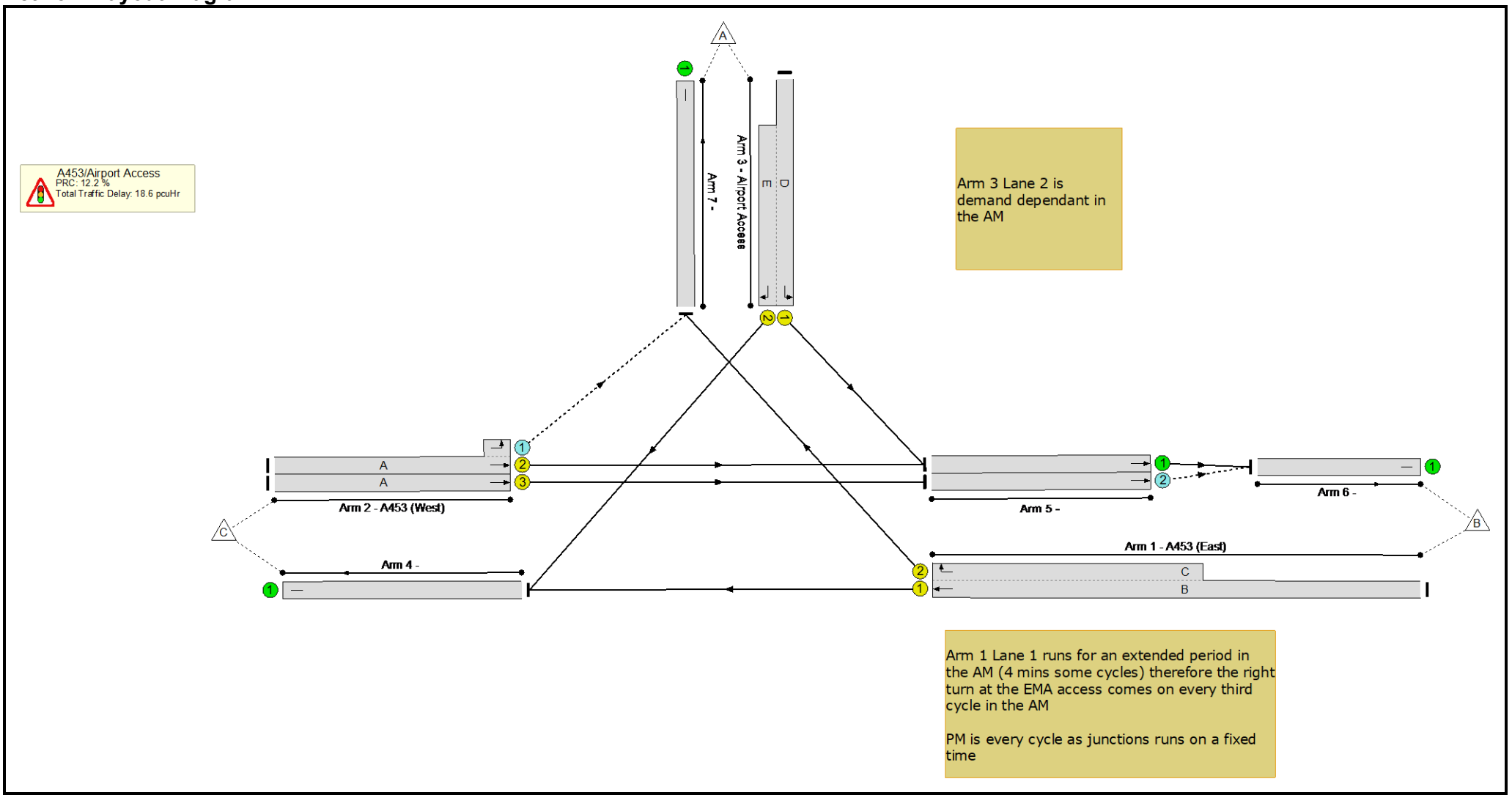
Stage	1	2	1	2	1	2	3
Duration	42	18	59	17	55	10	22
Change Point	0	48	73	139	163	225	242

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**80.2%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**80.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1:3	236:48	-	642	1965:1854	450+350	80.2 : 80.2%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		3	156	-	865	1965:1439	615+468	79.9 : 79.9%
2/3	A453 (West) Ahead	U	N/A	N/A	A		3	156	-	243	2105	1240	19.6%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		3:1	73:22	-	330	1805:1830	269+156	77.6 : 77.6%
4/1		U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	700	1965	1965	35.6%
5/2	Ahead	O	N/A	N/A	-		-	-	-	243	2105	561	43.3%
6/1		U	N/A	N/A	-		-	-	-	943	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%

Full Input Data And Results

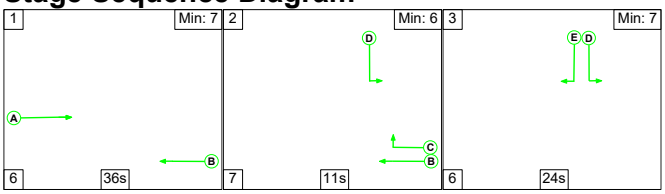
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**284**	**333**	**0**	**12.2**	**6.4**	**0.0**	**18.6**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**284**	**333**	**0**	**12.2**	**6.4**	**0.0**	**18.6**	**-**	**-**	**-**	**-**
1/1+1/2	642	642	-	-	-	3.0	2.0	-	5.0 (1.4+3.6)	27.9 (13.6:46.2)	7.4	2.0	9.4
2/2+2/1	865	865	41	333	0	2.7	2.0	-	4.6 (2.9+1.7)	19.2 (21.5:16.1)	20.6	2.0	22.5
2/3	243	243	-	-	-	0.6	0.1	-	0.7	10.9	3.8	0.1	3.9
3/1+3/2	330	330	-	-	-	5.6	1.7	-	7.3 (2.6+4.7)	79.5 (44.9:139.3)	8.9	1.7	10.5
4/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	700	700	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
5/2	243	243	243	0	0	0.4	0.4	-	0.7	10.9	6.2	0.4	6.6
6/1	943	943	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 12.2 Total Delay for Signalled Lanes (pcuHr): 17.61 Cycle Time (s): 270
PRC Over All Lanes (%): 12.2 Total Delay Over All Lanes(pcuHr): 18.62

Full Input Data And Results

Scenario 14: '2a 2038 Forecast Year With Development (PM)' (FG14: '2a 2038 Forecast Year With Development (PM)', Plan 2: 'Network Control Plan 2')

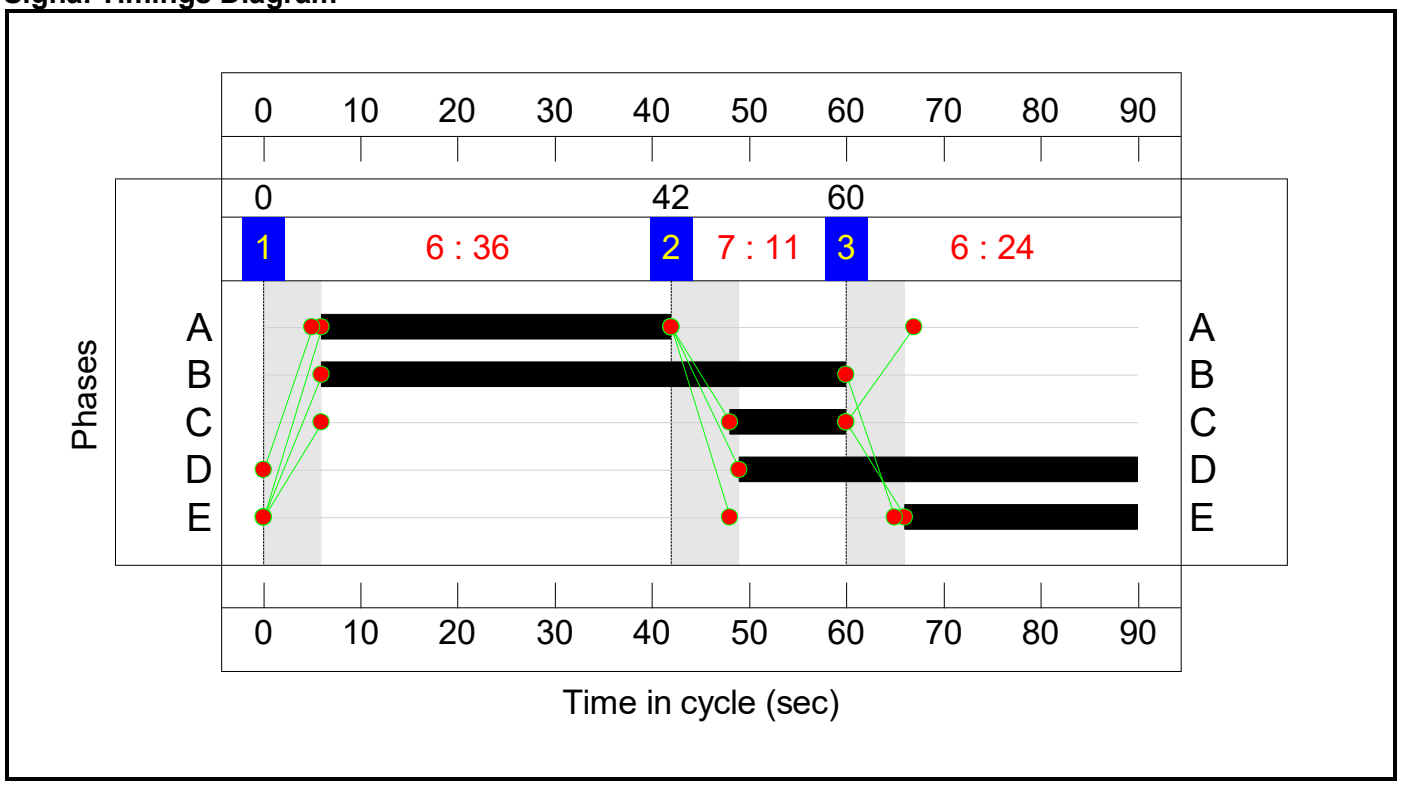
Stage Sequence Diagram



Stage Timings

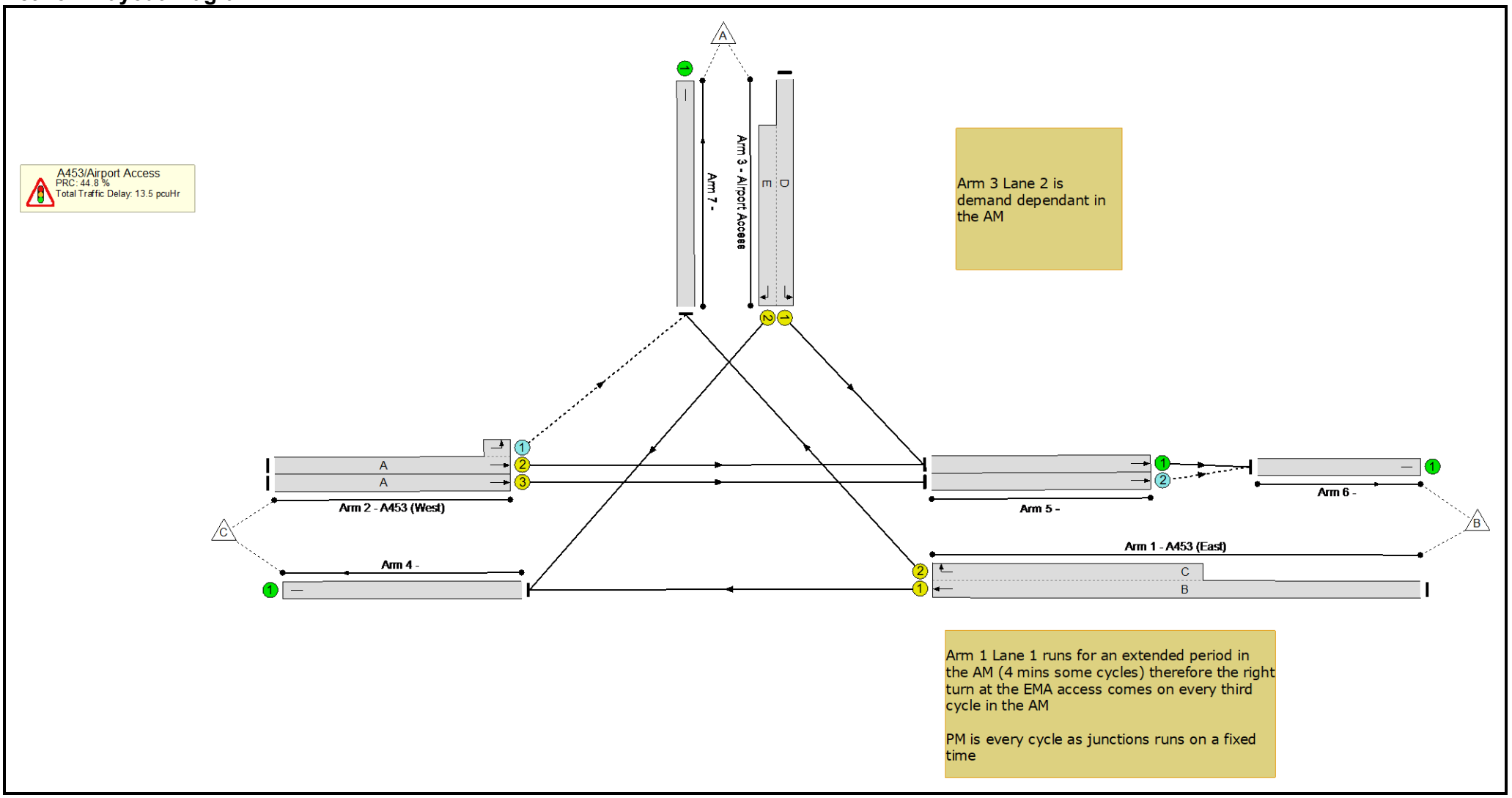
Stage	1	2	3
Duration	36	11	24
Change Point	0	42	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453/EMA Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.2%**
A453/Airport Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**62.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	B C		1	54:12	-	837	1965:1854	1160+268	58.6 : 58.6%
2/2+2/1	A453 (West) Ahead Left	U+O	N/A	N/A	A -		1	36	-	477	1965:1439	588+191	61.3 : 61.3%
2/3	A453 (West) Ahead	U	N/A	N/A	A		1	36	-	124	2105	865	14.3%
3/1+3/2	Airport Access Right Left	U	N/A	N/A	D E		1	41:24	-	681	1805:1830	587+508	62.2 : 62.2%
4/1		U	N/A	N/A	-		-	-	-	996	Inf	Inf	0.0%
5/1	Ahead	U	N/A	N/A	-		-	-	-	725	1965	1965	36.9%
5/2	Ahead	O	N/A	N/A	-		-	-	-	124	2105	555	22.3%
6/1		U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	274	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453/EMA Junction	**-**	**-**	**141**	**100**	**0**	**10.6**	**2.8**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
A453/Airport Access	**-**	**-**	**141**	**100**	**0**	**10.6**	**2.8**	**0.0**	**13.5**	**-**	**-**	**-**	**-**
1/1+1/2	837	837	-	-	-	3.5	0.7	-	4.2 (2.5+1.7)	18.2 (13.4:39.0)	10.0	0.7	10.7
2/2+2/1	477	477	17	100	0	2.3	0.8	-	3.1 (2.6+0.5)	23.2 (25.9:14.8)	8.5	0.8	9.3
2/3	124	124	-	-	-	0.6	0.1	-	0.7	19.0	1.9	0.1	2.0
3/1+3/2	681	681	-	-	-	4.1	0.8	-	4.9 (2.1+2.9)	26.1 (20.4:32.7)	6.8	0.8	7.7
4/1	996	996	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	725	725	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
5/2	124	124	124	0	0	0.1	0.1	-	0.3	7.3	2.4	0.1	2.6
6/1	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 44.8 Total Delay for Signalled Lanes (pcuHr): 12.91 Cycle Time (s): 90
PRC Over All Lanes (%): 44.8 Total Delay Over All Lanes(pcuHr): 13.45

APPENDIX 52: Junction 7: A453/Grimes Gate Priority Junction Stage 1A/2A Modelling Results

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.0.0.2177
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Filename: 250619_A453_Grimes Gate PICADY Model_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\7. A453_Grimes Gate
Report generation date: 20/06/2025 15:56:06

»2022 | Observed | AM
»2022 | Observed | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2022 - Observed																
Stream B-C	D1	0.0	6.14	0.01	A	0.67	A	114 % [Stream B-A]	D2	0.0	6.42	0.02	A	0.43	A	147 % [Stream B-A]
Stream B-A		0.2	8.25	0.14	A					0.1	7.54	0.06	A			
Stream C-AB		0.0	4.07	0.02	A					0.0	4.85	0.03	A			
2028 - 2a WD Flows																
Stream B-C	D11	0.0	6.75	0.01	A	1.40	A	43 % [Stream B-A]	D12	0.0	7.51	0.03	A	0.49	A	68 % [Stream B-A]
Stream B-A		0.5	12.52	0.34	B					0.1	10.08	0.10	B			
Stream C-AB		0.0	3.57	0.03	A					0.1	4.96	0.05	A			
2028 - WD Flows																
Stream B-C	D5	0.0	6.74	0.01	A	1.45	A	39 % [Stream B-A]	D6	0.0	7.34	0.03	A	0.51	A	74 % [Stream B-A]
Stream B-A		0.6	13.05	0.36	B					0.1	9.72	0.10	A			
Stream C-AB		0.0	3.45	0.03	A					0.1	5.00	0.05	A			
2028 - WoD Flows																
Stream B-C	D3	0.0	6.51	0.02	A	1.01	A	65 % [Stream B-A]	D4	0.0	6.75	0.02	A	0.47	A	100 % [Stream B-A]
Stream B-A		0.3	10.36	0.24	B					0.1	8.63	0.08	A			
Stream C-AB		0.0	3.89	0.02	A					0.1	4.75	0.04	A			
2038 - 2a WD Flows																
Stream B-C	D13	0.0	7.55	0.02	A	1.81	A	25 % [Stream B-A]	D14	0.0	8.54	0.04	A	0.61	A	35 % [Stream B-A]
Stream B-A		0.8	15.93	0.44	C					0.2	13.58	0.16	B			
Stream C-AB		0.0	3.40	0.02	A					0.1	4.85	0.06	A			
2038 - WD Flows																
Stream B-C	D9	0.0	7.79	0.03	A	2.08	A	22 % [Stream B-A]	D10	0.0	8.44	0.04	A	0.64	A	36 % [Stream B-A]
Stream B-A		0.9	16.82	0.47	C					0.2	13.42	0.17	B			
Stream C-AB		0.1	3.48	0.04	A					0.1	4.82	0.06	A			
2038 - WoD Flows																
Stream B-C	D7	0.0	7.27	0.03	A	1.32	A	40 % [Stream B-A]	D8	0.0	7.36	0.03	A	0.70	A	52 % [Stream B-A]
Stream B-A		0.5	12.77	0.33	B					0.2	11.35	0.17	B			
Stream C-AB		0.0	3.88	0.02	A					0.1	4.29	0.06	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. Junction LOS and Junction Delay are demand-weighted averages. 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	East Midlands Gateway Phase 2
Location	A453/Grimes Gate
Site number	
Date	06/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	Observed	AM	ONE HOUR	08:00	09:30	15
D2	2022	Observed	PM	ONE HOUR	17:00	18:30	15
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 | Observed | AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.67	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	114	Stream B-A	0.67	A

Arms

Arms

Arm	Name	Description	Arm type
A	A453 (E)		Major
B	Grimes Gate		Minor
C	A453 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.80			190.0	✓	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	8.25	7.50	7.40	4.30	3.80		1.00	215	153

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	732	0.123	0.311	0.195	0.444
B-C	700	0.099	0.250	-	-
C-B	684	0.244	0.244	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	Observed	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	316	100.000
B		✓	70	100.000
C		✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	296
	B	64	0	6
	C	547	7	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.14	0.0	A
B-A	0.14	8.25	0.2	A
C-AB	0.02	4.07	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	629	0.007	4	0.0	5.764	A
B-A	48	0.00	578	0.083	48	0.1	6.784	A
C-AB	10	0.00	895	0.011	10	0.0	4.068	A
C-A	407	0.00			407			
A-B	15	0.00			15			
A-C	223	0.00			223			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	614	0.009	5	0.0	5.912	A
B-A	58	0.00	548	0.105	57	0.1	7.332	A
C-AB	13	0.00	938	0.014	13	0.0	3.890	A
C-A	485	0.00			485			
A-B	18	0.00			18			
A-C	266	0.00			266			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	593	0.011	7	0.0	6.137	A
B-A	70	0.00	507	0.139	70	0.2	8.241	A
C-AB	19	0.00	1001	0.019	19	0.0	3.667	A
C-A	591	0.00			591			
A-B	22	0.00			22			
A-C	326	0.00			326			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	593	0.011	7	0.0	6.137	A
B-A	70	0.00	507	0.139	70	0.2	8.248	A
C-AB	19	0.00	1001	0.019	19	0.0	3.667	A
C-A	591	0.00			591			
A-B	22	0.00			22			
A-C	326	0.00			326			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	614	0.009	5	0.0	5.913	A
B-A	58	0.00	548	0.105	58	0.1	7.341	A
C-AB	13	0.00	938	0.014	13	0.0	3.892	A
C-A	485	0.00			485			
A-B	18	0.00			18			
A-C	266	0.00			266			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	629	0.007	5	0.0	5.768	A
B-A	48	0.00	578	0.083	48	0.1	6.795	A
C-AB	10	0.00	895	0.011	10	0.0	4.068	A
C-A	407	0.00			407			
A-B	15	0.00			15			
A-C	223	0.00			223			

2022 | Observed | PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.43	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	147	Stream B-A	0.43	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	Observed	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	482	100.000
B		✓	37	100.000
C		✓	330	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	74	408
	B	28	0	9
	C	318	12	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.42	0.0	A
B-A	0.06	7.54	0.1	A
C-AB	0.03	4.85	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	612	0.011	7	0.0	5.948	A
B-A	21	0.00	579	0.036	21	0.0	6.450	A
C-AB	13	0.00	756	0.018	13	0.0	4.848	A
C-A	235	0.00			235			
A-B	56	0.00			56			
A-C	307	0.00			307			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	595	0.014	8	0.0	6.137	A
B-A	25	0.00	549	0.046	25	0.0	6.869	A
C-AB	17	0.00	772	0.022	17	0.0	4.767	A
C-A	280	0.00			280			
A-B	67	0.00			67			
A-C	367	0.00			367			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	571	0.017	10	0.0	6.420	A
B-A	31	0.00	508	0.061	31	0.1	7.541	A
C-AB	24	0.00	797	0.030	24	0.0	4.656	A
C-A	340	0.00			340			
A-B	81	0.00			81			
A-C	449	0.00			449			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	571	0.017	10	0.0	6.420	A
B-A	31	0.00	508	0.061	31	0.1	7.541	A
C-AB	24	0.00	797	0.030	24	0.0	4.656	A
C-A	340	0.00			340			
A-B	81	0.00			81			
A-C	449	0.00			449			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	595	0.014	8	0.0	6.140	A
B-A	25	0.00	549	0.046	25	0.0	6.871	A
C-AB	17	0.00	772	0.022	17	0.0	4.769	A
C-A	279	0.00			279			
A-B	67	0.00			67			
A-C	367	0.00			367			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	612	0.011	7	0.0	5.951	A
B-A	21	0.00	579	0.036	21	0.0	6.456	A
C-AB	13	0.00	756	0.018	13	0.0	4.849	A
C-A	235	0.00			235			
A-B	56	0.00			56			
A-C	307	0.00			307			

2028 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.01	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	65	Stream B-A	1.01	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	353	100.000
B		✓	109	100.000
C		✓	704	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	21	332
	B	101	0	8
	C	697	7	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	12
	B	1	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.51	0.0	A
B-A	0.24	10.36	0.3	B
C-AB	0.02	3.89	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	612	0.010	6	0.0	5.938	A
B-A	76	0.00	548	0.139	75	0.2	7.692	A
C-AB	12	0.00	963	0.012	12	0.0	3.882	A
C-A	518	0.00			518			
A-B	16	0.00			16			
A-C	250	0.00			250			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	592	0.012	7	0.0	6.151	A
B-A	91	0.00	512	0.177	91	0.2	8.629	A
C-AB	16	0.00	1022	0.016	16	0.0	3.681	A
C-A	617	0.00			617			
A-B	19	0.00			19			
A-C	298	0.00			298			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	562	0.016	9	0.0	6.509	A
B-A	111	0.00	462	0.241	111	0.3	10.337	B
C-AB	25	0.00	1105	0.023	25	0.0	3.440	A
C-A	750	0.00			750			
A-B	23	0.00			23			
A-C	366	0.00			366			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	562	0.016	9	0.0	6.512	A
B-A	111	0.00	462	0.241	111	0.3	10.359	B
C-AB	25	0.00	1105	0.023	25	0.0	3.446	A
C-A	750	0.00			750			
A-B	23	0.00			23			
A-C	366	0.00			366			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	592	0.012	7	0.0	6.154	A
B-A	91	0.00	512	0.177	91	0.2	8.654	A
C-AB	16	0.00	1022	0.016	16	0.0	3.698	A
C-A	617	0.00			617			
A-B	19	0.00			19			
A-C	298	0.00			298			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	612	0.010	6	0.0	5.941	A
B-A	76	0.00	547	0.139	76	0.2	7.720	A
C-AB	12	0.00	963	0.012	12	0.0	3.891	A
C-A	518	0.00			518			
A-B	16	0.00			16			
A-C	250	0.00			250			

2028 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.47	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	100	Stream B-A	0.47	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	575	100.000
B		✓	45	100.000
C		✓	439	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	90	485
	B	35	0	10
	C	425	14	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	2	9
	B	0	0	0
	C	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.75	0.0	A
B-A	0.08	8.63	0.1	A
C-AB	0.04	4.75	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	595	0.013	7	0.0	6.132	A
B-A	26	0.00	543	0.049	26	0.1	6.965	A
C-AB	18	0.00	795	0.022	18	0.0	4.735	A
C-A	313	0.00			313			
A-B	68	0.00			68			
A-C	365	0.00			365			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	574	0.016	9	0.0	6.375	A
B-A	31	0.00	506	0.062	31	0.1	7.580	A
C-AB	24	0.00	821	0.029	24	0.0	4.626	A
C-A	371	0.00			371			
A-B	81	0.00			81			
A-C	436	0.00			436			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	544	0.020	11	0.0	6.748	A
B-A	39	0.00	456	0.085	38	0.1	8.627	A
C-AB	34	0.00	860	0.039	34	0.1	4.489	A
C-A	449	0.00			449			
A-B	99	0.00			99			
A-C	534	0.00			534			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	544	0.020	11	0.0	6.748	A
B-A	39	0.00	456	0.085	39	0.1	8.631	A
C-AB	34	0.00	860	0.039	34	0.1	4.498	A
C-A	449	0.00			449			
A-B	99	0.00			99			
A-C	534	0.00			534			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	574	0.016	9	0.0	6.378	A
B-A	31	0.00	506	0.062	32	0.1	7.583	A
C-AB	24	0.00	822	0.029	24	0.0	4.648	A
C-A	371	0.00			371			
A-B	81	0.00			81			
A-C	436	0.00			436			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	594	0.013	8	0.0	6.133	A
B-A	26	0.00	543	0.049	26	0.1	6.971	A
C-AB	18	0.00	795	0.022	18	0.0	4.747	A
C-A	313	0.00			313			
A-B	68	0.00			68			
A-C	365	0.00			365			

2028 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.45	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	39	Stream B-A	1.45	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	285	100.000
B		✓	149	100.000
C		✓	933	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	19	266
	B	143	0	6
	C	927	6	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	14
	B	1	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.74	0.0	A
B-A	0.36	13.05	0.6	B
C-AB	0.03	3.45	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	610	0.007	4	0.0	5.940	A
B-A	108	0.00	530	0.203	107	0.3	8.575	A
C-AB	13	0.00	1085	0.012	13	0.0	3.442	A
C-A	690	0.00			690			
A-B	14	0.00			14			
A-C	200	0.00			200			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	586	0.009	5	0.0	6.204	A
B-A	129	0.00	490	0.262	128	0.4	10.027	B
C-AB	19	0.00	1167	0.016	19	0.0	3.219	A
C-A	820	0.00			820			
A-B	17	0.00			17			
A-C	239	0.00			239			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	541	0.012	7	0.0	6.735	A
B-A	157	0.00	436	0.361	157	0.6	12.974	B
C-AB	32	0.00	1284	0.025	32	0.0	2.963	A
C-A	995	0.00			995			
A-B	21	0.00			21			
A-C	293	0.00			293			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	7	0.00	540	0.012	7	0.0	6.744	A
B-A	157	0.00	436	0.361	157	0.6	13.048	B
C-AB	32	0.00	1284	0.025	32	0.0	2.969	A
C-A	995	0.00			995			
A-B	21	0.00			21			
A-C	293	0.00			293			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	585	0.009	5	0.0	6.212	A
B-A	129	0.00	490	0.262	129	0.4	10.096	B
C-AB	19	0.00	1167	0.016	19	0.0	3.232	A
C-A	820	0.00			820			
A-B	17	0.00			17			
A-C	239	0.00			239			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	610	0.007	5	0.0	5.949	A
B-A	108	0.00	530	0.203	108	0.3	8.633	A
C-AB	13	0.00	1085	0.012	13	0.0	3.451	A
C-A	690	0.00			690			
A-B	14	0.00			14			
A-C	200	0.00			200			

2028 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.51	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	74	Stream B-A	0.51	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	746	100.000
B		✓	49	100.000
C		✓	411	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	133	613
	B	37	0	12
	C	394	17	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.34	0.0	A
B-A	0.10	9.72	0.1	A
C-AB	0.05	5.00	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	567	0.016	9	0.0	6.454	A
B-A	28	0.00	513	0.054	28	0.1	7.418	A
C-AB	21	0.00	753	0.028	21	0.0	4.991	A
C-A	288	0.00			288			
A-B	100	0.00			100			
A-C	461	0.00			461			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	540	0.020	11	0.0	6.797	A
B-A	33	0.00	470	0.071	33	0.1	8.239	A
C-AB	28	0.00	772	0.037	28	0.1	4.921	A
C-A	341	0.00			341			
A-B	120	0.00			120			
A-C	551	0.00			551			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	503	0.026	13	0.0	7.344	A
B-A	41	0.00	411	0.099	41	0.1	9.711	A
C-AB	41	0.00	801	0.051	41	0.1	4.832	A
C-A	412	0.00			412			
A-B	146	0.00			146			
A-C	675	0.00			675			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	503	0.026	13	0.0	7.344	A
B-A	41	0.00	411	0.099	41	0.1	9.718	A
C-AB	41	0.00	801	0.051	41	0.1	4.842	A
C-A	411	0.00			411			
A-B	146	0.00			146			
A-C	675	0.00			675			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	540	0.020	11	0.0	6.799	A
B-A	33	0.00	470	0.071	33	0.1	8.248	A
C-AB	28	0.00	772	0.037	28	0.1	4.940	A
C-A	341	0.00			341			
A-B	120	0.00			120			
A-C	551	0.00			551			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	9	0.00	567	0.016	9	0.0	6.458	A
B-A	28	0.00	513	0.054	28	0.1	7.427	A
C-AB	21	0.00	753	0.028	21	0.0	5.000	A
C-A	288	0.00			288			
A-B	100	0.00			100			
A-C	461	0.00			461			

2038 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.32	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	40	Stream B-A	1.32	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	465	100.000
B		✓	138	100.000
C		✓	731	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	23	442
	B	124	0	14
	C	724	7	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.27	0.0	A
B-A	0.33	12.77	0.5	B
C-AB	0.02	3.88	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	584	0.018	10	0.0	6.276	A
B-A	93	0.00	518	0.180	92	0.2	8.451	A
C-AB	12	0.00	962	0.013	12	0.0	3.872	A
C-A	538	0.00			538			
A-B	17	0.00			17			
A-C	333	0.00			333			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	556	0.023	13	0.0	6.620	A
B-A	111	0.00	476	0.234	111	0.3	9.858	A
C-AB	17	0.00	1022	0.017	17	0.0	3.666	A
C-A	640	0.00			640			
A-B	21	0.00			21			
A-C	397	0.00			397			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	511	0.030	15	0.0	7.266	A
B-A	137	0.00	418	0.326	136	0.5	12.708	B
C-AB	28	0.00	1109	0.025	27	0.0	3.419	A
C-A	777	0.00			777			
A-B	25	0.00			25			
A-C	487	0.00			487			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	510	0.030	15	0.0	7.273	A
B-A	137	0.00	418	0.326	137	0.5	12.769	B
C-AB	28	0.00	1109	0.025	28	0.0	3.424	A
C-A	777	0.00			777			
A-B	25	0.00			25			
A-C	487	0.00			487			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	556	0.023	13	0.0	6.627	A
B-A	111	0.00	476	0.234	112	0.3	9.913	A
C-AB	17	0.00	1022	0.017	17	0.0	3.681	A
C-A	640	0.00			640			
A-B	21	0.00			21			
A-C	397	0.00			397			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	584	0.018	11	0.0	6.284	A
B-A	93	0.00	518	0.180	94	0.2	8.501	A
C-AB	12	0.00	962	0.013	12	0.0	3.879	A
C-A	538	0.00			538			
A-B	17	0.00			17			
A-C	333	0.00			333			

2038 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.70	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	52	Stream B-A	0.70	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	676	100.000
B		✓	74	100.000
C		✓	620	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	99	577
	B	60	0	14
	C	604	16	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.36	0.0	A
B-A	0.17	11.35	0.2	B
C-AB	0.06	4.29	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	570	0.018	10	0.0	6.432	A
B-A	45	0.00	494	0.092	45	0.1	8.012	A
C-AB	25	0.00	873	0.029	25	0.0	4.289	A
C-A	442	0.00			442			
A-B	75	0.00			75			
A-C	434	0.00			434			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	543	0.023	13	0.0	6.780	A
B-A	54	0.00	447	0.121	54	0.1	9.144	A
C-AB	35	0.00	917	0.039	35	0.1	4.128	A
C-A	522	0.00			522			
A-B	89	0.00			89			
A-C	519	0.00			519			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	505	0.031	15	0.0	7.354	A
B-A	66	0.00	383	0.172	66	0.2	11.324	B
C-AB	55	0.00	982	0.056	55	0.1	3.932	A
C-A	628	0.00			628			
A-B	109	0.00			109			
A-C	635	0.00			635			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	0.00	505	0.031	15	0.0	7.356	A
B-A	66	0.00	383	0.172	66	0.2	11.345	B
C-AB	55	0.00	982	0.056	55	0.1	3.936	A
C-A	628	0.00			628			
A-B	109	0.00			109			
A-C	635	0.00			635			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	543	0.023	13	0.0	6.785	A
B-A	54	0.00	447	0.121	54	0.1	9.165	A
C-AB	35	0.00	917	0.039	36	0.1	4.138	A
C-A	522	0.00			522			
A-B	89	0.00			89			
A-C	519	0.00			519			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	570	0.018	11	0.0	6.434	A
B-A	45	0.00	494	0.092	45	0.1	8.032	A
C-AB	25	0.00	873	0.029	25	0.0	4.294	A
C-A	442	0.00			442			
A-B	75	0.00			75			
A-C	434	0.00			434			

2038 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		2.08	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	22	Stream B-A	2.08	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	375	100.000
B		✓	184	100.000
C		✓	945	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	342
	B	173	0	11
	C	935	10	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	6
	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	0.03	7.79	0.0	A
B-A	0.47	16.82	0.9	C
C-AB	0.04	3.48	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	583	0.014	8	0.0	6.263	A
B-A	130	0.00	508	0.256	129	0.3	9.461	A
C-AB	22	0.00	1078	0.020	22	0.0	3.471	A
C-A	690	0.00			690			
A-B	25	0.00			25			
A-C	257	0.00			257			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	547	0.018	10	0.0	6.703	A
B-A	156	0.00	465	0.335	155	0.5	11.604	B
C-AB	33	0.00	1161	0.028	33	0.0	3.254	A
C-A	817	0.00			817			
A-B	30	0.00			30			
A-C	307	0.00			307			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	476	0.025	12	0.0	7.764	A
B-A	190	0.00	404	0.471	189	0.9	16.603	C
C-AB	57	0.00	1279	0.044	56	0.1	3.011	A
C-A	984	0.00			984			
A-B	36	0.00			36			
A-C	377	0.00			377			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	474	0.026	12	0.0	7.794	A
B-A	190	0.00	404	0.471	190	0.9	16.815	C
C-AB	57	0.00	1279	0.044	57	0.1	3.017	A
C-A	984	0.00			984			
A-B	36	0.00			36			
A-C	377	0.00			377			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	545	0.018	10	0.0	6.727	A
B-A	156	0.00	464	0.335	157	0.5	11.762	B
C-AB	33	0.00	1161	0.028	33	0.0	3.263	A
C-A	817	0.00			817			
A-B	30	0.00			30			
A-C	307	0.00			307			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	582	0.014	8	0.0	6.278	A
B-A	130	0.00	508	0.256	131	0.3	9.562	A
C-AB	22	0.00	1079	0.020	22	0.0	3.476	A
C-A	690	0.00			690			
A-B	25	0.00			25			
A-C	257	0.00			257			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.64	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	36	Stream B-A	0.64	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	944	100.000
B		✓	64	100.000
C		✓	525	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	149	795
	B	49	0	15
	C	508	17	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	3
	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	0.04	8.44	0.0	A
B-A	0.17	13.42	0.2	B
C-AB	0.06	4.82	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	528	0.021	11	0.0	6.967	A
B-A	37	0.00	452	0.082	37	0.1	8.661	A
C-AB	25	0.00	784	0.032	25	0.0	4.808	A
C-A	370	0.00			370			
A-B	112	0.00			112			
A-C	599	0.00			599			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	493	0.027	13	0.0	7.503	A
B-A	44	0.00	397	0.111	44	0.1	10.178	B
C-AB	35	0.00	813	0.043	35	0.1	4.702	A
C-A	437	0.00			437			
A-B	134	0.00			134			
A-C	715	0.00			715			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	443	0.037	16	0.0	8.432	A
B-A	54	0.00	322	0.167	54	0.2	13.390	B
C-AB	54	0.00	856	0.063	54	0.1	4.572	A
C-A	524	0.00			524			
A-B	164	0.00			164			
A-C	875	0.00			875			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	443	0.037	17	0.0	8.437	A
B-A	54	0.00	322	0.167	54	0.2	13.421	B
C-AB	54	0.00	856	0.063	54	0.1	4.579	A
C-A	524	0.00			524			
A-B	164	0.00			164			
A-C	875	0.00			875			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	493	0.027	14	0.0	7.507	A
B-A	44	0.00	397	0.111	44	0.1	10.207	B
C-AB	35	0.00	813	0.043	35	0.1	4.719	A
C-A	437	0.00			437			
A-B	134	0.00			134			
A-C	715	0.00			715			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	528	0.021	11	0.0	6.973	A
B-A	37	0.00	452	0.082	37	0.1	8.682	A
C-AB	25	0.00	785	0.032	25	0.0	4.818	A
C-A	370	0.00			370			
A-B	112	0.00			112			
A-C	599	0.00			599			

2028 | 2a WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.40	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	43	Stream B-A	1.40	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	313	100.000
B		✓	144	100.000
C		✓	865	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	21	292
	B	137	0	7
	C	858	7	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	13
	B	1	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.75	0.0	A
B-A	0.34	12.52	0.5	B
C-AB	0.03	3.57	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	608	0.009	5	0.0	5.972	A
B-A	103	0.00	533	0.193	102	0.2	8.418	A
C-AB	14	0.00	1048	0.013	14	0.0	3.565	A
C-A	637	0.00			637			
A-B	16	0.00			16			
A-C	220	0.00			220			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	584	0.011	6	0.0	6.234	A
B-A	123	0.00	495	0.249	123	0.3	9.769	A
C-AB	20	0.00	1123	0.018	20	0.0	3.348	A
C-A	757	0.00			757			
A-B	19	0.00			19			
A-C	263	0.00			263			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	542	0.014	8	0.0	6.741	A
B-A	151	0.00	441	0.342	150	0.5	12.457	B
C-AB	33	0.00	1230	0.027	33	0.0	3.096	A
C-A	919	0.00			919			
A-B	23	0.00			23			
A-C	321	0.00			321			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	541	0.014	8	0.0	6.748	A
B-A	151	0.00	441	0.342	151	0.5	12.519	B
C-AB	33	0.00	1230	0.027	33	0.0	3.102	A
C-A	919	0.00			919			
A-B	23	0.00			23			
A-C	321	0.00			321			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	0.00	583	0.011	6	0.0	6.241	A
B-A	123	0.00	495	0.249	124	0.3	9.827	A
C-AB	20	0.00	1123	0.018	20	0.0	3.359	A
C-A	757	0.00			757			
A-B	19	0.00			19			
A-C	263	0.00			263			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	0.00	607	0.009	5	0.0	5.980	A
B-A	103	0.00	533	0.193	104	0.2	8.471	A
C-AB	14	0.00	1048	0.013	14	0.0	3.572	A
C-A	637	0.00			637			
A-B	16	0.00			16			
A-C	220	0.00			220			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.49	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	68	Stream B-A	0.49	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	769	100.000
B		✓	48	100.000
C		✓	426	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	111	658
	B	35	0	13
	C	410	16	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.03	7.51	0.0	A
B-A	0.10	10.08	0.1	B
C-AB	0.05	4.96	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	560	0.017	10	0.0	6.539	A
B-A	26	0.00	502	0.052	26	0.1	7.558	A
C-AB	20	0.00	758	0.027	20	0.0	4.955	A
C-A	300	0.00			300			
A-B	84	0.00			84			
A-C	495	0.00			495			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	533	0.022	12	0.0	6.910	A
B-A	31	0.00	458	0.069	31	0.1	8.447	A
C-AB	27	0.00	778	0.035	27	0.0	4.877	A
C-A	356	0.00			356			
A-B	100	0.00			100			
A-C	592	0.00			592			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	0.00	494	0.029	14	0.0	7.506	A
B-A	39	0.00	396	0.097	38	0.1	10.069	B
C-AB	40	0.00	809	0.049	40	0.1	4.777	A
C-A	429	0.00			429			
A-B	122	0.00			122			
A-C	724	0.00			724			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	0.00	494	0.029	14	0.0	7.507	A
B-A	39	0.00	396	0.097	39	0.1	10.076	B
C-AB	40	0.00	809	0.049	40	0.1	4.786	A
C-A	429	0.00			429			
A-B	122	0.00			122			
A-C	724	0.00			724			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	533	0.022	12	0.0	6.914	A
B-A	31	0.00	457	0.069	32	0.1	8.455	A
C-AB	27	0.00	778	0.035	28	0.0	4.896	A
C-A	356	0.00			356			
A-B	100	0.00			100			
A-C	592	0.00			592			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	560	0.017	10	0.0	6.540	A
B-A	26	0.00	502	0.052	26	0.1	7.568	A
C-AB	20	0.00	758	0.027	20	0.0	4.965	A
C-A	300	0.00			300			
A-B	84	0.00			84			
A-C	495	0.00			495			

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		1.81	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	25	Stream B-A	1.81	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	363	100.000
B		✓	172	100.000
C		✓	957	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	11	352
	B	161	0	11
	C	953	4	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	6
	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	0.02	7.55	0.0	A
B-A	0.44	15.93	0.8	C
C-AB	0.02	3.40	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	587	0.014	8	0.0	6.217	A
B-A	121	0.00	507	0.239	120	0.3	9.270	A
C-AB	9	0.00	1089	0.008	9	0.0	3.398	A
C-A	712	0.00			712			
A-B	8	0.00			8			
A-C	265	0.00			265			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	554	0.018	10	0.0	6.616	A
B-A	145	0.00	463	0.312	144	0.4	11.258	B
C-AB	13	0.00	1173	0.011	13	0.0	3.167	A
C-A	847	0.00			847			
A-B	10	0.00			10			
A-C	316	0.00			316			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	490	0.025	12	0.0	7.530	A
B-A	177	0.00	403	0.440	176	0.8	15.768	C
C-AB	23	0.00	1294	0.018	23	0.0	2.898	A
C-A	1030	0.00			1030			
A-B	12	0.00			12			
A-C	388	0.00			388			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	0.00	489	0.025	12	0.0	7.552	A
B-A	177	0.00	403	0.440	177	0.8	15.935	C
C-AB	23	0.00	1294	0.018	23	0.0	2.901	A
C-A	1030	0.00			1030			
A-B	12	0.00			12			
A-C	388	0.00			388			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	0.00	553	0.018	10	0.0	6.634	A
B-A	145	0.00	463	0.312	146	0.5	11.384	B
C-AB	13	0.00	1173	0.011	13	0.0	3.177	A
C-A	847	0.00			847			
A-B	10	0.00			10			
A-C	316	0.00			316			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	0.00	586	0.014	8	0.0	6.230	A
B-A	121	0.00	507	0.239	122	0.3	9.359	A
C-AB	9	0.00	1089	0.008	9	0.0	3.402	A
C-A	712	0.00			712			
A-B	8	0.00			8			
A-C	265	0.00			265			

2038 | 2a WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/Grimes Gate	T-Junction	Two-way	Two-way	Two-way		0.61	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	35	Stream B-A	0.61	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	970	100.000
B		✓	61	100.000
C		✓	518	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	152	818
	B	46	0	15
	C	502	16	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	3
	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	0.04	8.54	0.0	A
B-A	0.16	13.58	0.2	B
C-AB	0.06	4.85	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	524	0.022	11	0.0	7.020	A
B-A	35	0.00	447	0.077	34	0.1	8.706	A
C-AB	23	0.00	777	0.030	23	0.0	4.843	A
C-A	367	0.00			367			
A-B	114	0.00			114			
A-C	616	0.00			616			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	489	0.028	13	0.0	7.575	A
B-A	41	0.00	392	0.105	41	0.1	10.259	B
C-AB	33	0.00	804	0.041	33	0.1	4.739	A
C-A	433	0.00			433			
A-B	137	0.00			137			
A-C	735	0.00			735			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	438	0.038	16	0.0	8.539	A
B-A	51	0.00	316	0.160	50	0.2	13.550	B
C-AB	51	0.00	846	0.060	51	0.1	4.610	A
C-A	519	0.00			519			
A-B	167	0.00			167			
A-C	901	0.00			901			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	0.00	438	0.038	17	0.0	8.543	A
B-A	51	0.00	316	0.160	51	0.2	13.582	B
C-AB	51	0.00	846	0.060	51	0.1	4.619	A
C-A	519	0.00			519			
A-B	167	0.00			167			
A-C	901	0.00			901			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	0.00	489	0.028	14	0.0	7.581	A
B-A	41	0.00	392	0.105	42	0.1	10.280	B
C-AB	33	0.00	804	0.041	33	0.1	4.756	A
C-A	433	0.00			433			
A-B	137	0.00			137			
A-C	735	0.00			735			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	0.00	524	0.022	11	0.0	7.022	A
B-A	35	0.00	447	0.077	35	0.1	8.729	A
C-AB	24	0.00	777	0.030	24	0.0	4.853	A
C-A	366	0.00			366			
A-B	114	0.00			114			
A-C	616	0.00			616			

APPENDIX 53: Junction 8: A453/The Green Priority Junction Stage 1A/2A Modelling Results

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.0.0.2177
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Filename: 250619_A453_The Green_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\8. A453_The Green Junction
Report generation date: 20/06/2025 16:00:32

»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2028 - 2a WD Flows																
Stream B-AC	D9	40.2	243.49	1.13	F	82.07	F	-21 % [Stream B-AC]	D10	1.2	20.55	0.56	C	4.72	A	14 % [Stream B-AC]
Stream C-AB		0.7	4.53	0.24	A					1.1	8.27	0.42	A			
2028 - WD Flows																
Stream B-AC	D3	122.9	800.13	1.39	F	313.52	F	-33 % [Stream B-AC]	D4	1.1	17.92	0.53	C	3.97	A	20 % [Stream B-AC]
Stream C-AB		0.6	4.58	0.24	A					0.6	6.78	0.30	A			
2028 - WoD Flows																
Stream B-AC	D1	5.9	49.47	0.88	E	15.37	C	-5 % [Stream B-AC]	D2	1.0	14.84	0.50	B	3.65	A	30 % [Stream B-AC]
Stream C-AB		0.7	4.88	0.25	A					0.5	5.92	0.25	A			
2038 - 2a WD Flows																
Stream B-AC	D11	72.9	505.43	1.28	F	163.77	F	-28 % [Stream B-AC]	D12	25.2	276.97	1.18	F	88.90	F	-16 % [Stream B-AC]
Stream C-AB		0.7	4.37	0.22	A					31.0	129.44	1.03	F			
2038 - WD Flows																
Stream B-AC	D7	172.0	1153.41	1.54	F	428.30	F	-37 % [Stream B-AC]	D8	28.8	321.69	1.26	F	128.11	F	-16 % [Stream B-AC]
Stream C-AB		1.2	5.76	0.39	A					53.0	204.22	1.11	F			
2038 - WoD Flows																
Stream B-AC	D5	6.1	56.79	0.88	F	15.05	C	-7 % [Stream B-AC]	D6	5.3	60.80	0.87	F	21.04	C	-7 % [Stream B-AC]
Stream C-AB		1.2	5.92	0.38	A					7.9	26.89	0.85	D			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	East Midlands Gateway Phase 2
Location	A453/The Green T-Junction
Site number	
Date	06/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D2	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D3	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15
D4	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15
D5	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D6	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D7	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15
D8	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15
D9	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D10	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15
D11	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15
D12	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		15.37	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-5	Stream B-AC	15.37	C

Arms

Arms

Arm	Name	Description	Arm type
A	A453 (E)		Major
B	The Green		Minor
C	A453 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00			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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.60	119	135

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	621	0.108	0.273	0.172	0.390
B-C	752	0.110	0.279	-	-
C-B	719	0.266	0.266	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	338	100.000
B		✓	418	100.000
C		✓	653	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	305
	B	141	0	277
	C	562	91	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	13
	B	1	0	0
	C	6	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.88	49.47	5.9	E
C-AB	0.25	4.88	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	315	0.00	586	0.537	310	1.1	12.918	B
C-AB	127	0.00	921	0.138	126	0.3	4.696	A
C-A	365	0.00			365			
A-B	25	0.00			25			
A-C	230	0.00			230			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	376	0.00	561	0.670	373	1.9	18.859	C
C-AB	173	0.00	964	0.179	172	0.4	4.729	A
C-A	414	0.00			414			
A-B	30	0.00			30			
A-C	274	0.00			274			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	460	0.00	525	0.876	447	5.2	40.535	E
C-AB	254	0.00	1026	0.248	253	0.6	4.864	A
C-A	465	0.00			465			
A-B	36	0.00			36			
A-C	336	0.00			336			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	460	0.00	525	0.876	458	5.9	49.466	E
C-AB	254	0.00	1026	0.248	254	0.7	4.882	A
C-A	465	0.00			465			
A-B	36	0.00			36			
A-C	336	0.00			336			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	376	0.00	561	0.670	391	2.2	22.834	C
C-AB	173	0.00	965	0.179	174	0.4	4.761	A
C-A	414	0.00			414			
A-B	30	0.00			30			
A-C	274	0.00			274			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	315	0.00	585	0.538	319	1.2	13.729	B
C-AB	127	0.00	922	0.138	128	0.3	4.725	A
C-A	364	0.00			364			
A-B	25	0.00			25			
A-C	230	0.00			230			

2028 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		3.65	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	30	Stream B-AC	3.65	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	492	100.000
B		✓	217	100.000
C		✓	452	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	31	461
	B	87	0	130
	C	351	101	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	9
	B	0	0	0
	C	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.50	14.84	1.0	B
C-AB	0.25	5.92	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	0.00	552	0.296	162	0.4	9.196	A
C-AB	114	0.00	793	0.144	113	0.2	5.422	A
C-A	226	0.00			226			
A-B	23	0.00			23			
A-C	347	0.00			347			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	195	0.00	523	0.373	194	0.6	10.949	B
C-AB	149	0.00	811	0.184	149	0.3	5.585	A
C-A	257	0.00			257			
A-B	28	0.00			28			
A-C	414	0.00			414			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	239	0.00	481	0.496	237	1.0	14.668	B
C-AB	207	0.00	838	0.247	206	0.5	5.892	A
C-A	290	0.00			290			
A-B	34	0.00			34			
A-C	508	0.00			508			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	239	0.00	481	0.496	239	1.0	14.844	B
C-AB	208	0.00	838	0.248	207	0.5	5.924	A
C-A	290	0.00			290			
A-B	34	0.00			34			
A-C	508	0.00			508			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	195	0.00	522	0.374	197	0.6	11.100	B
C-AB	149	0.00	812	0.184	150	0.4	5.639	A
C-A	257	0.00			257			
A-B	28	0.00			28			
A-C	414	0.00			414			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	0.00	551	0.296	164	0.4	9.315	A
C-AB	114	0.00	794	0.144	115	0.3	5.464	A
C-A	226	0.00			226			
A-B	23	0.00			23			
A-C	347	0.00			347			

2028 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		313.52	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-33	Stream B-AC	313.52	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	273	100.000
B		✓	625	100.000
C		✓	700	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	232
	B	319	0	306
	C	614	86	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	16
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.39	800.13	122.9	F
C-AB	0.24	4.58	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	471	0.00	556	0.846	453	4.4	31.029	D
C-AB	125	0.00	956	0.131	124	0.3	4.478	A
C-A	402	0.00			402			
A-B	31	0.00			31			
A-C	175	0.00			175			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	562	0.00	530	1.059	511	17.2	95.975	F
C-AB	172	0.00	1005	0.171	172	0.4	4.476	A
C-A	457	0.00			457			
A-B	37	0.00			37			
A-C	209	0.00			209			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	688	0.00	494	1.394	492	66.1	320.321	F
C-AB	257	0.00	1075	0.239	256	0.6	4.565	A
C-A	514	0.00			514			
A-B	45	0.00			45			
A-C	255	0.00			255			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	688	0.00	493	1.394	493	114.8	652.304	F
C-AB	257	0.00	1076	0.239	257	0.6	4.581	A
C-A	514	0.00			514			
A-B	45	0.00			45			
A-C	255	0.00			255			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	562	0.00	530	1.060	530	122.9	800.133	F
C-AB	173	0.00	1006	0.172	174	0.4	4.503	A
C-A	456	0.00			456			
A-B	37	0.00			37			
A-C	209	0.00			209			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	471	0.00	556	0.846	551	102.7	737.341	F
C-AB	126	0.00	956	0.132	127	0.3	4.503	A
C-A	401	0.00			401			
A-B	31	0.00			31			
A-C	175	0.00			175			

2028 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		3.97	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	20	Stream B-AC	3.97	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	618	100.000
B		✓	204	100.000
C		✓	420	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	85	533
	B	106	0	98
	C	303	117	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.53	17.92	1.1	C
C-AB	0.30	6.78	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	0.00	509	0.302	152	0.4	10.047	B
C-AB	127	0.00	748	0.170	126	0.3	5.870	A
C-A	189	0.00			189			
A-B	64	0.00			64			
A-C	401	0.00			401			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	183	0.00	474	0.387	183	0.6	12.319	B
C-AB	165	0.00	757	0.218	164	0.4	6.175	A
C-A	213	0.00			213			
A-B	76	0.00			76			
A-C	479	0.00			479			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	225	0.00	425	0.528	223	1.1	17.603	C
C-AB	228	0.00	772	0.295	227	0.6	6.741	A
C-A	235	0.00			235			
A-B	94	0.00			94			
A-C	587	0.00			587			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	225	0.00	425	0.528	225	1.1	17.917	C
C-AB	228	0.00	772	0.295	228	0.6	6.775	A
C-A	234	0.00			234			
A-B	94	0.00			94			
A-C	587	0.00			587			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	183	0.00	474	0.387	185	0.6	12.551	B
C-AB	165	0.00	758	0.218	166	0.4	6.232	A
C-A	212	0.00			212			
A-B	76	0.00			76			
A-C	479	0.00			479			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	154	0.00	508	0.302	154	0.4	10.198	B
C-AB	127	0.00	748	0.170	128	0.3	5.911	A
C-A	189	0.00			189			
A-B	64	0.00			64			
A-C	401	0.00			401			

2038 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		15.05	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-7	Stream B-AC	15.05	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	448	100.000
B		✓	378	100.000
C		✓	721	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	69	379
	B	139	0	239
	C	592	129	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	6
	B	1	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.88	56.79	6.1	F
C-AB	0.38	5.92	1.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	285	0.00	550	0.518	280	1.0	13.222	B
C-AB	189	0.00	919	0.205	187	0.4	5.084	A
C-A	354	0.00			354			
A-B	52	0.00			52			
A-C	285	0.00			285			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	340	0.00	518	0.656	337	1.8	19.631	C
C-AB	261	0.00	963	0.270	260	0.7	5.304	A
C-A	388	0.00			388			
A-B	62	0.00			62			
A-C	341	0.00			341			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	416	0.00	471	0.883	402	5.3	45.234	E
C-AB	392	0.00	1027	0.381	390	1.2	5.875	A
C-A	402	0.00			402			
A-B	76	0.00			76			
A-C	417	0.00			417			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	416	0.00	471	0.884	413	6.1	56.787	F
C-AB	393	0.00	1028	0.382	393	1.2	5.920	A
C-A	401	0.00			401			
A-B	76	0.00			76			
A-C	417	0.00			417			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	340	0.00	517	0.657	356	2.0	24.321	C
C-AB	262	0.00	965	0.271	264	0.7	5.364	A
C-A	386	0.00			386			
A-B	62	0.00			62			
A-C	341	0.00			341			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	285	0.00	549	0.518	288	1.1	14.036	B
C-AB	190	0.00	920	0.206	191	0.5	5.131	A
C-A	353	0.00			353			
A-B	52	0.00			52			
A-C	285	0.00			285			

2038 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		21.04	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-7	Stream B-AC	21.04	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	583	100.000
B		✓	305	100.000
C		✓	803	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	52	531
	B	99	0	206
	C	519	284	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	4
	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-AC	0.87	60.80	5.3	F
C-AB	0.85	26.89	7.9	D
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	0.00	507	0.453	226	0.8	12.693	B
C-AB	391	0.00	862	0.454	386	1.2	7.641	A
C-A	213	0.00			213			
A-B	39	0.00			39			
A-C	400	0.00			400			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	274	0.00	461	0.595	272	1.4	18.789	C
C-AB	536	0.00	897	0.598	532	2.2	10.046	B
C-A	186	0.00			186			
A-B	47	0.00			47			
A-C	477	0.00			477			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	336	0.00	391	0.859	324	4.4	47.010	E
C-AB	799	0.00	948	0.842	780	7.0	21.512	C
C-A	85	0.00			85			
A-B	57	0.00			57			
A-C	585	0.00			585			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	336	0.00	386	0.869	333	5.3	60.805	F
C-AB	814	0.00	957	0.851	810	7.9	26.894	D
C-A	70	0.00			70			
A-B	57	0.00			57			
A-C	585	0.00			585			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	274	0.00	456	0.601	289	1.6	23.200	C
C-AB	551	0.00	909	0.606	572	2.5	11.825	B
C-A	171	0.00			171			
A-B	47	0.00			47			
A-C	477	0.00			477			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	0.00	505	0.455	233	0.9	13.345	B
C-AB	396	0.00	865	0.457	400	1.3	7.999	A
C-A	209	0.00			209			
A-B	39	0.00			39			
A-C	400	0.00			400			

2038 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		428.30	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-37	Stream B-AC	428.30	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	346	100.000
B		✓	646	100.000
C		✓	752	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	83	263
	B	328	0	318
	C	618	134	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	1	7
	B	0	0	0
	C	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.54	1153.41	172.0	F
C-AB	0.39	5.76	1.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	486	0.00	536	0.908	461	6.2	40.303	E
C-AB	198	0.00	947	0.210	197	0.5	4.962	A
C-A	368	0.00			368			
A-B	62	0.00			62			
A-C	198	0.00			198			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	581	0.00	505	1.150	496	27.4	143.731	F
C-AB	274	0.00	996	0.275	273	0.7	5.167	A
C-A	402	0.00			402			
A-B	75	0.00			75			
A-C	236	0.00			236			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	711	0.00	461	1.543	460	90.1	473.860	F
C-AB	411	0.00	1065	0.386	409	1.2	5.715	A
C-A	416	0.00			416			
A-B	91	0.00			91			
A-C	290	0.00			290			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	711	0.00	460	1.545	460	152.8	914.665	F
C-AB	413	0.00	1066	0.387	413	1.2	5.758	A
C-A	415	0.00			415			
A-B	91	0.00			91			
A-C	290	0.00			290			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	581	0.00	504	1.151	504	172.0	1153.408	F
C-AB	275	0.00	997	0.276	277	0.7	5.226	A
C-A	401	0.00			401			
A-B	75	0.00			75			
A-C	236	0.00			236			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	486	0.00	535	0.909	532	160.5	1125.196	F
C-AB	200	0.00	948	0.211	201	0.5	5.010	A
C-A	366	0.00			366			
A-B	62	0.00			62			
A-C	198	0.00			198			

2038 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		128.11	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-16	Stream B-AC	128.11	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	801	100.000
B		✓	273	100.000
C		✓	782	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	169	632
	B	118	0	155
	C	406	376	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.26	321.69	28.8	F
C-AB	1.11	204.22	53.0	F
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	206	0.00	432	0.476	202	0.9	15.444	C
C-AB	470	0.00	769	0.611	462	2.0	11.750	B
C-A	119	0.00			119			
A-B	127	0.00			127			
A-C	476	0.00			476			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	245	0.00	370	0.663	242	1.8	27.248	D
C-AB	637	0.00	787	0.809	625	5.1	22.103	C
C-A	66	0.00			66			
A-B	152	0.00			152			
A-C	568	0.00			568			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	301	0.00	273	1.100	258	12.6	130.737	F
C-AB	861	0.00	779	1.105	756	31.3	97.079	F
C-A	0	0.00			0			
A-B	186	0.00			186			
A-C	696	0.00			696			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	301	0.00	238	1.265	236	28.8	321.690	F
C-AB	861	0.00	780	1.104	774	53.0	204.223	F
C-A	0	0.00			0			
A-B	186	0.00			186			
A-C	696	0.00			696			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	245	0.00	313	0.784	302	14.6	260.133	F
C-AB	703	0.00	833	0.844	811	26.1	175.233	F
C-A	0	0.00			0			
A-B	152	0.00			152			
A-C	568	0.00			568			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	206	0.00	407	0.505	259	1.1	33.467	D
C-AB	511	0.00	806	0.634	606	2.5	28.512	D
C-A	78	0.00			78			
A-B	127	0.00			127			
A-C	476	0.00			476			

2028 | 2a WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		82.07	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-21	Stream B-AC	82.07	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	298	100.000
B		✓	513	100.000
C		✓	722	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	35	263
	B	225	0	288
	C	640	82	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	14
	B	0	0	0
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.13	243.49	40.2	F
C-AB	0.24	4.53	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	386	0.00	565	0.684	378	2.0	18.544	C
C-AB	123	0.00	964	0.128	122	0.3	4.445	A
C-A	420	0.00			420			
A-B	26	0.00			26			
A-C	198	0.00			198			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	461	0.00	539	0.856	451	4.7	36.866	E
C-AB	171	0.00	1016	0.168	170	0.4	4.435	A
C-A	478	0.00			478			
A-B	31	0.00			31			
A-C	236	0.00			236			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	565	0.00	501	1.127	489	23.6	123.835	F
C-AB	257	0.00	1089	0.236	256	0.7	4.511	A
C-A	538	0.00			538			
A-B	39	0.00			39			
A-C	290	0.00			290			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	565	0.00	501	1.127	498	40.2	243.494	F
C-AB	258	0.00	1090	0.237	258	0.7	4.527	A
C-A	537	0.00			537			
A-B	39	0.00			39			
A-C	290	0.00			290			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	461	0.00	539	0.856	526	24.1	223.307	F
C-AB	171	0.00	1017	0.169	172	0.4	4.456	A
C-A	478	0.00			478			
A-B	31	0.00			31			
A-C	236	0.00			236			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	386	0.00	565	0.684	473	2.4	63.201	F
C-AB	124	0.00	965	0.129	125	0.3	4.466	A
C-A	419	0.00			419			
A-B	26	0.00			26			
A-C	198	0.00			198			

2028 | 2a WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		4.72	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	14	Stream B-AC	4.72	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	664	100.000
B		✓	201	100.000
C		✓	481	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	117	547
	B	106	0	95
	C	320	161	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.56	20.55	1.2	C
C-AB	0.42	8.27	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	0.00	490	0.309	150	0.4	10.519	B
C-AB	179	0.00	748	0.239	177	0.4	6.393	A
C-A	183	0.00			183			
A-B	88	0.00			88			
A-C	412	0.00			412			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	181	0.00	451	0.400	180	0.7	13.214	B
C-AB	234	0.00	758	0.309	233	0.6	6.979	A
C-A	198	0.00			198			
A-B	105	0.00			105			
A-C	492	0.00			492			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	0.00	396	0.558	219	1.2	20.043	C
C-AB	327	0.00	774	0.422	325	1.1	8.185	A
C-A	203	0.00			203			
A-B	129	0.00			129			
A-C	602	0.00			602			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	221	0.00	396	0.559	221	1.2	20.550	C
C-AB	328	0.00	775	0.423	328	1.1	8.272	A
C-A	202	0.00			202			
A-B	129	0.00			129			
A-C	602	0.00			602			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	181	0.00	451	0.401	183	0.7	13.542	B
C-AB	235	0.00	759	0.309	237	0.7	7.080	A
C-A	198	0.00			198			
A-B	105	0.00			105			
A-C	492	0.00			492			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	151	0.00	490	0.309	152	0.5	10.704	B
C-AB	180	0.00	749	0.240	180	0.4	6.469	A
C-A	183	0.00			183			
A-B	88	0.00			88			
A-C	412	0.00			412			

2038 | 2a WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		163.77	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-28	Stream B-AC	163.77	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	361	100.000
B		✓	533	100.000
C		✓	756	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	47	314
	B	273	0	260
	C	684	72	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	2	6
	B	0	0	0
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.28	505.43	72.9	F
C-AB	0.22	4.37	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	401	0.00	534	0.752	390	2.7	23.581	C
C-AB	115	0.00	976	0.117	114	0.3	4.341	A
C-A	454	0.00			454			
A-B	35	0.00			35			
A-C	236	0.00			236			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	479	0.00	503	0.952	457	8.3	59.226	F
C-AB	161	0.00	1032	0.156	161	0.4	4.308	A
C-A	518	0.00			518			
A-B	42	0.00			42			
A-C	282	0.00			282			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	587	0.00	460	1.276	456	40.9	213.329	F
C-AB	248	0.00	1110	0.224	247	0.6	4.360	A
C-A	584	0.00			584			
A-B	52	0.00			52			
A-C	346	0.00			346			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	587	0.00	460	1.277	459	72.9	447.846	F
C-AB	249	0.00	1111	0.224	249	0.7	4.372	A
C-A	584	0.00			584			
A-B	52	0.00			52			
A-C	346	0.00			346			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	479	0.00	503	0.952	496	68.6	505.431	F
C-AB	162	0.00	1032	0.157	163	0.4	4.330	A
C-A	518	0.00			518			
A-B	42	0.00			42			
A-C	282	0.00			282			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	401	0.00	534	0.752	526	37.4	366.167	F
C-AB	115	0.00	977	0.118	116	0.3	4.362	A
C-A	454	0.00			454			
A-B	35	0.00			35			
A-C	236	0.00			236			

2038 | 2a WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		88.90	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-16	Stream B-AC	88.90	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	825	100.000
B		✓	278	100.000
C		✓	730	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	197	628
	B	132	0	146
	C	385	345	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.18	276.97	25.2	F
C-AB	1.03	129.44	31.0	F
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	0.00	428	0.489	206	0.9	15.919	C
C-AB	422	0.00	754	0.560	415	1.7	10.687	B
C-A	128	0.00			128			
A-B	148	0.00			148			
A-C	473	0.00			473			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	250	0.00	369	0.677	246	1.9	28.307	D
C-AB	569	0.00	769	0.740	561	3.6	17.505	C
C-A	87	0.00			87			
A-B	177	0.00			177			
A-C	565	0.00			565			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	306	0.00	279	1.095	264	12.6	127.612	F
C-AB	804	0.00	777	1.034	737	20.4	67.620	F
C-A	0	0.00			0			
A-B	217	0.00			217			
A-C	691	0.00			691			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	306	0.00	259	1.184	256	25.2	276.967	F
C-AB	804	0.00	779	1.032	762	31.0	129.436	F
C-A	0	0.00			0			
A-B	217	0.00			217			
A-C	691	0.00			691			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	250	0.00	338	0.739	325	6.3	185.303	F
C-AB	628	0.00	814	0.771	729	5.7	68.517	F
C-A	29	0.00			29			
A-B	177	0.00			177			
A-C	565	0.00			565			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	209	0.00	423	0.495	230	1.0	20.605	C
C-AB	430	0.00	762	0.565	446	1.8	12.313	B
C-A	119	0.00			119			
A-B	148	0.00			148			
A-C	473	0.00			473			

APPENDIX 54: Junction 9: A453/East Midlands Airport Roundabout Stage 1A/2A Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 250619 A453_EMA Roundabout ARCADY Model (Lane Sim)_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\9. A453_EMA Roundabout
Report generation date: 20/06/2025 16:11:17

»2022 | Base Flows | AM
»2022 | Base Flows | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
[Lane Simulation] - 2022 - Base Flows																
Arm 1	D1	0.2	4.22	0.14	A	7.50	A	%	D2	0.4	4.72	0.25	A	5.45	A	%
Arm 2		1.1	4.95	0.35	A					1.0	4.78	0.32	A			
Arm 3		2.0	11.14	0.58	B			[ ]		0.9	6.98	0.33	A			[ ]
[Lane Simulation] - 2028 - 2a WD Flows																
Arm 1	D11	0.2	4.82	0.12	A	34.74	D	%	D12	1.2	5.05	0.35	A	6.80	A	%
Arm 2		1.0	5.44	0.33	A					1.4	6.02	0.39	A			
Arm 3		16.7	57.19	0.95	F			[ ]		1.1	9.46	0.52	A			[ ]
[Lane Simulation] - 2028 - WD Flows																
Arm 1	D5	0.3	4.77	0.13	A	50.75	F	%	D6	0.6	4.90	0.35	A	6.29	A	%
Arm 2		1.0	5.54	0.31	A					1.4	5.97	0.40	A			
Arm 3		25.9	84.01	0.99	F			[ ]		1.2	8.31	0.45	A			[ ]
[Lane Simulation] - 2028 - WoD Flows																
Arm 1	D3	0.2	4.69	0.12	A	19.78	C	%	D4	0.7	5.00	0.35	A	7.17	A	%
Arm 2		1.0	5.41	0.34	A					1.3	6.27	0.35	A			
Arm 3		8.0	32.18	0.89	D			[ ]		1.5	10.47	0.51	B			[ ]
[Lane Simulation] - 2038 - 2a WD Flows																
Arm 1	D13	0.3	4.79	0.15	A	118.62	F	%	D14	1.0	6.34	0.44	A	11.70	B	%
Arm 2		0.9	5.18	0.33	A					1.4	6.43	0.43	A			
Arm 3		69.9	196.36	1.12	F			[ ]		4.7	19.71	0.79	C			[ ]
[Lane Simulation] - 2038 - WD Flows																
Arm 1	D9	0.4	4.84	0.17	A	135.07	F	%	D10	1.0	6.50	0.46	A	13.62	B	%
Arm 2		0.8	5.28	0.33	A					1.6	6.60	0.45	A			
Arm 3		74.3	229.49	1.15	F			[ ]		6.1	23.86	0.84	C			[ ]
[Lane Simulation] - 2038 - WoD Flows																
Arm 1	D7	0.4	4.85	0.16	A	95.46	F	%	D8	1.1	6.34	0.44	A	14.10	B	%
Arm 2		1.1	5.47	0.35	A					1.6	6.23	0.42	A			
Arm 3		56.3	166.82	1.11	F			[ ]		6.3	24.50	0.84	C			[ ]

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

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

File summary

File Description

Title	East Midlands Gateway Phase 2
Location	A453/EMA Roundabout
Site number	
Date	24/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			298314417	52

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2022 | Base Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	7.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.50	A

Arms

Arms

Arm	Name	Description	No give-way line
1	EMA Access		
2	A453 (E)		
3	A453 (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	6.13	8.46	8.0	20.5	50.0	21.0		
2	3.77	8.05	49.0	13.3	50.0	35.0		
3	3.89	6.48	6.5	24.5	50.0	27.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.730	2295
2	0.666	2065
3	0.586	1553

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	50.00
3	Evenly split	50.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2	✓	3.00			0	99999	
			2	1, 3	✓	3.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					
2	Entry	1	1	3	✓	11.00			0	99999	
			2	1, 2, (3)	✓	11.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					
3	Entry	1	1	1, 2	✓	14.00			0	99999	
			2	(2), 3	✓	14.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.365	1147
			2	0.365	1147
2	Entry	1	1	0.333	1033
			2	0.333	1033
3	Entry	1	1	0.293	777
			2	0.293	777

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm		
			1	2	3
1	1	1		✓	
		2	✓		✓
	2	1	✓	✓	✓
2	1	1			✓
		2	✓	✓	
	2	1	✓	✓	✓
3	1	1	✓	✓	
		2			✓
	2	1	✓	✓	✓

Summary of Entry Lane allowed secondary movements

Arm	Lane Level	Lane	Destination arm		
			1	2	3
1	1	1			
		2			
	2	1			
2	1	1			
		2			✓
	2	1			
3	1	1			
		2		✓	
	2	1			

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	153	100.000
2		ONE HOUR	✓	631	100.000
3		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	114	39
	2	241	0	390
	3	129	460	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.14	4.22	0.2	A	145	217
2	0.35	4.95	1.1	A	583	874
3	0.58	11.14	2.0	B	539	809

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	123	31	327	1335	0.092	123	119	282	0.0	0.2	3.849	A
2	488	122	33	2041	0.239	486	479	417	0.0	0.6	4.279	A
3	423	106	185	1180	0.359	424	431	334	0.0	1.0	7.454	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	135	34	413	1324	0.102	135	140	328	0.2	0.1	3.763	A
2	556	139	35	2051	0.271	558	572	514	0.6	0.7	4.384	A
3	534	133	209	1197	0.446	532	525	384	1.0	1.2	8.714	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	168	42	506	1283	0.131	168	172	425	0.1	0.1	4.225	A
2	713	178	44	2032	0.351	716	711	630	0.7	0.8	4.903	A
3	655	164	279	1139	0.575	651	650	480	1.2	2.0	11.138	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	181	45	511	1277	0.142	182	179	426	0.1	0.2	4.203	A
2	698	174	47	2032	0.344	700	707	646	0.8	1.1	4.949	A
3	658	164	277	1165	0.565	660	665	470	2.0	1.6	10.164	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	143	36	413	1307	0.110	143	147	329	0.2	0.2	3.860	A
2	552	138	36	1980	0.279	553	569	520	1.1	0.7	4.535	A
3	530	132	214	1127	0.470	528	537	376	1.6	1.8	8.937	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	118	29	333	1337	0.088	118	121	280	0.2	0.1	3.808	A
2	489	122	30	2091	0.234	489	495	421	0.7	0.6	4.387	A
3	435	109	182	1152	0.378	432	449	337	1.8	0.9	7.415	A

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	90	1028	0.088	90	90	0.0	0.1	3.910	A
			2	1, 3	33	1028	0.033	33	30	0.0	0.1	3.661	A
		2	1	(1, 2, 3)	123			123	120	0.0	0.0	0.001	A
	Exit	1	1		282			282	281	0.0	0.0	0.000	A
2	Entry	1	1	3	233	1022	0.228	232	224	0.0	0.2	4.301	A
			2	1, 2, (3)	255	1022	0.249	254	255	0.0	0.3	4.260	A
		2	1	(1, 2, 3)	488			488	482	0.0	0.0	0.000	A
	Exit	1	1		417			417	424	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	314	722	0.434	313	317	0.0	0.9	8.146	A
			2	(2), 3	109	722	0.151	111	114	0.0	0.1	5.523	A
		2	1	(1, 2, 3)	423			423	435	0.0	0.0	0.000	A
	Exit	1	1		334			334	324	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	100	997	0.100	101	104	0.1	0.1	3.784	A
			2	1, 3	35	997	0.035	35	37	0.1	0.0	3.700	A
		2	1	(1, 2, 3)	135			135	140	0.0	0.0	0.001	A
	Exit	1	1		328			328	339	0.0	0.0	0.000	A
2	Entry	1	1	3	267	1021	0.261	268	268	0.2	0.4	4.251	A
			2	1, 2, (3)	290	1021	0.284	291	304	0.3	0.3	4.502	A
		2	1	(1, 2, 3)	556			556	573	0.0	0.0	0.000	A
	Exit	1	1		514			514	512	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	395	715	0.552	394	384	0.9	1.0	9.746	A
			2	(2), 3	139	715	0.194	138	141	0.1	0.2	5.913	A
		2	1	(1, 2, 3)	534			534	526	0.0	0.0	0.000	A
	Exit	1	1		384			384	386	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	124	963	0.129	124	128	0.1	0.1	4.313	A
			2	1, 3	45	963	0.046	44	43	0.0	0.0	3.950	A
		2	1	(1, 2, 3)	168			168	172	0.0	0.0	0.003	A
	Exit	1	1		425			425	417	0.0	0.0	0.000	A
2	Entry	1	1	3	333	1018	0.327	333	331	0.4	0.4	4.717	A
			2	1, 2, (3)	379	1018	0.373	382	380	0.3	0.4	5.064	A
		2	1	(1, 2, 3)	713			713	712	0.0	0.0	0.000	A
	Exit	1	1		630			630	634	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	466	695	0.671	462	461	1.0	1.8	13.020	B
			2	(2), 3	189	695	0.272	189	189	0.2	0.2	6.533	A
		2	1	(1, 2, 3)	655			655	653	0.0	0.0	0.000	A
	Exit	1	1		480			480	481	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	134	961	0.140	135	135	0.1	0.1	4.325	A
			2	1, 3	46	961	0.048	47	44	0.0	0.0	3.820	A
		2	1	(1, 2, 3)	181			181	179	0.0	0.0	0.002	A
	Exit	1	1		426			426	421	0.0	0.0	0.000	A
2	Entry	1	1	3	321	1017	0.316	321	328	0.4	0.5	4.875	A
			2	1, 2, (3)	377	1017	0.370	379	379	0.4	0.5	5.013	A
		2	1	(1, 2, 3)	698			698	708	0.0	0.0	0.000	A
	Exit	1	1		646			646	654	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	470	695	0.676	474	474	1.8	1.2	11.562	B
			2	(2), 3	188	695	0.270	186	191	0.2	0.4	6.730	A
		2	1	(1, 2, 3)	658			658	663	0.0	0.0	0.000	A
	Exit	1	1		470			470	476	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	108	997	0.108	107	111	0.1	0.2	3.863	A
			2	1, 3	36	997	0.036	36	36	0.0	0.0	3.841	A
		2	1	(1, 2, 3)	143			143	147	0.0	0.0	0.002	A
	Exit	1	1		329			329	337	0.0	0.0	0.000	A
2	Entry	1	1	3	256	1021	0.251	257	265	0.5	0.4	4.502	A
			2	1, 2, (3)	296	1021	0.290	297	304	0.5	0.3	4.565	A
		2	1	(1, 2, 3)	552			552	567	0.0	0.0	0.000	A
	Exit	1	1		520			520	529	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	387	714	0.542	386	389	1.2	1.5	10.054	B
			2	(2), 3	143	714	0.200	142	148	0.4	0.3	5.970	A
		2	1	(1, 2, 3)	530			530	537	0.0	0.0	0.000	A
	Exit	1	1		376			376	387	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	88	1026	0.086	88	89	0.2	0.1	3.900	A
			2	1, 3	30	1026	0.029	30	32	0.0	0.0	3.546	A
		2	1	(1, 2, 3)	118			118	120	0.0	0.0	0.001	A
	Exit	1	1		280			280	282	0.0	0.0	0.000	A
2	Entry	1	1	3	235	1023	0.230	234	235	0.4	0.3	4.199	A
			2	1, 2, (3)	254	1023	0.248	255	260	0.3	0.3	4.556	A
		2	1	(1, 2, 3)	489			489	494	0.0	0.0	0.000	A
	Exit	1	1		421			421	441	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	325	723	0.449	323	334	1.5	0.7	8.085	A
			2	(2), 3	110	723	0.153	109	115	0.3	0.2	5.486	A
		2	1	(1, 2, 3)	435			435	445	0.0	0.0	0.000	A
	Exit	1	1		337			337	341	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	90	23	1147	1027	0.088	90	90	0.0	0.1	3.910	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	33	8	1147	1028	0.033	33	30	0.0	0.1	3.661	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	90	23	-	-	-	90	90	0.0	0.0	0.001	A
				3	33	8	-	-	-	33	30	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	233	58	1033	1022	0.228	232	224	0.0	0.2	4.301	A
			2	1	186	46	1033	1022	0.182	185	185	0.0	0.3	4.463	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1033	1021	0.068	69	70	0.0	0.1	3.723	A
		2	1	1	186	46	-	-	-	186	186	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	302	76	-	-	-	302	295	0.0	0.0	0.000	A
3	Entry	1	1	1	97	24	777	721	0.134	97	96	0.0	0.2	8.853	A
				2	217	54	777	722	0.300	216	221	0.0	0.7	7.839	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	109	27	777	720	0.152	111	114	0.0	0.1	5.523	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	97	24	-	-	-	97	97	0.0	0.0	0.000	A
				2	326	82	-	-	-	326	338	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	1147	999	0.100	101	104	0.1	0.1	3.784	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	1147	994	0.035	35	37	0.1	0.0	3.700	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	-	-	-	100	104	0.0	0.0	0.001	A
				3	35	9	-	-	-	35	36	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	267	67	1033	1021	0.261	268	268	0.2	0.4	4.251	A
			2	1	208	52	1033	1021	0.204	209	222	0.3	0.2	4.790	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	81	20	1033	1022	0.080	82	82	0.1	0.1	3.722	A
		2	1	1	208	52	-	-	-	208	222	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	348	87	-	-	-	348	350	0.0	0.0	0.000	A
3	Entry	1	1	1	121	30	777	715	0.169	119	117	0.2	0.4	10.564	B
				2	274	68	777	716	0.382	275	267	0.7	0.6	9.387	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	139	35	777	715	0.194	138	141	0.1	0.2	5.913	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	121	30	-	-	-	121	117	0.0	0.0	0.000	A
				2	412	103	-	-	-	412	409	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	1147	962	0.129	124	128	0.1	0.1	4.313	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	1147	964	0.046	44	43	0.0	0.0	3.950	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	-	-	-	124	129	0.0	0.0	0.005	A
				3	45	11	-	-	-	45	43	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	333	83	1033	1018	0.327	333	331	0.4	0.4	4.717	A
			2	1	278	69	1033	1018	0.273	279	273	0.2	0.3	5.452	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	102	25	1033	1018	0.100	103	107	0.1	0.1	4.071	A
		2	1	1	278	69	-	-	-	278	273	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	435	109	-	-	-	435	438	0.0	0.0	0.000	A
3	Entry	1	1	1	146	37	777	694	0.210	145	144	0.4	0.6	14.149	B
				2	320	80	777	695	0.461	317	316	0.6	1.2	12.504	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	777	695	0.272	189	189	0.2	0.2	6.533	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	146	37	-	-	-	146	145	0.0	0.0	0.000	A
				2	509	127	-	-	-	509	508	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	1147	960	0.140	135	135	0.1	0.1	4.325	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	1147	960	0.048	47	44	0.0	0.0	3.820	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	-	-	-	134	135	0.0	0.0	0.003	A
				3	46	12	-	-	-	46	44	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	321	80	1033	1017	0.316	321	328	0.4	0.5	4.875	A
			2	1	274	69	1033	1017	0.270	277	275	0.3	0.4	5.372	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	102	26	1033	1018	0.100	102	105	0.1	0.1	4.071	A
		2	1	1	274	69	-	-	-	274	275	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	423	106	-	-	-	423	433	0.0	0.0	0.000	A
3	Entry	1	1	1	148	37	777	696	0.213	149	146	0.6	0.4	11.886	B
				2	322	80	777	696	0.462	324	328	1.2	0.8	11.418	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	188	47	777	696	0.270	186	191	0.2	0.4	6.730	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	148	37	-	-	-	148	145	0.0	0.0	0.000	A
				2	510	127	-	-	-	510	518	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	108	27	1147	996	0.108	107	111	0.1	0.2	3.863	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	36	9	1147	998	0.036	36	36	0.0	0.0	3.841	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	108	27	-	-	-	108	111	0.0	0.0	0.003	A
				3	36	9	-	-	-	36	36	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	256	64	1033	1021	0.251	257	265	0.5	0.4	4.502	A
			2	1	213	53	1033	1021	0.208	214	218	0.4	0.2	4.856	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1033	1021	0.082	83	86	0.1	0.1	3.832	A
		2	1	1	213	53	-	-	-	213	217	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	340	85	-	-	-	340	350	0.0	0.0	0.000	A
3	Entry	1	1	1	113	28	777	713	0.159	115	119	0.4	0.4	10.744	B
				2	274	68	777	714	0.384	271	270	0.8	1.1	9.751	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	777	714	0.200	142	148	0.4	0.3	5.970	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	113	28	-	-	-	113	119	0.0	0.0	0.000	A
				2	417	104	-	-	-	417	418	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	1147	1025	0.086	88	89	0.2	0.1	3.900	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	1147	1026	0.029	30	32	0.0	0.0	3.546	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	-	-	-	88	89	0.0	0.0	0.002	A
				3	30	8	-	-	-	30	32	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	235	59	1033	1023	0.230	234	235	0.4	0.3	4.199	A
			2	1	181	45	1033	1023	0.177	182	185	0.2	0.2	4.806	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	1022	0.071	73	75	0.1	0.1	3.940	A
		2	1	1	181	45	-	-	-	181	185	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	307	77	-	-	-	307	309	0.0	0.0	0.000	A
3	Entry	1	1	1	99	25	777	723	0.137	99	97	0.4	0.2	8.644	A
				2	226	56	777	723	0.312	224	237	1.1	0.5	7.856	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	110	28	777	723	0.153	109	115	0.3	0.2	5.486	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	99	25	-	-	-	99	96	0.0	0.0	0.000	A
				2	336	84	-	-	-	336	349	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2022 | Base Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	5.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.45	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	289	100.000
2		ONE HOUR	✓	576	100.000
3		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	224	65
	2	133	0	443
	3	41	347	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	0	0	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.25	4.72	0.4	A	263	395
2	0.32	4.78	1.0	A	523	785
3	0.33	6.98	0.9	A	353	529

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	217	54	266	1316	0.165	216	218	126	0.0	0.1	3.887	A
2	421	105	48	1993	0.211	421	435	435	0.0	0.5	4.246	A
3	296	74	94	1284	0.231	299	285	375	0.0	0.4	5.954	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	252	63	298	1326	0.190	252	260	163	0.1	0.3	4.086	A
2	528	132	48	2055	0.257	529	525	502	0.5	0.7	4.360	A
3	336	84	123	1315	0.256	337	349	454	0.4	0.6	6.092	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	325	81	368	1278	0.255	326	335	194	0.3	0.4	4.616	A
2	624	156	69	1978	0.316	629	648	625	0.7	0.8	4.780	A
3	410	102	153	1263	0.325	409	426	545	0.6	0.9	6.809	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	312	78	379	1241	0.251	314	324	185	0.4	0.4	4.722	A
2	621	155	70	1950	0.318	619	638	623	0.8	1.0	4.696	A
3	421	105	139	1294	0.325	425	429	550	0.9	0.5	6.981	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	251	63	315	1313	0.191	249	262	169	0.4	0.4	4.317	A
2	538	134	52	2020	0.266	539	533	512	1.0	0.5	4.397	A
3	355	89	129	1285	0.276	355	363	462	0.5	0.6	6.240	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	222	55	266	1364	0.162	222	225	125	0.4	0.2	3.977	A
2	407	102	50	1980	0.205	405	434	439	0.5	0.6	4.183	A
3	298	75	97	1303	0.229	294	304	358	0.6	0.6	6.050	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	169	1050	0.161	168	173	0.0	0.1	3.999	A
			2	1, 3	48	1050	0.045	48	46	0.0	0.0	3.421	A
		2	1	(1, 2, 3)	217			217	219	0.0	0.0	0.009	A
	Exit	1	1		126			126	126	0.0	0.0	0.000	A
2	Entry	1	1	3	232	1017	0.228	232	250	0.0	0.3	4.394	A
			2	1, 2, (3)	189	1017	0.185	189	185	0.0	0.2	4.045	A
		2	1	(1, 2, 3)	421			421	437	0.0	0.0	0.000	A
	Exit	1	1		435			435	428	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	217	749	0.290	219	210	0.0	0.3	6.284	A
			2	(2), 3	79	749	0.105	79	75	0.0	0.1	5.033	A
		2	1	(1, 2, 3)	296			296	287	0.0	0.0	0.000	A
	Exit	1	1		375			375	385	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	204	1039	0.197	204	204	0.1	0.3	4.156	A
			2	1, 3	48	1039	0.046	48	56	0.0	0.0	3.719	A
		2	1	(1, 2, 3)	252			252	261	0.0	0.0	0.025	A
	Exit	1	1		163			163	160	0.0	0.0	0.000	A
2	Entry	1	1	3	300	1017	0.295	300	295	0.3	0.4	4.585	A
			2	1, 2, (3)	229	1017	0.225	229	231	0.2	0.2	4.072	A
		2	1	(1, 2, 3)	528			528	526	0.0	0.0	0.000	A
	Exit	1	1		502			502	514	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	245	740	0.331	247	253	0.3	0.4	6.492	A
			2	(2), 3	91	740	0.123	91	96	0.1	0.1	5.035	A
		2	1	(1, 2, 3)	336			336	349	0.0	0.0	0.000	A
	Exit	1	1		454			454	459	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	256	1013	0.252	257	262	0.3	0.3	4.727	A
			2	1, 3	70	1013	0.069	69	73	0.0	0.1	3.863	A
		2	1	(1, 2, 3)	325			325	335	0.0	0.0	0.078	A
	Exit	1	1		194			194	197	0.0	0.0	0.000	A
2	Entry	1	1	3	349	1010	0.346	353	360	0.4	0.4	4.980	A
			2	1, 2, (3)	275	1010	0.272	276	288	0.2	0.4	4.530	A
		2	1	(1, 2, 3)	624			624	648	0.0	0.0	0.000	A
	Exit	1	1		625			625	643	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	296	732	0.404	295	306	0.4	0.8	7.371	A
			2	(2), 3	114	732	0.156	114	119	0.1	0.1	5.357	A
		2	1	(1, 2, 3)	410			410	427	0.0	0.0	0.000	A
	Exit	1	1		545			545	568	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	243	1009	0.241	244	253	0.3	0.3	4.784	A
			2	1, 3	69	1009	0.069	70	72	0.1	0.0	4.146	A
		2	1	(1, 2, 3)	312			312	324	0.0	0.0	0.077	A
	Exit	1	1		185			185	192	0.0	0.0	0.000	A
2	Entry	1	1	3	348	1010	0.344	345	354	0.4	0.7	4.832	A
			2	1, 2, (3)	273	1010	0.270	275	283	0.4	0.3	4.524	A
		2	1	(1, 2, 3)	621			621	638	0.0	0.0	0.000	A
	Exit	1	1		623			623	635	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	299	736	0.406	304	305	0.8	0.4	7.703	A
			2	(2), 3	122	736	0.165	121	124	0.1	0.1	5.221	A
		2	1	(1, 2, 3)	421			421	427	0.0	0.0	0.000	A
	Exit	1	1		550			550	564	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	199	1032	0.193	197	203	0.3	0.4	4.434	A
			2	1, 3	52	1032	0.050	52	59	0.0	0.0	3.753	A
		2	1	(1, 2, 3)	251			251	262	0.0	0.0	0.038	A
	Exit	1	1		169			169	162	0.0	0.0	0.000	A
2	Entry	1	1	3	301	1015	0.297	300	303	0.7	0.3	4.558	A
			2	1, 2, (3)	236	1015	0.233	239	230	0.3	0.1	4.186	A
		2	1	(1, 2, 3)	538			538	531	0.0	0.0	0.000	A
	Exit	1	1		512			512	526	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	254	739	0.343	253	262	0.4	0.5	6.656	A
			2	(2), 3	101	739	0.137	102	101	0.1	0.1	5.153	A
		2	1	(1, 2, 3)	355			355	363	0.0	0.0	0.000	A
	Exit	1	1		462			462	470	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	172	1050	0.164	172	176	0.4	0.1	4.011	A
			2	1, 3	50	1050	0.047	50	49	0.0	0.0	3.779	A
		2	1	(1, 2, 3)	222			222	224	0.0	0.0	0.017	A
	Exit	1	1		125			125	132	0.0	0.0	0.000	A
2	Entry	1	1	3	228	1016	0.224	227	242	0.3	0.5	4.441	A
			2	1, 2, (3)	179	1016	0.176	178	191	0.1	0.1	3.856	A
		2	1	(1, 2, 3)	407			407	434	0.0	0.0	0.000	A
	Exit	1	1		439			439	448	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	217	748	0.290	214	224	0.5	0.6	6.394	A
			2	(2), 3	81	748	0.108	80	80	0.1	0.1	5.083	A
		2	1	(1, 2, 3)	298			298	304	0.0	0.0	0.000	A
	Exit	1	1		358			358	383	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	169	42	1147	1050	0.161	168	173	0.0	0.1	3.999	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	48	12	1147	1053	0.045	48	46	0.0	0.0	3.421	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	169	42	-	-	-	169	173	0.0	0.0	0.011	A
				3	48	12	-	-	-	48	46	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	1033	1017	0.228	232	250	0.0	0.3	4.394	A
			2	1	93	23	1033	1017	0.091	94	96	0.0	0.1	4.316	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	96	24	1033	1017	0.094	95	89	0.0	0.1	3.752	A
		2	1	1	93	23	-	-	-	93	97	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	-	-	-	328	340	0.0	0.0	0.000	A
3	Entry	1	1	1	31	8	777	747	0.041	32	30	0.0	0.0	6.966	A
				2	186	47	777	750	0.249	187	180	0.0	0.3	6.171	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	777	748	0.105	79	75	0.0	0.1	5.033	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	31	8	-	-	-	31	30	0.0	0.0	0.000	A
				2	265	66	-	-	-	265	257	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	204	51	1147	1041	0.197	204	204	0.1	0.3	4.156	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	48	12	1147	1038	0.046	48	56	0.0	0.0	3.719	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	204	51	-	-	-	204	204	0.0	0.0	0.032	A
				3	48	12	-	-	-	48	56	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	1033	1016	0.295	300	295	0.3	0.4	4.585	A
			2	1	123	31	1033	1016	0.121	123	122	0.1	0.1	4.339	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	106	26	1033	1016	0.104	106	108	0.1	0.1	3.770	A
		2	1	1	123	31	-	-	-	123	122	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	405	101	-	-	-	405	404	0.0	0.0	0.000	A
3	Entry	1	1	1	39	10	777	740	0.053	40	38	0.0	0.1	6.253	A
				2	206	51	777	740	0.278	207	215	0.3	0.3	6.535	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	91	23	777	740	0.123	91	96	0.1	0.1	5.035	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	39	10	-	-	-	39	38	0.0	0.0	0.000	A
				2	297	74	-	-	-	297	311	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	256	64	1147	1012	0.253	257	262	0.3	0.3	4.727	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	17	1147	1012	0.069	69	73	0.0	0.1	3.863	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	256	64	-	-	-	256	262	0.0	0.0	0.088	A
				3	70	17	-	-	-	70	74	0.0	0.0	0.046	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	349	87	1033	1010	0.346	353	360	0.4	0.4	4.980	A
			2	1	151	38	1033	1010	0.149	153	153	0.1	0.2	4.947	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	124	31	1033	1009	0.123	124	135	0.1	0.2	4.055	A
		2	1	1	151	38	-	-	-	151	153	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	474	118	-	-	-	474	495	0.0	0.0	0.000	A
3	Entry	1	1	1	42	10	777	734	0.057	41	44	0.1	0.1	7.965	A
				2	254	63	777	732	0.347	254	262	0.3	0.7	7.271	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	777	732	0.156	114	119	0.1	0.1	5.357	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	42	10	-	-	-	42	44	0.0	0.0	0.000	A
				2	368	92	-	-	-	368	383	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	243	61	1147	1009	0.241	244	253	0.3	0.3	4.784	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1147	1012	0.068	70	72	0.1	0.0	4.146	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	242	61	-	-	-	243	253	0.0	0.0	0.095	A
				3	69	17	-	-	-	69	72	0.0	0.0	0.014	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	348	87	1033	1010	0.344	345	354	0.4	0.7	4.832	A
			2	1	138	35	1033	1010	0.137	139	145	0.2	0.2	4.923	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	135	34	1033	1009	0.133	135	138	0.2	0.1	4.102	A
		2	1	1	138	35	-	-	-	138	145	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	482	121	-	-	-	482	493	0.0	0.0	0.000	A
3	Entry	1	1	1	46	11	777	734	0.062	46	47	0.1	0.1	8.910	A
				2	253	63	777	736	0.344	258	258	0.7	0.3	7.484	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	122	30	777	735	0.166	121	124	0.1	0.1	5.221	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	46	11	-	-	-	46	47	0.0	0.0	0.000	A
				2	375	94	-	-	-	375	380	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	199	50	1147	1032	0.193	197	203	0.3	0.4	4.434	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	52	13	1147	1030	0.050	52	59	0.0	0.0	3.753	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	199	50	-	-	-	199	203	0.0	0.0	0.042	A
				3	52	13	-	-	-	52	59	0.0	0.0	0.027	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	301	75	1033	1015	0.297	300	303	0.7	0.3	4.558	A
			2	1	128	32	1033	1016	0.126	129	122	0.2	0.1	4.406	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	108	27	1033	1016	0.107	109	108	0.1	0.1	3.937	A
		2	1	1	128	32	-	-	-	128	121	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	410	102	-	-	-	410	410	0.0	0.0	0.000	A
3	Entry	1	1	1	40	10	777	739	0.055	40	40	0.1	0.1	6.847	A
				2	213	53	777	740	0.288	213	223	0.3	0.4	6.622	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	101	25	777	739	0.137	102	101	0.1	0.1	5.153	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	40	10	-	-	-	40	40	0.0	0.0	0.000	A
				2	314	79	-	-	-	314	324	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	172	43	1147	1049	0.164	172	176	0.4	0.1	4.011	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	12	1147	1050	0.047	50	49	0.0	0.0	3.779	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	172	43	-	-	-	172	175	0.0	0.0	0.021	A
				3	50	12	-	-	-	50	49	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	228	57	1033	1016	0.224	227	242	0.3	0.5	4.441	A
			2	1	97	24	1033	1016	0.096	97	99	0.1	0.1	4.032	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	20	1033	1016	0.080	82	92	0.1	0.0	3.665	A
		2	1	1	97	24	-	-	-	97	100	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	309	77	-	-	-	309	335	0.0	0.0	0.000	A
3	Entry	1	1	1	28	7	777	748	0.038	28	33	0.1	0.1	6.796	A
				2	189	47	777	748	0.253	186	191	0.4	0.5	6.325	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	777	746	0.108	80	80	0.1	0.1	5.083	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	28	7	-	-	-	28	33	0.0	0.0	0.000	A
				2	270	67	-	-	-	270	271	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	19.78	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	19.78	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	144	100.000
2		ONE HOUR	✓	581	100.000
3		ONE HOUR	✓	847	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	60	84
	2	266	0	315
	3	255	592	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	10	4
	2	1	0	15
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.12	4.69	0.2	A	130	196
2	0.34	5.41	1.0	A	533	799
3	0.89	32.18	8.0	D	777	1165

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	106	26	447	1456	0.073	106	111	388	0.0	0.1	4.025	A
2	433	108	61	1938	0.223	430	437	492	0.0	0.8	4.663	A
3	635	159	200	1087	0.584	635	629	291	0.0	1.8	10.285	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	537	1388	0.093	129	137	476	0.1	0.2	4.401	A
2	536	134	75	1844	0.290	535	541	592	0.8	0.9	5.023	A
3	778	194	242	1073	0.725	771	763	368	1.8	3.6	14.422	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	155	39	642	1330	0.116	156	163	563	0.2	0.2	4.694	A
2	635	159	92	1878	0.338	637	644	707	0.9	0.9	5.412	A
3	915	229	291	1029	0.889	913	920	437	3.6	8.0	29.021	D

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	159	40	665	1308	0.121	159	164	564	0.2	0.1	4.601	A
2	631	158	92	1915	0.329	630	640	732	0.9	1.0	5.403	A
3	932	233	288	1082	0.861	940	935	434	8.0	7.5	32.177	D

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	126	32	545	1404	0.090	126	137	470	0.1	0.2	4.502	A
2	516	129	74	1971	0.262	516	528	598	1.0	0.8	5.060	A
3	774	194	241	1057	0.732	775	787	348	7.5	3.2	17.742	C

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	443	1454	0.075	109	115	389	0.2	0.1	4.469	A
2	445	111	62	1969	0.226	446	446	490	0.8	0.6	4.864	A
3	626	156	203	1091	0.573	628	650	304	3.2	1.8	11.097	B

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	45	984	0.045	44	47	0.0	0.1	4.168	A
			2	1, 3	61	984	0.062	61	64	0.0	0.1	3.924	A
		2	1	(1, 2, 3)	106			106	111	0.0	0.0	0.000	A
	Exit	1	1		388			388	387	0.0	0.0	0.000	A
2	Entry	1	1	3	181	1012	0.179	180	184	0.0	0.3	4.631	A
			2	1, 2, (3)	251	1012	0.248	250	253	0.0	0.4	4.684	A
		2	1	(1, 2, 3)	433			433	440	0.0	0.0	0.000	A
	Exit	1	1		492			492	489	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	469	718	0.654	471	464	0.0	1.5	11.765	B
			2	(2), 3	165	718	0.230	164	165	0.0	0.3	6.109	A
		2	1	(1, 2, 3)	635			635	637	0.0	0.0	0.001	A
	Exit	1	1		291			291	301	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	54	951	0.057	54	58	0.1	0.0	4.299	A
			2	1, 3	75	951	0.079	75	79	0.1	0.1	4.420	A
		2	1	(1, 2, 3)	129			129	137	0.0	0.0	0.031	A
	Exit	1	1		476			476	478	0.0	0.0	0.000	A
2	Entry	1	1	3	225	1008	0.223	224	227	0.3	0.4	4.967	A
			2	1, 2, (3)	310	1008	0.308	311	314	0.4	0.5	5.059	A
		2	1	(1, 2, 3)	536			536	542	0.0	0.0	0.000	A
	Exit	1	1		592			592	590	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	555	706	0.787	550	545	1.5	3.1	17.378	C
			2	(2), 3	222	706	0.315	221	218	0.3	0.5	6.899	A
		2	1	(1, 2, 3)	778			777	770	0.0	0.0	0.012	A
	Exit	1	1		368			368	374	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	65	913	0.071	65	67	0.0	0.1	4.737	A
			2	1, 3	90	913	0.098	92	96	0.1	0.1	4.626	A
		2	1	(1, 2, 3)	155			155	163	0.0	0.0	0.024	A
	Exit	1	1		563			563	574	0.0	0.0	0.000	A
2	Entry	1	1	3	269	1002	0.268	271	270	0.4	0.4	5.237	A
			2	1, 2, (3)	366	1002	0.366	366	374	0.5	0.6	5.526	A
		2	1	(1, 2, 3)	635			635	645	0.0	0.0	0.000	A
	Exit	1	1		707			707	709	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	629	691	0.910	626	626	3.1	5.9	33.036	D
			2	(2), 3	283	691	0.410	287	293	0.5	0.6	8.957	A
		2	1	(1, 2, 3)	915			912	931	0.0	1.4	3.402	A
	Exit	1	1		437			437	444	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	67	905	0.074	67	68	0.1	0.1	4.627	A
			2	1, 3	92	905	0.101	92	96	0.1	0.1	4.563	A
		2	1	(1, 2, 3)	159			159	164	0.0	0.0	0.013	A
	Exit	1	1		564			564	575	0.0	0.0	0.000	A
2	Entry	1	1	3	265	1002	0.264	266	270	0.4	0.3	5.421	A
			2	1, 2, (3)	366	1002	0.366	364	370	0.6	0.7	5.391	A
		2	1	(1, 2, 3)	631			631	640	0.0	0.0	0.000	A
	Exit	1	1		732			732	720	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	637	692	0.920	639	635	5.9	6.2	36.386	E
			2	(2), 3	299	692	0.433	301	300	0.6	0.6	9.883	A
		2	1	(1, 2, 3)	932			936	936	1.4	0.7	4.380	A
	Exit	1	1		434			434	443	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	52	948	0.055	52	57	0.1	0.1	4.798	A
			2	1, 3	74	948	0.078	74	80	0.1	0.1	4.262	A
		2	1	(1, 2, 3)	126			126	137	0.0	0.0	0.024	A
	Exit	1	1		470			470	484	0.0	0.0	0.000	A
2	Entry	1	1	3	211	1008	0.209	210	218	0.3	0.3	4.850	A
			2	1, 2, (3)	306	1008	0.303	306	310	0.7	0.5	5.194	A
		2	1	(1, 2, 3)	516			516	527	0.0	0.0	0.000	A
	Exit	1	1		598			598	606	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	552	706	0.782	554	563	6.2	2.8	21.466	C
			2	(2), 3	223	706	0.315	222	224	0.6	0.5	7.135	A
		2	1	(1, 2, 3)	774			775	773	0.7	0.0	0.541	A
	Exit	1	1		348			348	363	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	47	986	0.048	47	49	0.1	0.0	4.476	A
			2	1, 3	62	986	0.062	62	66	0.1	0.1	4.454	A
		2	1	(1, 2, 3)	109			109	115	0.0	0.0	0.005	A
	Exit	1	1		389			389	400	0.0	0.0	0.000	A
2	Entry	1	1	3	188	1012	0.186	190	185	0.3	0.2	4.880	A
			2	1, 2, (3)	256	1012	0.253	256	261	0.5	0.3	4.854	A
		2	1	(1, 2, 3)	445			445	445	0.0	0.0	0.000	A
	Exit	1	1		490			490	506	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	458	717	0.639	460	475	2.8	1.5	12.862	B
			2	(2), 3	168	717	0.234	168	175	0.5	0.3	6.166	A
		2	1	(1, 2, 3)	626			626	644	0.0	0.0	0.046	A
	Exit	1	1		304			304	305	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	1147	986	0.045	44	47	0.0	0.1	4.168	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	61	15	1147	985	0.062	61	64	0.0	0.1	3.924	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	-	-	-	45	47	0.0	0.0	0.000	A
				3	61	15	-	-	-	61	64	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	181	45	1033	1012	0.179	180	184	0.0	0.3	4.631	A
			2	1	201	50	1033	1012	0.199	200	200	0.0	0.3	4.775	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	13	1033	1012	0.050	50	53	0.0	0.1	4.292	A
		2	1	1	201	50	-	-	-	201	201	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	-	-	-	232	239	0.0	0.0	0.000	A
3	Entry	1	1	1	188	47	777	717	0.263	188	187	0.0	0.7	12.545	B
				2	281	70	777	718	0.392	283	277	0.0	0.8	11.236	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	165	41	777	718	0.230	164	165	0.0	0.3	6.109	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	188	47	-	-	-	188	190	0.0	0.0	0.000	A
				2	446	112	-	-	-	446	447	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	1147	953	0.057	54	58	0.1	0.0	4.299	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1147	955	0.078	75	79	0.1	0.1	4.420	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	-	-	-	54	58	0.0	0.0	0.044	A
				3	75	19	-	-	-	75	79	0.0	0.0	0.022	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	225	56	1033	1008	0.223	224	227	0.3	0.4	4.967	A
			2	1	242	61	1033	1008	0.240	242	246	0.3	0.4	5.188	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	68	17	1033	1008	0.068	69	68	0.1	0.0	4.529	A
		2	1	1	242	61	-	-	-	242	247	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	293	73	-	-	-	293	295	0.0	0.0	0.000	A
3	Entry	1	1	1	237	59	777	705	0.336	234	231	0.7	1.5	18.532	C
				2	318	79	777	706	0.450	316	314	0.8	1.6	16.525	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	222	56	777	705	0.315	221	218	0.3	0.5	6.899	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	238	59	-	-	-	237	234	0.0	0.0	0.013	A
				2	540	135	-	-	-	540	536	0.0	0.0	0.011	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	1147	911	0.071	65	67	0.0	0.1	4.737	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	90	22	1147	913	0.098	92	96	0.1	0.1	4.626	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	-	-	-	65	68	0.0	0.0	0.023	A
				3	90	22	-	-	-	90	96	0.0	0.0	0.025	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	269	67	1033	1002	0.268	271	270	0.4	0.4	5.237	A
			2	1	291	73	1033	1002	0.291	291	296	0.4	0.4	5.732	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1033	1002	0.075	75	78	0.0	0.1	4.637	A
		2	1	1	291	73	-	-	-	291	296	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	344	86	-	-	-	344	348	0.0	0.0	0.000	A
3	Entry	1	1	1	274	69	777	691	0.396	271	278	1.5	2.7	34.358	D
				2	355	89	777	691	0.514	355	348	1.6	3.2	31.982	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	283	71	777	691	0.410	287	293	0.5	0.6	8.957	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	275	69	-	-	-	274	283	0.0	0.4	3.867	A
				2	640	160	-	-	-	638	649	0.0	1.0	3.199	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	1147	906	0.074	67	68	0.1	0.1	4.627	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	92	23	1147	909	0.101	92	96	0.1	0.1	4.563	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	-	-	-	67	68	0.0	0.0	0.016	A
				3	92	23	-	-	-	92	96	0.0	0.0	0.010	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	265	66	1033	1002	0.265	266	270	0.4	0.3	5.421	A
			2	1	290	73	1033	1002	0.289	288	293	0.4	0.6	5.564	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	76	19	1033	1001	0.076	76	77	0.1	0.1	4.640	A
		2	1	1	290	73	-	-	-	290	294	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	341	85	-	-	-	341	346	0.0	0.0	0.000	A
3	Entry	1	1	1	276	69	777	692	0.398	275	282	2.7	2.8	37.292	E
				2	361	90	777	692	0.522	364	353	3.2	3.4	35.663	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	299	75	777	692	0.433	301	300	0.6	0.6	9.883	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	275	69	-	-	-	276	282	0.4	0.2	4.624	A
				2	658	164	-	-	-	660	653	1.0	0.5	4.274	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1147	949	0.055	52	57	0.1	0.1	4.798	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	18	1147	950	0.078	74	80	0.1	0.1	4.262	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	-	-	-	52	57	0.0	0.0	0.030	A
				3	74	18	-	-	-	74	80	0.0	0.0	0.019	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	211	53	1033	1008	0.209	210	218	0.3	0.3	4.850	A
			2	1	241	60	1033	1008	0.239	241	245	0.6	0.4	5.311	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	65	16	1033	1008	0.064	65	65	0.1	0.1	4.698	A
		2	1	1	241	60	-	-	-	241	244	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	275	69	-	-	-	275	283	0.0	0.0	0.000	A
3	Entry	1	1	1	229	57	777	706	0.324	230	239	2.8	1.2	23.160	C
				2	323	81	777	706	0.458	324	324	3.4	1.6	20.224	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	223	56	777	706	0.315	222	224	0.6	0.5	7.135	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	229	57	-	-	-	229	232	0.2	0.0	0.613	A
				2	546	136	-	-	-	546	541	0.5	0.0	0.510	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1147	983	0.048	47	49	0.1	0.0	4.476	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	15	1147	985	0.063	62	66	0.1	0.1	4.454	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	-	-	-	47	49	0.0	0.0	0.000	A
				3	62	15	-	-	-	62	66	0.0	0.0	0.009	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	188	47	1033	1012	0.186	190	185	0.3	0.2	4.880	A
			2	1	203	51	1033	1012	0.201	203	206	0.4	0.2	4.924	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	1033	1012	0.053	53	55	0.1	0.1	4.554	A
		2	1	1	203	51	-	-	-	203	205	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	242	60	-	-	-	242	239	0.0	0.0	0.000	A
3	Entry	1	1	1	182	46	777	717	0.255	185	194	1.2	0.6	13.886	B
				2	275	69	777	717	0.384	275	281	1.6	0.9	12.158	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	168	42	777	717	0.234	168	175	0.5	0.3	6.166	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	182	46	-	-	-	182	191	0.0	0.0	0.039	A
				2	443	111	-	-	-	443	453	0.0	0.0	0.049	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	7.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.17	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	470	100.000
2		ONE HOUR	✓	585	100.000
3		ONE HOUR	✓	456	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	179	291
	2	117	0	468
	3	183	273	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	10	0
2	20	0	10
3	6	6	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.35	5.00	0.7	A	426	638
2	0.35	6.27	1.3	A	533	799
3	0.51	10.47	1.5	B	424	636

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	344	86	194	1524	0.225	341	349	230	0.0	0.5	4.164	A
2	440	110	218	1828	0.241	441	450	317	0.0	0.5	5.062	A
3	336	84	84	1057	0.317	340	348	576	0.0	0.7	7.185	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	421	105	254	1595	0.264	422	424	268	0.5	0.4	4.701	A
2	504	126	257	1849	0.273	508	531	418	0.5	0.8	5.514	A
3	425	106	100	1112	0.382	423	413	665	0.7	1.1	8.434	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	513	128	308	1510	0.340	517	516	328	0.4	0.5	4.907	A
2	642	161	315	1820	0.353	642	656	510	0.8	1.2	6.147	A
3	507	127	125	1066	0.476	511	503	832	1.1	1.4	9.346	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	522	131	301	1506	0.347	521	514	342	0.5	0.7	4.998	A
2	645	161	330	1842	0.350	646	666	492	1.2	1.3	6.267	A
3	515	129	130	1002	0.514	513	511	846	1.4	1.5	10.473	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	419	105	252	1517	0.276	419	425	286	0.7	0.4	4.629	A
2	522	130	266	1845	0.283	523	533	406	1.3	0.8	5.406	A
3	420	105	116	1096	0.383	423	426	674	1.5	0.7	7.839	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	336	84	212	1561	0.215	335	354	214	0.4	0.5	4.313	A
2	445	111	208	1825	0.244	443	444	339	0.8	0.7	5.135	A
3	340	85	89	1052	0.323	337	346	562	0.7	0.8	7.232	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	125	1077	0.116	123	130	0.0	0.2	4.173	A
			2	1, 3	219	1077	0.203	218	219	0.0	0.3	4.041	A
		2	1	(1, 2, 3)	344			344	351	0.0	0.0	0.076	A
	Exit	1	1		230			230	227	0.0	0.0	0.000	A
2	Entry	1	1	3	257	960	0.268	257	265	0.0	0.3	5.116	A
			2	1, 2, (3)	183	960	0.190	184	184	0.0	0.2	4.982	A
		2	1	(1, 2, 3)	440			440	452	0.0	0.0	0.000	A
	Exit	1	1		317			317	336	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	271	752	0.360	276	280	0.0	0.6	7.670	A
			2	(2), 3	64	752	0.086	65	68	0.0	0.1	5.169	A
		2	1	(1, 2, 3)	336			336	351	0.0	0.0	0.000	A
	Exit	1	1		576			576	582	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	163	1055	0.155	164	162	0.2	0.2	4.517	A
			2	1, 3	258	1055	0.244	257	261	0.3	0.2	4.628	A
		2	1	(1, 2, 3)	421			421	423	0.0	0.0	0.113	A
	Exit	1	1		268			268	273	0.0	0.0	0.000	A
2	Entry	1	1	3	295	947	0.312	298	307	0.3	0.5	5.785	A
			2	1, 2, (3)	208	947	0.220	209	224	0.2	0.3	5.130	A
		2	1	(1, 2, 3)	504			504	532	0.0	0.0	0.000	A
	Exit	1	1		418			418	412	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	341	747	0.456	338	329	0.6	1.1	9.169	A
			2	(2), 3	84	747	0.113	85	84	0.1	0.0	5.508	A
		2	1	(1, 2, 3)	425			425	415	0.0	0.0	0.000	A
	Exit	1	1		665			665	683	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	200	1035	0.193	202	202	0.2	0.2	4.666	A
			2	1, 3	313	1035	0.303	315	315	0.2	0.3	4.713	A
		2	1	(1, 2, 3)	513			513	516	0.0	0.0	0.211	A
	Exit	1	1		328			328	335	0.0	0.0	0.000	A
2	Entry	1	1	3	377	928	0.407	377	382	0.5	0.7	6.356	A
			2	1, 2, (3)	265	928	0.285	265	274	0.3	0.5	5.844	A
		2	1	(1, 2, 3)	642			642	657	0.0	0.0	0.000	A
	Exit	1	1		510			510	501	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	393	740	0.531	395	395	1.1	1.3	10.368	B
			2	(2), 3	114	740	0.154	116	108	0.0	0.1	5.647	A
		2	1	(1, 2, 3)	507			507	504	0.0	0.0	0.000	A
	Exit	1	1		832			832	839	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	192	1038	0.185	191	192	0.2	0.3	4.791	A
			2	1, 3	330	1038	0.318	330	322	0.3	0.4	4.894	A
		2	1	(1, 2, 3)	522			522	515	0.0	0.0	0.139	A
	Exit	1	1		342			342	343	0.0	0.0	0.000	A
2	Entry	1	1	3	375	923	0.406	372	382	0.7	0.9	6.700	A
			2	1, 2, (3)	270	923	0.293	273	284	0.5	0.3	5.642	A
		2	1	(1, 2, 3)	645			645	666	0.0	0.0	0.009	A
	Exit	1	1		492			492	495	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	399	739	0.540	398	400	1.3	1.2	11.829	B
			2	(2), 3	117	739	0.158	115	110	0.1	0.3	5.606	A
		2	1	(1, 2, 3)	515			515	511	0.0	0.0	0.000	A
	Exit	1	1		846			846	853	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	154	1055	0.146	153	155	0.3	0.2	4.490	A
			2	1, 3	265	1055	0.251	266	269	0.4	0.3	4.611	A
		2	1	(1, 2, 3)	419			419	424	0.0	0.0	0.060	A
	Exit	1	1		286			286	282	0.0	0.0	0.000	A
2	Entry	1	1	3	301	944	0.318	302	309	0.9	0.5	5.570	A
			2	1, 2, (3)	221	944	0.234	221	225	0.3	0.3	5.170	A
		2	1	(1, 2, 3)	522			522	532	0.0	0.0	0.000	A
	Exit	1	1		406			406	410	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	335	743	0.451	338	338	1.2	0.6	8.463	A
			2	(2), 3	85	743	0.114	85	88	0.3	0.1	5.429	A
		2	1	(1, 2, 3)	420			420	423	0.0	0.0	0.000	A
	Exit	1	1		674			674	692	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	128	1070	0.119	127	128	0.2	0.3	4.290	A
			2	1, 3	208	1070	0.195	208	226	0.3	0.2	4.267	A
		2	1	(1, 2, 3)	336			336	354	0.0	0.0	0.039	A
	Exit	1	1		214			214	221	0.0	0.0	0.000	A
2	Entry	1	1	3	264	963	0.274	262	260	0.5	0.5	5.298	A
			2	1, 2, (3)	181	963	0.188	181	184	0.3	0.3	4.897	A
		2	1	(1, 2, 3)	445			445	444	0.0	0.0	0.000	A
	Exit	1	1		339			339	342	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	271	750	0.362	269	272	0.6	0.8	7.729	A
			2	(2), 3	68	750	0.091	69	73	0.1	0.1	5.362	A
		2	1	(1, 2, 3)	340			340	346	0.0	0.0	0.000	A
	Exit	1	1		562			562	582	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	1147	1075	0.116	123	130	0.0	0.2	4.173	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	219	55	1147	1076	0.203	218	219	0.0	0.3	4.041	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	-	-	-	125	131	0.0	0.0	0.080	A
				3	219	55	-	-	-	219	220	0.0	0.0	0.074	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	257	64	1033	959	0.268	257	265	0.0	0.3	5.116	A
			2	1	84	21	1033	960	0.087	84	86	0.0	0.2	5.581	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	100	25	1033	961	0.104	101	98	0.0	0.1	4.488	A
		2	1	1	84	21	-	-	-	84	87	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	-	-	-	357	365	0.0	0.0	0.000	A
3	Entry	1	1	1	144	36	777	753	0.191	147	141	0.0	0.3	7.980	A
				2	128	32	777	752	0.170	129	139	0.0	0.3	7.359	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	777	751	0.086	65	68	0.0	0.1	5.169	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	144	36	-	-	-	144	142	0.0	0.0	0.000	A
				2	192	48	-	-	-	192	208	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	163	41	1147	1055	0.155	164	162	0.2	0.2	4.517	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	258	64	1147	1056	0.244	257	261	0.3	0.2	4.628	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	163	41	-	-	-	163	162	0.0	0.0	0.138	A
				3	258	64	-	-	-	258	261	0.0	0.0	0.100	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	1033	946	0.312	298	307	0.3	0.5	5.785	A
			2	1	98	24	1033	948	0.103	100	109	0.2	0.2	5.877	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	111	28	1033	945	0.117	110	115	0.1	0.1	4.480	A
		2	1	1	98	24	-	-	-	98	109	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	406	102	-	-	-	406	423	0.0	0.0	0.000	A
3	Entry	1	1	1	173	43	777	747	0.231	168	164	0.3	0.7	9.730	A
				2	168	42	777	747	0.225	170	165	0.3	0.4	8.609	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	84	21	777	746	0.113	85	84	0.1	0.0	5.508	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	173	43	-	-	-	173	166	0.0	0.0	0.000	A
				2	252	63	-	-	-	252	249	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	1147	1036	0.193	202	202	0.2	0.2	4.666	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	313	78	1147	1037	0.302	315	315	0.2	0.3	4.713	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	-	-	-	200	202	0.0	0.0	0.219	A
				3	313	78	-	-	-	313	315	0.0	0.0	0.207	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	377	94	1033	927	0.407	377	382	0.5	0.7	6.356	A
			2	1	125	31	1033	928	0.134	125	131	0.2	0.2	6.766	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	140	35	1033	926	0.151	140	143	0.1	0.3	5.091	A
		2	1	1	125	31	-	-	-	125	132	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	517	129	-	-	-	517	526	0.0	0.0	0.000	A
3	Entry	1	1	1	204	51	777	741	0.275	203	203	0.7	0.7	11.100	B
				2	189	47	777	740	0.255	192	191	0.4	0.6	9.603	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	777	741	0.154	116	108	0.0	0.1	5.647	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	204	51	-	-	-	204	203	0.0	0.0	0.000	A
				2	303	76	-	-	-	303	301	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	192	48	1147	1038	0.185	191	192	0.2	0.3	4.791	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	82	1147	1037	0.318	330	322	0.3	0.4	4.894	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	192	48	-	-	-	192	192	0.0	0.0	0.133	A
				3	330	82	-	-	-	330	323	0.0	0.0	0.143	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	375	94	1033	924	0.406	372	382	0.7	0.9	6.700	A
			2	1	128	32	1033	923	0.139	130	135	0.2	0.1	6.482	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	142	36	1033	925	0.154	144	149	0.3	0.2	4.945	A
		2	1	1	128	32	-	-	-	128	135	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	517	129	-	-	-	517	531	0.0	0.0	0.011	A
3	Entry	1	1	1	212	53	777	738	0.287	212	208	0.7	0.7	12.484	B
				2	186	46	777	738	0.252	186	192	0.6	0.5	11.122	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	117	29	777	739	0.158	115	110	0.1	0.3	5.606	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	212	53	-	-	-	212	208	0.0	0.0	0.000	A
				2	303	76	-	-	-	303	303	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	154	38	1147	1055	0.146	153	155	0.3	0.2	4.490	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	265	66	1147	1054	0.252	266	269	0.4	0.3	4.611	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	154	38	-	-	-	154	155	0.0	0.0	0.040	A
				3	265	66	-	-	-	265	269	0.0	0.0	0.071	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	301	75	1033	943	0.319	302	309	0.9	0.5	5.570	A
			2	1	116	29	1033	943	0.123	116	111	0.1	0.2	5.843	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	943	0.111	106	114	0.2	0.1	4.557	A
		2	1	1	116	29	-	-	-	116	111	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	405	101	-	-	-	405	420	0.0	0.0	0.000	A
3	Entry	1	1	1	167	42	777	743	0.225	171	171	0.7	0.3	8.978	A
				2	168	42	777	743	0.226	168	167	0.5	0.4	7.927	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	85	21	777	744	0.114	85	88	0.3	0.1	5.429	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	167	42	-	-	-	167	170	0.0	0.0	0.000	A
				2	253	63	-	-	-	253	253	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	1147	1070	0.119	127	128	0.2	0.3	4.290	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	208	52	1147	1070	0.195	208	226	0.3	0.2	4.267	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	-	-	-	128	129	0.0	0.0	0.048	A
				3	208	52	-	-	-	208	225	0.0	0.0	0.034	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1033	964	0.274	262	260	0.5	0.5	5.298	A
			2	1	90	22	1033	962	0.093	89	88	0.2	0.2	5.556	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	92	23	1033	964	0.095	92	96	0.1	0.0	4.338	A
		2	1	1	90	22	-	-	-	90	88	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	356	89	-	-	-	356	356	0.0	0.0	0.000	A
3	Entry	1	1	1	127	32	777	749	0.170	125	132	0.3	0.4	8.136	A
				2	144	36	777	750	0.192	144	140	0.4	0.4	7.345	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	68	17	777	751	0.091	69	73	0.1	0.1	5.362	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	133	0.0	0.0	0.000	A
				2	212	53	-	-	-	212	213	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	50.75	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	50.75	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	149	100.000
2		ONE HOUR	✓	537	100.000
3		ONE HOUR	✓	936	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	66	83
	2	263	0	274
	3	301	635	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	9	4
	2	2	0	18
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.13	4.77	0.3	A	138	206
2	0.31	5.54	1.0	A	488	733
3	0.99	84.01	25.9	F	854	1281

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	112	28	474	1453	0.077	112	115	417	0.0	0.2	3.969	A
2	400	100	63	1894	0.211	398	399	522	0.0	0.7	4.832	A
3	699	175	190	1063	0.657	701	695	271	0.0	2.3	12.092	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	140	35	567	1398	0.100	141	143	499	0.2	0.2	4.470	A
2	474	119	78	1860	0.255	474	486	630	0.7	0.6	5.020	A
3	830	208	233	1090	0.761	833	833	320	2.3	4.3	19.368	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	164	41	674	1333	0.123	165	171	599	0.2	0.1	4.515	A
2	580	145	91	1863	0.311	579	592	747	0.6	1.0	5.537	A
3	1028	257	280	1062	0.968	992	980	390	4.3	17.5	47.062	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	168	42	690	1306	0.129	168	171	603	0.1	0.3	4.771	A
2	583	146	95	1860	0.313	583	600	763	1.0	0.9	5.528	A
3	1024	256	289	1031	0.994	1005	1001	390	17.5	25.9	84.013	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	607	1367	0.097	133	140	522	0.3	0.2	4.582	A
2	482	121	75	1885	0.256	482	489	665	0.9	0.7	5.003	A
3	842	211	238	1105	0.762	891	915	318	25.9	8.5	59.010	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	476	1423	0.076	110	117	421	0.2	0.1	4.203	A
2	412	103	63	1879	0.219	413	418	523	0.7	0.6	4.870	A
3	702	176	199	1106	0.635	698	735	276	8.5	2.7	17.696	C

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	974	0.050	49	50	0.0	0.1	3.987	A
			2	1, 3	63	974	0.065	63	65	0.0	0.1	3.955	A
		2	1	(1, 2, 3)	112			112	116	0.0	0.0	0.000	A
	Exit	1	1		417			417	418	0.0	0.0	0.000	A
2	Entry	1	1	3	161	1012	0.159	161	158	0.0	0.2	4.865	A
			2	1, 2, (3)	238	1012	0.236	237	241	0.0	0.5	4.813	A
		2	1	(1, 2, 3)	400			400	402	0.0	0.0	0.000	A
	Exit	1	1		522			522	522	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	513	721	0.712	513	508	0.0	2.0	14.155	B
			2	(2), 3	186	721	0.258	187	187	0.0	0.3	6.288	A
		2	1	(1, 2, 3)	699			699	704	0.0	0.0	0.037	A
	Exit	1	1		271			271	270	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	62	940	0.066	63	63	0.1	0.0	4.432	A
			2	1, 3	78	940	0.083	78	80	0.1	0.1	4.487	A
		2	1	(1, 2, 3)	140			140	143	0.0	0.0	0.007	A
	Exit	1	1		499			499	505	0.0	0.0	0.000	A
2	Entry	1	1	3	187	1007	0.186	187	192	0.2	0.3	5.036	A
			2	1, 2, (3)	287	1007	0.285	287	294	0.5	0.3	5.011	A
		2	1	(1, 2, 3)	474			474	486	0.0	0.0	0.000	A
	Exit	1	1		630			630	631	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	582	708	0.821	585	587	2.0	3.7	23.397	C
			2	(2), 3	247	708	0.349	248	245	0.3	0.4	7.630	A
		2	1	(1, 2, 3)	830			829	840	0.0	0.2	0.548	A
	Exit	1	1		320			320	326	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	74	901	0.082	74	76	0.0	0.1	4.586	A
			2	1, 3	90	901	0.100	91	96	0.1	0.1	4.437	A
		2	1	(1, 2, 3)	164			164	171	0.0	0.0	0.014	A
	Exit	1	1		599			599	599	0.0	0.0	0.000	A
2	Entry	1	1	3	233	1002	0.232	233	238	0.3	0.4	5.295	A
			2	1, 2, (3)	347	1002	0.346	347	355	0.3	0.6	5.681	A
		2	1	(1, 2, 3)	580			580	594	0.0	0.0	0.000	A
	Exit	1	1		747			747	745	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	681	694	0.981	669	663	3.7	9.9	44.571	E
			2	(2), 3	323	694	0.465	323	317	0.4	1.0	10.520	B
		2	1	(1, 2, 3)	1028			1004	1007	0.2	6.7	12.863	B
	Exit	1	1		390			390	399	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	73	895	0.081	73	76	0.1	0.1	4.925	A
			2	1, 3	96	895	0.107	95	95	0.1	0.2	4.639	A
		2	1	(1, 2, 3)	168			168	171	0.0	0.0	0.009	A
	Exit	1	1		603			603	614	0.0	0.0	0.000	A
2	Entry	1	1	3	228	1001	0.228	228	237	0.4	0.4	5.314	A
			2	1, 2, (3)	354	1001	0.354	355	363	0.6	0.5	5.653	A
		2	1	(1, 2, 3)	583			583	599	0.0	0.0	0.000	A
	Exit	1	1		763			763	758	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	673	692	0.973	671	670	9.9	10.7	57.244	F
			2	(2), 3	334	692	0.483	334	331	1.0	1.1	11.899	B
		2	1	(1, 2, 3)	1024			1007	1004	6.7	14.1	41.358	E
	Exit	1	1		390			390	399	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	58	926	0.063	58	62	0.1	0.1	4.498	A
			2	1, 3	75	926	0.081	75	77	0.2	0.1	4.644	A
		2	1	(1, 2, 3)	133			133	139	0.0	0.0	0.002	A
	Exit	1	1		522			522	536	0.0	0.0	0.000	A
2	Entry	1	1	3	191	1008	0.189	190	190	0.4	0.3	4.927	A
			2	1, 2, (3)	291	1008	0.289	292	300	0.5	0.4	5.045	A
		2	1	(1, 2, 3)	482			482	489	0.0	0.0	0.000	A
	Exit	1	1		665			665	684	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	614	707	0.869	627	635	10.7	5.6	42.955	E
			2	(2), 3	261	707	0.369	264	280	1.1	0.6	10.018	B
		2	1	(1, 2, 3)	842			875	893	14.1	2.3	27.522	D
	Exit	1	1		318			318	324	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	46	973	0.047	47	52	0.1	0.0	4.331	A
			2	1, 3	63	973	0.064	63	65	0.1	0.0	4.092	A
		2	1	(1, 2, 3)	108			108	117	0.0	0.0	0.008	A
	Exit	1	1		421			421	441	0.0	0.0	0.000	A
2	Entry	1	1	3	164	1012	0.162	166	167	0.3	0.2	4.891	A
			2	1, 2, (3)	248	1012	0.245	247	251	0.4	0.5	4.857	A
		2	1	(1, 2, 3)	412			412	417	0.0	0.0	0.000	A
	Exit	1	1		523			523	549	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	513	718	0.714	509	534	5.6	2.4	19.436	C
			2	(2), 3	189	718	0.264	189	200	0.6	0.4	7.029	A
		2	1	(1, 2, 3)	702			702	721	2.3	0.0	2.132	A
	Exit	1	1		276			276	280	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	973	0.050	49	50	0.0	0.1	3.987	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	1147	973	0.065	63	65	0.0	0.1	3.955	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	50	0.0	0.0	0.000	A
				3	63	16	-	-	-	63	65	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	161	40	1033	1011	0.159	161	158	0.0	0.2	4.865	A
			2	1	191	48	1033	1011	0.189	190	194	0.0	0.4	4.864	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	47	12	1033	1013	0.047	47	47	0.0	0.1	4.567	A
		2	1	1	191	48	-	-	-	191	196	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	-	-	-	209	206	0.0	0.0	0.000	A
3	Entry	1	1	1	226	56	777	721	0.314	227	223	0.0	0.9	14.921	B
				2	287	72	777	721	0.398	287	285	0.0	1.1	13.554	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	186	47	777	721	0.259	187	187	0.0	0.3	6.288	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	226	56	-	-	-	226	227	0.0	0.0	0.036	A
				2	473	118	-	-	-	473	477	0.0	0.0	0.037	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	62	16	1147	941	0.066	63	63	0.1	0.0	4.432	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	78	19	1147	942	0.083	78	80	0.1	0.1	4.487	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	62	16	-	-	-	62	63	0.0	0.0	0.007	A
				3	78	19	-	-	-	78	80	0.0	0.0	0.007	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	187	47	1033	1007	0.186	187	192	0.2	0.3	5.036	A
			2	1	232	58	1033	1007	0.231	233	240	0.4	0.3	5.109	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	54	14	1033	1006	0.054	55	55	0.1	0.1	4.515	A
		2	1	1	232	58	-	-	-	232	239	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	242	60	-	-	-	242	247	0.0	0.0	0.000	A
3	Entry	1	1	1	267	67	777	708	0.377	266	265	0.9	1.9	24.844	C
				2	315	79	777	708	0.445	319	322	1.1	1.8	22.200	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	247	62	777	708	0.349	248	245	0.3	0.4	7.630	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	268	67	-	-	-	267	269	0.0	0.1	0.691	A
				2	563	141	-	-	-	562	571	0.0	0.1	0.480	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	18	1147	901	0.082	74	76	0.0	0.1	4.586	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	90	23	1147	902	0.100	91	96	0.1	0.1	4.437	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	18	-	-	-	74	76	0.0	0.0	0.013	A
				3	90	23	-	-	-	90	95	0.0	0.0	0.014	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	233	58	1033	1002	0.232	233	238	0.3	0.4	5.295	A
			2	1	280	70	1033	1002	0.280	280	289	0.3	0.5	5.843	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	66	17	1033	1003	0.066	66	66	0.1	0.1	4.855	A
		2	1	1	280	70	-	-	-	280	289	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	-	-	-	300	305	0.0	0.0	0.000	A
3	Entry	1	1	1	324	81	777	694	0.467	318	310	1.9	4.8	45.881	E
				2	357	89	777	695	0.514	351	352	1.8	5.1	43.416	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	323	81	777	694	0.466	323	317	0.4	1.0	10.520	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	335	84	-	-	-	324	322	0.1	2.4	13.786	B
				2	692	173	-	-	-	680	685	0.1	4.3	12.427	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	1147	896	0.081	73	76	0.1	0.1	4.925	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	96	24	1147	895	0.107	95	95	0.1	0.2	4.639	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	76	0.0	0.0	0.007	A
				3	96	24	-	-	-	96	95	0.0	0.0	0.011	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	228	57	1033	1001	0.228	228	237	0.4	0.4	5.314	A
			2	1	288	72	1033	1001	0.288	289	295	0.5	0.4	5.825	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	66	16	1033	1001	0.066	66	68	0.1	0.1	4.790	A
		2	1	1	288	72	-	-	-	288	295	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	294	74	-	-	-	294	304	0.0	0.0	0.000	A
3	Entry	1	1	1	315	79	777	692	0.456	314	318	4.8	5.2	57.895	F
				2	357	89	777	692	0.517	357	352	5.1	5.5	56.654	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	334	84	777	692	0.483	334	331	1.0	1.1	11.899	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	324	81	-	-	-	315	320	2.4	4.6	41.967	E
				2	701	175	-	-	-	692	685	4.3	9.5	41.075	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	14	1147	925	0.063	58	62	0.1	0.1	4.498	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1147	925	0.081	75	77	0.2	0.1	4.644	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	14	-	-	-	58	62	0.0	0.0	0.002	A
				3	75	19	-	-	-	75	77	0.0	0.0	0.002	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	191	48	1033	1008	0.189	190	190	0.4	0.3	4.927	A
			2	1	237	59	1033	1008	0.235	238	243	0.4	0.3	5.123	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	54	14	1033	1007	0.054	54	57	0.1	0.1	4.665	A
		2	1	1	237	59	-	-	-	237	242	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	245	61	-	-	-	245	247	0.0	0.0	0.000	A
3	Entry	1	1	1	279	70	777	707	0.395	284	293	5.2	2.6	44.495	E
				2	335	84	777	707	0.475	343	341	5.5	3.0	41.638	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	261	65	777	706	0.369	264	280	1.1	0.6	10.018	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	268	67	-	-	-	279	283	4.6	0.7	27.841	D
				2	574	144	-	-	-	596	610	9.5	1.6	27.375	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	1147	972	0.047	47	52	0.1	0.0	4.331	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	1147	971	0.064	63	65	0.1	0.0	4.092	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	52	0.0	0.0	0.007	A
				3	63	16	-	-	-	63	65	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	164	41	1033	1012	0.162	166	167	0.3	0.2	4.891	A
			2	1	200	50	1033	1012	0.198	199	203	0.3	0.4	4.958	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	48	12	1033	1012	0.047	48	47	0.1	0.1	4.352	A
		2	1	1	200	50	-	-	-	200	204	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	212	53	-	-	-	212	214	0.0	0.0	0.000	A
3	Entry	1	1	1	225	56	777	718	0.314	222	237	2.6	1.2	20.686	C
				2	287	72	777	718	0.400	288	297	3.0	1.2	18.439	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	777	718	0.264	189	200	0.6	0.4	7.029	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	225	56	-	-	-	225	232	0.7	0.0	2.338	A
				2	477	119	-	-	-	477	489	1.6	0.0	2.034	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.29	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	468	100.000
2		ONE HOUR	✓	624	100.000
3		ONE HOUR	✓	419	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	173	295
	2	128	0	496
	3	172	247	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	3	0
2	10	0	4
3	4	4	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.35	4.90	0.6	A	431	647
2	0.40	5.97	1.4	A	572	858
3	0.45	8.31	1.2	A	388	582

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	368	92	189	1574	0.234	367	363	209	0.0	0.4	4.198	A
2	446	112	238	1925	0.232	448	471	318	0.0	0.6	4.791	A
3	316	79	84	1063	0.297	314	312	602	0.0	0.7	7.164	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	108	226	1525	0.282	432	428	274	0.4	0.5	4.449	A
2	560	140	263	1849	0.303	560	569	395	0.6	0.8	5.285	A
3	382	96	115	1139	0.335	385	383	709	0.7	0.7	7.498	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	532	133	273	1524	0.349	535	529	324	0.5	0.6	4.863	A
2	691	173	336	1829	0.378	689	691	472	0.8	1.3	5.911	A
3	454	114	142	1057	0.430	455	459	883	0.7	0.9	8.192	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	491	123	266	1519	0.324	497	518	330	0.6	0.5	4.898	A
2	707	177	319	1786	0.396	707	702	445	1.3	1.4	5.968	A
3	457	114	143	1006	0.454	453	464	883	0.9	1.2	8.312	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	412	103	220	1520	0.271	411	417	279	0.5	0.4	4.418	A
2	565	141	259	1880	0.301	562	569	372	1.4	0.7	5.570	A
3	383	96	114	1047	0.366	385	384	707	1.2	0.5	7.489	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	354	89	202	1580	0.224	355	364	237	0.4	0.4	4.105	A
2	463	116	222	1919	0.241	460	478	336	0.7	0.7	5.087	A
3	337	84	100	1038	0.325	339	330	582	0.5	0.6	6.909	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	127	1078	0.118	129	132	0.0	0.1	3.908	A
			2	1, 3	240	1078	0.223	238	230	0.0	0.3	4.240	A
		2	1	(1, 2, 3)	368			368	364	0.0	0.0	0.076	A
	Exit	1	1		209			209	224	0.0	0.0	0.000	A
2	Entry	1	1	3	264	953	0.277	264	272	0.0	0.3	4.941	A
			2	1, 2, (3)	183	953	0.192	184	198	0.0	0.2	4.580	A
		2	1	(1, 2, 3)	446			446	473	0.0	0.0	0.000	A
	Exit	1	1		318			318	316	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	256	752	0.341	253	257	0.0	0.7	7.536	A
			2	(2), 3	60	752	0.080	61	55	0.0	0.0	5.411	A
		2	1	(1, 2, 3)	316			316	315	0.0	0.0	0.000	A
	Exit	1	1		602			602	605	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	170	1065	0.160	169	161	0.1	0.2	4.067	A
			2	1, 3	261	1065	0.245	263	268	0.3	0.3	4.506	A
		2	1	(1, 2, 3)	430			431	429	0.0	0.0	0.105	A
	Exit	1	1		274			274	278	0.0	0.0	0.000	A
2	Entry	1	1	3	330	945	0.350	332	330	0.3	0.4	5.479	A
			2	1, 2, (3)	230	945	0.243	229	238	0.2	0.5	5.009	A
		2	1	(1, 2, 3)	560			560	570	0.0	0.0	0.000	A
	Exit	1	1		395			395	383	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	307	743	0.413	310	311	0.7	0.5	7.982	A
			2	(2), 3	76	743	0.102	75	72	0.0	0.2	5.425	A
		2	1	(1, 2, 3)	382			382	383	0.0	0.0	0.000	A
	Exit	1	1		709			709	719	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	198	1048	0.189	200	187	0.2	0.2	4.305	A
			2	1, 3	335	1048	0.319	336	342	0.3	0.4	4.855	A
		2	1	(1, 2, 3)	532			533	530	0.0	0.0	0.199	A
	Exit	1	1		324			324	328	0.0	0.0	0.000	A
2	Entry	1	1	3	395	921	0.429	395	394	0.4	0.7	6.347	A
			2	1, 2, (3)	296	921	0.321	294	297	0.5	0.6	5.317	A
		2	1	(1, 2, 3)	691			691	693	0.0	0.0	0.000	A
	Exit	1	1		472			472	460	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	364	735	0.495	365	366	0.5	0.8	8.880	A
			2	(2), 3	91	735	0.124	90	94	0.2	0.2	5.513	A
		2	1	(1, 2, 3)	454			454	460	0.0	0.0	0.000	A
	Exit	1	1		883			883	892	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	178	1050	0.170	179	184	0.2	0.2	4.277	A
			2	1, 3	315	1050	0.300	319	334	0.4	0.3	4.889	A
		2	1	(1, 2, 3)	491			493	518	0.0	0.0	0.223	A
	Exit	1	1		330			330	339	0.0	0.0	0.000	A
2	Entry	1	1	3	404	927	0.436	403	402	0.7	0.8	6.261	A
			2	1, 2, (3)	303	927	0.327	303	299	0.6	0.5	5.566	A
		2	1	(1, 2, 3)	707			707	702	0.0	0.0	0.000	A
	Exit	1	1		445			445	453	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	361	735	0.492	358	370	0.8	1.0	9.092	A
			2	(2), 3	96	735	0.130	95	95	0.2	0.2	5.286	A
		2	1	(1, 2, 3)	457			457	465	0.0	0.0	0.000	A
	Exit	1	1		883			883	892	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	152	1067	0.142	152	153	0.2	0.1	4.072	A
			2	1, 3	260	1067	0.244	259	263	0.3	0.3	4.543	A
		2	1	(1, 2, 3)	412			412	417	0.0	0.0	0.045	A
	Exit	1	1		279			279	272	0.0	0.0	0.000	A
2	Entry	1	1	3	333	946	0.352	331	332	0.8	0.5	5.818	A
			2	1, 2, (3)	232	946	0.245	232	237	0.5	0.2	5.216	A
		2	1	(1, 2, 3)	565			565	566	0.0	0.0	0.000	A
	Exit	1	1		372			372	377	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	314	743	0.422	315	308	1.0	0.4	7.965	A
			2	(2), 3	70	743	0.094	70	77	0.2	0.1	5.581	A
		2	1	(1, 2, 3)	383			383	382	0.0	0.0	0.000	A
	Exit	1	1		707			707	721	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	134	1074	0.125	134	130	0.1	0.1	3.870	A
			2	1, 3	220	1074	0.205	222	234	0.3	0.3	4.209	A
		2	1	(1, 2, 3)	354			354	364	0.0	0.0	0.016	A
	Exit	1	1		237			237	235	0.0	0.0	0.000	A
2	Entry	1	1	3	266	959	0.278	267	272	0.5	0.4	5.508	A
			2	1, 2, (3)	195	959	0.204	194	206	0.2	0.3	4.513	A
		2	1	(1, 2, 3)	463			463	478	0.0	0.0	0.000	A
	Exit	1	1		336			336	327	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	268	747	0.359	269	266	0.4	0.5	7.392	A
			2	(2), 3	69	747	0.093	69	64	0.1	0.1	4.926	A
		2	1	(1, 2, 3)	337			337	331	0.0	0.0	0.000	A
	Exit	1	1		582			582	611	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	1147	1078	0.118	129	132	0.0	0.1	3.908	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	240	60	1147	1078	0.223	238	230	0.0	0.3	4.240	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	133	0.0	0.0	0.044	A
				3	240	60	-	-	-	240	232	0.0	0.0	0.093	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1033	954	0.277	264	272	0.0	0.3	4.941	A
			2	1	85	21	1033	956	0.089	84	95	0.0	0.2	5.016	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	98	24	1033	956	0.102	99	103	0.0	0.0	4.199	A
		2	1	1	85	21	-	-	-	85	96	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	362	90	-	-	-	362	377	0.0	0.0	0.000	A
3	Entry	1	1	1	128	32	777	751	0.170	125	128	0.0	0.4	7.821	A
				2	129	32	777	752	0.171	128	129	0.0	0.3	7.245	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	777	750	0.080	61	55	0.0	0.0	5.411	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	128	32	-	-	-	128	130	0.0	0.0	0.000	A
				2	189	47	-	-	-	189	185	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	43	1147	1065	0.160	169	161	0.1	0.2	4.067	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	261	65	1147	1065	0.245	263	268	0.3	0.3	4.506	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	43	-	-	-	170	161	0.0	0.0	0.086	A
				3	260	65	-	-	-	261	268	0.0	0.0	0.117	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	83	1033	945	0.350	332	330	0.3	0.4	5.479	A
			2	1	116	29	1033	943	0.123	115	118	0.2	0.3	5.583	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	114	29	1033	944	0.121	114	121	0.0	0.2	4.490	A
		2	1	1	116	29	-	-	-	116	118	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	445	111	-	-	-	445	452	0.0	0.0	0.000	A
3	Entry	1	1	1	157	39	777	743	0.211	159	161	0.4	0.3	8.367	A
				2	149	37	777	743	0.201	151	150	0.3	0.2	7.569	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	76	19	777	742	0.102	75	72	0.0	0.2	5.425	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	157	39	-	-	-	157	160	0.0	0.0	0.000	A
				2	225	56	-	-	-	225	222	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	198	50	1147	1050	0.189	200	187	0.2	0.2	4.305	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	335	84	1147	1048	0.319	336	342	0.3	0.4	4.855	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	198	50	-	-	-	198	187	0.0	0.0	0.202	A
				3	334	84	-	-	-	335	343	0.0	0.0	0.197	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	395	99	1033	921	0.429	395	394	0.4	0.7	6.347	A
			2	1	143	36	1033	922	0.155	142	141	0.3	0.3	5.895	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	153	38	1033	923	0.166	153	156	0.2	0.2	4.820	A
		2	1	1	143	36	-	-	-	143	141	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	548	137	-	-	-	548	552	0.0	0.0	0.000	A
3	Entry	1	1	1	181	45	777	735	0.246	183	187	0.3	0.4	9.437	A
				2	183	46	777	735	0.249	183	179	0.2	0.4	8.291	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	91	23	777	736	0.123	90	94	0.2	0.2	5.513	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	181	45	-	-	-	181	187	0.0	0.0	0.000	A
				2	274	68	-	-	-	274	273	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	178	45	1147	1050	0.170	179	184	0.2	0.2	4.277	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	315	79	1147	1050	0.300	319	334	0.4	0.3	4.889	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	178	45	-	-	-	178	184	0.0	0.0	0.209	A
				3	313	78	-	-	-	315	334	0.0	0.0	0.230	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	404	101	1033	927	0.435	403	402	0.7	0.8	6.261	A
			2	1	141	35	1033	926	0.152	143	143	0.3	0.2	6.175	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	162	41	1033	925	0.175	161	156	0.2	0.3	5.039	A
		2	1	1	141	35	-	-	-	141	143	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	566	142	-	-	-	566	559	0.0	0.0	0.000	A
3	Entry	1	1	1	189	47	777	734	0.258	188	195	0.4	0.6	9.609	A
				2	172	43	777	734	0.234	171	174	0.4	0.4	8.509	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	96	24	777	735	0.130	95	95	0.2	0.2	5.286	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	189	47	-	-	-	189	196	0.0	0.0	0.000	A
				2	268	67	-	-	-	268	269	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	152	38	1147	1069	0.142	152	153	0.2	0.1	4.072	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	260	65	1147	1068	0.243	259	263	0.3	0.3	4.543	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	152	38	-	-	-	152	153	0.0	0.0	0.042	A
				3	260	65	-	-	-	260	263	0.0	0.0	0.047	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	333	83	1033	945	0.353	331	332	0.8	0.5	5.818	A
			2	1	115	29	1033	944	0.121	114	112	0.2	0.1	5.654	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	117	29	1033	944	0.124	117	125	0.3	0.2	4.839	A
		2	1	1	115	29	-	-	-	115	111	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	451	113	-	-	-	451	455	0.0	0.0	0.000	A
3	Entry	1	1	1	165	41	777	743	0.223	165	160	0.6	0.3	8.694	A
				2	148	37	777	742	0.199	150	147	0.4	0.2	7.176	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	17	777	742	0.094	70	77	0.2	0.1	5.581	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	165	41	-	-	-	165	159	0.0	0.0	0.000	A
				2	218	54	-	-	-	218	223	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	1147	1075	0.125	134	130	0.1	0.1	3.870	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	220	55	1147	1075	0.205	222	234	0.3	0.3	4.209	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	134	34	-	-	-	134	130	0.0	0.0	0.010	A
				3	220	55	-	-	-	220	234	0.0	0.0	0.019	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	266	67	1033	960	0.278	267	272	0.5	0.4	5.508	A
			2	1	100	25	1033	962	0.104	100	101	0.1	0.1	5.029	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	96	24	1033	959	0.100	94	105	0.2	0.2	4.049	A
		2	1	1	100	25	-	-	-	100	101	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	362	91	-	-	-	362	377	0.0	0.0	0.000	A
3	Entry	1	1	1	137	34	777	747	0.183	137	134	0.3	0.3	7.727	A
				2	131	33	777	747	0.176	133	132	0.2	0.2	7.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	777	747	0.093	69	64	0.1	0.1	4.926	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	137	34	-	-	-	137	135	0.0	0.0	0.000	A
				2	201	50	-	-	-	201	196	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	95.46	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	95.46	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	174	100.000
2		ONE HOUR	✓	605	100.000
3		ONE HOUR	✓	988	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	48	126
	2	213	0	392
	3	398	590	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	6
	2	4	0	8
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.16	4.85	0.4	A	161	241
2	0.35	5.47	1.1	A	555	832
3	1.11	166.82	56.3	F	904	1355

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	33	440	1265	0.104	132	131	455	0.0	0.1	4.093	A
2	455	114	91	1965	0.232	458	464	481	0.0	0.5	4.723	A
3	735	184	162	1018	0.722	732	726	387	0.0	3.2	14.086	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	148	37	526	1273	0.116	149	160	548	0.1	0.1	4.469	A
2	536	134	107	1953	0.274	538	549	568	0.5	0.7	4.894	A
3	886	222	187	1035	0.856	886	876	457	3.2	6.5	25.289	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	201	50	596	1233	0.163	200	201	632	0.1	0.2	4.797	A
2	670	167	145	1913	0.350	669	673	651	0.7	1.1	5.387	A
3	1085	271	236	978	1.110	991	984	577	6.5	31.5	74.606	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	193	48	605	1254	0.154	191	198	649	0.2	0.4	4.853	A
2	664	166	138	1951	0.340	665	674	658	1.1	1.0	5.474	A
3	1098	274	240	1013	1.083	1014	1002	563	31.5	56.3	166.816	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	158	39	591	1244	0.127	158	160	592	0.4	0.2	4.647	A
2	547	137	116	1947	0.281	546	555	633	1.0	0.8	5.141	A
3	884	221	189	1024	0.863	993	1000	473	56.3	31.3	160.648	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	463	1329	0.100	132	138	482	0.2	0.2	4.563	A
2	457	114	95	1967	0.232	455	458	500	0.8	0.8	4.603	A
3	734	184	162	1066	0.689	783	843	388	31.3	6.7	58.730	F

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	42	987	0.042	42	37	0.0	0.1	4.009	A
			2	1, 3	90	987	0.091	91	94	0.0	0.1	4.120	A
		2	1	(1, 2, 3)	131			131	132	0.0	0.0	0.004	A
	Exit	1	1		455			455	454	0.0	0.0	0.000	A
2	Entry	1	1	3	223	1002	0.222	224	226	0.0	0.3	4.728	A
			2	1, 2, (3)	233	1002	0.232	234	238	0.0	0.2	4.718	A
		2	1	(1, 2, 3)	455			455	466	0.0	0.0	0.000	A
	Exit	1	1		481			481	473	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	557	729	0.763	552	545	0.0	2.9	16.411	C
			2	(2), 3	179	729	0.246	180	180	0.0	0.3	6.302	A
		2	1	(1, 2, 3)	735			736	738	0.0	0.0	0.160	A
	Exit	1	1		387			387	395	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	42	955	0.044	43	45	0.1	0.0	4.367	A
			2	1, 3	106	955	0.111	107	115	0.1	0.1	4.468	A
		2	1	(1, 2, 3)	148			148	160	0.0	0.0	0.030	A
	Exit	1	1		548			548	545	0.0	0.0	0.000	A
2	Entry	1	1	3	259	997	0.260	262	268	0.3	0.3	4.909	A
			2	1, 2, (3)	276	997	0.277	276	281	0.2	0.3	4.880	A
		2	1	(1, 2, 3)	536			536	550	0.0	0.0	0.000	A
	Exit	1	1		568			568	569	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	657	722	0.911	656	641	2.9	5.4	28.775	D
			2	(2), 3	231	722	0.320	230	234	0.3	0.5	7.073	A
		2	1	(1, 2, 3)	886			888	887	0.0	0.5	2.173	A
	Exit	1	1		457			457	471	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	55	930	0.059	55	55	0.0	0.1	4.498	A
			2	1, 3	145	930	0.156	145	146	0.1	0.1	4.820	A
		2	1	(1, 2, 3)	201			201	201	0.0	0.0	0.064	A
	Exit	1	1		632			632	630	0.0	0.0	0.000	A
2	Entry	1	1	3	328	984	0.333	328	328	0.3	0.6	5.343	A
			2	1, 2, (3)	342	984	0.347	341	345	0.3	0.6	5.428	A
		2	1	(1, 2, 3)	670			670	675	0.0	0.0	0.000	A
	Exit	1	1		651			651	649	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	702	707	0.993	690	687	5.4	12.5	54.758	F
			2	(2), 3	303	707	0.428	301	297	0.5	0.9	10.068	B
		2	1	(1, 2, 3)	1085			1005	1014	0.5	18.1	32.232	D
	Exit	1	1		577			577	579	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	54	927	0.059	53	54	0.1	0.2	4.601	A
			2	1, 3	139	927	0.150	138	144	0.1	0.2	4.893	A
		2	1	(1, 2, 3)	193			193	199	0.0	0.0	0.040	A
	Exit	1	1		649			649	642	0.0	0.0	0.000	A
2	Entry	1	1	3	319	987	0.324	319	326	0.6	0.5	5.385	A
			2	1, 2, (3)	345	987	0.349	346	348	0.6	0.5	5.555	A
		2	1	(1, 2, 3)	664			664	674	0.0	0.0	0.000	A
	Exit	1	1		658			658	652	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	710	706	1.006	707	704	12.5	13.4	66.671	F
			2	(2), 3	311	706	0.440	307	298	0.9	1.2	11.103	B
		2	1	(1, 2, 3)	1098			1021	1006	18.1	41.7	116.412	F
	Exit	1	1		563			563	579	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	42	932	0.045	42	44	0.2	0.0	4.364	A
			2	1, 3	116	932	0.124	116	116	0.2	0.2	4.724	A
		2	1	(1, 2, 3)	158			158	159	0.0	0.0	0.020	A
	Exit	1	1		592			592	596	0.0	0.0	0.000	A
2	Entry	1	1	3	268	994	0.270	268	271	0.5	0.4	5.138	A
			2	1, 2, (3)	279	994	0.281	278	284	0.5	0.4	5.145	A
		2	1	(1, 2, 3)	547			547	554	0.0	0.0	0.000	A
	Exit	1	1		633			633	641	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	689	721	0.955	707	709	13.4	10.6	62.460	F
			2	(2), 3	283	721	0.393	287	292	1.2	0.6	11.388	B
		2	1	(1, 2, 3)	884			972	987	41.7	20.1	113.903	F
	Exit	1	1		473			473	478	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	38	978	0.039	37	38	0.0	0.1	4.033	A
			2	1, 3	95	978	0.097	95	100	0.2	0.2	4.708	A
		2	1	(1, 2, 3)	133			133	138	0.0	0.0	0.042	A
	Exit	1	1		482			482	502	0.0	0.0	0.000	A
2	Entry	1	1	3	225	1001	0.225	224	226	0.4	0.5	4.675	A
			2	1, 2, (3)	232	1001	0.232	231	233	0.4	0.3	4.534	A
		2	1	(1, 2, 3)	457			457	458	0.0	0.0	0.000	A
	Exit	1	1		500			500	537	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	574	729	0.787	589	622	10.6	3.8	37.087	E
			2	(2), 3	194	729	0.266	194	220	0.6	0.4	8.520	A
		2	1	(1, 2, 3)	734			768	814	20.1	2.5	31.711	D
	Exit	1	1		388			388	399	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	1147	987	0.042	42	37	0.0	0.1	4.009	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	90	22	1147	988	0.091	91	94	0.0	0.1	4.120	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	-	-	-	42	38	0.0	0.0	0.000	A
				3	90	22	-	-	-	90	94	0.0	0.0	0.006	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	223	56	1033	1002	0.222	224	226	0.0	0.3	4.728	A
			2	1	161	40	1033	1003	0.160	162	163	0.0	0.2	4.992	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	1003	0.072	72	75	0.0	0.1	4.105	A
		2	1	1	161	40	-	-	-	161	164	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	-	-	-	295	303	0.0	0.0	0.000	A
3	Entry	1	1	1	296	74	777	729	0.406	293	290	0.0	1.7	17.290	C
				2	260	65	777	729	0.357	259	255	0.0	1.1	15.404	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	777	729	0.246	180	180	0.0	0.3	6.302	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	296	74	-	-	-	296	297	0.0	0.0	0.181	A
				2	439	110	-	-	-	439	441	0.0	0.0	0.146	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	11	1147	956	0.044	43	45	0.1	0.0	4.367	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	106	27	1147	956	0.111	107	115	0.1	0.1	4.468	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	11	-	-	-	42	45	0.0	0.0	0.012	A
				3	106	27	-	-	-	106	115	0.0	0.0	0.036	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	259	65	1033	997	0.260	262	268	0.3	0.3	4.909	A
			2	1	187	47	1033	997	0.188	187	193	0.2	0.3	5.110	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1033	996	0.089	89	88	0.1	0.1	4.351	A
		2	1	1	187	47	-	-	-	187	193	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	349	87	-	-	-	349	356	0.0	0.0	0.000	A
3	Entry	1	1	1	364	91	777	722	0.505	361	352	1.7	3.1	29.378	D
				2	293	73	777	722	0.406	296	289	1.1	2.3	28.042	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	231	58	777	722	0.319	230	234	0.3	0.5	7.073	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	364	91	-	-	-	364	358	0.0	0.2	2.128	A
				2	522	131	-	-	-	524	529	0.0	0.3	2.203	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	1147	929	0.059	55	55	0.0	0.1	4.498	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	145	36	1147	930	0.156	145	146	0.1	0.1	4.820	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	55	0.0	0.0	0.019	A
				3	145	36	-	-	-	145	146	0.0	0.0	0.081	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	1033	985	0.333	328	328	0.3	0.6	5.343	A
			2	1	237	59	1033	985	0.241	236	240	0.3	0.4	5.748	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	984	0.106	105	105	0.1	0.1	4.670	A
		2	1	1	237	59	-	-	-	237	241	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	433	108	-	-	-	433	434	0.0	0.0	0.000	A
3	Entry	1	1	1	402	100	777	707	0.568	396	390	3.1	7.3	55.396	F
				2	300	75	777	707	0.424	295	297	2.3	5.2	53.916	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	303	76	777	707	0.428	301	297	0.5	0.9	10.068	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	436	109	-	-	-	402	407	0.2	7.5	33.315	D
				2	650	162	-	-	-	603	607	0.3	10.6	31.504	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	1147	927	0.059	53	54	0.1	0.2	4.601	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	139	35	1147	924	0.150	138	144	0.1	0.2	4.893	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	-	-	-	54	54	0.0	0.0	0.049	A
				3	139	35	-	-	-	139	144	0.0	0.0	0.037	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	319	80	1033	987	0.324	319	326	0.6	0.5	5.385	A
			2	1	240	60	1033	987	0.243	240	239	0.4	0.4	5.955	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	986	0.106	105	109	0.1	0.1	4.635	A
		2	1	1	240	60	-	-	-	240	239	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	424	106	-	-	-	424	435	0.0	0.0	0.000	A
3	Entry	1	1	1	408	102	777	706	0.578	409	403	7.3	7.7	66.752	F
				2	302	76	777	706	0.428	297	301	5.2	5.8	66.563	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	311	78	777	706	0.440	307	298	0.9	1.2	11.103	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	442	111	-	-	-	408	405	7.5	16.6	117.523	F
				2	655	164	-	-	-	613	601	10.6	25.1	115.668	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	1147	929	0.045	42	44	0.2	0.0	4.364	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	116	29	1147	931	0.124	116	116	0.2	0.2	4.724	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	-	-	-	42	43	0.0	0.0	0.025	A
				3	116	29	-	-	-	116	116	0.0	0.0	0.018	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	268	67	1033	994	0.270	268	271	0.5	0.4	5.138	A
			2	1	190	47	1033	995	0.191	189	193	0.4	0.2	5.472	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1033	994	0.090	89	91	0.1	0.2	4.425	A
		2	1	1	190	47	-	-	-	190	193	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	358	89	-	-	-	358	362	0.0	0.0	0.000	A
3	Entry	1	1	1	389	97	777	721	0.540	403	403	7.7	5.9	62.696	F
				2	300	75	777	721	0.415	304	306	5.8	4.7	62.150	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	283	71	777	721	0.393	287	292	1.2	0.6	11.388	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	352	88	-	-	-	389	396	16.6	8.1	115.384	F
				2	532	133	-	-	-	583	591	25.1	12.0	112.909	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	1147	974	0.039	37	38	0.0	0.1	4.033	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	95	24	1147	976	0.097	95	100	0.2	0.2	4.708	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	-	-	-	38	38	0.0	0.0	0.013	A
				3	95	24	-	-	-	95	100	0.0	0.0	0.053	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	225	56	1033	1001	0.225	224	226	0.4	0.5	4.675	A
			2	1	164	41	1033	1001	0.163	162	159	0.2	0.3	4.743	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1033	1001	0.069	69	73	0.2	0.1	4.067	A
		2	1	1	164	41	-	-	-	164	159	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	294	73	-	-	-	294	299	0.0	0.0	0.000	A
3	Entry	1	1	1	312	78	777	729	0.429	320	343	5.9	2.2	38.452	E
				2	261	65	777	729	0.359	269	279	4.7	1.5	35.409	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	194	49	777	729	0.267	194	220	0.6	0.4	8.520	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	299	75	-	-	-	312	329	8.1	1.1	32.111	D
				2	435	109	-	-	-	456	486	12.0	1.4	31.439	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	14.10	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.10	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	488	100.000
2		ONE HOUR	✓	656	100.000
3		ONE HOUR	✓	868	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	164	324
	2	89	0	567
	3	260	608	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	2	0
	2	7	0	4
	3	3	2	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.44	6.34	1.1	A	451	676
2	0.42	6.23	1.6	A	599	899
3	0.84	24.50	6.3	C	789	1184

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	377	94	453	1342	0.281	377	370	259	0.0	0.5	4.679	A
2	497	124	250	1835	0.271	496	492	580	0.0	0.7	4.962	A
3	643	161	66	1155	0.557	646	648	679	0.0	1.8	9.407	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	431	108	544	1338	0.322	429	437	313	0.5	0.6	5.096	A
2	576	144	282	1805	0.319	580	595	692	0.7	0.8	5.360	A
3	782	195	77	1139	0.686	779	791	784	1.8	2.8	12.707	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	540	135	656	1232	0.438	538	541	383	0.6	1.1	6.191	A
2	726	181	355	1748	0.415	723	732	839	0.8	1.6	6.096	A
3	932	233	96	1159	0.805	942	941	982	2.8	5.2	19.896	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	546	137	674	1248	0.438	548	547	386	1.1	0.9	6.343	A
2	717	179	365	1739	0.412	721	730	857	1.6	1.0	6.231	A
3	959	240	96	1135	0.845	964	960	990	5.2	6.3	24.497	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	441	110	542	1340	0.329	442	446	307	0.9	0.6	5.194	A
2	585	146	299	1847	0.317	586	599	685	1.0	1.0	5.611	A
3	768	192	80	1146	0.670	770	798	805	6.3	3.2	14.548	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	369	92	451	1374	0.268	367	377	263	0.6	0.6	4.735	A
2	496	124	246	1847	0.269	495	500	572	1.0	0.6	4.965	A
3	650	162	69	1125	0.578	646	664	673	3.2	1.8	10.248	B

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	127	982	0.130	127	124	0.0	0.2	4.364	A
			2	1, 3	250	982	0.254	250	246	0.0	0.3	4.736	A
		2	1	(1, 2, 3)	377			377	372	0.0	0.0	0.064	A
	Exit	1	1		259			259	257	0.0	0.0	0.000	A
2	Entry	1	1	3	308	950	0.325	307	307	0.0	0.5	5.231	A
			2	1, 2, (3)	188	950	0.198	188	185	0.0	0.2	4.512	A
		2	1	(1, 2, 3)	497			497	495	0.0	0.0	0.000	A
	Exit	1	1		580			580	581	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	473	757	0.625	476	477	0.0	1.5	10.732	B
			2	(2), 3	170	757	0.225	171	172	0.0	0.3	5.732	A
		2	1	(1, 2, 3)	643			643	655	0.0	0.0	0.001	A
	Exit	1	1		679			679	673	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	148	949	0.156	148	151	0.2	0.2	4.441	A
			2	1, 3	282	949	0.297	282	287	0.3	0.4	5.277	A
		2	1	(1, 2, 3)	431			431	438	0.0	0.0	0.103	A
	Exit	1	1		313			313	317	0.0	0.0	0.000	A
2	Entry	1	1	3	350	939	0.373	353	365	0.5	0.5	5.743	A
			2	1, 2, (3)	226	939	0.241	227	230	0.2	0.3	4.748	A
		2	1	(1, 2, 3)	576			576	596	0.0	0.0	0.000	A
	Exit	1	1		692			692	704	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	563	754	0.747	563	566	1.5	2.3	15.116	C
			2	(2), 3	218	754	0.289	217	225	0.3	0.4	6.358	A
		2	1	(1, 2, 3)	782			781	795	0.0	0.1	0.071	A
	Exit	1	1		784			784	802	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	182	908	0.200	183	184	0.2	0.2	5.142	A
			2	1, 3	357	908	0.394	355	357	0.4	0.7	6.037	A
		2	1	(1, 2, 3)	540			539	542	0.0	0.2	0.441	A
	Exit	1	1		383			383	380	0.0	0.0	0.000	A
2	Entry	1	1	3	437	915	0.478	435	441	0.5	1.1	6.628	A
			2	1, 2, (3)	288	915	0.315	288	291	0.3	0.5	5.279	A
		2	1	(1, 2, 3)	726			726	735	0.0	0.0	0.000	A
	Exit	1	1		839			839	841	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	648	748	0.866	658	652	2.3	4.4	24.481	C
			2	(2), 3	284	748	0.379	284	288	0.4	0.6	7.520	A
		2	1	(1, 2, 3)	932			932	950	0.1	0.2	0.599	A
	Exit	1	1		982			982	992	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	182	901	0.202	183	183	0.2	0.2	5.045	A
			2	1, 3	364	901	0.404	365	364	0.7	0.6	6.285	A
		2	1	(1, 2, 3)	546			546	547	0.2	0.1	0.476	A
	Exit	1	1		386			386	388	0.0	0.0	0.000	A
2	Entry	1	1	3	432	911	0.475	437	442	1.1	0.6	6.834	A
			2	1, 2, (3)	284	911	0.312	284	288	0.5	0.5	5.304	A
		2	1	(1, 2, 3)	717			717	727	0.0	0.0	0.000	A
	Exit	1	1		857			857	853	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	652	748	0.871	659	654	4.4	5.0	29.246	D
			2	(2), 3	303	748	0.404	304	306	0.6	0.8	8.210	A
		2	1	(1, 2, 3)	959			954	963	0.2	0.6	1.892	A
	Exit	1	1		990			990	995	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	143	949	0.150	143	149	0.2	0.2	4.610	A
			2	1, 3	298	949	0.314	299	298	0.6	0.4	5.269	A
		2	1	(1, 2, 3)	441			441	446	0.1	0.0	0.145	A
	Exit	1	1		307			307	320	0.0	0.0	0.000	A
2	Entry	1	1	3	365	933	0.391	363	368	0.6	0.7	5.955	A
			2	1, 2, (3)	221	933	0.236	222	231	0.5	0.3	5.055	A
		2	1	(1, 2, 3)	585			585	599	0.0	0.0	0.000	A
	Exit	1	1		685			685	709	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	550	753	0.730	550	570	5.0	2.7	17.156	C
			2	(2), 3	218	753	0.290	220	228	0.8	0.4	6.680	A
		2	1	(1, 2, 3)	768			768	787	0.6	0.1	0.542	A
	Exit	1	1		805			805	815	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	121	983	0.123	120	127	0.2	0.2	4.273	A
			2	1, 3	248	983	0.252	246	251	0.4	0.4	4.875	A
		2	1	(1, 2, 3)	369			369	377	0.0	0.0	0.060	A
	Exit	1	1		263			263	270	0.0	0.0	0.000	A
2	Entry	1	1	3	300	951	0.316	299	306	0.7	0.4	5.236	A
			2	1, 2, (3)	196	951	0.206	196	194	0.3	0.2	4.536	A
		2	1	(1, 2, 3)	496			496	498	0.0	0.0	0.000	A
	Exit	1	1		572			572	588	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	485	756	0.641	480	492	2.7	1.6	11.704	B
			2	(2), 3	165	756	0.218	165	172	0.4	0.2	6.108	A
		2	1	(1, 2, 3)	650			650	659	0.1	0.0	0.039	A
	Exit	1	1		673			673	683	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	1147	983	0.129	127	124	0.0	0.2	4.364	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	250	62	1147	982	0.254	250	246	0.0	0.3	4.736	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	125	0.0	0.0	0.038	A
				3	250	62	-	-	-	250	247	0.0	0.0	0.077	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	308	77	1033	949	0.325	307	307	0.0	0.5	5.231	A
			2	1	66	17	1033	950	0.070	66	65	0.0	0.1	4.897	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	122	31	1033	949	0.129	122	120	0.0	0.1	4.310	A
		2	1	1	66	17	-	-	-	66	66	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	430	108	-	-	-	430	429	0.0	0.0	0.000	A
3	Entry	1	1	1	191	48	777	757	0.253	193	191	0.0	0.6	11.482	B
				2	282	70	777	757	0.372	283	285	0.0	0.9	10.232	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	43	777	757	0.225	171	172	0.0	0.3	5.732	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	194	0.0	0.0	0.001	A
				2	452	113	-	-	-	452	462	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	148	37	1147	949	0.156	148	151	0.2	0.2	4.441	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	282	71	1147	949	0.297	282	287	0.3	0.4	5.277	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	148	37	-	-	-	148	151	0.0	0.0	0.059	A
				3	282	71	-	-	-	282	287	0.0	0.0	0.126	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	350	87	1033	938	0.373	353	365	0.5	0.5	5.743	A
			2	1	77	19	1033	938	0.082	77	80	0.1	0.1	5.311	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	149	37	1033	939	0.159	149	150	0.1	0.2	4.460	A
		2	1	1	77	19	-	-	-	77	80	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	499	125	-	-	-	499	516	0.0	0.0	0.000	A
3	Entry	1	1	1	235	59	777	754	0.311	235	237	0.6	1.0	16.016	C
				2	328	82	777	754	0.435	327	328	0.9	1.3	14.472	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	218	55	777	754	0.289	217	225	0.3	0.4	6.358	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	235	59	-	-	-	235	239	0.0	0.0	0.074	A
				2	547	137	-	-	-	546	556	0.0	0.1	0.070	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	45	1147	908	0.200	183	184	0.2	0.2	5.142	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	1147	907	0.394	355	357	0.4	0.7	6.037	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	-	-	-	182	184	0.0	0.1	0.332	A
				3	358	89	-	-	-	357	358	0.0	0.1	0.496	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	437	109	1033	915	0.478	435	441	0.5	1.1	6.628	A
			2	1	98	24	1033	915	0.107	96	97	0.1	0.3	5.989	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	191	48	1033	915	0.208	192	194	0.2	0.3	4.930	A
		2	1	1	98	24	-	-	-	98	98	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	628	157	-	-	-	628	637	0.0	0.0	0.000	A
3	Entry	1	1	1	280	70	777	748	0.375	287	283	1.0	2.0	25.875	D
				2	368	92	777	748	0.492	371	370	1.3	2.4	23.424	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	284	71	777	748	0.380	284	288	0.4	0.6	7.520	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	280	70	-	-	-	280	287	0.0	0.0	0.608	A
				2	653	163	-	-	-	652	663	0.1	0.1	0.595	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	1147	900	0.202	183	183	0.2	0.2	5.045	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	364	91	1147	902	0.404	365	364	0.7	0.6	6.285	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	-	-	-	182	183	0.1	0.0	0.348	A
				3	364	91	-	-	-	364	364	0.1	0.0	0.539	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	432	108	1033	911	0.474	437	442	1.1	0.6	6.834	A
			2	1	97	24	1033	911	0.107	96	98	0.3	0.3	5.930	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	187	47	1033	912	0.205	188	190	0.3	0.2	4.988	A
		2	1	1	97	24	-	-	-	97	98	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	620	155	-	-	-	620	629	0.0	0.0	0.000	A
3	Entry	1	1	1	286	72	777	749	0.382	290	290	2.0	2.4	30.984	D
				2	366	91	777	748	0.489	370	364	2.4	2.6	27.875	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	303	76	777	748	0.404	304	306	0.6	0.8	8.210	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	287	72	-	-	-	286	291	0.0	0.2	2.054	A
				2	672	168	-	-	-	668	672	0.1	0.4	1.823	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	1147	948	0.151	143	149	0.2	0.2	4.610	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	298	74	1147	949	0.314	299	298	0.6	0.4	5.269	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	-	-	-	143	149	0.0	0.0	0.076	A
				3	298	75	-	-	-	298	297	0.0	0.0	0.179	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	365	91	1033	934	0.391	363	368	0.6	0.7	5.955	A
			2	1	78	20	1033	934	0.084	80	82	0.3	0.1	5.599	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	142	36	1033	935	0.152	143	149	0.2	0.2	4.767	A
		2	1	1	78	20	-	-	-	78	81	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	507	127	-	-	-	507	517	0.0	0.0	0.000	A
3	Entry	1	1	1	226	57	777	753	0.300	228	238	2.4	1.0	18.250	C
				2	324	81	777	754	0.430	323	332	2.6	1.6	16.389	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	218	55	777	754	0.290	220	228	0.8	0.4	6.680	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	226	57	-	-	-	226	232	0.2	0.0	0.686	A
				2	542	136	-	-	-	542	555	0.4	0.1	0.483	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	121	30	1147	981	0.123	120	127	0.2	0.2	4.273	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	248	62	1147	982	0.252	246	251	0.4	0.4	4.875	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	121	30	-	-	-	121	126	0.0	0.0	0.046	A
				3	248	62	-	-	-	248	251	0.0	0.0	0.067	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	1033	950	0.316	299	306	0.7	0.4	5.236	A
			2	1	69	17	1033	951	0.072	69	67	0.1	0.1	5.090	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	127	32	1033	951	0.134	127	126	0.2	0.1	4.250	A
		2	1	1	69	17	-	-	-	69	67	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	427	107	-	-	-	427	431	0.0	0.0	0.000	A
3	Entry	1	1	1	197	49	777	757	0.260	194	203	1.0	0.8	12.521	B
				2	288	72	777	756	0.381	286	289	1.6	0.8	11.137	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	165	41	777	756	0.218	165	172	0.4	0.2	6.108	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	197	49	-	-	-	197	201	0.0	0.0	0.057	A
				2	453	113	-	-	-	453	458	0.1	0.0	0.031	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	Arm 3	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	135.07	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	135.07	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	187	100.000
2		ONE HOUR	✓	569	100.000
3		ONE HOUR	✓	1035	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	55	132
	2	210	0	359
	3	406	629	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	6	5
	2	4	0	9
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.17	4.84	0.4	A	173	259
2	0.33	5.28	0.8	A	518	777
3	1.15	229.49	74.3	F	951	1426

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	147	37	474	1323	0.111	147	144	462	0.0	0.2	4.220	A
2	425	106	103	1920	0.221	423	426	518	0.0	0.7	4.723	A
3	782	195	158	1042	0.750	778	766	368	0.0	3.9	15.102	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	169	42	562	1293	0.131	168	173	560	0.2	0.3	4.556	A
2	499	125	117	1937	0.257	498	513	613	0.7	0.8	4.891	A
3	921	230	190	1030	0.895	932	921	424	3.9	8.1	31.328	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	206	51	626	1239	0.166	206	211	627	0.3	0.3	4.758	A
2	627	157	147	1917	0.327	630	640	685	0.8	0.8	5.256	A
3	1142	285	232	1025	1.114	1021	1014	544	8.1	41.4	94.730	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	200	50	618	1208	0.166	197	207	618	0.3	0.4	4.839	A
2	610	153	134	1959	0.312	613	632	681	0.8	0.8	5.275	A
3	1148	287	228	998	1.150	1008	1021	519	41.4	74.3	208.543	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	172	43	603	1258	0.137	173	175	580	0.4	0.2	4.655	A
2	521	130	124	1911	0.273	521	527	652	0.8	0.7	4.999	A
3	939	235	181	1025	0.916	1001	1018	464	74.3	54.6	229.488	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	143	36	541	1258	0.114	141	146	505	0.2	0.3	4.666	A
2	427	107	102	1950	0.219	427	439	580	0.7	0.6	4.682	A
3	772	193	154	1067	0.723	891	941	375	54.6	15.7	114.542	F

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	44	974	0.045	44	42	0.0	0.0	4.030	A
			2	1, 3	103	974	0.106	103	101	0.0	0.1	4.289	A
		2	1	(1, 2, 3)	147			147	145	0.0	0.0	0.008	A
	Exit	1	1		462			462	456	0.0	0.0	0.000	A
2	Entry	1	1	3	202	999	0.203	201	202	0.0	0.4	4.793	A
			2	1, 2, (3)	223	999	0.223	222	225	0.0	0.4	4.662	A
		2	1	(1, 2, 3)	425			425	429	0.0	0.0	0.000	A
	Exit	1	1		518			518	512	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	580	730	0.794	577	568	0.0	3.4	17.847	C
			2	(2), 3	200	730	0.274	201	198	0.0	0.3	6.492	A
		2	1	(1, 2, 3)	782			780	781	0.0	0.2	0.109	A
	Exit	1	1		368			368	368	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	51	942	0.054	51	52	0.0	0.1	4.287	A
			2	1, 3	118	942	0.125	117	121	0.1	0.3	4.634	A
		2	1	(1, 2, 3)	169			169	174	0.0	0.0	0.026	A
	Exit	1	1		560			560	554	0.0	0.0	0.000	A
2	Entry	1	1	3	236	994	0.238	236	244	0.4	0.4	4.981	A
			2	1, 2, (3)	262	994	0.264	262	268	0.4	0.4	4.811	A
		2	1	(1, 2, 3)	499			499	513	0.0	0.0	0.000	A
	Exit	1	1		613			613	609	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	665	721	0.922	670	661	3.4	6.5	34.874	D
			2	(2), 3	261	721	0.362	262	259	0.3	0.6	7.861	A
		2	1	(1, 2, 3)	921			926	934	0.2	1.1	3.856	A
	Exit	1	1		424			424	443	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	59	919	0.064	59	65	0.1	0.1	4.516	A
			2	1, 3	147	919	0.160	147	146	0.3	0.2	4.810	A
		2	1	(1, 2, 3)	206			206	210	0.0	0.0	0.037	A
	Exit	1	1		627			627	623	0.0	0.0	0.000	A
2	Entry	1	1	3	299	984	0.304	301	305	0.4	0.4	5.190	A
			2	1, 2, (3)	328	984	0.333	329	335	0.4	0.5	5.315	A
		2	1	(1, 2, 3)	627			627	641	0.0	0.0	0.000	A
	Exit	1	1		685			685	689	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	708	708	0.999	700	699	6.5	12.8	57.837	F
			2	(2), 3	321	708	0.453	321	316	0.6	1.1	10.983	B
		2	1	(1, 2, 3)	1142			1029	1042	1.1	27.4	50.249	F
	Exit	1	1		544			544	552	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	64	922	0.069	63	63	0.1	0.1	4.515	A
			2	1, 3	136	922	0.148	134	144	0.2	0.2	4.907	A
		2	1	(1, 2, 3)	200			200	207	0.0	0.0	0.050	A
	Exit	1	1		618			618	632	0.0	0.0	0.000	A
2	Entry	1	1	3	291	988	0.294	292	300	0.4	0.4	5.351	A
			2	1, 2, (3)	319	988	0.323	321	331	0.5	0.4	5.209	A
		2	1	(1, 2, 3)	610			610	631	0.0	0.0	0.000	A
	Exit	1	1		681			681	684	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	703	710	0.990	699	709	12.8	13.8	67.856	F
			2	(2), 3	311	710	0.439	309	311	1.1	1.4	12.645	B
		2	1	(1, 2, 3)	1148			1014	1026	27.4	59.1	157.526	F
	Exit	1	1		519			519	543	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	927	0.053	49	51	0.1	0.1	4.527	A
			2	1, 3	123	927	0.133	124	124	0.2	0.1	4.683	A
		2	1	(1, 2, 3)	172			172	174	0.0	0.0	0.017	A
	Exit	1	1		580			580	598	0.0	0.0	0.000	A
2	Entry	1	1	3	255	991	0.257	256	253	0.4	0.3	5.014	A
			2	1, 2, (3)	266	991	0.269	265	273	0.4	0.4	4.985	A
		2	1	(1, 2, 3)	521			521	526	0.0	0.0	0.000	A
	Exit	1	1		652			652	664	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	709	723	0.980	711	714	13.8	12.6	66.257	F
			2	(2), 3	295	723	0.408	291	304	1.4	1.1	11.696	B
		2	1	(1, 2, 3)	939			1004	1012	59.1	40.8	179.421	F
	Exit	1	1		464			464	457	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	41	950	0.043	39	43	0.1	0.1	4.473	A
			2	1, 3	103	950	0.108	102	103	0.1	0.2	4.683	A
		2	1	(1, 2, 3)	143			143	146	0.0	0.0	0.044	A
	Exit	1	1		505			505	534	0.0	0.0	0.000	A
2	Entry	1	1	3	206	999	0.206	207	210	0.3	0.2	4.609	A
			2	1, 2, (3)	221	999	0.221	220	229	0.4	0.4	4.747	A
		2	1	(1, 2, 3)	427			427	438	0.0	0.0	0.000	A
	Exit	1	1		580			580	611	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	617	731	0.843	645	675	12.6	6.0	50.612	F
			2	(2), 3	244	731	0.333	246	267	1.1	0.6	10.392	B
		2	1	(1, 2, 3)	772			861	913	40.8	9.0	78.907	F
	Exit	1	1		375			375	380	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	1147	974	0.045	44	42	0.0	0.0	4.030	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1147	973	0.106	103	101	0.0	0.1	4.289	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	43	0.0	0.0	0.015	A
				3	103	26	-	-	-	103	102	0.0	0.0	0.005	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	202	51	1033	999	0.203	201	202	0.0	0.4	4.793	A
			2	1	158	39	1033	999	0.158	158	160	0.0	0.3	4.829	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	1033	999	0.065	64	65	0.0	0.1	4.224	A
		2	1	1	158	39	-	-	-	158	161	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	267	67	-	-	-	267	268	0.0	0.0	0.000	A
3	Entry	1	1	1	305	76	777	731	0.418	304	296	0.0	1.9	18.598	C
				2	274	69	777	731	0.375	273	272	0.0	1.5	17.027	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	777	731	0.274	201	198	0.0	0.3	6.492	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	306	77	-	-	-	305	304	0.0	0.1	0.131	A
				2	476	119	-	-	-	474	477	0.0	0.1	0.095	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	51	13	1147	943	0.054	51	52	0.0	0.1	4.287	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	118	30	1147	942	0.125	117	121	0.1	0.3	4.634	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	51	13	-	-	-	51	52	0.0	0.0	0.014	A
				3	118	30	-	-	-	118	122	0.0	0.0	0.031	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	236	59	1033	994	0.237	236	244	0.4	0.4	4.981	A
			2	1	191	48	1033	994	0.192	190	190	0.3	0.3	5.079	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	994	0.072	71	78	0.1	0.1	4.128	A
		2	1	2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	308	77	-	-	-	308	323	0.0	0.0	0.000	A
3	Entry	1	1	1	367	92	777	721	0.508	370	364	1.9	3.8	35.650	E
				2	298	75	777	720	0.414	300	298	1.5	2.7	33.922	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	261	65	777	720	0.362	262	259	0.3	0.6	7.861	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	365	91	-	-	-	367	371	0.1	0.5	4.066	A
				2	556	139	-	-	-	559	563	0.1	0.6	3.717	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1147	918	0.064	59	65	0.1	0.1	4.516	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	147	37	1147	917	0.161	147	146	0.3	0.2	4.810	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	65	0.0	0.0	0.019	A
				3	147	37	-	-	-	147	146	0.0	0.0	0.046	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	299	75	1033	984	0.304	301	305	0.4	0.4	5.190	A
			2	1	233	58	1033	984	0.237	232	234	0.3	0.4	5.614	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	95	24	1033	983	0.097	96	101	0.1	0.1	4.582	A
		2	1	1	233	58	-	-	-	233	234	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	394	98	-	-	-	394	406	0.0	0.0	0.000	A
3	Entry	1	1	1	399	100	777	708	0.563	394	389	3.8	7.2	58.247	F
				2	309	77	777	708	0.436	305	309	2.7	5.7	57.323	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	321	80	777	709	0.453	321	316	0.6	1.1	10.983	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	452	113	-	-	-	399	403	0.5	11.3	51.108	F
				2	690	173	-	-	-	630	639	0.6	16.1	49.703	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	1147	922	0.069	63	63	0.1	0.1	4.515	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	136	34	1147	921	0.148	134	144	0.2	0.2	4.907	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	-	-	-	64	63	0.0	0.0	0.035	A
				3	136	34	-	-	-	136	144	0.0	0.0	0.056	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	291	73	1033	988	0.294	292	300	0.4	0.4	5.351	A
			2	1	227	57	1033	988	0.229	228	233	0.4	0.3	5.503	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	1033	987	0.094	93	98	0.1	0.1	4.476	A
		2	1	1	227	57	-	-	-	227	233	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	384	96	-	-	-	384	399	0.0	0.0	0.000	A
3	Entry	1	1	1	396	99	777	710	0.558	390	400	7.2	8.1	68.284	F
				2	307	77	777	709	0.432	310	310	5.7	5.7	67.299	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	311	78	777	709	0.439	309	311	1.1	1.4	12.645	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	452	113	-	-	-	396	403	11.3	23.3	158.740	F
				2	696	174	-	-	-	618	622	16.1	35.8	156.744	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	926	0.053	49	51	0.1	0.1	4.527	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1147	930	0.132	124	124	0.2	0.1	4.683	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	51	0.0	0.0	0.011	A
				3	123	31	-	-	-	123	123	0.0	0.0	0.020	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	255	64	1033	992	0.257	256	253	0.4	0.3	5.014	A
			2	1	182	46	1033	991	0.184	181	193	0.3	0.3	5.249	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	1033	991	0.085	84	80	0.1	0.1	4.317	A
		2	1	1	182	46	-	-	-	182	193	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	339	85	-	-	-	339	333	0.0	0.0	0.000	A
3	Entry	1	1	1	401	100	777	723	0.556	398	405	8.1	7.3	66.643	F
				2	307	77	777	723	0.425	312	309	5.7	5.3	65.753	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	295	74	777	723	0.408	291	304	1.4	1.1	11.696	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	374	94	-	-	-	401	401	23.3	16.5	181.355	F
				2	565	141	-	-	-	602	610	35.8	24.3	178.138	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	1147	945	0.043	39	43	0.1	0.1	4.473	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1147	948	0.108	102	103	0.1	0.2	4.683	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	-	-	-	41	43	0.0	0.0	0.034	A
				3	103	26	-	-	-	103	103	0.0	0.0	0.049	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	206	51	1033	999	0.206	207	210	0.3	0.2	4.609	A
			2	1	156	39	1033	999	0.156	154	161	0.3	0.3	4.949	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	65	16	1033	999	0.066	66	68	0.1	0.1	4.245	A
		2	1	1	156	39	-	-	-	156	161	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	-	-	-	271	277	0.0	0.0	0.000	A
3	Entry	1	1	1	334	84	777	731	0.457	351	373	7.3	3.3	51.669	F
				2	282	71	777	731	0.386	294	302	5.3	2.8	49.314	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	244	61	777	731	0.334	246	267	1.1	0.6	10.392	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	307	77	-	-	-	334	357	16.5	3.9	79.411	F
				2	464	116	-	-	-	526	556	24.3	5.2	78.581	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	13.62	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.62	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	523	100.000
2		ONE HOUR	✓	702	100.000
3		ONE HOUR	✓	846	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	169	354
	2	89	0	613
	3	262	584	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	2	0
2	6	0	3
3	2	3	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.46	6.50	1.0	A	481	721
2	0.45	6.60	1.6	A	641	962
3	0.84	23.86	6.1	C	774	1162

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	393	98	436	1356	0.290	393	388	268	0.0	0.4	4.701	A
2	524	131	264	1856	0.282	524	530	564	0.0	0.8	5.144	A
3	631	158	69	1138	0.555	634	632	718	0.0	1.5	9.665	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	470	118	522	1319	0.356	472	476	328	0.4	0.5	5.347	A
2	632	158	322	1770	0.357	633	634	671	0.8	1.0	5.585	A
3	762	190	83	1147	0.664	767	755	872	1.5	2.5	12.452	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	582	145	628	1278	0.455	583	578	388	0.5	0.9	6.104	A
2	787	197	396	1738	0.453	783	782	815	1.0	1.6	6.449	A
3	921	230	101	1121	0.821	915	922	1078	2.5	5.8	20.385	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	571	143	649	1231	0.463	572	588	387	0.9	1.0	6.505	A
2	763	191	384	1755	0.435	762	785	837	1.6	1.2	6.596	A
3	942	236	90	1118	0.843	946	945	1056	5.8	6.1	23.864	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	467	117	522	1300	0.359	466	470	325	1.0	0.8	5.466	A
2	627	157	317	1752	0.358	625	633	671	1.2	1.0	5.620	A
3	756	189	84	1168	0.648	762	778	858	6.1	2.7	14.651	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	101	441	1354	0.297	401	406	263	0.8	0.5	4.863	A
2	517	129	270	1835	0.281	513	532	572	1.0	0.9	5.168	A
3	634	159	66	1142	0.555	638	643	717	2.7	1.5	10.093	B

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	128	988	0.130	129	126	0.0	0.1	4.331	A
			2	1, 3	264	988	0.267	264	261	0.0	0.3	4.748	A
		2	1	(1, 2, 3)	393			392	389	0.0	0.0	0.085	A
	Exit	1	1		268			268	265	0.0	0.0	0.000	A
2	Entry	1	1	3	326	945	0.345	326	330	0.0	0.5	5.410	A
			2	1, 2, (3)	197	945	0.209	197	200	0.0	0.3	4.699	A
		2	1	(1, 2, 3)	524			524	533	0.0	0.0	0.000	A
	Exit	1	1		564			564	562	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	472	756	0.624	474	470	0.0	1.3	11.039	B
			2	(2), 3	159	756	0.210	160	162	0.0	0.2	5.654	A
		2	1	(1, 2, 3)	631			631	638	0.0	0.0	0.000	A
	Exit	1	1		718			718	723	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	149	957	0.156	149	154	0.1	0.2	4.494	A
			2	1, 3	321	957	0.336	322	322	0.3	0.3	5.448	A
		2	1	(1, 2, 3)	470			470	476	0.0	0.0	0.206	A
	Exit	1	1		328			328	314	0.0	0.0	0.000	A
2	Entry	1	1	3	385	925	0.416	385	389	0.5	0.7	6.033	A
			2	1, 2, (3)	247	925	0.267	247	245	0.3	0.3	4.863	A
		2	1	(1, 2, 3)	632			632	635	0.0	0.0	0.000	A
	Exit	1	1		671			671	677	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	559	752	0.743	561	548	1.3	2.1	14.610	B
			2	(2), 3	203	752	0.270	206	207	0.2	0.3	6.603	A
		2	1	(1, 2, 3)	762			762	759	0.0	0.0	0.022	A
	Exit	1	1		872			872	874	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	187	918	0.204	187	189	0.2	0.2	4.883	A
			2	1, 3	395	918	0.430	396	389	0.3	0.7	6.140	A
		2	1	(1, 2, 3)	582			582	579	0.0	0.1	0.364	A
	Exit	1	1		388			388	381	0.0	0.0	0.000	A
2	Entry	1	1	3	475	901	0.528	472	474	0.7	1.1	7.169	A
			2	1, 2, (3)	311	901	0.346	312	308	0.3	0.5	5.325	A
		2	1	(1, 2, 3)	787			787	784	0.0	0.0	0.001	A
	Exit	1	1		815			815	828	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	642	747	0.860	636	641	2.1	4.8	24.146	C
			2	(2), 3	281	747	0.376	279	281	0.3	0.7	7.856	A
		2	1	(1, 2, 3)	921			923	934	0.0	0.3	1.101	A
	Exit	1	1		1078			1078	1072	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	189	911	0.207	189	191	0.2	0.3	4.888	A
			2	1, 3	384	911	0.421	384	397	0.7	0.7	6.535	A
		2	1	(1, 2, 3)	571			572	589	0.1	0.0	0.505	A
	Exit	1	1		387			387	388	0.0	0.0	0.000	A
2	Entry	1	1	3	466	905	0.515	467	477	1.1	0.7	7.213	A
			2	1, 2, (3)	297	905	0.328	295	309	0.5	0.4	5.635	A
		2	1	(1, 2, 3)	763			763	784	0.0	0.0	0.000	A
	Exit	1	1		837			837	844	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	656	750	0.875	657	659	4.8	4.9	27.403	D
			2	(2), 3	288	750	0.384	289	286	0.7	0.7	7.651	A
		2	1	(1, 2, 3)	942			944	945	0.3	0.5	2.411	A
	Exit	1	1		1056			1056	1086	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	150	957	0.157	149	149	0.3	0.2	4.634	A
			2	1, 3	316	957	0.330	317	322	0.7	0.5	5.537	A
		2	1	(1, 2, 3)	467			466	469	0.0	0.0	0.210	A
	Exit	1	1		325			325	326	0.0	0.0	0.000	A
2	Entry	1	1	3	383	927	0.413	383	388	0.7	0.6	6.039	A
			2	1, 2, (3)	244	927	0.263	242	245	0.4	0.4	4.953	A
		2	1	(1, 2, 3)	627			627	633	0.0	0.0	0.000	A
	Exit	1	1		671			671	681	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	554	752	0.737	559	566	4.9	2.3	17.500	C
			2	(2), 3	202	752	0.269	203	211	0.7	0.4	6.622	A
		2	1	(1, 2, 3)	756			756	766	0.5	0.0	0.206	A
	Exit	1	1		858			858	874	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	131	986	0.133	131	133	0.2	0.1	4.246	A
			2	1, 3	271	986	0.275	270	273	0.5	0.3	4.968	A
		2	1	(1, 2, 3)	402			402	405	0.0	0.0	0.131	A
	Exit	1	1		263			263	265	0.0	0.0	0.000	A
2	Entry	1	1	3	324	943	0.343	322	330	0.6	0.6	5.559	A
			2	1, 2, (3)	193	943	0.205	192	202	0.4	0.3	4.524	A
		2	1	(1, 2, 3)	517			517	532	0.0	0.0	0.000	A
	Exit	1	1		572			572	579	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	471	757	0.622	473	477	2.3	1.3	11.535	B
			2	(2), 3	163	757	0.216	164	166	0.4	0.2	5.950	A
		2	1	(1, 2, 3)	634			634	639	0.0	0.0	0.001	A
	Exit	1	1		717			717	737	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	1147	987	0.130	129	126	0.0	0.1	4.331	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1147	988	0.267	264	261	0.0	0.3	4.748	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	-	-	-	128	127	0.0	0.0	0.052	A
				3	264	66	-	-	-	264	263	0.0	0.0	0.101	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	326	82	1033	944	0.346	326	330	0.0	0.5	5.410	A
			2	1	69	17	1033	944	0.073	69	68	0.0	0.1	5.294	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	128	32	1033	945	0.136	128	132	0.0	0.2	4.397	A
		2	1	1	69	17	-	-	-	69	69	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	455	114	-	-	-	455	464	0.0	0.0	0.000	A
3	Entry	1	1	1	197	49	777	756	0.261	198	196	0.0	0.6	11.629	B
				2	275	69	777	756	0.363	276	273	0.0	0.7	10.611	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	777	756	0.210	160	162	0.0	0.2	5.654	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	197	49	-	-	-	197	199	0.0	0.0	0.000	A
				2	434	108	-	-	-	434	439	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	1147	957	0.156	149	154	0.1	0.2	4.494	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	321	80	1147	958	0.335	322	322	0.3	0.3	5.448	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	149	154	0.0	0.0	0.141	A
				3	321	80	-	-	-	321	322	0.0	0.0	0.237	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	385	96	1033	926	0.416	385	389	0.5	0.7	6.033	A
			2	1	83	21	1033	927	0.089	83	82	0.1	0.1	5.536	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	165	41	1033	926	0.178	164	163	0.2	0.3	4.537	A
		2	1	1	83	21	-	-	-	83	82	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	550	137	-	-	-	550	553	0.0	0.0	0.000	A
3	Entry	1	1	1	240	60	777	752	0.319	245	232	0.6	0.8	15.459	C
				2	318	80	777	752	0.423	316	316	0.7	1.4	13.982	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	203	51	777	752	0.270	206	207	0.2	0.3	6.603	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	240	60	-	-	-	240	233	0.0	0.0	0.038	A
				2	522	130	-	-	-	522	526	0.0	0.0	0.015	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	1147	917	0.204	187	189	0.2	0.2	4.883	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	395	99	1147	917	0.431	396	389	0.3	0.7	6.140	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	-	-	-	187	189	0.0	0.0	0.260	A
				3	395	99	-	-	-	395	391	0.0	0.1	0.414	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	475	119	1033	901	0.528	472	474	0.7	1.1	7.169	A
			2	1	101	25	1033	900	0.112	101	99	0.1	0.2	6.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	210	53	1033	901	0.234	210	209	0.3	0.3	5.011	A
		2	1	1	101	25	-	-	-	101	100	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	686	171	-	-	-	686	685	0.0	0.0	0.001	A
3	Entry	1	1	1	290	72	777	747	0.388	287	282	0.8	2.2	25.091	D
				2	352	88	777	747	0.472	349	359	1.4	2.6	23.392	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	281	70	777	747	0.376	279	281	0.3	0.7	7.856	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	289	72	-	-	-	290	288	0.0	0.1	1.177	A
				2	632	158	-	-	-	633	646	0.0	0.2	1.066	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	1147	911	0.207	189	191	0.2	0.3	4.888	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	384	96	1147	910	0.422	384	397	0.7	0.7	6.535	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	188	47	-	-	-	189	192	0.0	0.0	0.367	A
				3	382	96	-	-	-	384	397	0.1	0.0	0.571	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	466	116	1033	905	0.515	467	477	1.1	0.7	7.213	A
			2	1	90	23	1033	904	0.100	90	96	0.2	0.1	6.393	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	206	52	1033	904	0.228	205	213	0.3	0.3	5.305	A
		2	1	1	90	23	-	-	-	90	95	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	672	168	-	-	-	672	688	0.0	0.0	0.000	A
3	Entry	1	1	1	293	73	777	750	0.391	297	292	2.2	2.2	28.420	D
				2	363	91	777	750	0.484	360	367	2.6	2.7	26.585	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	288	72	777	750	0.384	289	286	0.7	0.7	7.651	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	293	73	-	-	-	293	292	0.1	0.1	2.688	A
				2	649	162	-	-	-	651	653	0.2	0.3	2.285	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	38	1147	956	0.157	149	149	0.3	0.2	4.634	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	316	79	1147	956	0.331	317	322	0.7	0.5	5.537	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	38	-	-	-	150	149	0.0	0.0	0.106	A
				3	316	79	-	-	-	316	321	0.0	0.0	0.257	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	383	96	1033	927	0.413	383	388	0.7	0.6	6.039	A
			2	1	84	21	1033	928	0.091	84	81	0.1	0.1	5.614	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	159	40	1033	927	0.172	158	165	0.3	0.2	4.636	A
		2	1	1	84	21	-	-	-	84	81	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	542	136	-	-	-	542	552	0.0	0.0	0.000	A
3	Entry	1	1	1	234	59	777	752	0.312	240	245	2.2	0.9	18.557	C
				2	320	80	777	752	0.425	318	321	2.7	1.5	16.690	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	202	51	777	752	0.269	203	211	0.7	0.4	6.622	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	234	59	-	-	-	234	240	0.1	0.0	0.255	A
				2	522	130	-	-	-	522	526	0.3	0.0	0.183	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	131	33	1147	987	0.133	131	133	0.2	0.1	4.246	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	1147	988	0.274	270	273	0.5	0.3	4.968	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	131	33	-	-	-	131	132	0.0	0.0	0.086	A
				3	271	68	-	-	-	271	273	0.0	0.0	0.153	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	324	81	1033	944	0.343	322	330	0.6	0.6	5.559	A
			2	1	67	17	1033	943	0.071	66	68	0.1	0.1	5.027	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	126	32	1033	942	0.134	125	134	0.2	0.2	4.276	A
		2	1	1	67	17	-	-	-	67	68	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	450	112	-	-	-	450	464	0.0	0.0	0.000	A
3	Entry	1	1	1	194	49	777	757	0.256	196	197	0.9	0.6	12.387	B
				2	277	69	777	757	0.366	277	280	1.5	0.7	10.928	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	163	41	777	757	0.215	164	166	0.4	0.2	5.950	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	194	49	-	-	-	194	196	0.0	0.0	0.003	A
				2	440	110	-	-	-	440	443	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	34.74	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	34.74	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	549	100.000
3		ONE HOUR	✓	917	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	66	79
	2	259	0	290
	3	262	655	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	9	5
	2	2	0	14
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.12	4.82	0.2	A	133	199
2	0.33	5.44	1.0	A	508	762
3	0.95	57.19	16.7	F	840	1260

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	104	26	492	1453	0.072	104	108	396	0.0	0.2	4.236	A
2	412	103	57	1940	0.213	412	412	539	0.0	0.5	4.690	A
3	684	171	202	1097	0.623	686	687	267	0.0	2.0	11.268	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	582	1393	0.095	133	138	469	0.2	0.1	4.567	A
2	508	127	72	1948	0.261	507	504	644	0.5	0.7	4.888	A
3	811	203	239	1134	0.715	812	816	339	2.0	3.7	15.809	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	160	40	710	1318	0.122	160	165	574	0.1	0.2	4.586	A
2	610	153	92	1887	0.323	611	608	778	0.7	0.9	5.436	A
3	1021	255	290	1101	0.927	994	977	413	3.7	13.4	35.720	E

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	163	41	707	1336	0.122	164	166	568	0.2	0.1	4.821	A
2	605	151	86	1858	0.326	604	611	786	0.9	1.0	5.302	A
3	1007	252	278	1064	0.946	997	1003	412	13.4	16.7	57.186	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	127	32	600	1414	0.090	126	135	481	0.1	0.1	4.507	A
2	488	122	67	1890	0.258	490	501	659	1.0	0.5	4.984	A
3	825	206	237	1088	0.759	844	876	320	16.7	4.5	32.379	D

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	27	497	1392	0.079	109	117	388	0.1	0.1	4.333	A
2	422	106	58	1904	0.222	423	422	548	0.5	0.4	4.720	A
3	691	173	196	1094	0.631	690	702	285	4.5	2.4	12.800	B

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	47	968	0.048	46	50	0.0	0.1	4.305	A
			2	1, 3	58	968	0.059	57	58	0.0	0.1	4.170	A
		2	1	(1, 2, 3)	104			104	108	0.0	0.0	0.004	A
	Exit	1	1		396			396	393	0.0	0.0	0.000	A
2	Entry	1	1	3	161	1014	0.159	160	164	0.0	0.2	4.510	A
			2	1, 2, (3)	252	1014	0.248	252	247	0.0	0.3	4.800	A
		2	1	(1, 2, 3)	412			412	414	0.0	0.0	0.000	A
	Exit	1	1		539			539	543	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	487	717	0.679	488	494	0.0	1.7	13.142	B
			2	(2), 3	197	717	0.275	198	193	0.0	0.3	6.412	A
		2	1	(1, 2, 3)	684			684	695	0.0	0.0	0.005	A
	Exit	1	1		267			267	271	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	61	935	0.065	62	63	0.1	0.1	4.617	A
			2	1, 3	71	935	0.076	72	75	0.1	0.1	4.506	A
		2	1	(1, 2, 3)	133			133	138	0.0	0.0	0.011	A
	Exit	1	1		469			469	473	0.0	0.0	0.000	A
2	Entry	1	1	3	207	1009	0.205	205	204	0.2	0.4	4.781	A
			2	1, 2, (3)	301	1009	0.298	301	300	0.3	0.3	4.956	A
		2	1	(1, 2, 3)	508			508	505	0.0	0.0	0.000	A
	Exit	1	1		644			644	647	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	567	707	0.803	567	572	1.7	3.2	19.256	C
			2	(2), 3	244	707	0.346	246	244	0.3	0.4	7.099	A
		2	1	(1, 2, 3)	811			811	823	0.0	0.0	0.157	A
	Exit	1	1		339			339	339	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	69	888	0.078	68	73	0.1	0.1	4.576	A
			2	1, 3	91	888	0.103	92	92	0.1	0.1	4.575	A
		2	1	(1, 2, 3)	160			160	165	0.0	0.0	0.010	A
	Exit	1	1		574			574	570	0.0	0.0	0.000	A
2	Entry	1	1	3	248	1002	0.247	247	247	0.4	0.4	5.229	A
			2	1, 2, (3)	363	1002	0.362	364	361	0.3	0.5	5.566	A
		2	1	(1, 2, 3)	610			610	609	0.0	0.0	0.000	A
	Exit	1	1		778			778	768	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	663	692	0.958	652	650	3.2	8.8	38.964	E
			2	(2), 3	340	692	0.491	342	328	0.4	1.1	10.448	B
		2	1	(1, 2, 3)	1021			1003	1002	0.0	3.6	5.832	A
	Exit	1	1		413			413	412	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	77	889	0.087	78	78	0.1	0.0	4.823	A
			2	1, 3	86	889	0.097	86	89	0.1	0.1	4.808	A
		2	1	(1, 2, 3)	163			163	166	0.0	0.0	0.006	A
	Exit	1	1		568			568	572	0.0	0.0	0.000	A
2	Entry	1	1	3	255	1004	0.254	254	253	0.4	0.4	5.065	A
			2	1, 2, (3)	351	1004	0.350	350	358	0.5	0.6	5.457	A
		2	1	(1, 2, 3)	605			605	612	0.0	0.0	0.000	A
	Exit	1	1		786			786	795	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	661	695	0.951	661	657	8.8	8.8	50.039	F
			2	(2), 3	338	695	0.486	336	345	1.1	1.1	12.042	B
		2	1	(1, 2, 3)	1007			998	1003	3.6	6.8	20.000	C
	Exit	1	1		412			412	414	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	59	928	0.064	59	62	0.0	0.1	4.245	A
			2	1, 3	67	928	0.073	67	73	0.1	0.1	4.694	A
		2	1	(1, 2, 3)	127			127	135	0.0	0.0	0.017	A
	Exit	1	1		481			481	495	0.0	0.0	0.000	A
2	Entry	1	1	3	192	1010	0.190	194	201	0.4	0.2	4.845	A
			2	1, 2, (3)	296	1010	0.293	296	300	0.6	0.3	5.069	A
		2	1	(1, 2, 3)	488			488	499	0.0	0.0	0.000	A
	Exit	1	1		659			659	682	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	586	707	0.829	589	609	8.8	3.7	30.557	D
			2	(2), 3	253	707	0.358	255	268	1.1	0.6	9.458	A
		2	1	(1, 2, 3)	825			840	854	6.8	0.3	9.340	A
	Exit	1	1		320			320	335	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	52	966	0.053	51	54	0.1	0.1	4.447	A
			2	1, 3	58	966	0.060	58	63	0.1	0.0	4.229	A
		2	1	(1, 2, 3)	110			110	117	0.0	0.0	0.006	A
	Exit	1	1		388			388	395	0.0	0.0	0.000	A
2	Entry	1	1	3	173	1013	0.171	174	172	0.2	0.2	4.817	A
			2	1, 2, (3)	249	1013	0.246	249	250	0.3	0.2	4.660	A
		2	1	(1, 2, 3)	422			422	422	0.0	0.0	0.000	A
	Exit	1	1		548			548	559	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	496	719	0.689	494	504	3.7	2.1	15.172	C
			2	(2), 3	195	719	0.271	196	198	0.6	0.3	6.656	A
		2	1	(1, 2, 3)	691			691	695	0.3	0.0	0.105	A
	Exit	1	1		285			285	287	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1147	968	0.048	46	50	0.0	0.1	4.305	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	58	14	1147	967	0.060	57	58	0.0	0.1	4.170	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	-	-	-	47	50	0.0	0.0	0.000	A
				3	58	14	-	-	-	58	58	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	161	40	1033	1014	0.159	160	164	0.0	0.2	4.510	A
			2	1	202	50	1033	1014	0.199	202	199	0.0	0.3	4.880	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	13	1033	1014	0.050	50	49	0.0	0.1	4.430	A
		2	1	1	202	50	-	-	-	202	200	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	211	53	-	-	-	211	214	0.0	0.0	0.000	A
3	Entry	1	1	1	193	48	777	717	0.270	194	194	0.0	0.7	14.193	B
				2	294	73	777	717	0.409	294	300	0.0	1.0	12.459	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	197	49	777	717	0.275	198	193	0.0	0.3	6.412	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	193	48	-	-	-	193	197	0.0	0.0	0.003	A
				2	491	123	-	-	-	491	498	0.0	0.0	0.006	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	1147	935	0.065	62	63	0.1	0.1	4.617	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	1147	938	0.076	72	75	0.1	0.1	4.506	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	-	-	-	61	63	0.0	0.0	0.018	A
				3	71	18	-	-	-	71	75	0.0	0.0	0.006	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	207	52	1033	1009	0.205	205	204	0.2	0.4	4.781	A
			2	1	238	60	1033	1008	0.236	239	240	0.3	0.3	5.103	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	1033	1009	0.062	62	59	0.1	0.0	4.289	A
		2	1	1	238	60	-	-	-	238	240	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	269	67	-	-	-	269	264	0.0	0.0	0.000	A
3	Entry	1	1	1	232	58	777	707	0.329	230	232	0.7	1.5	20.340	C
				2	335	84	777	707	0.474	337	340	1.0	1.7	18.512	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	244	61	777	707	0.346	246	244	0.3	0.4	7.099	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	232	58	-	-	-	232	235	0.0	0.0	0.208	A
				2	579	145	-	-	-	579	587	0.0	0.0	0.136	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	1147	890	0.078	68	73	0.1	0.1	4.576	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	91	23	1147	888	0.103	92	92	0.1	0.1	4.575	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	73	0.0	0.0	0.007	A
				3	91	23	-	-	-	91	92	0.0	0.0	0.013	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	248	62	1033	1002	0.247	247	247	0.4	0.4	5.229	A
			2	1	288	72	1033	1002	0.288	290	288	0.3	0.4	5.772	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1033	1002	0.074	75	72	0.0	0.1	4.647	A
		2	1	1	288	72	-	-	-	288	289	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	322	81	-	-	-	322	320	0.0	0.0	0.000	A
3	Entry	1	1	1	291	73	777	691	0.420	285	282	1.5	4.0	40.305	E
				2	372	93	777	692	0.538	368	368	1.7	4.7	37.933	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	340	85	777	692	0.491	342	328	0.4	1.1	10.448	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	295	74	-	-	-	291	292	0.0	1.0	6.085	A
				2	726	181	-	-	-	712	711	0.0	2.6	5.728	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	77	19	1147	891	0.087	78	78	0.1	0.0	4.823	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	86	21	1147	887	0.097	86	89	0.1	0.1	4.808	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	77	19	-	-	-	77	78	0.0	0.0	0.005	A
				3	86	21	-	-	-	86	89	0.0	0.0	0.007	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	255	64	1033	1004	0.254	254	253	0.4	0.4	5.065	A
			2	1	279	70	1033	1004	0.278	278	286	0.4	0.5	5.650	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	1004	0.071	71	72	0.1	0.1	4.591	A
		2	1	1	279	70	-	-	-	279	286	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	327	82	-	-	-	327	325	0.0	0.0	0.000	A
3	Entry	1	1	1	287	72	777	695	0.413	290	286	4.0	3.8	51.057	F
				2	374	93	777	695	0.538	371	372	4.7	5.0	49.262	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	338	84	777	695	0.485	336	345	1.1	1.1	12.042	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	291	73	-	-	-	287	285	1.0	2.0	20.854	C
				2	717	179	-	-	-	711	718	2.6	4.9	19.661	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1147	932	0.064	59	62	0.0	0.1	4.245	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	67	17	1147	930	0.072	67	73	0.1	0.1	4.694	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	62	0.0	0.0	0.017	A
				3	67	17	-	-	-	67	73	0.0	0.0	0.017	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1033	1010	0.190	194	201	0.4	0.2	4.845	A
			2	1	237	59	1033	1010	0.235	237	239	0.5	0.2	5.231	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	59	15	1033	1010	0.059	59	61	0.1	0.1	4.357	A
		2	1	1	237	59	-	-	-	237	238	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	251	63	-	-	-	251	261	0.0	0.0	0.000	A
3	Entry	1	1	1	243	61	777	707	0.344	244	256	3.8	1.6	31.756	D
				2	344	86	777	707	0.486	345	353	5.0	2.1	29.688	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	253	63	777	707	0.358	255	268	1.1	0.6	9.458	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	237	59	-	-	-	243	247	2.0	0.0	9.551	A
				2	588	147	-	-	-	597	606	4.9	0.3	9.255	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1147	965	0.053	51	54	0.1	0.1	4.447	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	58	15	1147	967	0.060	58	63	0.1	0.0	4.229	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	-	-	-	52	54	0.0	0.0	0.001	A
				3	58	15	-	-	-	58	63	0.0	0.0	0.010	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	173	43	1033	1013	0.171	174	172	0.2	0.2	4.817	A
			2	1	196	49	1033	1013	0.193	196	198	0.2	0.2	4.763	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	1033	1014	0.053	53	52	0.1	0.0	4.221	A
		2	1	1	196	49	-	-	-	196	198	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	227	57	-	-	-	227	224	0.0	0.0	0.000	A
3	Entry	1	1	1	195	49	777	719	0.271	192	197	1.6	1.0	15.899	C
				2	301	75	777	719	0.418	302	307	2.1	1.1	14.706	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	195	49	777	719	0.271	196	198	0.6	0.3	6.656	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	195	49	-	-	-	195	195	0.0	0.0	0.101	A
				2	496	124	-	-	-	496	500	0.3	0.0	0.106	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.80	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.80	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	465	100.000
2		ONE HOUR	✓	638	100.000
3		ONE HOUR	✓	483	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	176	289
	2	121	0	517
	3	178	305	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	3	0
2	10	0	4
3	4	3	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.35	5.05	1.2	A	426	638
2	0.39	6.02	1.4	A	580	870
3	0.52	9.46	1.1	A	450	676

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	84	231	1573	0.214	340	343	219	0.0	0.3	4.404	A
2	492	123	208	1852	0.265	493	489	363	0.0	0.7	4.937	A
3	358	89	92	1075	0.333	358	354	609	0.0	0.8	6.479	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	430	107	275	1588	0.271	427	426	259	0.3	0.5	4.436	A
2	553	138	274	1848	0.299	550	582	427	0.7	1.1	5.290	A
3	430	107	104	1122	0.383	430	437	720	0.8	1.0	7.629	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	495	124	357	1478	0.335	492	518	320	0.5	1.0	5.051	A
2	705	176	309	1800	0.392	703	706	539	1.1	1.1	5.636	A
3	547	137	126	1057	0.518	551	546	887	1.0	1.1	9.460	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	515	129	346	1466	0.351	508	529	354	1.0	1.2	4.994	A
2	691	173	320	1786	0.387	691	714	535	1.1	1.4	6.021	A
3	557	139	141	1088	0.512	559	541	869	1.1	1.0	9.039	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	425	106	278	1558	0.273	423	434	279	1.2	0.7	4.749	A
2	569	142	257	1869	0.305	569	577	444	1.4	0.8	5.247	A
3	439	110	118	1062	0.414	439	442	709	1.0	1.0	7.713	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	88	227	1556	0.226	350	371	231	0.7	0.5	4.364	A
2	472	118	216	1865	0.253	473	490	360	0.8	0.5	4.942	A
3	371	93	86	1086	0.342	373	378	603	1.0	0.7	7.038	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	128	1063	0.121	132	135	0.0	0.1	4.517	A
			2	1, 3	210	1063	0.197	208	209	0.0	0.2	4.250	A
		2	1	(1, 2, 3)	337			338	344	0.0	0.0	0.051	A
	Exit	1	1		219			219	222	0.0	0.0	0.000	A
2	Entry	1	1	3	287	963	0.298	288	286	0.0	0.5	5.082	A
			2	1, 2, (3)	205	963	0.213	205	203	0.0	0.2	4.731	A
		2	1	(1, 2, 3)	492			492	492	0.0	0.0	0.000	A
	Exit	1	1		363			363	360	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	284	750	0.378	283	279	0.0	0.8	6.938	A
			2	(2), 3	74	750	0.099	75	75	0.0	0.1	4.756	A
		2	1	(1, 2, 3)	358			358	357	0.0	0.0	0.000	A
	Exit	1	1		609			609	604	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	153	1047	0.146	152	159	0.1	0.2	4.024	A
			2	1, 3	276	1047	0.264	274	267	0.2	0.3	4.554	A
		2	1	(1, 2, 3)	430			430	427	0.0	0.0	0.076	A
	Exit	1	1		259			259	274	0.0	0.0	0.000	A
2	Entry	1	1	3	324	941	0.344	322	343	0.5	0.7	5.444	A
			2	1, 2, (3)	230	941	0.244	228	239	0.2	0.4	5.065	A
		2	1	(1, 2, 3)	553			553	583	0.0	0.0	0.000	A
	Exit	1	1		427			427	431	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	336	746	0.451	336	345	0.8	0.8	8.298	A
			2	(2), 3	94	746	0.126	93	91	0.1	0.1	5.123	A
		2	1	(1, 2, 3)	430			430	437	0.0	0.0	0.000	A
	Exit	1	1		720			720	740	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	181	1017	0.178	182	188	0.2	0.3	4.332	A
			2	1, 3	313	1017	0.307	309	330	0.3	0.6	5.152	A
		2	1	(1, 2, 3)	495			494	520	0.0	0.1	0.190	A
	Exit	1	1		320			320	328	0.0	0.0	0.000	A
2	Entry	1	1	3	408	930	0.438	407	406	0.7	0.6	5.954	A
			2	1, 2, (3)	297	930	0.320	296	300	0.4	0.4	5.192	A
		2	1	(1, 2, 3)	705			705	706	0.0	0.0	0.000	A
	Exit	1	1		539			539	539	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	415	740	0.561	422	420	0.8	0.7	10.502	B
			2	(2), 3	132	740	0.179	129	126	0.1	0.5	6.023	A
		2	1	(1, 2, 3)	547			547	547	0.0	0.0	0.000	A
	Exit	1	1		887			887	902	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	189	1021	0.186	188	196	0.3	0.4	4.360	A
			2	1, 3	325	1021	0.318	320	333	0.6	0.7	5.050	A
		2	1	(1, 2, 3)	515			515	530	0.1	0.1	0.194	A
	Exit	1	1		354			354	332	0.0	0.0	0.000	A
2	Entry	1	1	3	396	926	0.427	395	418	0.6	0.9	6.318	A
			2	1, 2, (3)	296	926	0.319	296	296	0.4	0.5	5.586	A
		2	1	(1, 2, 3)	691			691	716	0.0	0.0	0.000	A
	Exit	1	1		535			535	541	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	431	735	0.586	430	417	0.7	0.9	10.053	B
			2	(2), 3	127	735	0.173	128	124	0.5	0.1	5.576	A
		2	1	(1, 2, 3)	557			557	541	0.0	0.0	0.000	A
	Exit	1	1		869			869	912	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	167	1046	0.160	166	163	0.4	0.2	4.253	A
			2	1, 3	258	1046	0.247	257	271	0.7	0.5	4.721	A
		2	1	(1, 2, 3)	425			425	432	0.1	0.0	0.203	A
	Exit	1	1		279			279	280	0.0	0.0	0.000	A
2	Entry	1	1	3	328	947	0.346	329	335	0.9	0.5	5.435	A
			2	1, 2, (3)	241	947	0.254	241	242	0.5	0.4	4.980	A
		2	1	(1, 2, 3)	569			569	576	0.0	0.0	0.000	A
	Exit	1	1		444			444	440	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	345	742	0.464	345	346	0.9	0.8	8.446	A
			2	(2), 3	95	742	0.128	94	96	0.1	0.2	5.125	A
		2	1	(1, 2, 3)	439			439	442	0.0	0.0	0.000	A
	Exit	1	1		709			709	733	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	137	1064	0.129	134	139	0.2	0.4	4.098	A
			2	1, 3	215	1064	0.202	216	232	0.5	0.2	4.421	A
		2	1	(1, 2, 3)	352			352	370	0.0	0.0	0.062	A
	Exit	1	1		231			231	235	0.0	0.0	0.000	A
2	Entry	1	1	3	284	961	0.296	284	289	0.5	0.4	5.152	A
			2	1, 2, (3)	188	961	0.195	189	201	0.4	0.2	4.630	A
		2	1	(1, 2, 3)	472			472	489	0.0	0.0	0.000	A
	Exit	1	1		360			360	376	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	296	751	0.394	297	295	0.8	0.6	7.492	A
			2	(2), 3	75	751	0.100	76	83	0.2	0.1	5.420	A
		2	1	(1, 2, 3)	371			371	376	0.0	0.0	0.000	A
	Exit	1	1		603			603	628	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	1147	1066	0.120	132	135	0.0	0.1	4.517	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	210	52	1147	1063	0.197	208	209	0.0	0.2	4.250	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	128	32	-	-	-	128	135	0.0	0.0	0.075	A
				3	209	52	-	-	-	210	209	0.0	0.0	0.036	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	287	72	1033	964	0.298	288	286	0.0	0.5	5.082	A
			2	1	92	23	1033	965	0.096	92	94	0.0	0.1	5.286	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	112	28	1033	964	0.117	112	110	0.0	0.2	4.281	A
		2	1	1	92	23	-	-	-	92	94	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	399	100	-	-	-	399	398	0.0	0.0	0.000	A
3	Entry	1	1	1	127	32	777	749	0.170	127	129	0.0	0.4	7.264	A
				2	156	39	777	750	0.209	156	150	0.0	0.4	6.660	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	19	777	751	0.099	75	75	0.0	0.1	4.756	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	130	0.0	0.0	0.000	A
				2	231	58	-	-	-	231	227	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	1147	1047	0.146	152	159	0.1	0.2	4.024	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	276	69	1147	1047	0.264	274	267	0.2	0.3	4.554	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	159	0.0	0.0	0.035	A
				3	276	69	-	-	-	276	268	0.0	0.0	0.100	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	324	81	1033	941	0.344	322	343	0.5	0.7	5.444	A
			2	1	107	27	1033	941	0.113	104	109	0.1	0.3	5.609	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1033	939	0.131	124	130	0.2	0.1	4.625	A
		2	1	1	107	27	-	-	-	107	110	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	446	112	-	-	-	446	473	0.0	0.0	0.000	A
3	Entry	1	1	1	155	39	777	746	0.208	154	164	0.4	0.5	8.959	A
				2	181	45	777	745	0.243	182	181	0.4	0.4	7.700	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	94	23	777	746	0.126	93	91	0.1	0.1	5.123	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	155	39	-	-	-	155	165	0.0	0.0	0.000	A
				2	275	69	-	-	-	275	272	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	1147	1017	0.178	182	188	0.2	0.3	4.332	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	313	78	1147	1017	0.308	309	330	0.3	0.6	5.152	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	-	-	-	181	189	0.0	0.0	0.103	A
				3	313	78	-	-	-	313	331	0.0	0.1	0.237	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	408	102	1033	929	0.439	407	406	0.7	0.6	5.954	A
			2	1	127	32	1033	928	0.137	126	133	0.3	0.2	5.877	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	170	42	1033	928	0.183	169	166	0.1	0.2	4.682	A
		2	1	1	127	32	-	-	-	127	133	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	577	144	-	-	-	577	573	0.0	0.0	0.000	A
3	Entry	1	1	1	191	48	777	739	0.259	193	195	0.5	0.5	10.947	B
				2	223	56	777	740	0.302	228	225	0.4	0.2	10.122	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	132	33	777	740	0.179	129	126	0.1	0.5	6.023	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	195	0.0	0.0	0.000	A
				2	356	89	-	-	-	356	352	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	1147	1024	0.185	188	196	0.3	0.4	4.360	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	325	81	1147	1021	0.318	320	333	0.6	0.7	5.050	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	189	47	-	-	-	189	197	0.0	0.0	0.122	A
				3	325	81	-	-	-	325	333	0.1	0.1	0.235	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	396	99	1033	927	0.427	395	418	0.6	0.9	6.318	A
			2	1	141	35	1033	924	0.153	141	135	0.2	0.3	6.219	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	154	39	1033	930	0.166	154	161	0.2	0.2	5.081	A
		2	1	1	141	35	-	-	-	141	136	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	550	137	-	-	-	550	580	0.0	0.0	0.000	A
3	Entry	1	1	1	213	53	777	735	0.290	212	196	0.5	0.5	10.508	B
				2	217	54	777	735	0.295	219	221	0.2	0.4	9.652	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	777	735	0.173	128	124	0.5	0.1	5.576	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	213	53	-	-	-	213	197	0.0	0.0	0.000	A
				2	344	86	-	-	-	344	344	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	167	42	1147	1046	0.160	166	163	0.4	0.2	4.253	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	258	65	1147	1047	0.247	257	271	0.7	0.5	4.721	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	167	42	-	-	-	167	163	0.0	0.0	0.211	A
				3	258	64	-	-	-	258	270	0.1	0.0	0.198	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	1033	946	0.347	329	335	0.9	0.5	5.435	A
			2	1	118	29	1033	948	0.124	118	115	0.3	0.2	5.491	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1033	946	0.130	123	128	0.2	0.2	4.555	A
		2	1	1	118	29	-	-	-	118	114	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	452	113	-	-	-	452	462	0.0	0.0	0.000	A
3	Entry	1	1	1	163	41	777	742	0.219	162	165	0.5	0.5	9.131	A
				2	181	45	777	743	0.244	184	181	0.4	0.3	7.824	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	95	24	777	742	0.128	94	96	0.1	0.2	5.125	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	163	41	-	-	-	163	165	0.0	0.0	0.000	A
				2	277	69	-	-	-	277	277	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	1147	1063	0.129	134	139	0.2	0.4	4.098	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	215	54	1147	1065	0.202	216	232	0.5	0.2	4.421	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	-	-	-	137	140	0.0	0.0	0.032	A
				3	215	54	-	-	-	215	231	0.0	0.0	0.080	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	284	71	1033	961	0.296	284	289	0.5	0.4	5.152	A
			2	1	85	21	1033	961	0.088	86	94	0.2	0.1	5.115	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1033	961	0.107	104	107	0.2	0.1	4.233	A
		2	1	1	85	21	-	-	-	85	94	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	387	97	-	-	-	387	395	0.0	0.0	0.000	A
3	Entry	1	1	1	144	36	777	750	0.192	145	141	0.5	0.3	7.899	A
				2	152	38	777	752	0.203	152	154	0.3	0.3	7.121	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	777	750	0.100	76	83	0.2	0.1	5.420	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	144	36	-	-	-	144	140	0.0	0.0	0.000	A
				2	228	57	-	-	-	228	236	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	Arm 3	Arm 3: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	118.62	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	118.62	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2038	2a WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	169	100.000
2		ONE HOUR	✓	560	100.000
3		ONE HOUR	✓	1038	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	52	117
	2	209	0	351
	3	408	630	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	5	6
	2	4	0	8
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.15	4.79	0.3	A	156	234
2	0.33	5.18	0.9	A	517	776
3	1.12	196.36	69.9	F	954	1432

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	131	33	476	1357	0.097	131	128	469	0.0	0.2	4.260	A
2	434	109	91	1964	0.221	435	428	516	0.0	0.5	4.541	A
3	784	196	161	1098	0.714	784	766	365	0.0	3.7	15.675	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	561	1330	0.114	153	158	556	0.2	0.1	4.433	A
2	504	126	105	1979	0.255	506	515	608	0.5	0.6	4.811	A
3	938	235	193	1027	0.914	924	922	418	3.7	9.7	31.863	D

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	189	47	594	1275	0.148	188	192	626	0.1	0.3	4.680	A
2	612	153	132	1944	0.315	613	624	650	0.6	0.9	5.178	A
3	1156	289	230	1001	1.125	991	1001	515	9.7	45.7	102.481	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	183	46	617	1228	0.149	183	194	631	0.3	0.2	4.785	A
2	621	155	124	1868	0.333	622	620	676	0.9	0.8	5.115	A
3	1147	287	233	1045	1.097	1016	1021	514	45.7	69.9	195.656	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	614	1174	0.129	152	157	606	0.2	0.2	4.773	A
2	513	128	103	1975	0.260	515	513	664	0.8	0.6	4.849	A
3	923	231	197	1010	0.914	1023	1020	420	69.9	59.2	196.806	F

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	127	32	535	1301	0.098	128	133	510	0.2	0.2	4.553	A
2	417	104	89	1970	0.212	416	427	573	0.6	0.6	4.648	A
3	778	194	150	1043	0.746	895	953	356	59.2	17.8	120.205	F

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	39	974	0.040	40	40	0.0	0.0	4.052	A
			2	1, 3	92	974	0.094	91	89	0.0	0.1	4.345	A
		2	1	(1, 2, 3)	131			131	129	0.0	0.0	0.006	A
	Exit	1	1		469			469	457	0.0	0.0	0.000	A
2	Entry	1	1	3	210	1002	0.209	210	203	0.0	0.3	4.595	A
			2	1, 2, (3)	224	1002	0.224	225	224	0.0	0.2	4.494	A
		2	1	(1, 2, 3)	434			434	430	0.0	0.0	0.000	A
	Exit	1	1		516			516	508	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	585	729	0.802	583	572	0.0	3.3	18.430	C
			2	(2), 3	200	729	0.274	201	194	0.0	0.3	6.542	A
		2	1	(1, 2, 3)	784			785	781	0.0	0.1	0.206	A
	Exit	1	1		365			365	357	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	47	943	0.050	48	49	0.0	0.0	4.159	A
			2	1, 3	105	943	0.111	105	109	0.1	0.1	4.504	A
		2	1	(1, 2, 3)	152			152	158	0.0	0.0	0.037	A
	Exit	1	1		556			556	551	0.0	0.0	0.000	A
2	Entry	1	1	3	237	998	0.238	238	246	0.3	0.3	4.768	A
			2	1, 2, (3)	267	998	0.268	268	269	0.2	0.3	4.848	A
		2	1	(1, 2, 3)	504			504	515	0.0	0.0	0.001	A
	Exit	1	1		608			608	609	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	674	720	0.936	671	664	3.3	7.1	34.541	D
			2	(2), 3	254	720	0.352	253	258	0.3	0.6	8.347	A
		2	1	(1, 2, 3)	938			928	939	0.1	2.0	4.360	A
	Exit	1	1		418			418	435	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	56	930	0.061	56	56	0.0	0.1	4.427	A
			2	1, 3	133	930	0.143	132	136	0.1	0.2	4.736	A
		2	1	(1, 2, 3)	189			189	193	0.0	0.0	0.035	A
	Exit	1	1		626			626	629	0.0	0.0	0.000	A
2	Entry	1	1	3	289	989	0.293	289	294	0.3	0.4	5.179	A
			2	1, 2, (3)	323	989	0.327	323	330	0.3	0.5	5.177	A
		2	1	(1, 2, 3)	612			612	625	0.0	0.0	0.000	A
	Exit	1	1		650			650	662	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	698	709	0.985	689	695	7.1	13.5	59.926	F
			2	(2), 3	304	709	0.429	301	306	0.6	1.0	10.947	B
		2	1	(1, 2, 3)	1156			1002	1028	2.0	31.2	56.371	F
	Exit	1	1		515			515	526	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	59	922	0.064	59	61	0.1	0.1	4.557	A
			2	1, 3	124	922	0.134	124	133	0.2	0.1	4.843	A
		2	1	(1, 2, 3)	183			183	194	0.0	0.0	0.033	A
	Exit	1	1		631			631	631	0.0	0.0	0.000	A
2	Entry	1	1	3	294	991	0.296	293	293	0.4	0.4	5.053	A
			2	1, 2, (3)	327	991	0.330	329	327	0.5	0.4	5.169	A
		2	1	(1, 2, 3)	621			621	620	0.0	0.0	0.000	A
	Exit	1	1		676			676	684	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	710	708	1.002	708	707	13.5	13.9	69.642	F
			2	(2), 3	306	708	0.432	308	314	1.0	0.9	12.353	B
		2	1	(1, 2, 3)	1147			1016	1022	31.2	65.1	176.489	F
	Exit	1	1		514			514	521	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	923	0.053	49	47	0.1	0.1	4.501	A
			2	1, 3	103	923	0.111	103	109	0.1	0.1	4.839	A
		2	1	(1, 2, 3)	152			152	156	0.0	0.0	0.036	A
	Exit	1	1		606			606	601	0.0	0.0	0.000	A
2	Entry	1	1	3	238	998	0.239	239	240	0.4	0.3	4.842	A
			2	1, 2, (3)	275	998	0.276	276	273	0.4	0.3	4.854	A
		2	1	(1, 2, 3)	513			513	512	0.0	0.0	0.000	A
	Exit	1	1		664			664	661	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	709	719	0.986	719	716	13.9	12.3	67.065	F
			2	(2), 3	300	719	0.418	304	304	0.9	0.9	12.317	B
		2	1	(1, 2, 3)	923			1009	1014	65.1	46.1	199.798	F
	Exit	1	1		420			420	428	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	38	952	0.040	39	41	0.1	0.0	4.244	A
			2	1, 3	89	952	0.094	89	93	0.1	0.1	4.678	A
		2	1	(1, 2, 3)	127			127	133	0.0	0.0	0.009	A
	Exit	1	1		510			510	537	0.0	0.0	0.000	A
2	Entry	1	1	3	200	1003	0.199	200	202	0.3	0.2	4.696	A
			2	1, 2, (3)	217	1003	0.217	216	225	0.3	0.4	4.607	A
		2	1	(1, 2, 3)	417			417	427	0.0	0.0	0.000	A
	Exit	1	1		573			573	617	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	631	733	0.861	653	683	12.3	6.7	50.943	F
			2	(2), 3	240	733	0.328	241	271	0.9	0.6	9.940	A
		2	1	(1, 2, 3)	778			871	930	46.1	10.6	84.080	F
	Exit	1	1		356			356	360	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1147	973	0.040	40	40	0.0	0.0	4.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	92	23	1147	974	0.094	91	89	0.0	0.1	4.345	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	-	-	-	39	40	0.0	0.0	0.000	A
				3	92	23	-	-	-	92	89	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	210	52	1033	1003	0.209	210	203	0.0	0.3	4.595	A
			2	1	161	40	1033	1003	0.160	161	159	0.0	0.2	4.731	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	1033	1003	0.063	63	65	0.0	0.0	3.892	A
		2	1	1	161	40	-	-	-	161	160	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	274	68	-	-	-	274	270	0.0	0.0	0.000	A
3	Entry	1	1	1	310	77	777	729	0.425	308	298	0.0	1.9	19.457	C
				2	275	69	777	729	0.378	276	274	0.0	1.4	17.307	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	777	729	0.274	201	194	0.0	0.3	6.542	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	309	77	-	-	-	310	305	0.0	0.0	0.221	A
				2	475	119	-	-	-	475	475	0.0	0.1	0.195	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1147	944	0.050	48	49	0.0	0.0	4.159	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1147	944	0.111	105	109	0.1	0.1	4.504	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	-	-	-	47	49	0.0	0.0	0.014	A
				3	105	26	-	-	-	105	109	0.0	0.0	0.048	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	237	59	1033	998	0.238	238	246	0.3	0.3	4.768	A
			2	1	192	48	1033	998	0.192	193	189	0.2	0.2	5.095	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1033	998	0.075	75	80	0.0	0.1	4.240	A
		2	1	1	192	48	-	-	-	192	189	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	312	78	-	-	-	312	326	0.0	0.0	0.000	A
3	Entry	1	1	1	365	91	777	720	0.507	364	362	1.9	4.1	35.529	E
				2	309	77	777	720	0.429	307	302	1.4	3.0	33.354	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	254	63	777	720	0.352	253	258	0.3	0.6	8.347	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	369	92	-	-	-	365	371	0.0	0.8	4.404	A
				2	569	142	-	-	-	562	568	0.1	1.2	4.332	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	1147	930	0.061	56	56	0.0	0.1	4.427	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	133	33	1147	929	0.143	132	136	0.1	0.2	4.736	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	56	0.0	0.0	0.020	A
				3	133	33	-	-	-	133	137	0.0	0.0	0.041	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	289	72	1033	989	0.293	289	294	0.3	0.4	5.179	A
			2	1	230	57	1033	988	0.233	230	235	0.2	0.4	5.468	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	1033	988	0.094	94	96	0.1	0.1	4.432	A
		2	1	1	230	57	-	-	-	230	235	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	382	96	-	-	-	382	390	0.0	0.0	0.000	A
3	Entry	1	1	1	402	100	777	709	0.566	396	395	4.1	7.7	60.302	F
				2	297	74	777	710	0.418	293	301	3.0	5.9	59.432	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	304	76	777	710	0.428	301	306	0.6	1.0	10.947	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	453	113	-	-	-	402	409	0.8	11.9	56.157	F
				2	703	176	-	-	-	601	619	1.2	19.4	56.511	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1147	921	0.065	59	61	0.1	0.1	4.557	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	124	31	1147	922	0.134	124	133	0.2	0.1	4.843	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	61	0.0	0.0	0.021	A
				3	124	31	-	-	-	124	133	0.0	0.0	0.038	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	294	73	1033	992	0.296	293	293	0.4	0.4	5.053	A
			2	1	232	58	1033	991	0.234	233	233	0.4	0.3	5.448	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	95	24	1033	991	0.096	96	94	0.1	0.1	4.455	A
		2	1	1	232	58	-	-	-	232	233	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	389	97	-	-	-	389	388	0.0	0.0	0.000	A
3	Entry	1	1	1	399	100	777	709	0.563	398	398	7.7	7.7	69.552	F
				2	311	78	777	708	0.439	309	309	5.9	6.1	69.757	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	306	76	777	708	0.432	308	314	1.0	0.9	12.353	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	454	114	-	-	-	399	398	11.9	26.0	177.554	F
				2	692	173	-	-	-	617	624	19.4	39.1	175.799	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	922	0.053	49	47	0.1	0.1	4.501	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1147	922	0.111	103	109	0.1	0.1	4.839	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	47	0.0	0.0	0.033	A
				3	103	26	-	-	-	103	109	0.0	0.0	0.038	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	238	60	1033	999	0.239	239	240	0.4	0.3	4.842	A
			2	1	196	49	1033	999	0.197	197	194	0.3	0.2	5.098	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	79	20	1033	999	0.079	79	79	0.1	0.1	4.236	A
		2	1	1	196	49	-	-	-	196	194	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	317	79	-	-	-	317	319	0.0	0.0	0.000	A
3	Entry	1	1	1	404	101	777	719	0.562	409	407	7.7	7.0	67.366	F
				2	305	76	777	719	0.424	311	309	6.1	5.3	66.668	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	300	75	777	719	0.417	304	304	0.9	0.9	12.317	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	365	91	-	-	-	404	404	26.0	18.2	201.039	F
				2	558	140	-	-	-	605	610	39.1	27.9	198.980	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	1147	949	0.040	39	41	0.1	0.0	4.244	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1147	951	0.094	89	93	0.1	0.1	4.678	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	-	-	-	38	40	0.0	0.0	0.000	A
				3	89	22	-	-	-	89	93	0.0	0.0	0.012	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	200	50	1033	1003	0.199	200	202	0.3	0.2	4.696	A
			2	1	150	37	1033	1003	0.149	150	160	0.2	0.2	4.843	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	67	17	1033	1004	0.067	66	65	0.1	0.2	4.004	A
		2	1	1	150	37	-	-	-	150	160	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	267	67	-	-	-	267	267	0.0	0.0	0.000	A
3	Entry	1	1	1	349	87	777	732	0.476	360	377	7.0	3.8	51.974	F
				2	282	70	777	732	0.385	293	306	5.3	2.9	49.674	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	240	60	777	732	0.328	241	271	0.9	0.6	9.940	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	309	77	-	-	-	349	364	18.2	4.2	84.378	F
				2	469	117	-	-	-	522	565	27.9	6.4	83.885	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	11.70	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.70	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2038	2a WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	513	100.000
2		ONE HOUR	✓	691	100.000
3		ONE HOUR	✓	791	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	163	350
	2	95	0	596
	3	255	536	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	2	0
	2	6	0	3
	3	3	3	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.44	6.34	1.0	A	466	699
2	0.43	6.43	1.4	A	633	949
3	0.79	19.71	4.7	C	727	1091

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	386	96	405	1352	0.285	385	389	259	0.0	0.6	4.688	A
2	533	133	261	1842	0.289	533	519	530	0.0	0.7	4.990	A
3	594	149	70	1134	0.524	595	596	725	0.0	1.6	9.156	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	456	114	467	1350	0.338	454	468	314	0.6	0.7	5.233	A
2	610	152	311	1816	0.336	613	624	610	0.7	0.8	5.555	A
3	705	176	82	1180	0.597	699	711	842	1.6	2.5	11.967	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	557	139	600	1273	0.438	558	573	377	0.7	0.9	6.205	A
2	765	191	381	1761	0.435	766	763	778	0.8	1.3	6.140	A
3	877	219	106	1111	0.790	872	871	1042	2.5	4.4	18.708	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
2	763	191	387	1760	0.433	764	769	766	1.3	1.4	6.429	A
3	872	218	107	1150	0.758	872	882	1044	4.4	4.7	19.713	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	453	113	490	1350	0.335	454	464	309	1.0	0.7	5.271	A
2	619	155	309	1807	0.342	619	629	635	1.4	1.0	5.632	A
3	716	179	84	1116	0.641	714	730	843	4.7	2.1	12.938	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	383	96	403	1363	0.281	383	394	269	0.7	0.5	4.664	A
2	508	127	264	1842	0.276	510	519	521	1.0	0.8	4.993	A
3	600	150	69	1111	0.540	602	609	704	2.1	1.4	9.511	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	125	999	0.125	124	124	0.0	0.2	4.112	A
			2	1, 3	261	999	0.261	261	265	0.0	0.3	4.840	A
		2	1	(1, 2, 3)	386			385	391	0.0	0.0	0.077	A
	Exit	1	1		259			259	262	0.0	0.0	0.000	A
2	Entry	1	1	3	330	946	0.349	330	318	0.0	0.5	5.245	A
			2	1, 2, (3)	203	946	0.214	203	200	0.0	0.2	4.579	A
		2	1	(1, 2, 3)	533			533	521	0.0	0.0	0.000	A
	Exit	1	1		530			530	531	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	451	756	0.597	452	450	0.0	1.3	10.247	B
			2	(2), 3	143	756	0.189	142	146	0.0	0.3	5.803	A
		2	1	(1, 2, 3)	594			594	602	0.0	0.0	0.000	A
	Exit	1	1		725			725	711	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	143	977	0.147	143	149	0.2	0.2	4.492	A
			2	1, 3	313	977	0.320	311	319	0.3	0.5	5.267	A
		2	1	(1, 2, 3)	456			456	469	0.0	0.0	0.208	A
	Exit	1	1		314			314	319	0.0	0.0	0.000	A
2	Entry	1	1	3	375	929	0.404	378	377	0.5	0.5	5.975	A
			2	1, 2, (3)	234	929	0.252	236	247	0.2	0.3	4.906	A
		2	1	(1, 2, 3)	610			610	624	0.0	0.0	0.000	A
	Exit	1	1		610			610	629	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	520	752	0.691	516	521	1.3	2.1	14.079	B
			2	(2), 3	185	752	0.246	183	191	0.3	0.4	6.008	A
		2	1	(1, 2, 3)	705			705	715	0.0	0.0	0.041	A
	Exit	1	1		842			842	855	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	176	928	0.190	177	181	0.2	0.2	4.921	A
			2	1, 3	381	928	0.411	381	392	0.5	0.6	6.156	A
		2	1	(1, 2, 3)	557			557	573	0.0	0.1	0.433	A
	Exit	1	1		377			377	385	0.0	0.0	0.000	A
2	Entry	1	1	3	463	906	0.511	463	460	0.5	0.9	6.659	A
			2	1, 2, (3)	302	906	0.334	303	303	0.3	0.5	5.349	A
		2	1	(1, 2, 3)	765			765	765	0.0	0.0	0.000	A
	Exit	1	1		778			778	773	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	626	746	0.839	621	620	2.1	3.9	22.379	C
			2	(2), 3	251	746	0.336	251	251	0.4	0.4	7.230	A
		2	1	(1, 2, 3)	877			876	878	0.0	0.1	0.639	A
	Exit	1	1		1042			1042	1049	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	176	932	0.189	177	178	0.2	0.2	4.879	A
			2	1, 3	386	932	0.414	387	390	0.6	0.7	6.251	A
		2	1	(1, 2, 3)	563			563	568	0.1	0.1	0.512	A
	Exit	1	1		390			390	389	0.0	0.0	0.000	A
2	Entry	1	1	3	455	904	0.503	455	461	0.9	1.0	7.088	A
			2	1, 2, (3)	308	904	0.340	309	308	0.5	0.4	5.432	A
		2	1	(1, 2, 3)	763			763	769	0.0	0.0	0.000	A
	Exit	1	1		766			766	777	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	622	745	0.835	622	626	3.9	4.1	23.679	C
			2	(2), 3	249	745	0.334	250	257	0.4	0.5	7.412	A
		2	1	(1, 2, 3)	872			871	883	0.1	0.1	0.778	A
	Exit	1	1		1044			1044	1054	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	145	969	0.149	146	150	0.2	0.2	4.442	A
			2	1, 3	308	969	0.318	309	315	0.7	0.5	5.391	A
		2	1	(1, 2, 3)	453			453	463	0.1	0.0	0.186	A
	Exit	1	1		309			309	320	0.0	0.0	0.000	A
2	Entry	1	1	3	377	930	0.406	377	384	1.0	0.7	6.049	A
			2	1, 2, (3)	241	930	0.259	242	246	0.4	0.4	4.979	A
		2	1	(1, 2, 3)	619			619	628	0.0	0.0	0.000	A
	Exit	1	1		635			635	645	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	525	752	0.698	524	536	4.1	1.7	15.083	C
			2	(2), 3	191	752	0.254	190	193	0.5	0.4	6.243	A
		2	1	(1, 2, 3)	716			716	720	0.1	0.0	0.253	A
	Exit	1	1		843			843	858	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	119	1000	0.119	119	125	0.2	0.1	4.128	A
			2	1, 3	264	1000	0.264	264	268	0.5	0.4	4.783	A
		2	1	(1, 2, 3)	383			383	393	0.0	0.0	0.087	A
	Exit	1	1		269			269	271	0.0	0.0	0.000	A
2	Entry	1	1	3	316	945	0.334	318	320	0.7	0.4	5.249	A
			2	1, 2, (3)	193	945	0.204	192	199	0.4	0.3	4.579	A
		2	1	(1, 2, 3)	508			508	517	0.0	0.0	0.000	A
	Exit	1	1		521			521	535	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	451	756	0.596	454	455	1.7	1.1	10.816	B
			2	(2), 3	150	756	0.198	148	153	0.4	0.3	5.620	A
		2	1	(1, 2, 3)	600			600	606	0.0	0.0	0.001	A
	Exit	1	1		704			704	714	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	1147	1000	0.125	124	124	0.0	0.2	4.112	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	261	65	1147	999	0.261	261	265	0.0	0.3	4.840	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	-	-	-	125	125	0.0	0.0	0.039	A
				3	261	65	-	-	-	261	267	0.0	0.0	0.094	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	83	1033	946	0.349	330	318	0.0	0.5	5.245	A
			2	1	69	17	1033	946	0.073	70	73	0.0	0.1	5.032	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	133	33	1033	946	0.141	134	127	0.0	0.1	4.326	A
		2	1	1	69	17	-	-	-	69	74	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	463	116	-	-	-	463	448	0.0	0.0	0.000	A
3	Entry	1	1	1	188	47	777	756	0.249	189	189	0.0	0.6	10.937	B
				2	263	66	777	757	0.348	263	261	0.0	0.7	9.746	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	777	756	0.189	142	146	0.0	0.3	5.803	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	188	47	-	-	-	188	191	0.0	0.0	0.000	A
				2	406	102	-	-	-	406	411	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	1147	977	0.147	143	149	0.2	0.2	4.492	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	313	78	1147	977	0.320	311	319	0.3	0.5	5.267	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	-	-	-	143	149	0.0	0.0	0.164	A
				3	313	78	-	-	-	313	320	0.0	0.0	0.229	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	375	94	1033	929	0.404	378	377	0.5	0.5	5.975	A
			2	1	83	21	1033	929	0.089	82	88	0.1	0.1	5.420	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	152	38	1033	929	0.163	153	159	0.1	0.2	4.629	A
		2	1	1	83	21	-	-	-	83	88	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	527	132	-	-	-	527	536	0.0	0.0	0.000	A
3	Entry	1	1	1	233	58	777	752	0.309	231	231	0.6	1.0	14.841	B
				2	287	72	777	752	0.382	284	289	0.7	1.1	13.467	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	777	752	0.246	183	191	0.3	0.4	6.008	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	233	58	-	-	-	233	233	0.0	0.0	0.040	A
				2	472	118	-	-	-	472	482	0.0	0.0	0.041	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	1147	929	0.189	177	181	0.2	0.2	4.921	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	381	95	1147	928	0.411	381	392	0.5	0.6	6.156	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	-	-	-	176	181	0.0	0.0	0.332	A
				3	381	95	-	-	-	381	392	0.0	0.0	0.479	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	463	116	1033	906	0.511	463	460	0.5	0.9	6.659	A
			2	1	104	26	1033	906	0.115	106	106	0.1	0.1	5.864	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	198	49	1033	905	0.219	197	197	0.2	0.3	5.079	A
		2	1	1	104	26	-	-	-	104	106	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	661	165	-	-	-	661	659	0.0	0.0	0.000	A
3	Entry	1	1	1	273	68	777	745	0.366	272	279	1.0	1.8	23.563	C
				2	353	88	777	746	0.473	349	341	1.1	2.1	21.408	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	251	63	777	745	0.336	251	251	0.4	0.4	7.230	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	273	68	-	-	-	273	282	0.0	0.0	0.677	A
				2	604	151	-	-	-	603	596	0.0	0.1	0.621	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	1147	932	0.189	177	178	0.2	0.2	4.879	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	386	97	1147	932	0.414	387	390	0.6	0.7	6.251	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	176	44	-	-	-	176	178	0.0	0.0	0.411	A
				3	387	97	-	-	-	386	390	0.0	0.1	0.557	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	455	114	1033	904	0.503	455	461	0.9	1.0	7.088	A
			2	1	107	27	1033	904	0.118	107	105	0.1	0.1	6.120	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	201	50	1033	904	0.222	202	203	0.3	0.3	5.087	A
		2	1	1	107	27	-	-	-	107	105	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	656	164	-	-	-	656	664	0.0	0.0	0.000	A
3	Entry	1	1	1	282	71	777	745	0.379	283	284	1.8	1.9	24.954	C
				2	340	85	777	745	0.456	339	342	2.1	2.2	22.622	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	249	62	777	745	0.334	250	257	0.4	0.5	7.412	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	283	71	-	-	-	282	284	0.0	0.1	0.916	A
				2	590	147	-	-	-	589	599	0.1	0.1	0.713	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	145	36	1147	968	0.149	146	150	0.2	0.2	4.442	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	308	77	1147	968	0.319	309	315	0.7	0.5	5.391	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	144	36	-	-	-	145	150	0.0	0.0	0.098	A
				3	308	77	-	-	-	308	314	0.1	0.0	0.227	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	377	94	1033	930	0.406	377	384	1.0	0.7	6.049	A
			2	1	84	21	1033	929	0.091	84	85	0.1	0.2	5.468	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	157	39	1033	931	0.168	157	160	0.3	0.2	4.722	A
		2	1	1	84	21	-	-	-	84	86	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	534	134	-	-	-	534	542	0.0	0.0	0.000	A
3	Entry	1	1	1	226	56	777	752	0.300	224	235	1.9	0.8	15.984	C
				2	299	75	777	752	0.397	300	302	2.2	0.9	14.380	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	777	752	0.254	190	193	0.5	0.4	6.243	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	226	56	-	-	-	226	230	0.1	0.0	0.296	A
				2	490	122	-	-	-	490	489	0.1	0.0	0.232	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	1147	1000	0.119	119	125	0.2	0.1	4.128	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	264	66	1147	1001	0.264	264	268	0.5	0.4	4.783	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	-	-	-	119	125	0.0	0.0	0.057	A
				3	264	66	-	-	-	264	268	0.0	0.0	0.101	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	316	79	1033	944	0.334	318	320	0.7	0.4	5.249	A
			2	1	70	17	1033	945	0.074	69	73	0.2	0.1	5.022	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	123	31	1033	945	0.130	123	126	0.2	0.2	4.334	A
		2	1	1	70	17	-	-	-	70	73	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	439	110	-	-	-	439	445	0.0	0.0	0.000	A
3	Entry	1	1	1	199	50	777	756	0.263	200	199	0.8	0.5	11.649	B
				2	252	63	777	756	0.333	254	257	0.9	0.6	10.177	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	37	777	756	0.198	148	153	0.4	0.3	5.620	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	199	50	-	-	-	199	197	0.0	0.0	0.001	A
				2	402	100	-	-	-	402	408	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

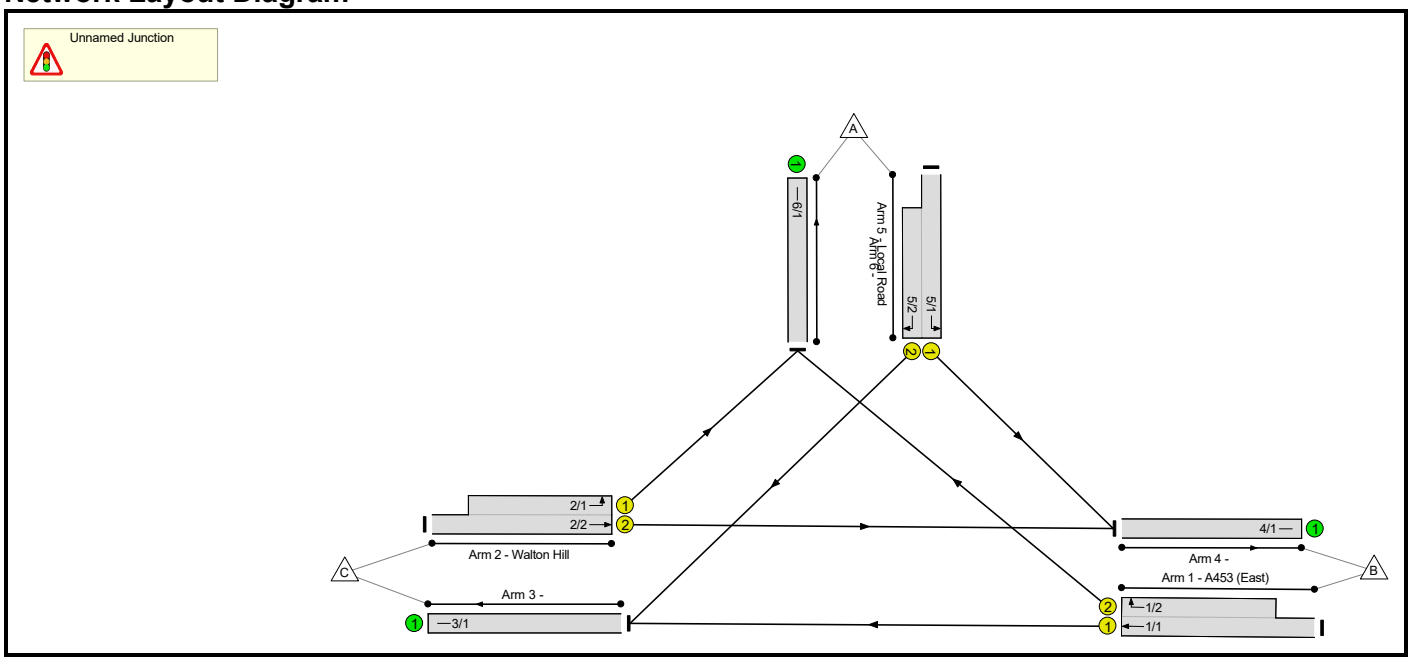
APPENDIX 55: Junction 10: A453/Walton Hill Signal Junction Stage 1A/2A Modelling Results

Full Input Data And Results

User and Project Details

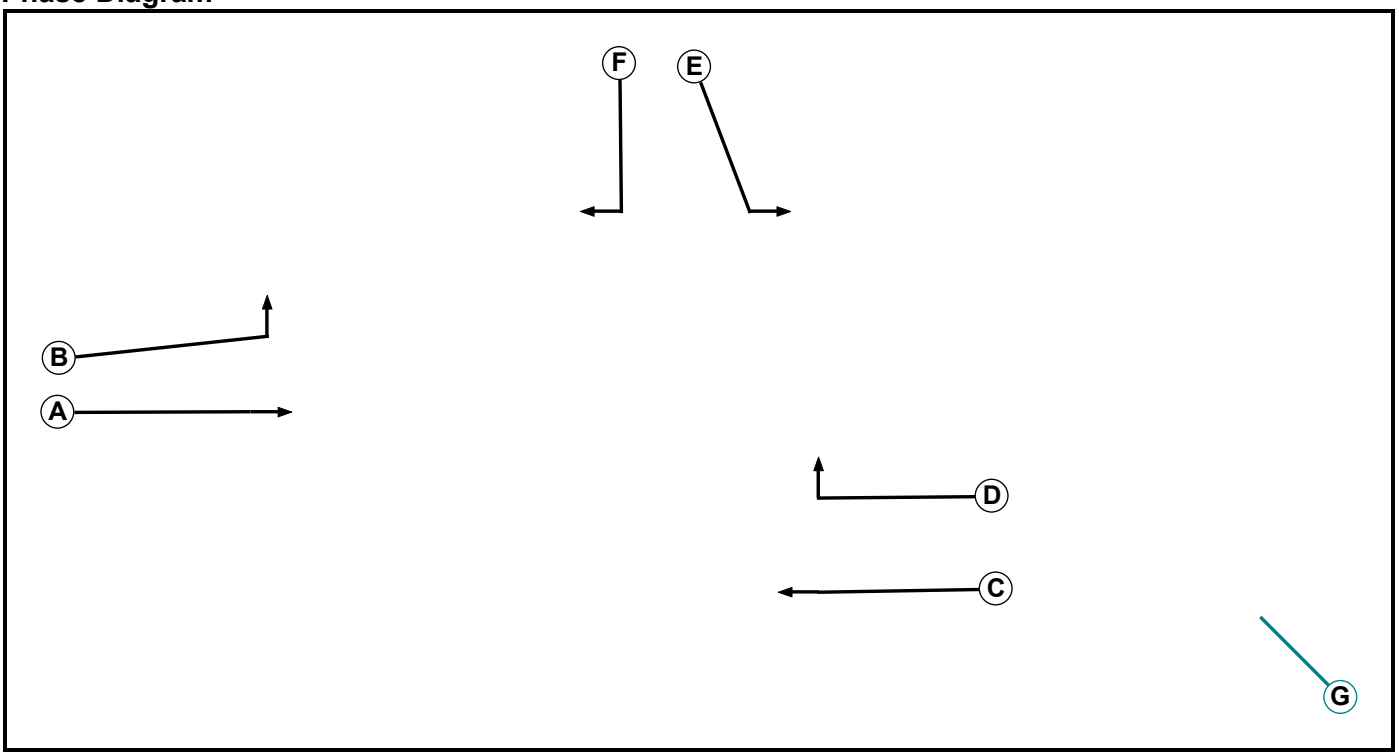
Project:	**East Midlands Gateway Phase 2**
Title:	**A453 Walton Hill Junction**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 10
Date Completed:	27/03/24
Checked By:	Vibeeshan Devaharan
Additional detail:	Phase B added to run in stage 3 as per on site observations
File name:	250619 A453_Local Road Signal Junction_Stage 1a+2a.lsg3x
Author:	Charlie Cresswell
Company:	BWB
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Dummy		4	4

Full Input Data And Results

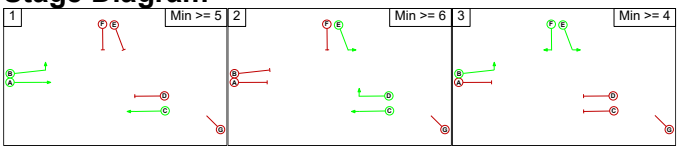
Phase Intergreens Matrix

Terminating Phase	Starting Phase							
		A	B	C	D	E	F	G
	A		-	-	6	7	6	3
	B	-		-	5	-	-	3
	C	-	-		-	-	5	3
	D	6	8	-		-	5	3
	E	3	-	-	-		-	3
	F	6	-	6	6	-		3
	G	2	2	2	2	2	2	

Phases in Stage

Stage No.	Phases in Stage
1	A B C
2	C D E
3	B E F

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	E	Losing	2	2

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	7
	2	8		8
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A453 (East))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Ahead	Inf
1/2 (A453 (East))	U	D	2	3	19.1	Geom	-	3.50	0.00	Y	Arm 6 Right	20.00
2/1 (Walton Hill)	U	B	2	3	13.9	Geom	-	3.50	0.00	Y	Arm 6 Left	20.00
2/2 (Walton Hill)	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Ahead	Inf
3/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Local Road)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	15.00
5/2 (Local Road)	U	F	2	3	13.0	Geom	-	3.50	0.00	Y	Arm 3 Right	20.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Observed (AM) (Current Scenario)'	07:45	08:45	01:00	
2: '2022 Observed (PM)'	17:00	18:00	01:00	
3: '2028 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
4: '2028 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
5: '2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
6: '2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
7: '2038 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
8: '2038 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
9: '2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
10: '2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	
11: '2a 2028 Forecast Year with Dev (AM)'	07:45	08:45	01:00	
12: '2a 2028 Forecast Year with Dev (PM)'	17:00	18:00	01:00	
13: '2a 2038 Forecast Year with Dev (AM)'	07:45	08:45	01:00	
14: '2a 2038 Forecast Year with Dev (PM)'	17:00	18:00	01:00	

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM) (Current Scenario)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	520	287	807
	B	215	0	189	404
	C	314	406	0	720
	Tot.	529	926	476	1931

Traffic Lane Flows

Lane	Scenario 1: 2022 Observed (AM)
Junction: Unnamed Junction	
1/1 (with short)	404(In) 189(Out)
1/2 (short)	215
2/1 (short)	314
2/2 (with short)	720(In) 406(Out)
3/1	476
4/1	926
5/1 (with short)	807(In) 520(Out)
5/2 (short)	287
6/1	529

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	228	289	517
	B	343	0	288	631
	C	227	187	0	414
	Tot.	570	415	577	1562

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 Observed (PM)
Junction: Unnamed Junction	
1/1 (with short)	631(In) 288(Out)
1/2 (short)	343
2/1 (short)	227
2/2 (with short)	414(In) 187(Out)
3/1	577
4/1	415
5/1 (with short)	517(In) 228(Out)
5/2 (short)	289
6/1	570

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2028 Forecast Year Without Development (AM)' (FG3: '2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	674	373	1047
	B	347	0	238	585
	C	319	325	0	644
	Tot.	666	999	611	2276

Traffic Lane Flows

Lane	Scenario 3: 2028 Forecast Year Without Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	585(In) 238(Out)
1/2 (short)	347
2/1 (short)	319
2/2 (with short)	644(In) 325(Out)
3/1	611
4/1	999
5/1 (with short)	1047(In) 674(Out)
5/2 (short)	373
6/1	666

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2028 Forecast Year Without Development (PM)' (FG4: '2028 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	303	419	722
	B	406	0	398	804
	C	203	177	0	380
	Tot.	609	480	817	1906

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2028 Forecast Year Without Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	804(In) 398(Out)
1/2 (short)	406
2/1 (short)	203
2/2 (with short)	380(In) 177(Out)
3/1	817
4/1	480
5/1 (with short)	722(In) 303(Out)
5/2 (short)	419
6/1	609

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2028 Forecast Year With Development (AM)' (FG5: '2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	749	355	1104
	B	337	0	209	546
	C	321	343	0	664
	Tot.	658	1092	564	2314

Traffic Lane Flows

Lane	Scenario 5: 2028 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	546(In) 209(Out)
1/2 (short)	337
2/1 (short)	321
2/2 (with short)	664(In) 343(Out)
3/1	564
4/1	1092
5/1 (with short)	1104(In) 749(Out)
5/2 (short)	355
6/1	658

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2028 Forecast Year With Development (PM)' (FG6: '2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	288	432	720
	B	425	0	412	837
	C	191	158	0	349
	Tot.	616	446	844	1906

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	837(In) 412(Out)
1/2 (short)	425
2/1 (short)	191
2/2 (with short)	349(In) 158(Out)
3/1	844
4/1	446
5/1 (with short)	720(In) 288(Out)
5/2 (short)	432
6/1	616

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2038 Forecast Year Without Development (AM)' (FG7: '2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	624	515	1139
	B	405	0	302	707
	C	676	510	0	1186
	Tot.	1081	1134	817	3032

Traffic Lane Flows

Lane	Scenario 7: 2038 Forecast Year Without Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	707(In) 302(Out)
1/2 (short)	405
2/1 (short)	676
2/2 (with short)	1186(In) 510(Out)
3/1	817
4/1	1134
5/1 (with short)	1139(In) 624(Out)
5/2 (short)	515
6/1	1081

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2038 Forecast Year Without Development (PM)' (FG8: '2038 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	451	749	1200
	B	480	0	458	938
	C	599	446	0	1045
	Tot.	1079	897	1207	3183

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 Forecast Year Without Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	938(In) 458(Out)
1/2 (short)	480
2/1 (short)	599
2/2 (with short)	1045(In) 446(Out)
3/1	1207
4/1	897
5/1 (with short)	1200(In) 451(Out)
5/2 (short)	749
6/1	1079

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2038 Forecast Year With Development (AM)' (FG9: '2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	659	468	1127
	B	411	0	268	679
	C	693	531	0	1224
	Tot.	1104	1190	736	3030

Traffic Lane Flows

Lane	Scenario 9: 2038 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	679(In) 268(Out)
1/2 (short)	411
2/1 (short)	693
2/2 (with short)	1224(In) 531(Out)
3/1	736
4/1	1190
5/1 (with short)	1127(In) 659(Out)
5/2 (short)	468
6/1	1104

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2038 Forecast Year With Development (PM)' (FG10: '2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	451	794	1245
	B	525	0	489	1014
	C	603	421	0	1024
	Tot.	1128	872	1283	3283

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	1014(In) 489(Out)
1/2 (short)	525
2/1 (short)	603
2/2 (with short)	1024(In) 421(Out)
3/1	1283
4/1	872
5/1 (with short)	1245(In) 451(Out)
5/2 (short)	794
6/1	1128

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '2a 2028 Forecast Year with Dev' (FG11: '2a 2028 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	716	367	1083
	B	330	0	229	559
	C	321	354	0	675
	Tot.	651	1070	596	2317

Traffic Lane Flows

Lane	Scenario 11: 2a 2028 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	559(In) 229(Out)
1/2 (short)	330
2/1 (short)	321
2/2 (with short)	675(In) 354(Out)
3/1	596
4/1	1070
5/1 (with short)	1083(In) 716(Out)
5/2 (short)	367
6/1	651

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2a 2028 Forecast Year with Dev' (FG12: '2a 2028 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	365	456	821
	B	453	0	397	850
	C	158	142	0	300
	Tot.	611	507	853	1971

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2a 2028 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	850(In) 397(Out)
1/2 (short)	453
2/1 (short)	158
2/2 (with short)	300(In) 142(Out)
3/1	853
4/1	507
5/1 (with short)	821(In) 365(Out)
5/2 (short)	456
6/1	611

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '2a 2038 Forecast Year with Dev' (FG13: '2a 2038 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	615	473	1088
	B	369	0	287	656
	C	685	575	0	1260
	Tot.	1054	1190	760	3004

Traffic Lane Flows

Lane	Scenario 13: 2a 2038 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	656(In) 287(Out)
1/2 (short)	369
2/1 (short)	685
2/2 (with short)	1260(In) 575(Out)
3/1	760
4/1	1190
5/1 (with short)	1088(In) 615(Out)
5/2 (short)	473
6/1	1054

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2a 2038 Forecast Year with Dev' (FG14: '2a 2038 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	406	782	1188
	B	498	0	496	994
	C	619	413	0	1032
	Tot.	1117	819	1278	3214

Full Input Data And Results

Traffic Lane Flows

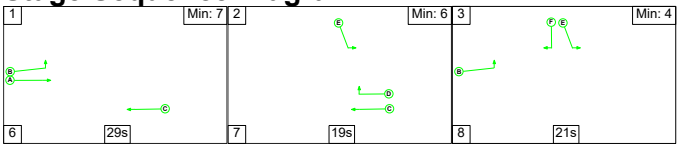
Lane	Scenario 14: 2a 2038 Forecast Year with Dev
Junction: Unnamed Junction	
1/1 (with short)	994(In) 496(Out)
1/2 (short)	498
2/1 (short)	619
2/2 (with short)	1032(In) 413(Out)
3/1	1278
4/1	819
5/1 (with short)	1188(In) 406(Out)
5/2 (short)	782
6/1	1117

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM) (Current Scenario)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

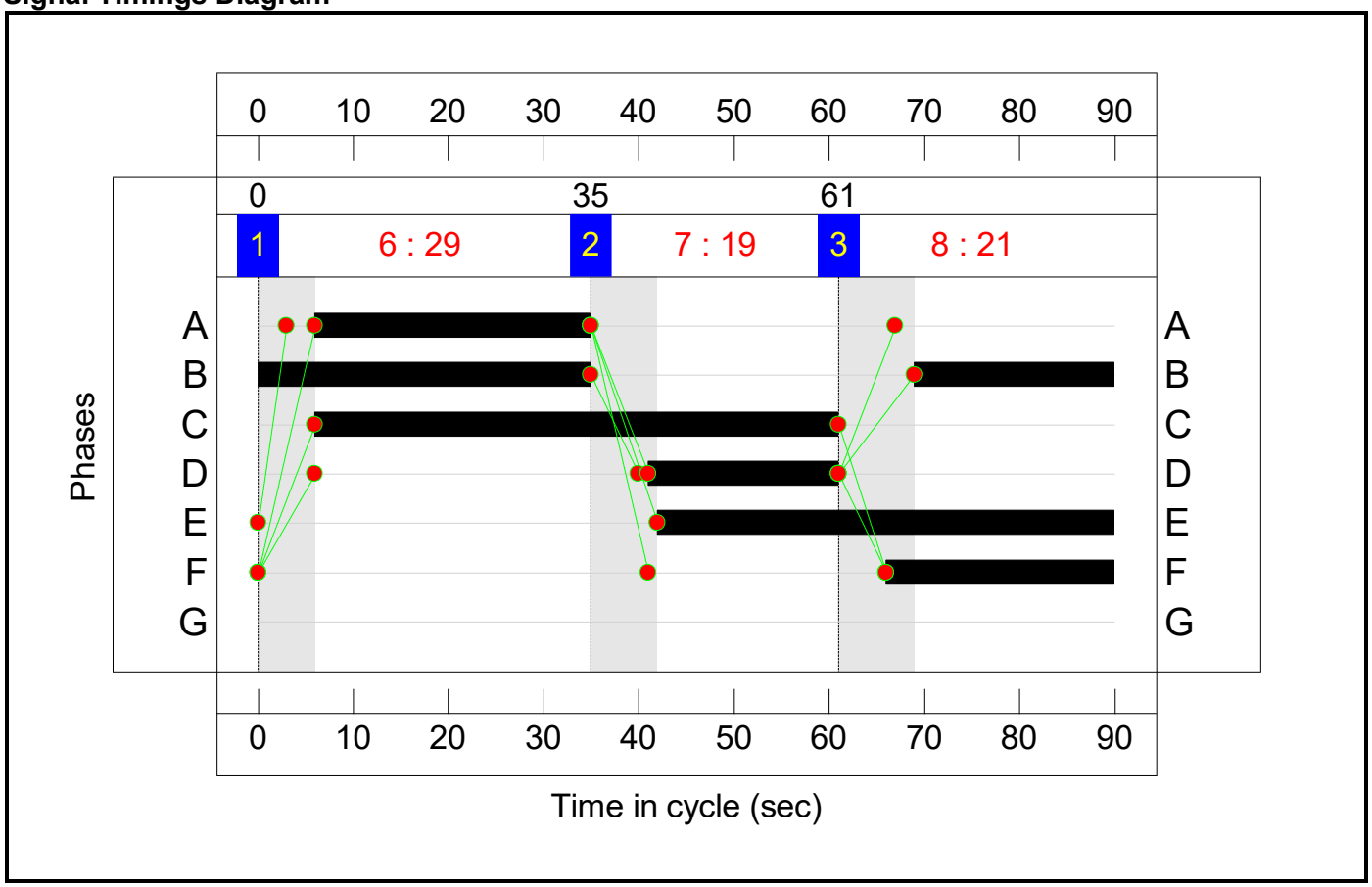


Full Input Data And Results

Stage Timings

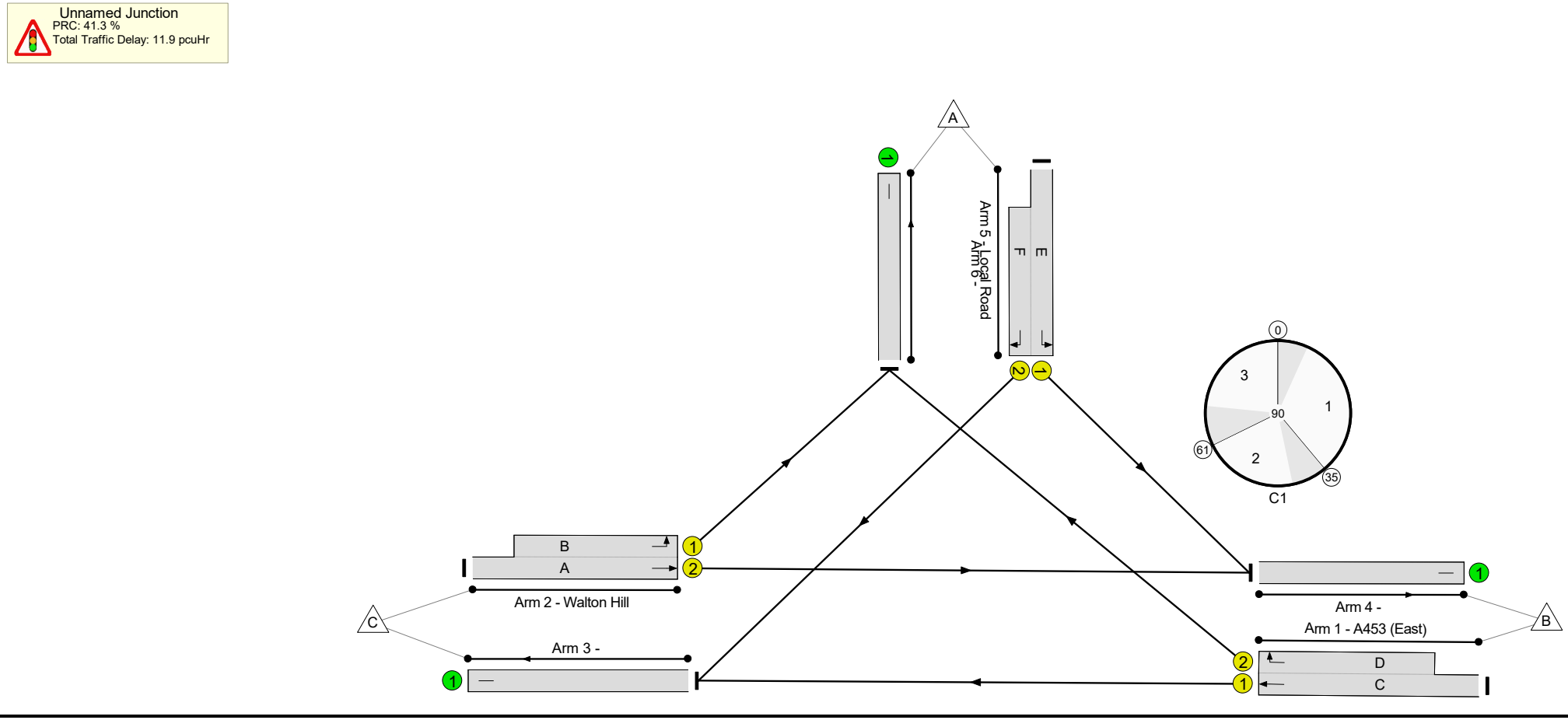
Stage	1	2	3
Duration	29	19	21
Change Point	0	35	61

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	55:20	-	404	1965:1828	375+427	50.4 : 50.4%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	29:56	-	720	2105:1828	645+499	63.0 : 63.0%
3/1		U	N/A	N/A	-		-	-	-	476	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	926	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	48:24	-	807	1786:1828	817+451	63.7 : 63.7%
6/1		U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%

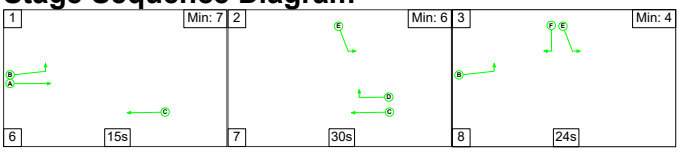
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**9.7**	**2.2**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**9.7**	**2.2**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
1/1+1/2	404	404	-	-	-	2.2	0.5	-	2.7	23.8	4.7	0.5	5.2
2/2+2/1	720	720	-	-	-	3.4	0.8	-	4.3	21.4	8.3	0.8	9.2
3/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	926	926	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	807	807	-	-	-	4.1	0.9	-	5.0	22.3	8.2	0.9	9.1
6/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 41.3 Total Delay for Signalled Lanes (pcuHr): 11.95 Cycle Time (s): 90
PRC Over All Lanes (%): 41.3 Total Delay Over All Lanes(pcuHr): 11.95

Full Input Data And Results

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 1: 'Network Control Plan 1')

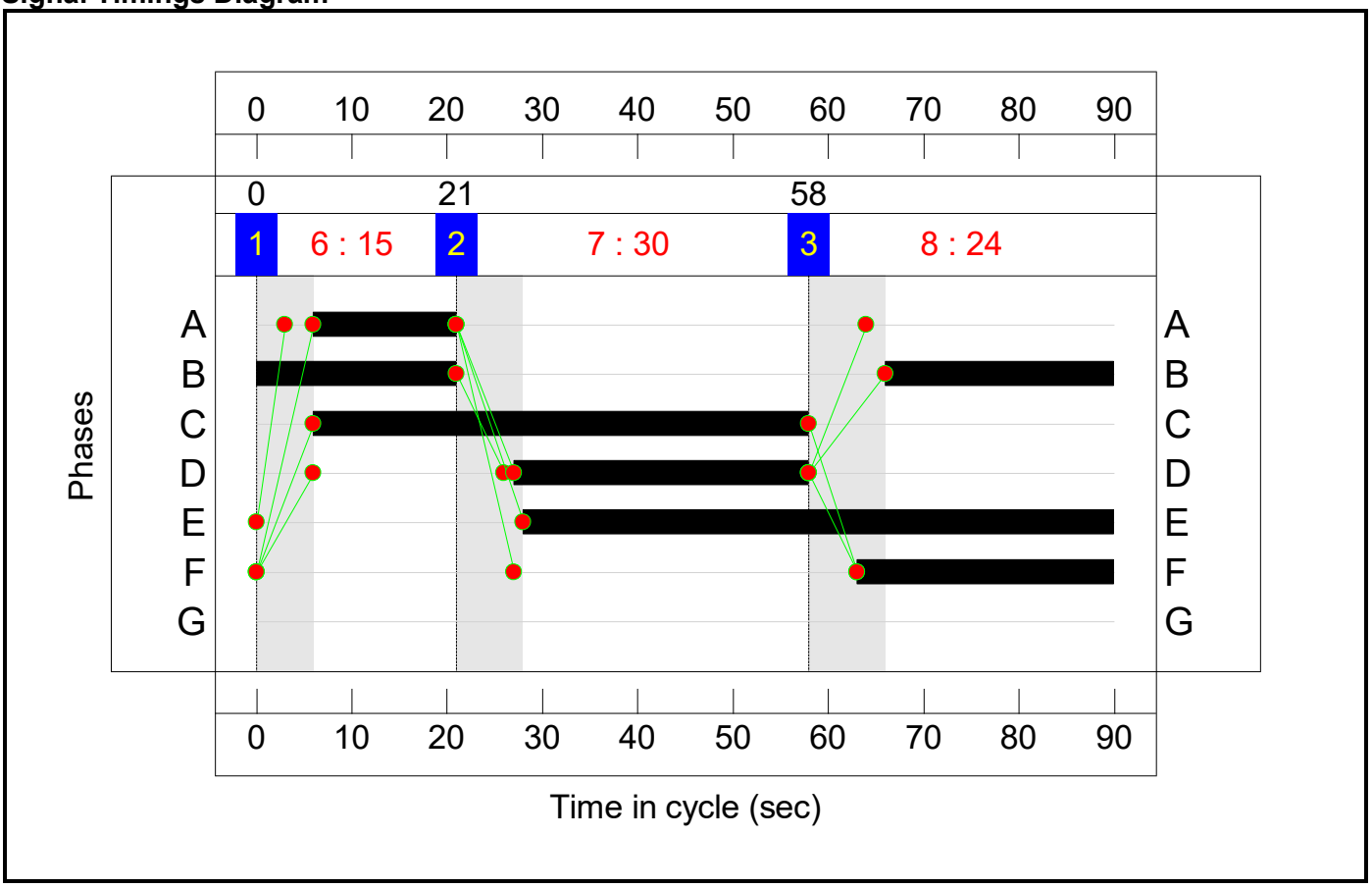
Stage Sequence Diagram



Stage Timings

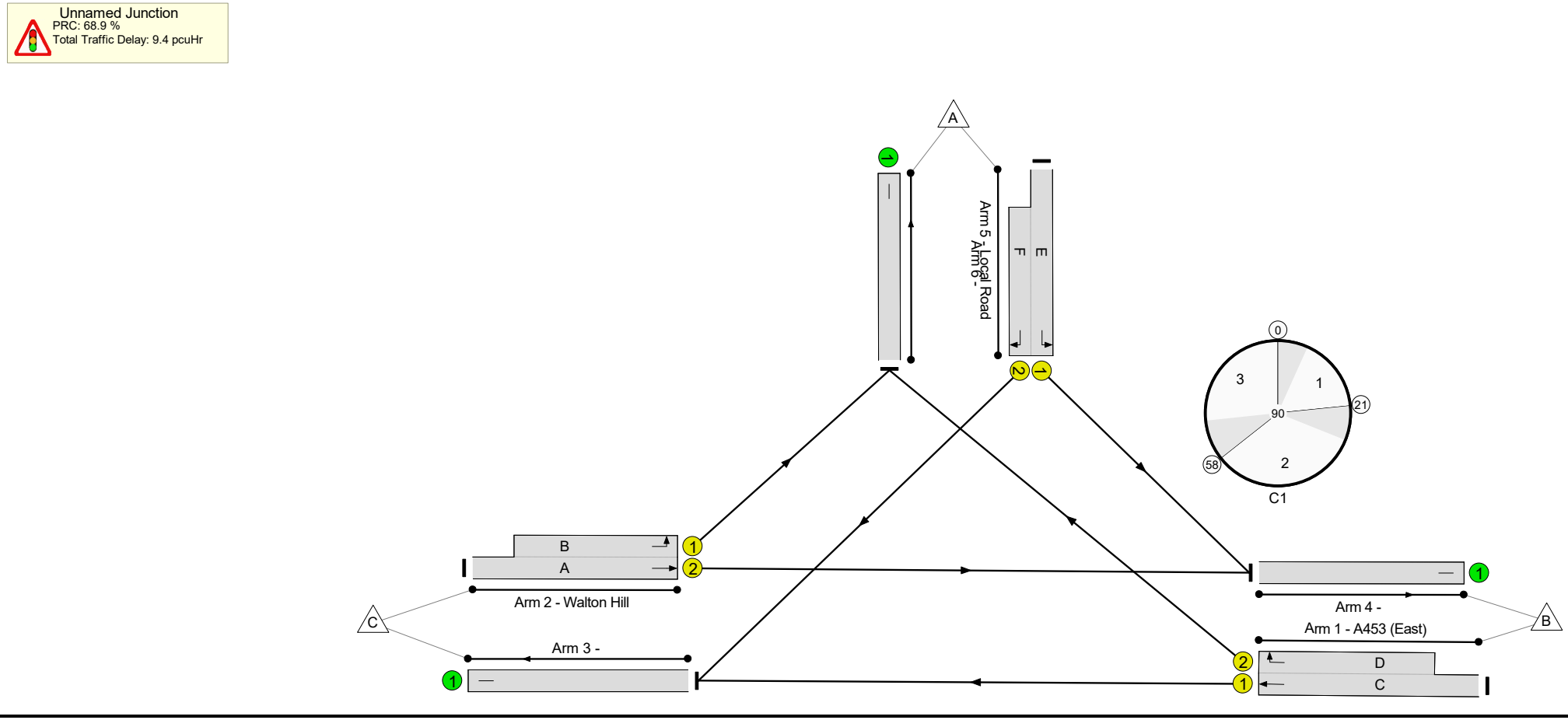
Stage	1	2	3
Duration	15	30	24
Change Point	0	21	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.3%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	52:31	-	631	1965:1828	546+650	52.8 : 52.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:45	-	414	2105:1828	374+454	50.0 : 50.0%
3/1		U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:27	-	517	1786:1828	428+542	53.3 : 53.3%
6/1		U	N/A	N/A	-		-	-	-	570	Inf	Inf	0.0%

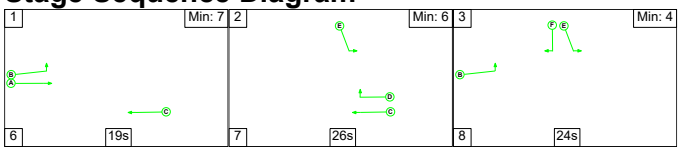
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**7.7**	**1.6**	**0.0**	**9.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**7.7**	**1.6**	**0.0**	**9.4**	**-**	**-**	**-**	**-**
1/1+1/2	631	631	-	-	-	2.9	0.6	-	3.5	19.8	6.8	0.6	7.3
2/2+2/1	414	414	-	-	-	2.5	0.5	-	3.0	26.2	4.2	0.5	4.7
3/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	517	517	-	-	-	2.3	0.6	-	2.9	20.2	5.9	0.6	6.4
6/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 68.9 Total Delay for Signalled Lanes (pcuHr): 9.37 Cycle Time (s): 90
PRC Over All Lanes (%): 68.9 Total Delay Over All Lanes(pcuHr): 9.37

Full Input Data And Results

Scenario 3: '2028 Forecast Year Without Development (AM)' (FG3: '2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

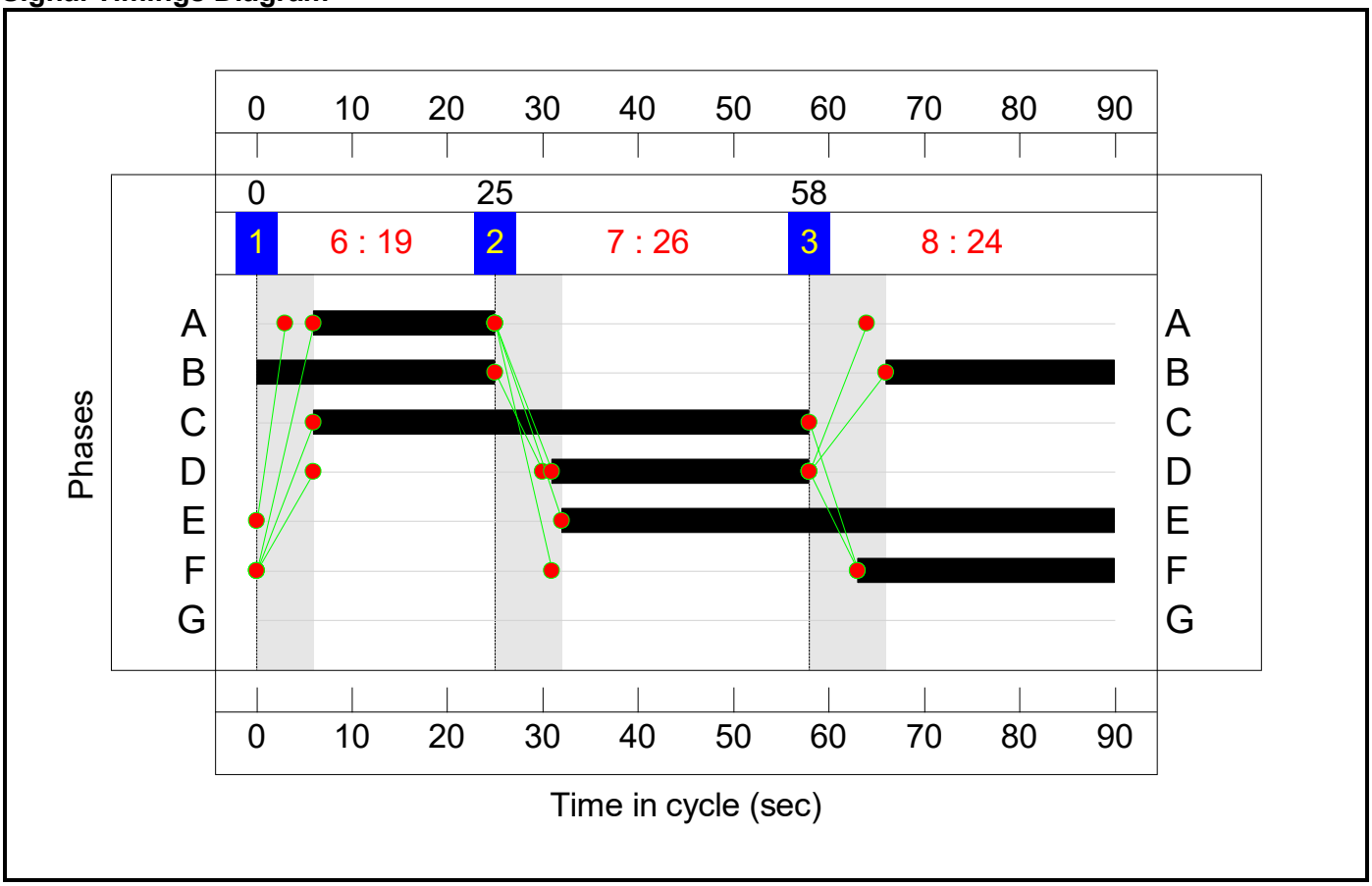
Stage Sequence Diagram



Stage Timings

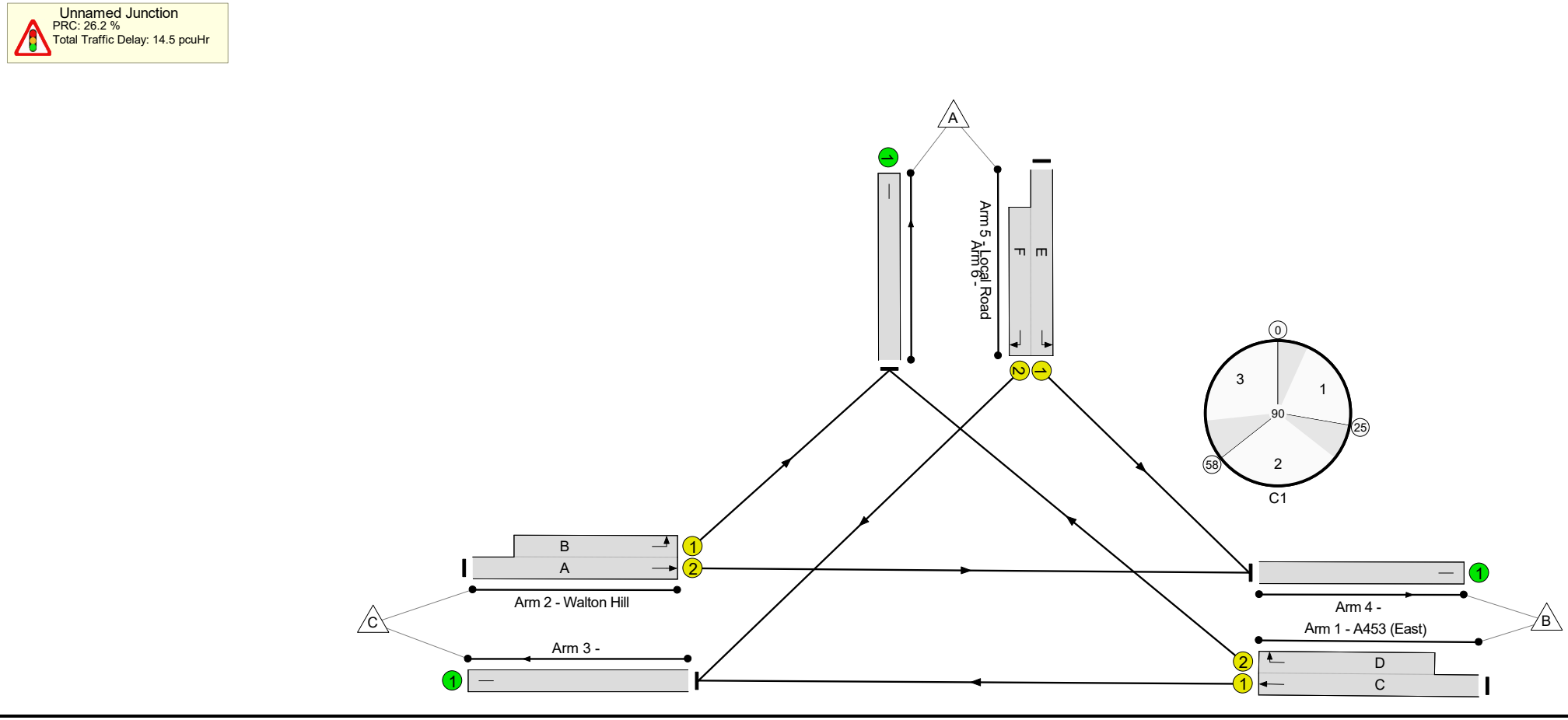
Stage	1	2	3
Duration	19	26	24
Change Point	0	25	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	52:27	-	585	1965:1828	390+569	61.0 : 61.0%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	19:49	-	644	2105:1828	468+459	69.5 : 69.5%
3/1		U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	999	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	58:27	-	1047	1786:1828	945+523	71.3 : 71.3%
6/1		U	N/A	N/A	-		-	-	-	666	Inf	Inf	0.0%

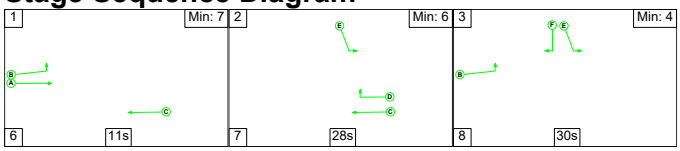
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.4**	**3.1**	**0.0**	**14.5**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.4**	**3.1**	**0.0**	**14.5**	-	-	-	-
1/1+1/2	585	585	-	-	-	3.1	0.8	-	3.9	24.0	7.3	0.8	8.1
2/2+2/1	644	644	-	-	-	3.9	1.1	-	5.0	27.9	7.4	1.1	8.5
3/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	999	999	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1047	1047	-	-	-	4.4	1.2	-	5.6	19.3	9.2	1.2	10.4
6/1	666	666	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.2 Total Delay for Signalled Lanes (pcuHr): 14.51 Cycle Time (s): 90
PRC Over All Lanes (%): 26.2 Total Delay Over All Lanes(pcuHr): 14.51

Full Input Data And Results

Scenario 4: '2028 Forecast Year Without Development (PM)' (FG4: '2028 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

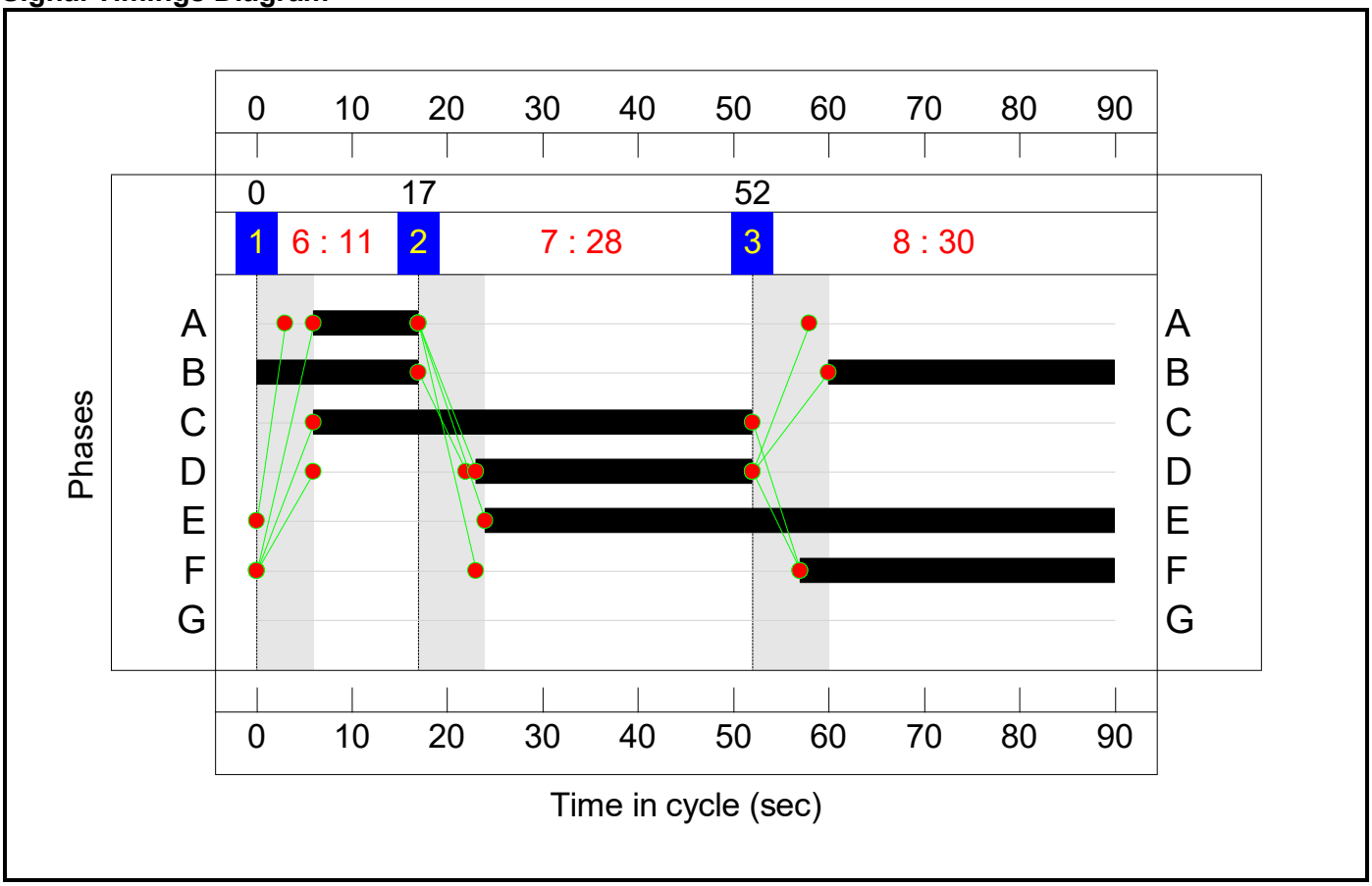
Stage Sequence Diagram



Stage Timings

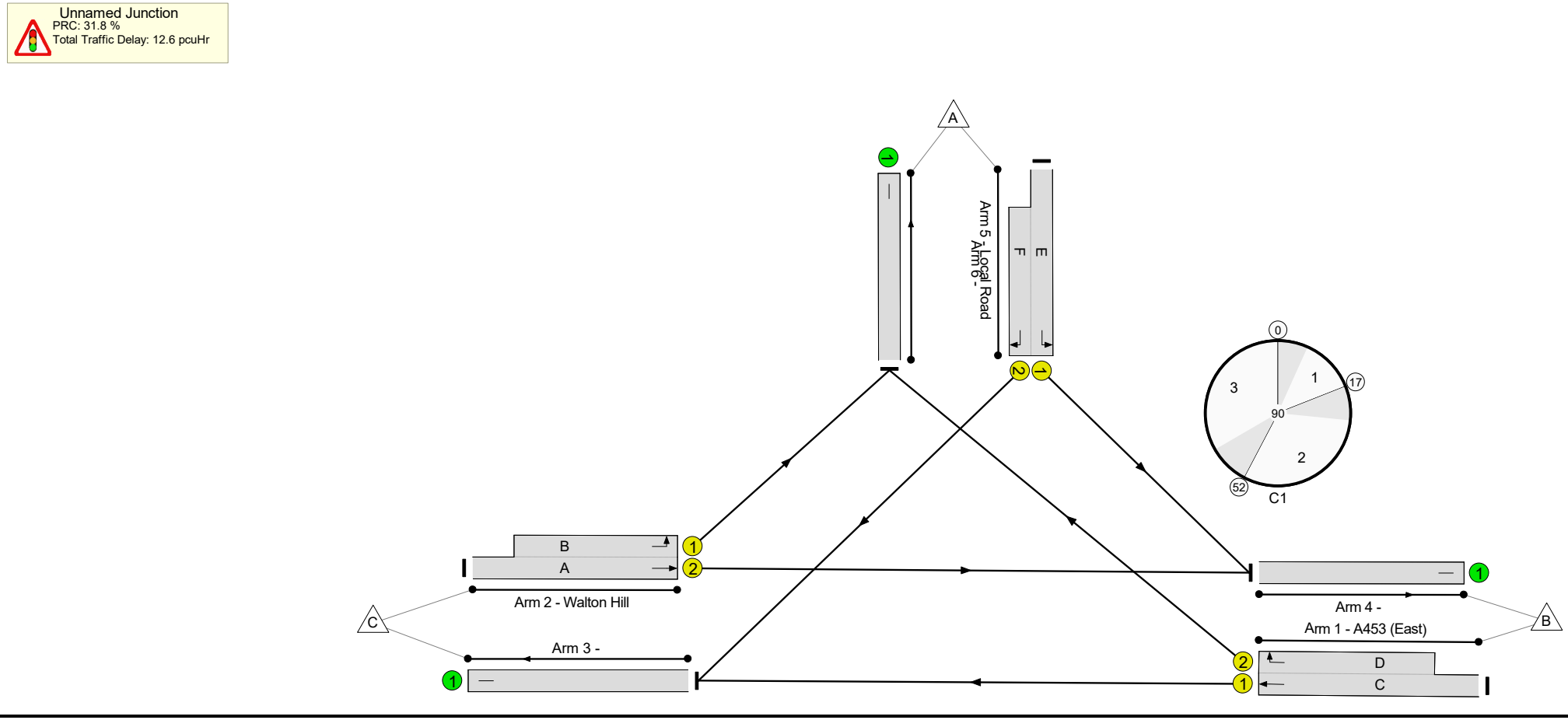
Stage	1	2	3
Duration	11	28	30
Change Point	0	17	52

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	46:29	-	804	1965:1828	597+609	66.6 : 66.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	11:47	-	380	2105:1828	281+322	63.1 : 63.1%
3/1		U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	480	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	66:33	-	722	1786:1828	444+613	68.3 : 68.3%
6/1		U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%

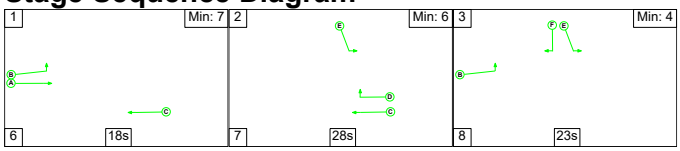
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.7**	**2.9**	**0.0**	**12.6**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.7**	**2.9**	**0.0**	**12.6**	-	-	-	-
1/1+1/2	804	804	-	-	-	4.3	1.0	-	5.3	23.8	8.7	1.0	9.7
2/2+2/1	380	380	-	-	-	2.4	0.8	-	3.3	31.1	4.2	0.8	5.0
3/1	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	480	480	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	722	722	-	-	-	2.9	1.1	-	4.0	19.9	8.4	1.1	9.5
6/1	609	609	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 31.8 Total Delay for Signalled Lanes (pcuHr): 12.60 Cycle Time (s): 90
PRC Over All Lanes (%): 31.8 Total Delay Over All Lanes(pcuHr): 12.60

Full Input Data And Results

Scenario 5: '2028 Forecast Year With Development (AM)' (FG5: '2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

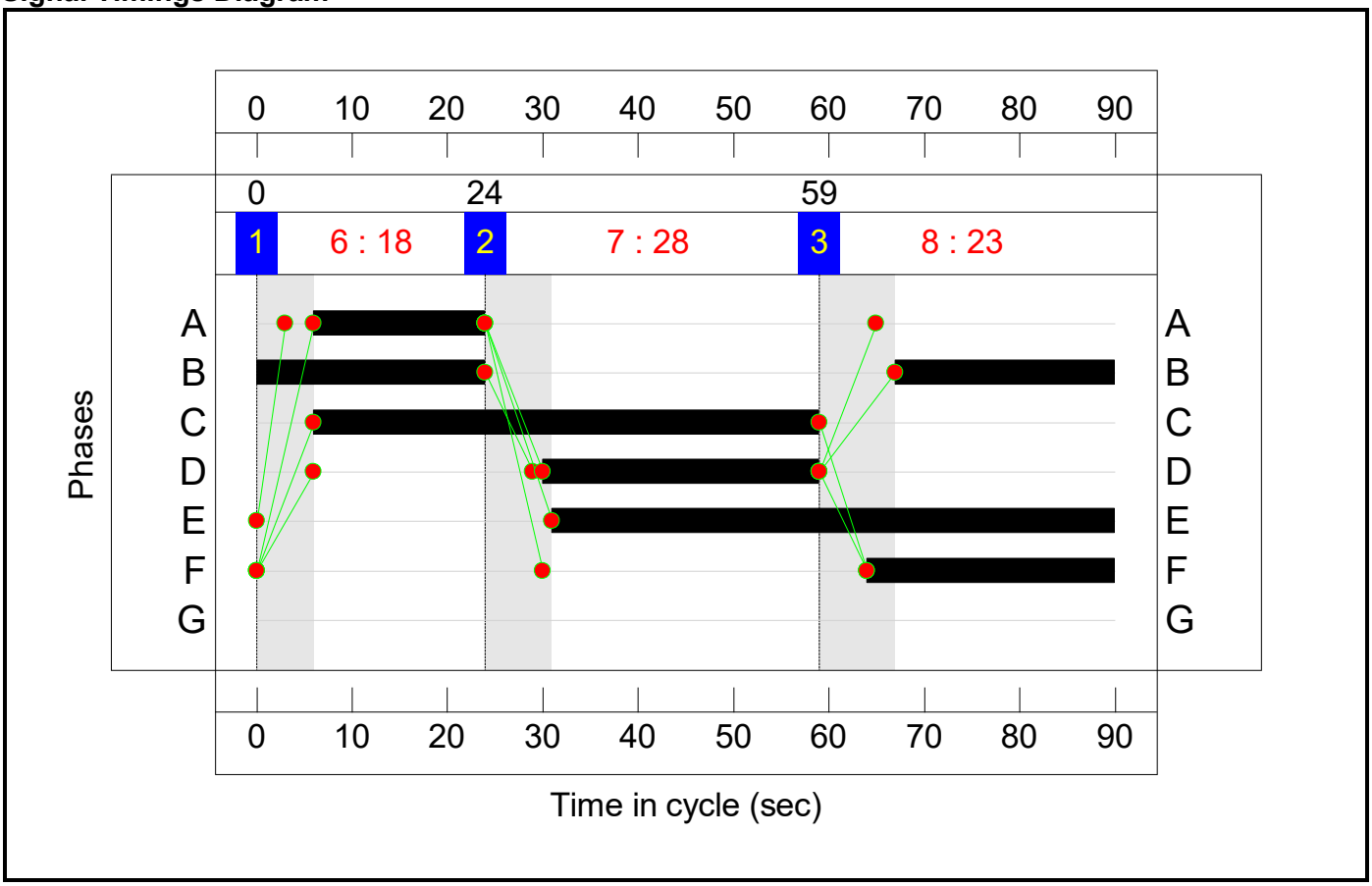
Stage Sequence Diagram



Stage Timings

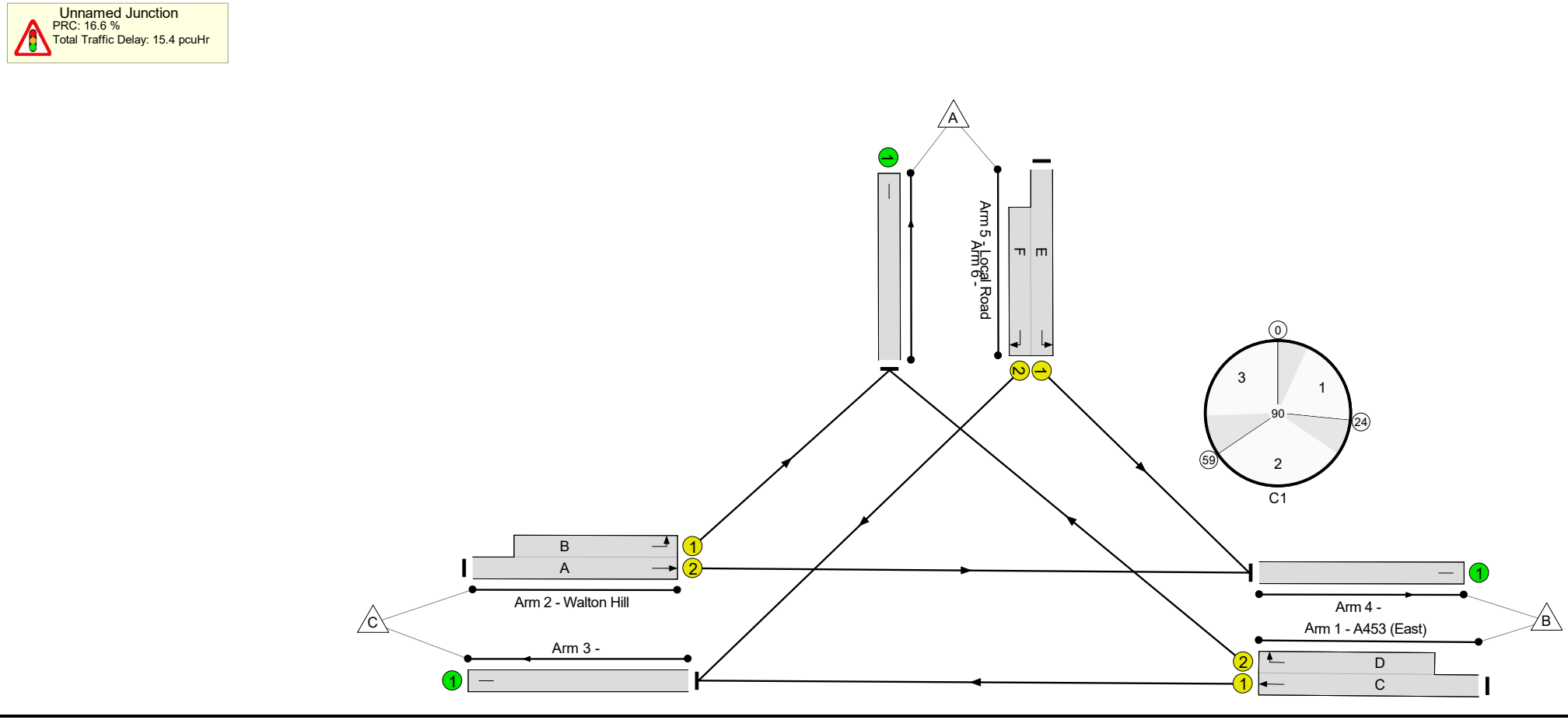
Stage	1	2	3
Duration	18	28	23
Change Point	0	24	59

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	53:29	-	546	1965:1828	378+609	55.3 : 55.3%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	18:47	-	664	2105:1828	444+416	77.2 : 77.2%
3/1		U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1092	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	59:26	-	1104	1786:1828	981+465	76.3 : 76.3%
6/1		U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%

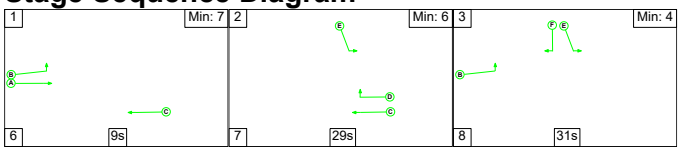
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**11.5**	**3.9**	**0.0**	**15.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**11.5**	**3.9**	**0.0**	**15.4**	**-**	**-**	**-**	**-**
1/1+1/2	546	546	-	-	-	2.8	0.6	-	3.4	22.3	6.8	0.6	7.5
2/2+2/1	664	664	-	-	-	4.2	1.7	-	5.9	32.1	8.0	1.7	9.7
3/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1092	1092	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1104	1104	-	-	-	4.5	1.6	-	6.1	19.9	10.6	1.6	12.2
6/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 16.6 Total Delay for Signalled Lanes (pcuHr): 15.38 Cycle Time (s): 90
PRC Over All Lanes (%): 16.6 Total Delay Over All Lanes(pcuHr): 15.38

Full Input Data And Results

Scenario 6: '2028 Forecast Year With Development (PM)' (FG6: '2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

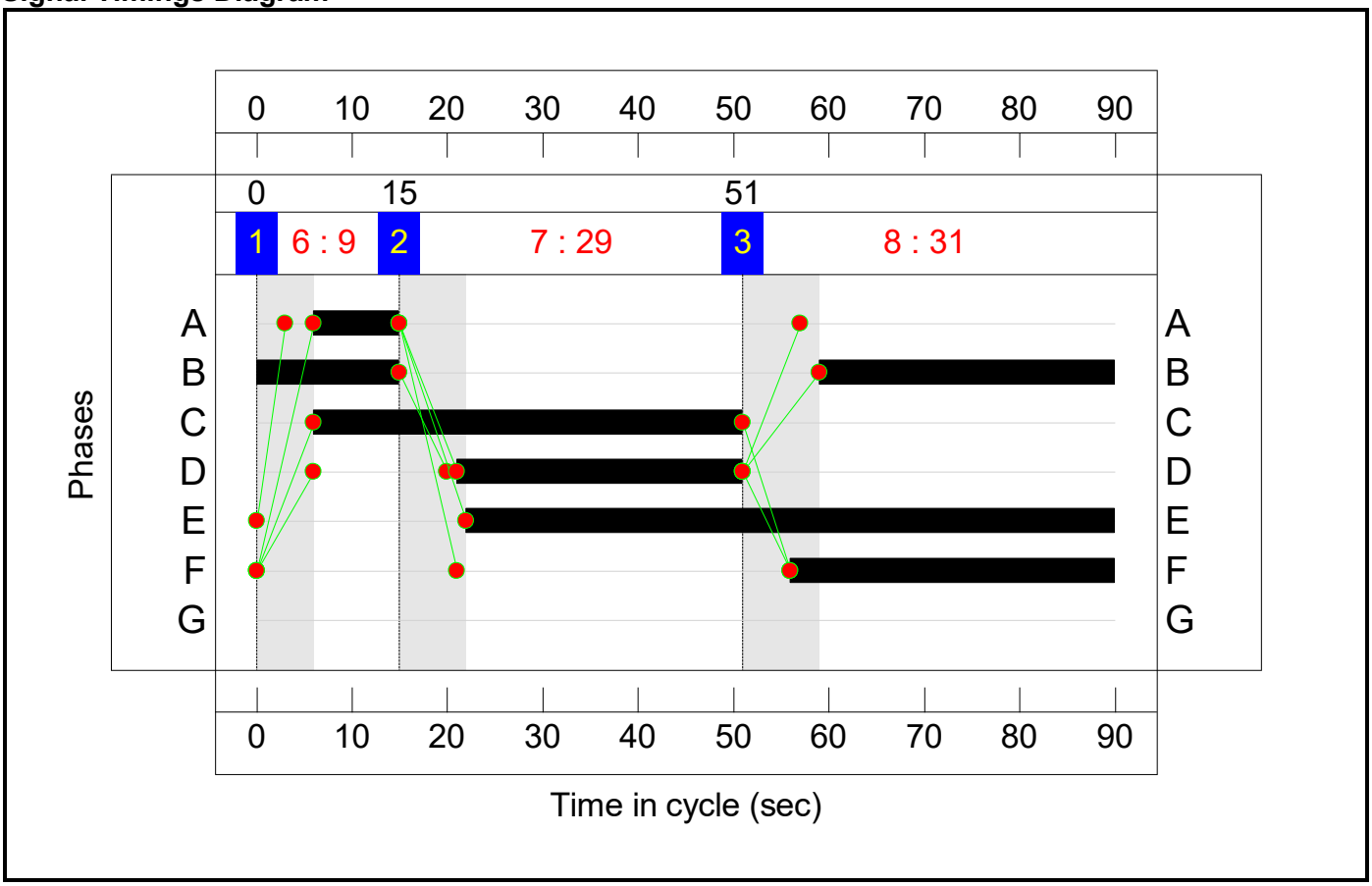
Stage Sequence Diagram



Stage Timings

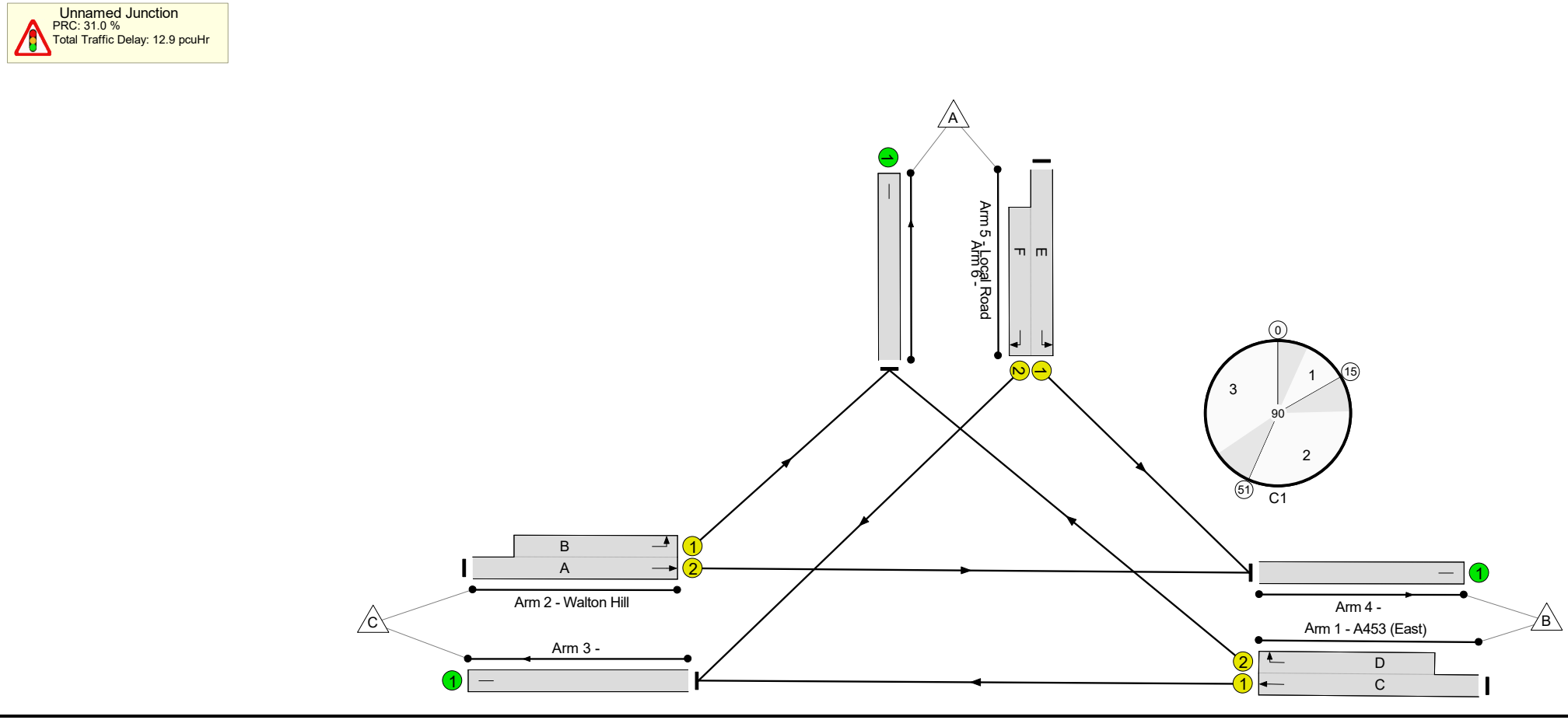
Stage	1	2	3
Duration	9	29	31
Change Point	0	15	51

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	45:30	-	837	1965:1828	610+630	67.5 : 67.5%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	9:46	-	349	2105:1828	234+283	67.6 : 67.6%
3/1		U	N/A	N/A	-		-	-	-	844	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	68:34	-	720	1786:1828	419+629	68.7 : 68.7%
6/1		U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%

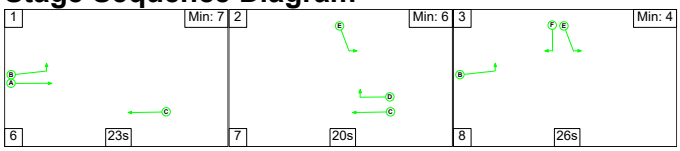
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.7**	**3.2**	**0.0**	**12.9**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.7**	**3.2**	**0.0**	**12.9**	-	-	-	-
1/1+1/2	837	837	-	-	-	4.5	1.0	-	5.6	23.9	9.0	1.0	10.0
2/2+2/1	349	349	-	-	-	2.3	1.0	-	3.3	34.3	3.8	1.0	4.8
3/1	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	720	720	-	-	-	2.9	1.1	-	4.0	19.8	8.6	1.1	9.7
6/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 31.0 Total Delay for Signalled Lanes (pcuHr): 12.86 Cycle Time (s): 90
PRC Over All Lanes (%): 31.0 Total Delay Over All Lanes(pcuHr): 12.86

Full Input Data And Results

Scenario 7: '2038 Forecast Year Without Development (AM)' (FG7: '2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

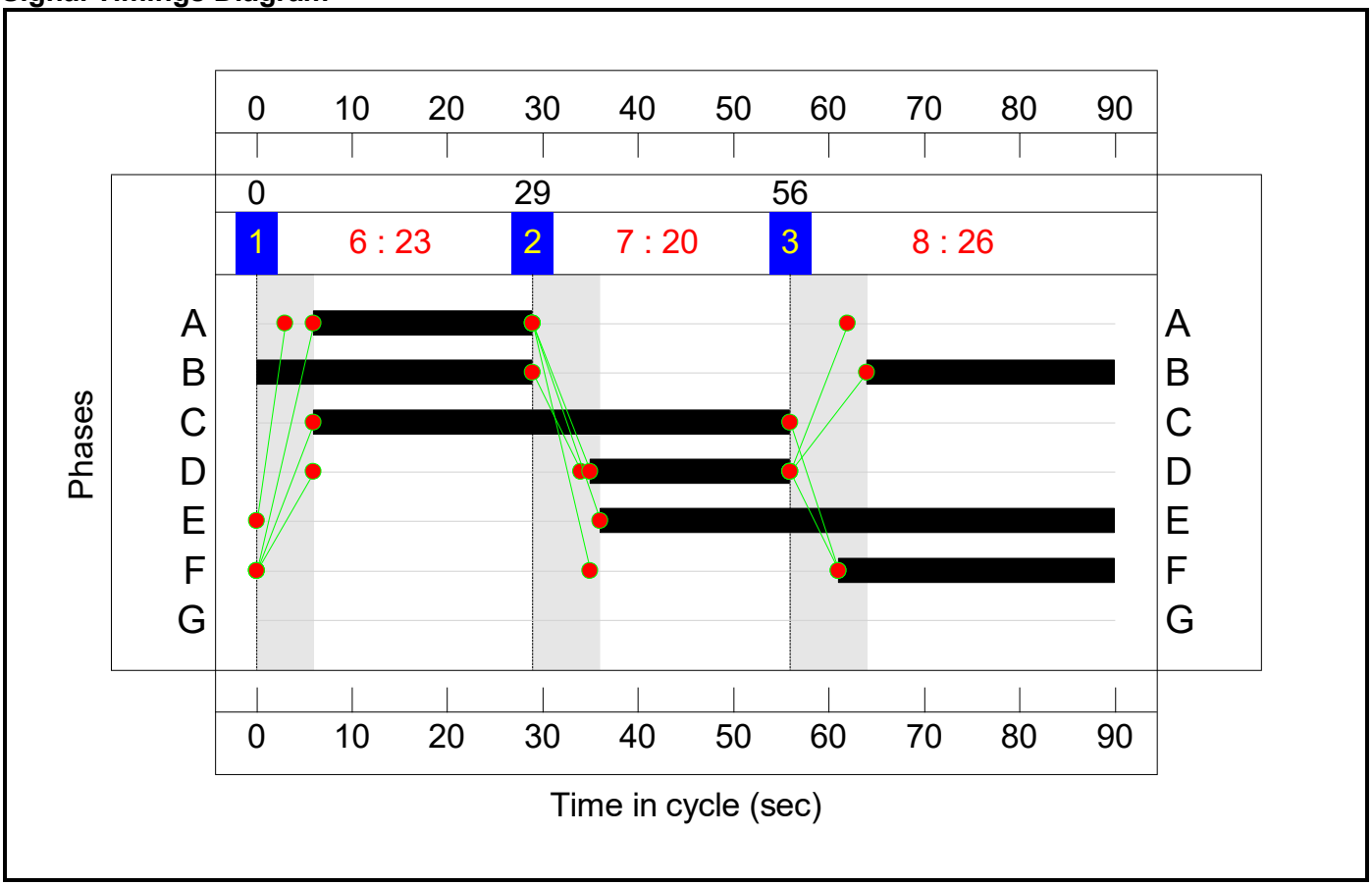
Stage Sequence Diagram



Stage Timings

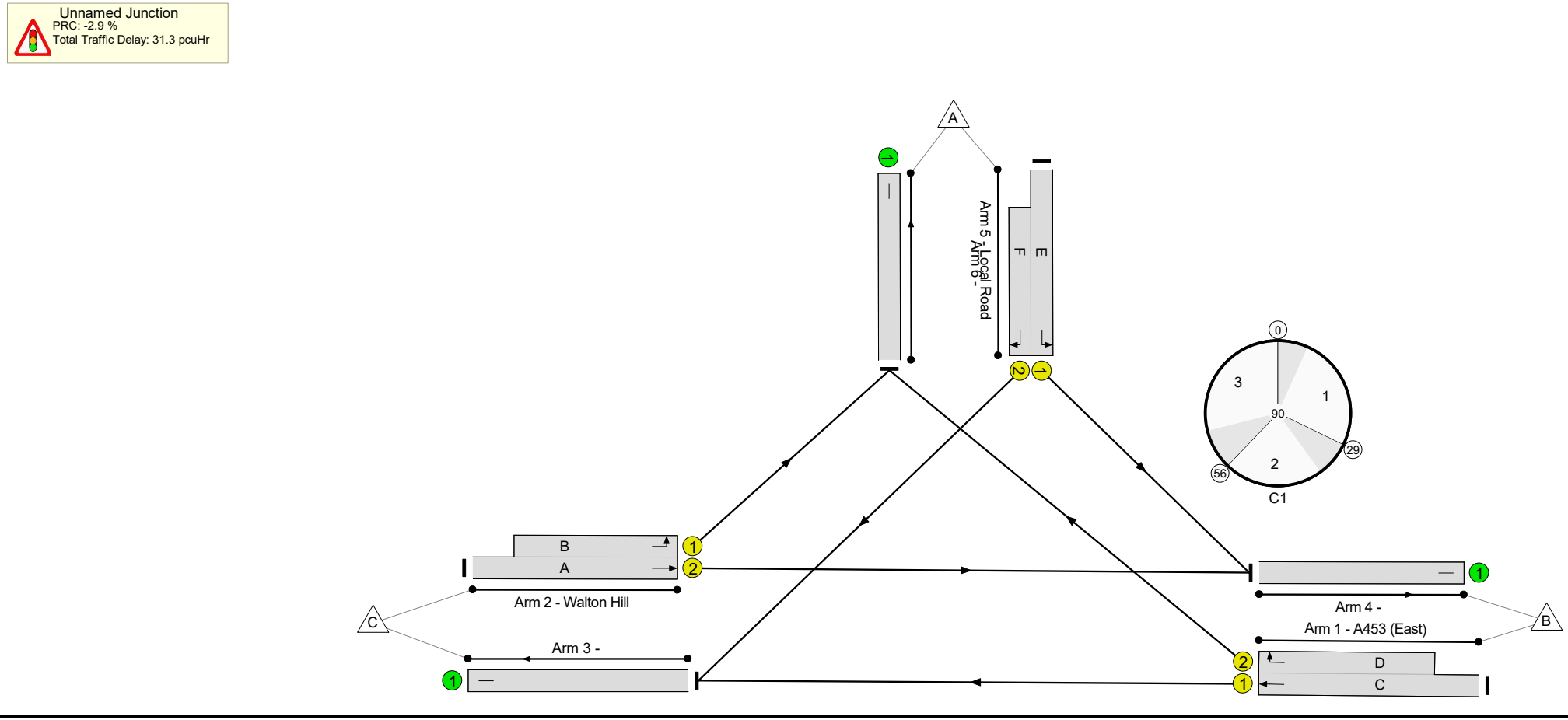
Stage	1	2	3
Duration	23	20	26
Change Point	0	29	56

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	50:21	-	707	1965:1828	333+447	90.6 : 90.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	23:55	-	1186	2105:1828	561+744	90.9 : 90.9%
3/1		U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1134	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	54:29	-	1139	1786:1828	674+556	92.6 : 92.6%
6/1		U	N/A	N/A	-		-	-	-	1081	Inf	Inf	0.0%

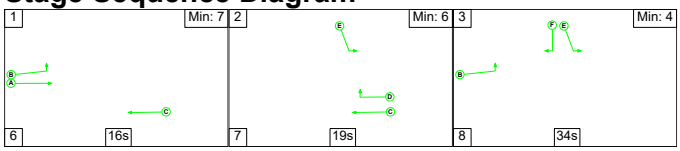
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**16.8**	**14.5**	**0.0**	**31.3**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**16.8**	**14.5**	**0.0**	**31.3**	-	-	-	-
1/1+1/2	707	707	-	-	-	4.6	4.3	-	8.9	45.2	9.8	4.3	14.1
2/2+2/1	1186	1186	-	-	-	6.4	4.6	-	11.0	33.5	12.3	4.6	16.9
3/1	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1134	1134	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1139	1139	-	-	-	5.8	5.6	-	11.4	35.9	11.9	5.6	17.4
6/1	1081	1081	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -2.9 Total Delay for Signalled Lanes (pcuHr): 31.29 Cycle Time (s): 90
PRC Over All Lanes (%): -2.9 Total Delay Over All Lanes(pcuHr): 31.29

Full Input Data And Results

Scenario 8: '2038 Forecast Year Without Development (PM)' (FG8: '2038 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

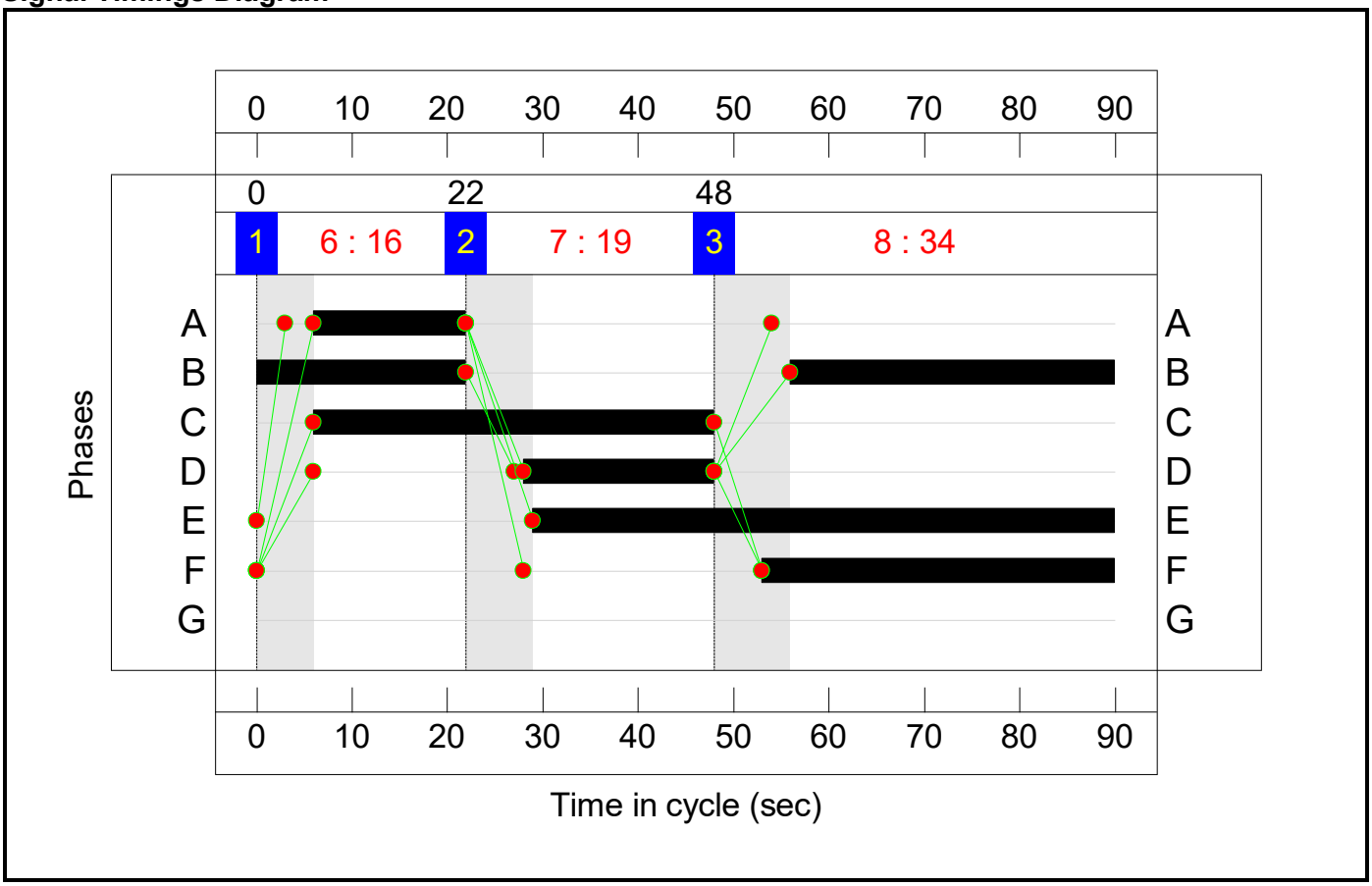
Stage Sequence Diagram



Stage Timings

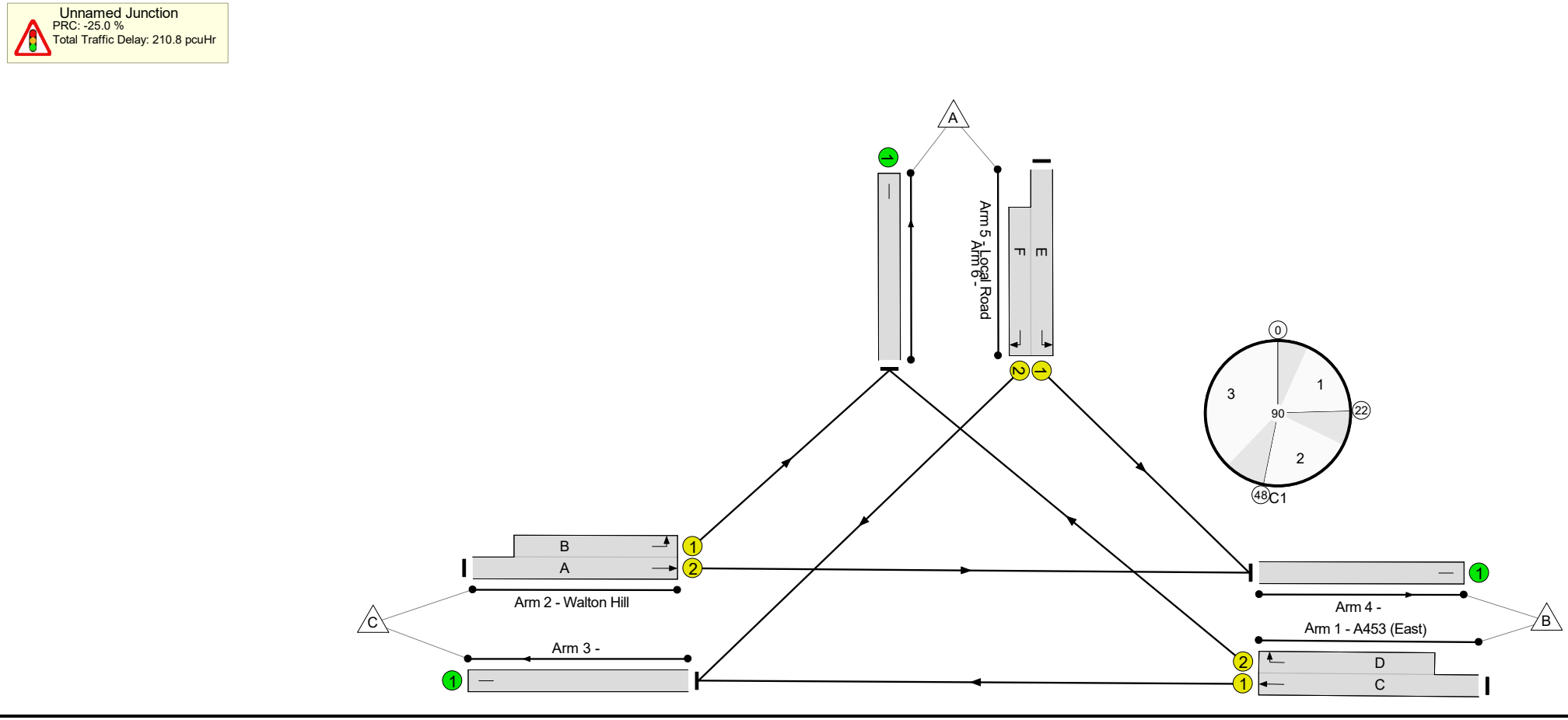
Stage	1	2	3
Duration	16	19	34
Change Point	0	22	48

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.5%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	42:20	-	938	1965:1828	407+427	112.5 : 112.5%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	16:56	-	1045	2105:1828	398+534	112.2 : 112.2%
3/1		U	N/A	N/A	-		-	-	-	1207	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	897	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	61:37	-	1200	1786:1828	404+671	111.7 : 111.7%
6/1		U	N/A	N/A	-		-	-	-	1079	Inf	Inf	0.0%

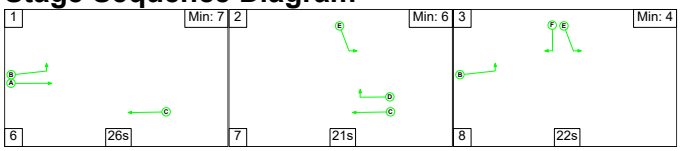
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**26.3**	**184.5**	**0.0**	**210.8**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**26.3**	**184.5**	**0.0**	**210.8**	-	-	-	-
1/1+1/2	938	885	-	-	-	8.7	56.4	-	65.1	249.9	13.3	56.4	69.7
2/2+2/1	1045	997	-	-	-	8.2	61.0	-	69.2	238.4	12.4	61.0	73.3
3/1	1129	1129	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	802	802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1200	1075	-	-	-	9.4	67.1	-	76.5	229.5	26.7	67.1	93.8
6/1	1026	1026	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -25.0 PRC Over All Lanes (%): -25.0 Total Delay for Signalled Lanes (pcuHr): 210.81 Total Delay Over All Lanes(pcuHr): 210.81 Cycle Time (s): 90

Full Input Data And Results

Scenario 9: '2038 Forecast Year With Development (AM)' (FG9: '2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

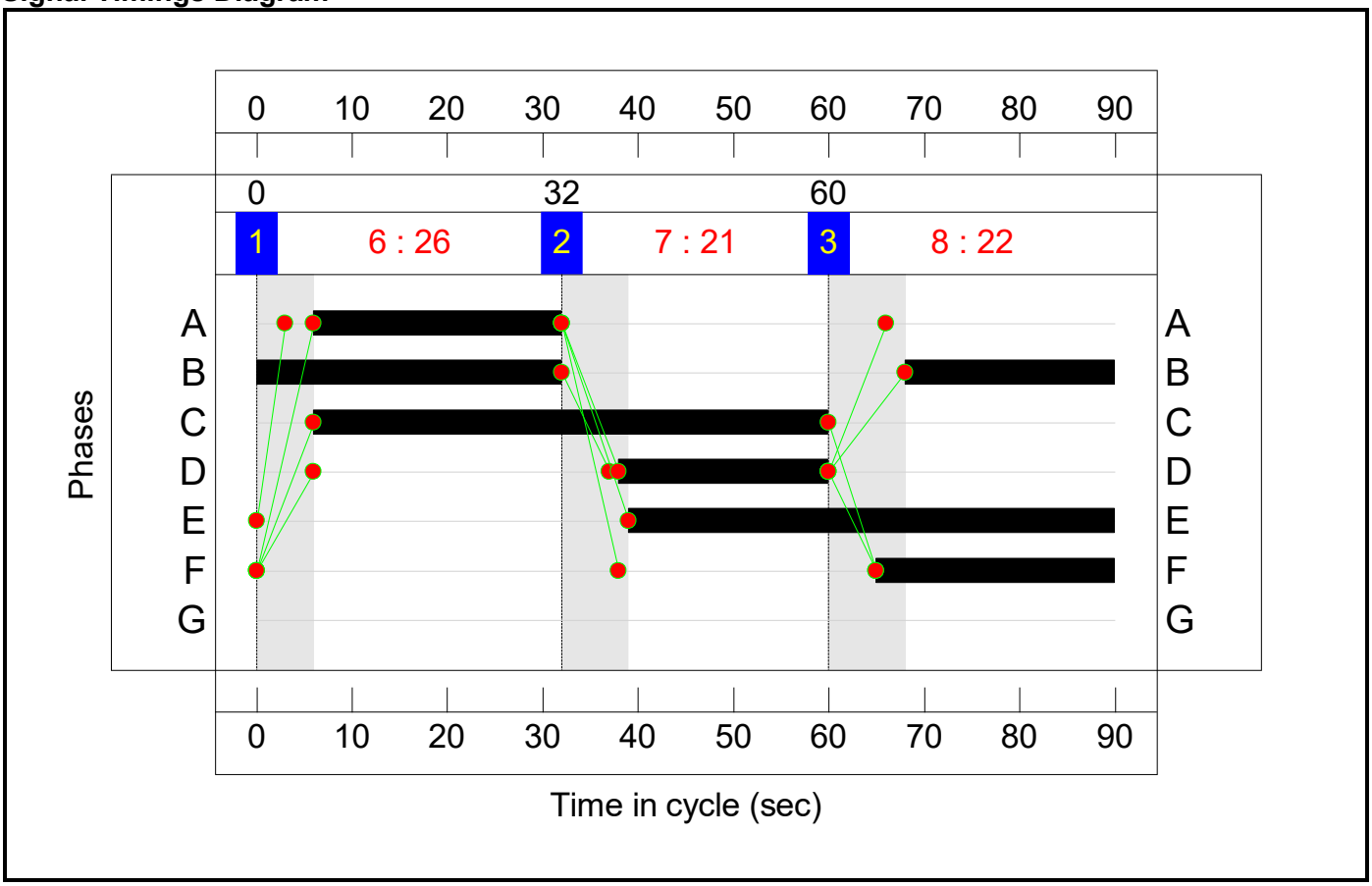
Stage Sequence Diagram



Stage Timings

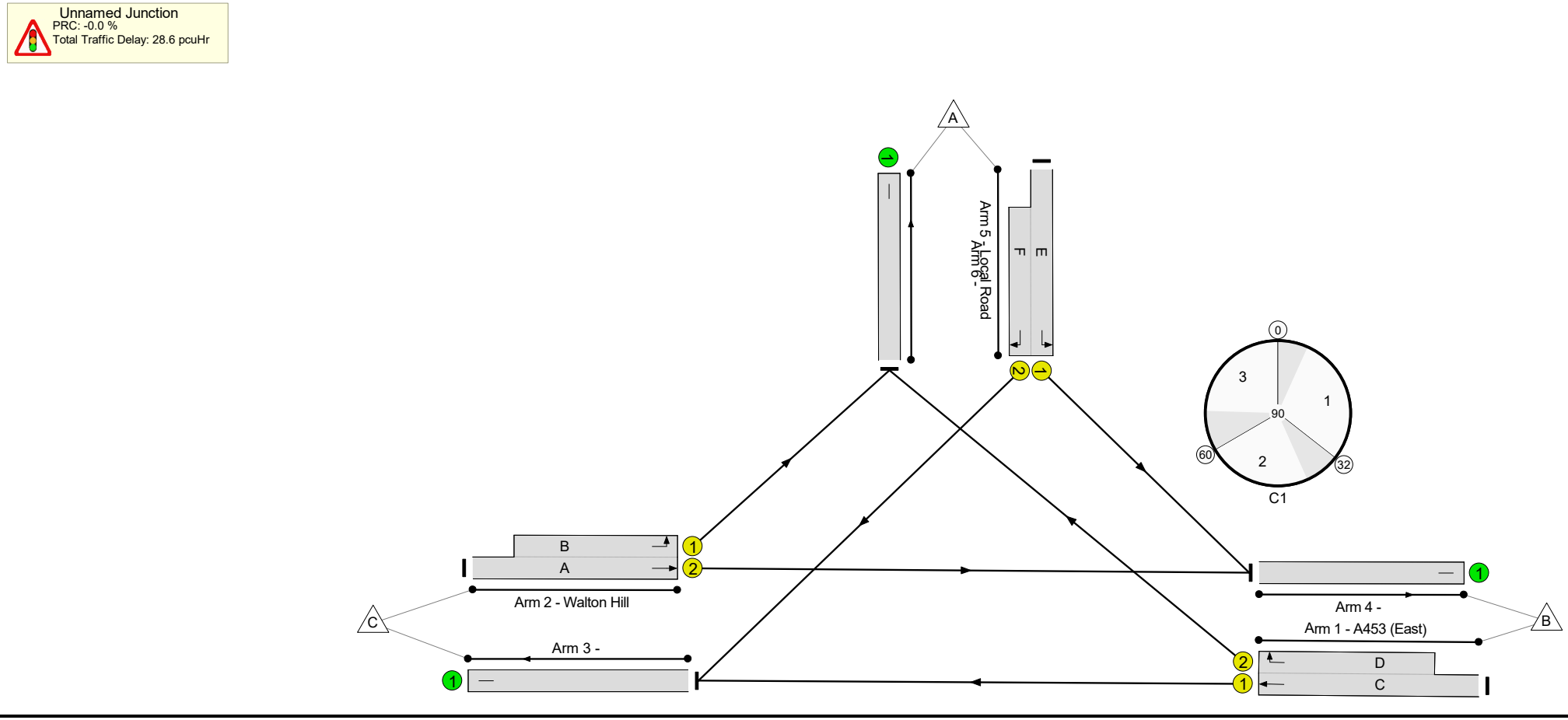
Stage	1	2	3
Duration	26	21	22
Change Point	0	32	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**90.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	54:22	-	679	1965:1828	305+467	88.0 : 88.0%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	26:54	-	1224	2105:1828	595+777	89.2 : 89.2%
3/1		U	N/A	N/A	-		-	-	-	736	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1190	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	51:25	-	1127	1786:1828	732+520	90.0 : 90.0%
6/1		U	N/A	N/A	-		-	-	-	1104	Inf	Inf	0.0%

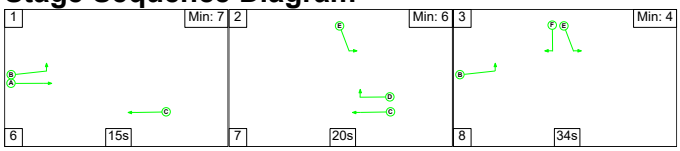
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**17.0**	**11.5**	**0.0**	**28.6**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**17.0**	**11.5**	**0.0**	**28.6**	-	-	-	-
1/1+1/2	679	679	-	-	-	4.3	3.4	-	7.7	40.7	9.8	3.4	13.2
2/2+2/1	1224	1224	-	-	-	6.5	3.9	-	10.4	30.5	12.4	3.9	16.3
3/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1190	1190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1127	1127	-	-	-	6.3	4.2	-	10.5	33.6	11.2	4.2	15.4
6/1	1104	1104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -0.0 Total Delay for Signalled Lanes (pcuHr): 28.57 Cycle Time (s): 90
PRC Over All Lanes (%): -0.0 Total Delay Over All Lanes(pcuHr): 28.57

Full Input Data And Results

Scenario 10: '2038 Forecast Year With Development (PM)' (FG10: '2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

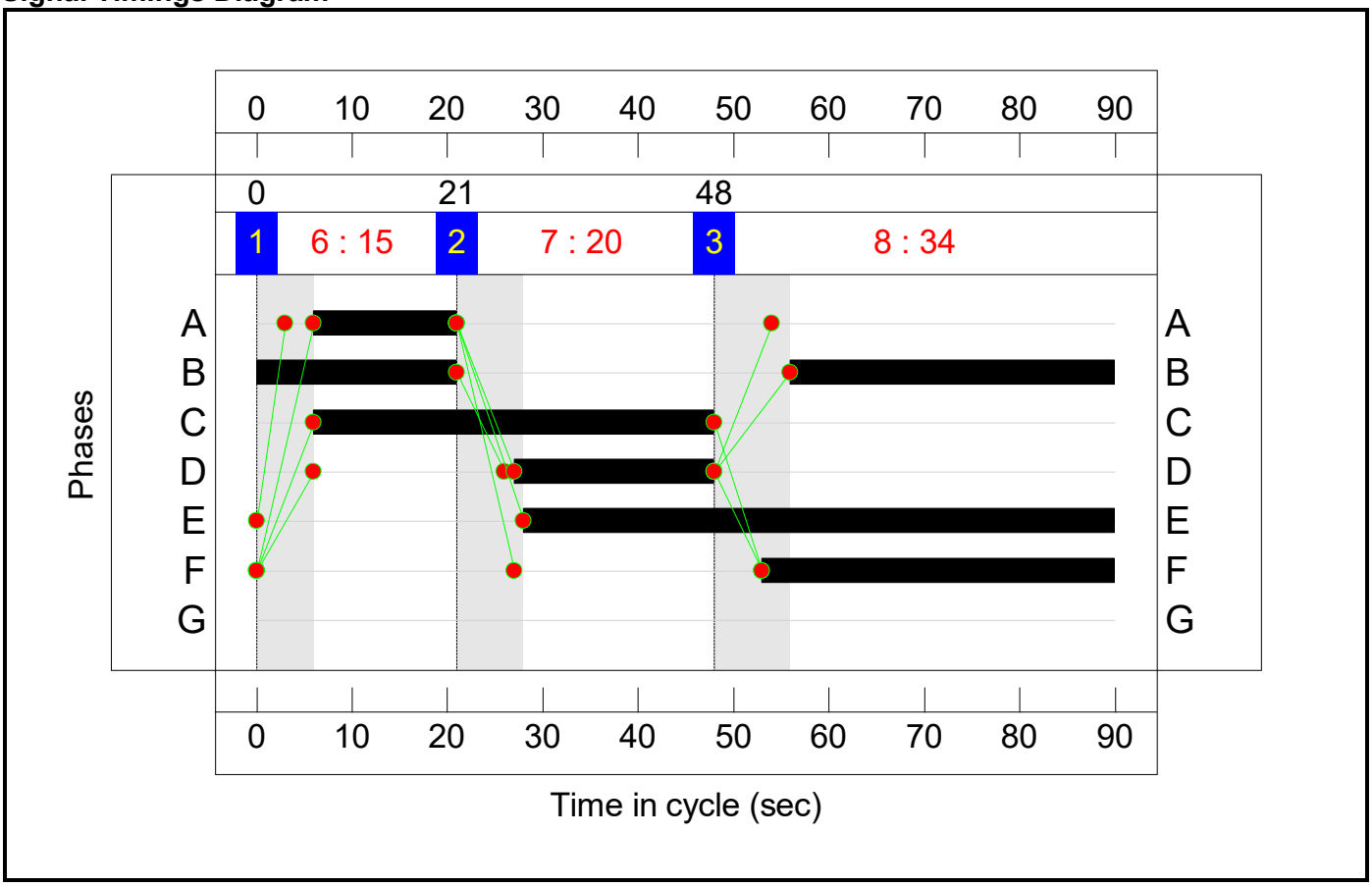
Stage Sequence Diagram



Stage Timings

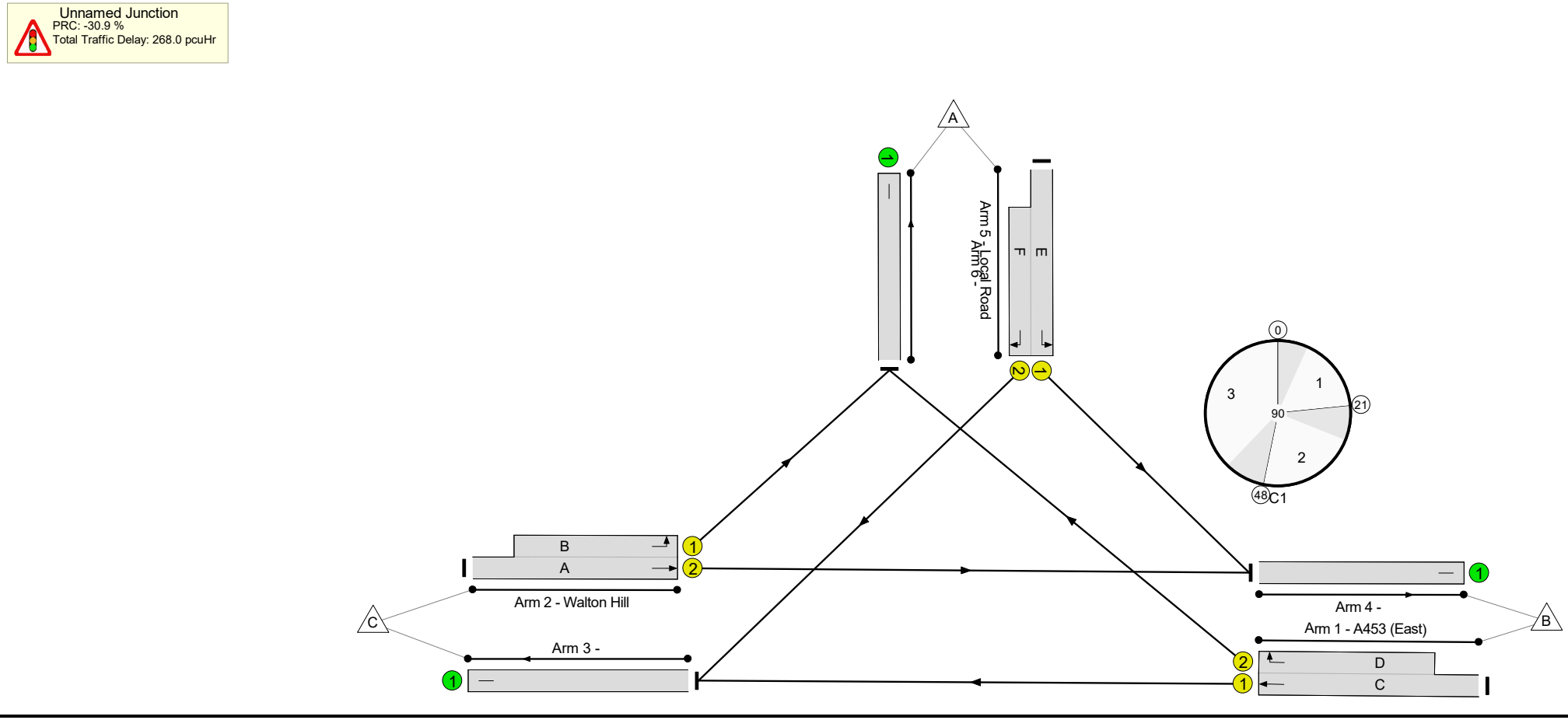
Stage	1	2	3
Duration	15	20	34
Change Point	0	21	48

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.8%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	42:21	-	1014	1965:1828	416+447	117.5 : 117.5%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:55	-	1024	2105:1828	374+536	112.5 : 112.5%
3/1		U	N/A	N/A	-		-	-	-	1283	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	872	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:37	-	1245	1786:1828	383+674	117.8 : 117.8%
6/1		U	N/A	N/A	-		-	-	-	1128	Inf	Inf	0.0%

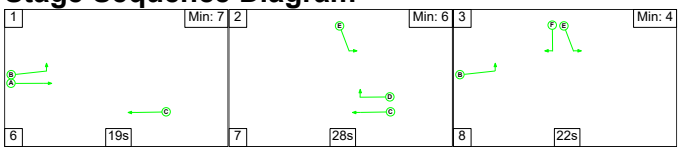
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**31.1**	**237.0**	**0.0**	**268.0**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**31.1**	**237.0**	**0.0**	**268.0**	-	-	-	-
1/1+1/2	1014	936	-	-	-	10.2	78.7	-	88.9	315.7	15.1	78.7	93.8
2/2+2/1	1024	977	-	-	-	8.1	61.1	-	69.2	243.1	11.7	61.1	72.8
3/1	1163	1163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	757	757	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1245	1057	-	-	-	12.8	97.2	-	110.0	317.9	29.6	97.2	126.8
6/1	1050	1050	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -30.9 PRC Over All Lanes (%): -30.9 Total Delay for Signalled Lanes (pcuHr): 268.03 Total Delay Over All Lanes(pcuHr): 268.03 Cycle Time (s): 90

Full Input Data And Results

Scenario 11: '2a 2028 Forecast Year with Dev' (FG11: '2a 2028 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

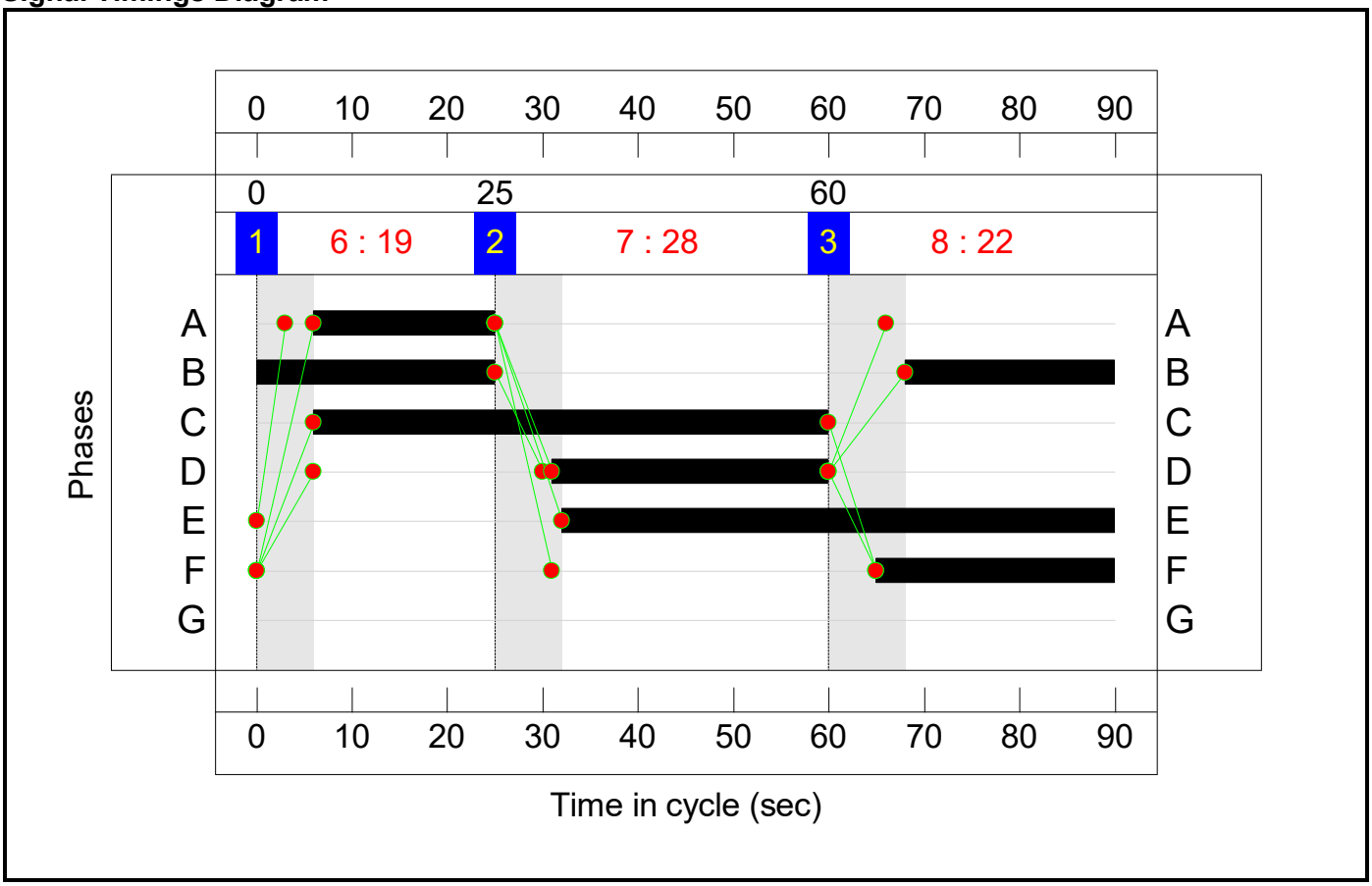
Stage Sequence Diagram



Stage Timings

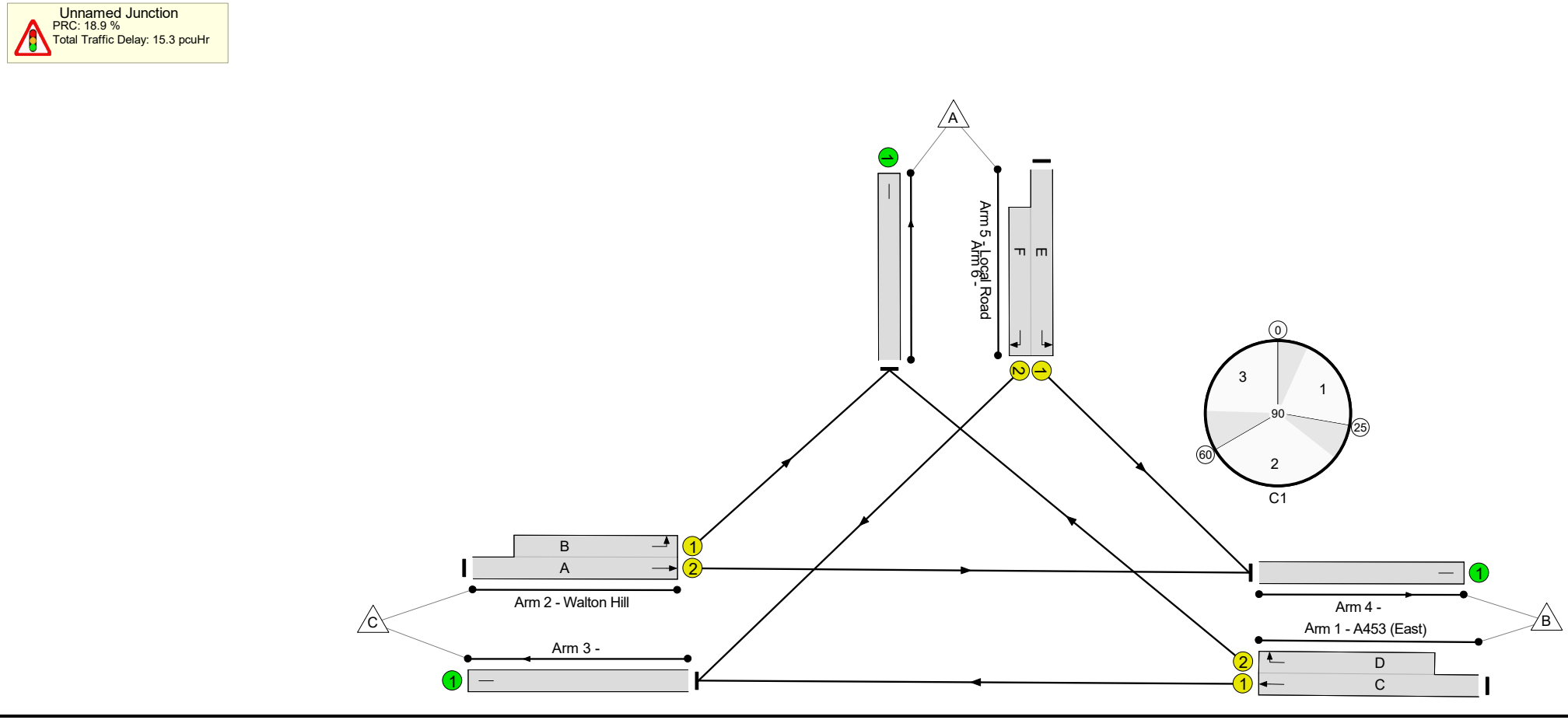
Stage	1	2	3
Duration	19	28	22
Change Point	0	25	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	54:29	-	559	1965:1828	423+609	54.2 : 54.2%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	19:47	-	675	2105:1828	468+424	75.7 : 75.7%
3/1		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1070	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	58:25	-	1083	1786:1828	956+490	74.9 : 74.9%
6/1		U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%

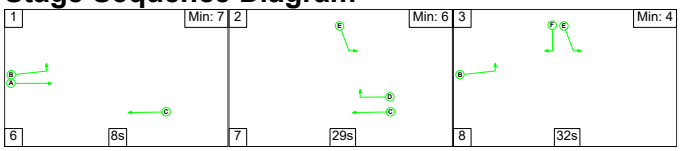
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.7**	**3.6**	**0.0**	**15.3**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.7**	**3.6**	**0.0**	**15.3**	-	-	-	-
1/1+1/2	559	559	-	-	-	2.7	0.6	-	3.3	21.4	6.7	0.6	7.3
2/2+2/1	675	675	-	-	-	4.3	1.5	-	5.8	31.0	8.3	1.5	9.8
3/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1083	1083	-	-	-	4.7	1.5	-	6.2	20.5	10.1	1.5	11.6
6/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 18.9 Total Delay for Signalled Lanes (pcuHr): 15.28 Cycle Time (s): 90
PRC Over All Lanes (%): 18.9 Total Delay Over All Lanes(pcuHr): 15.28

Full Input Data And Results

Scenario 12: '2a 2028 Forecast Year with Dev' (FG12: '2a 2028 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

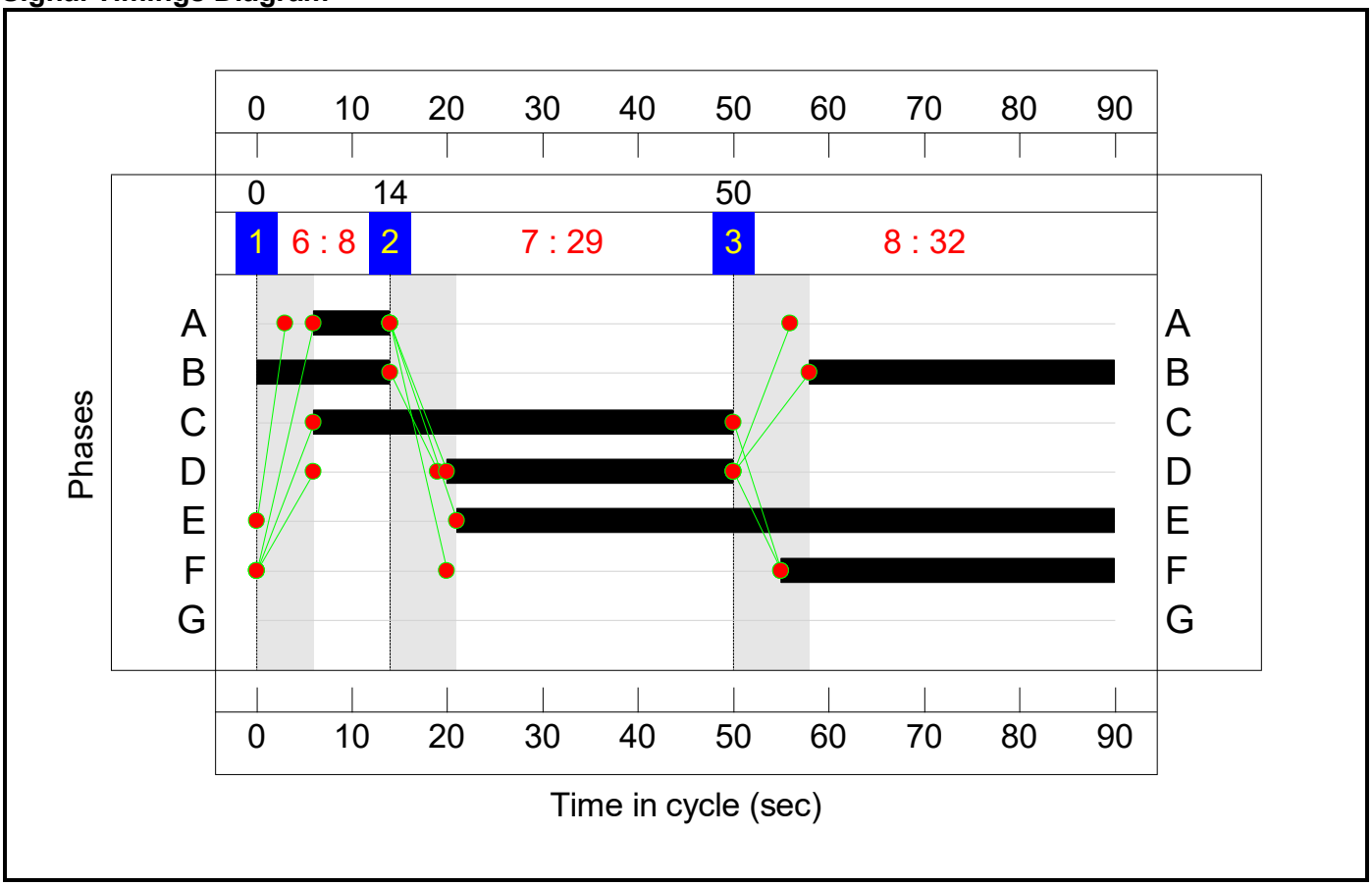
Stage Sequence Diagram



Stage Timings

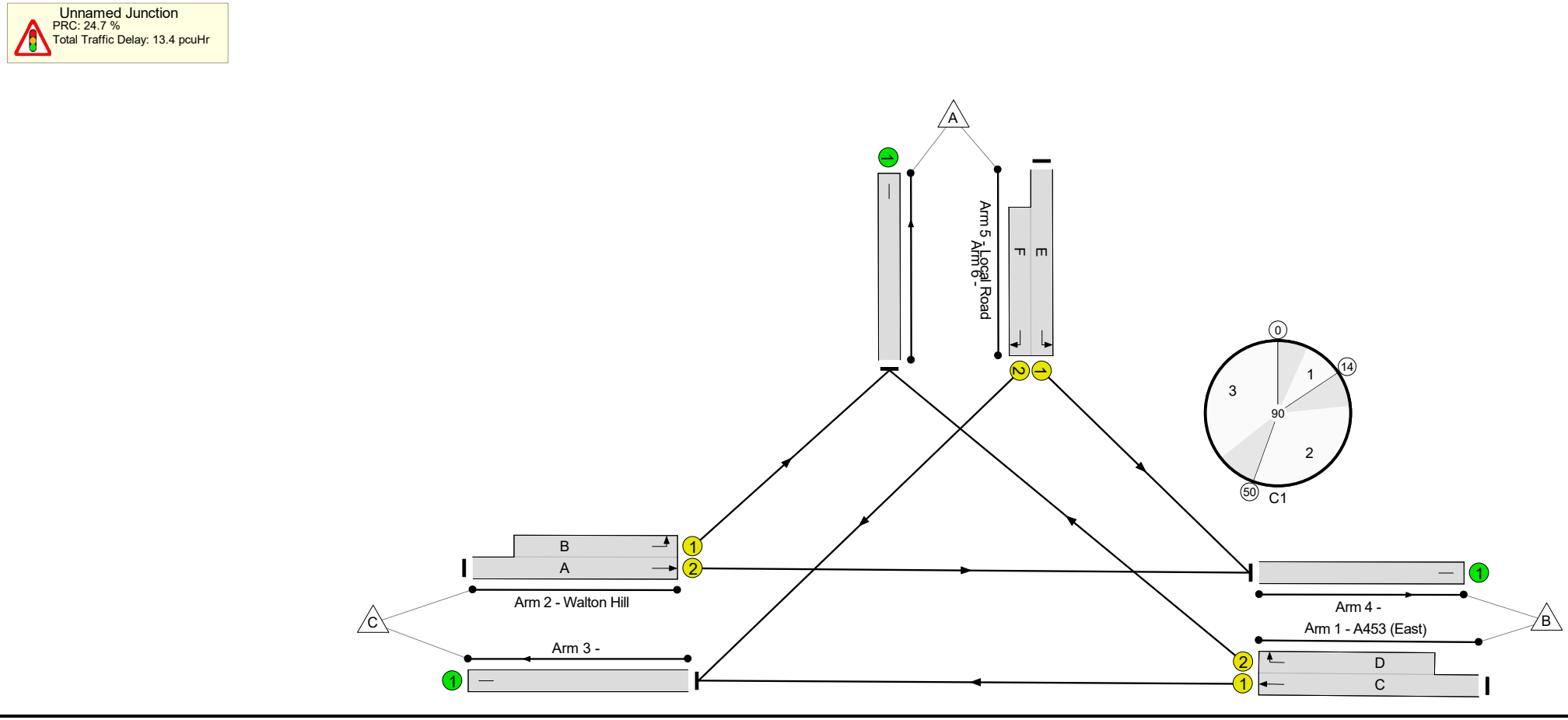
Stage	1	2	3
Duration	8	29	32
Change Point	0	14	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	44:30	-	850	1965:1828	552+630	71.9 : 71.9%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	8:46	-	300	2105:1828	210+234	67.5 : 67.5%
3/1		U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	69:35	-	821	1786:1828	506+632	72.2 : 72.2%
6/1		U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%

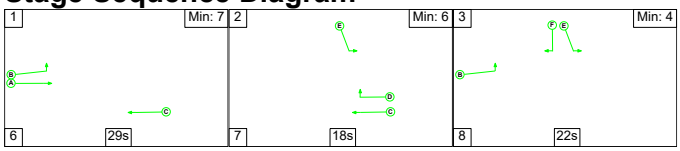
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.8**	**3.6**	**0.0**	**13.4**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.8**	**3.6**	**0.0**	**13.4**	-	-	-	-
1/1+1/2	850	850	-	-	-	4.8	1.3	-	6.1	25.7	9.8	1.3	11.1
2/2+2/1	300	300	-	-	-	2.0	1.0	-	3.1	36.7	3.4	1.0	4.4
3/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	821	821	-	-	-	3.0	1.3	-	4.3	18.9	9.0	1.3	10.3
6/1	611	611	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 24.7 Total Delay for Signalled Lanes (pcuHr): 13.43 Cycle Time (s): 90
PRC Over All Lanes (%): 24.7 Total Delay Over All Lanes(pcuHr): 13.43

Full Input Data And Results

Scenario 13: '2a 2038 Forecast Year with Dev' (FG13: '2a 2038 Forecast Year with Dev (AM)', Plan 1: 'Network Control Plan 1')

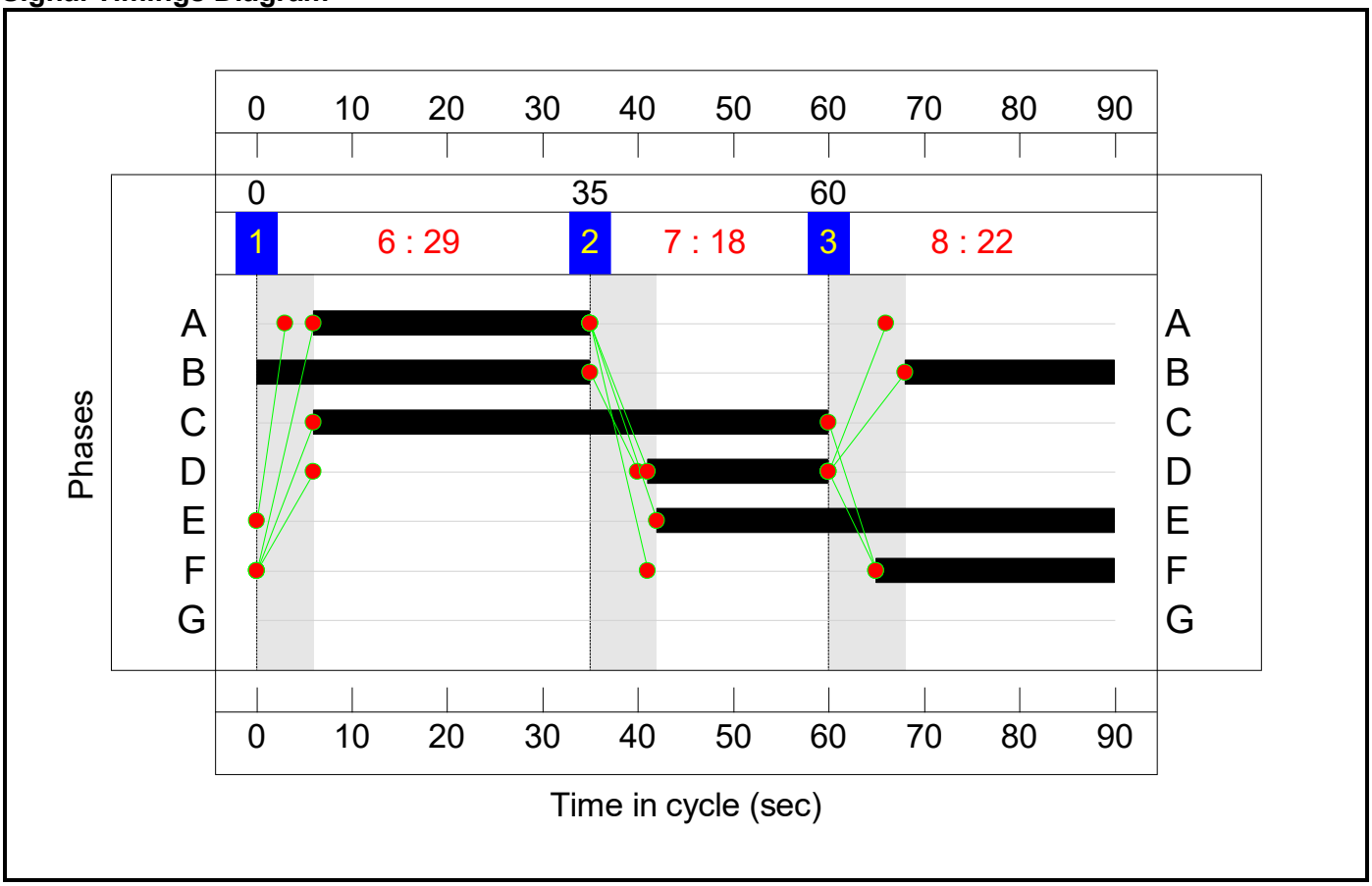
Stage Sequence Diagram



Stage Timings

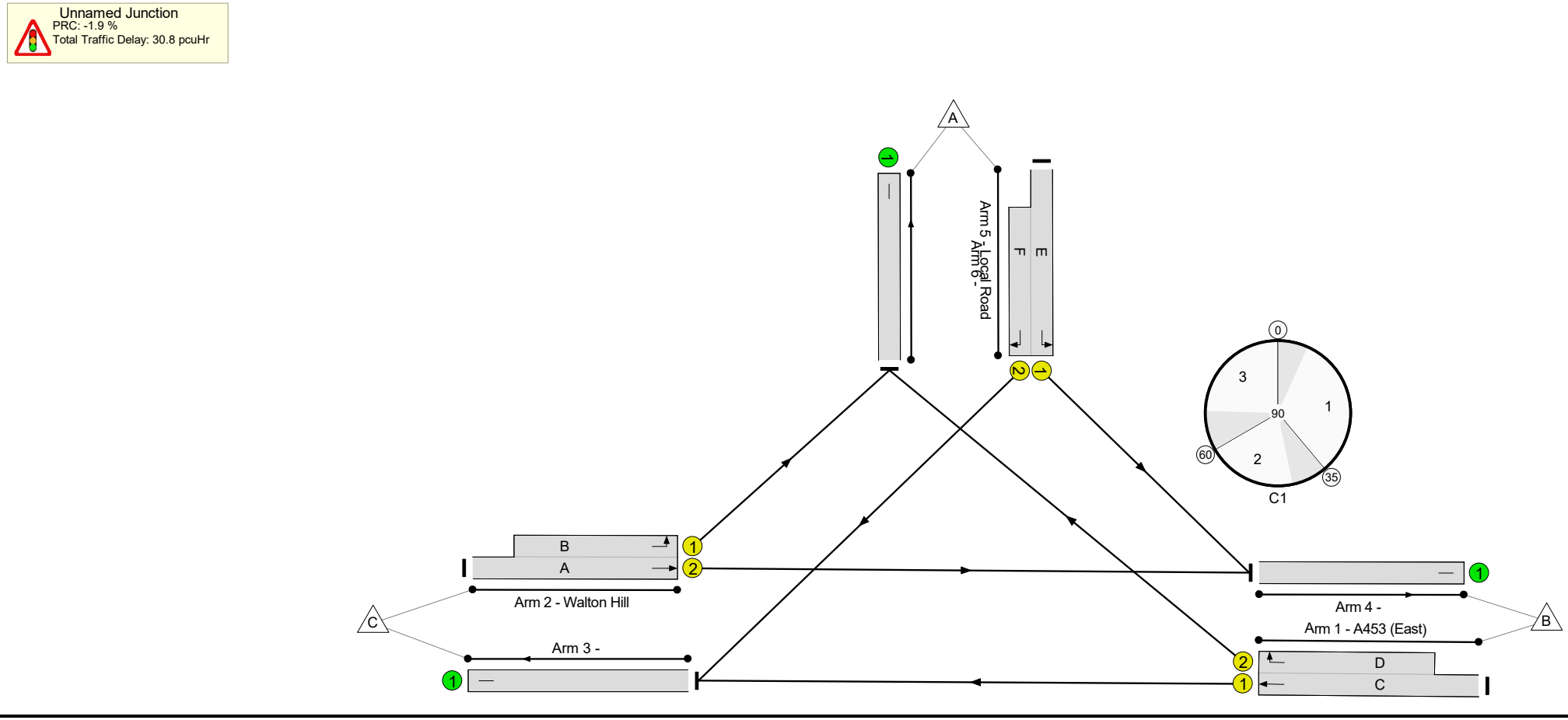
Stage	1	2	3
Duration	29	18	22
Change Point	0	35	60

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	54:19	-	656	1965:1828	316+406	90.8 : 90.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	29:57	-	1260	2105:1828	627+747	91.7 : 91.7%
3/1		U	N/A	N/A	-		-	-	-	760	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1190	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	48:25	-	1088	1786:1828	676+520	91.0 : 91.0%
6/1		U	N/A	N/A	-		-	-	-	1054	Inf	Inf	0.0%

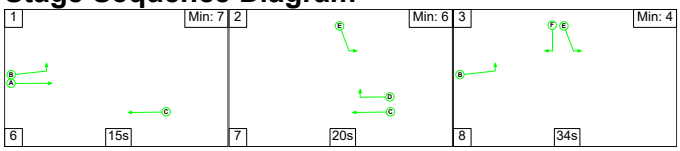
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**16.7**	**14.1**	**0.0**	**30.8**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**16.7**	**14.1**	**0.0**	**30.8**	-	-	-	-
1/1+1/2	656	656	-	-	-	4.1	4.4	-	8.5	46.7	8.9	4.4	13.3
2/2+2/1	1260	1260	-	-	-	6.1	5.1	-	11.2	32.0	13.1	5.1	18.2
3/1	760	760	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1190	1190	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1088	1088	-	-	-	6.5	4.6	-	11.1	36.7	11.3	4.6	15.9
6/1	1054	1054	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -1.9 Total Delay for Signalled Lanes (pcuHr): 30.81 Cycle Time (s): 90
PRC Over All Lanes (%): -1.9 Total Delay Over All Lanes(pcuHr): 30.81

Full Input Data And Results

Scenario 14: '2a 2038 Forecast Year with Dev' (FG14: '2a 2038 Forecast Year with Dev (PM)', Plan 1: 'Network Control Plan 1')

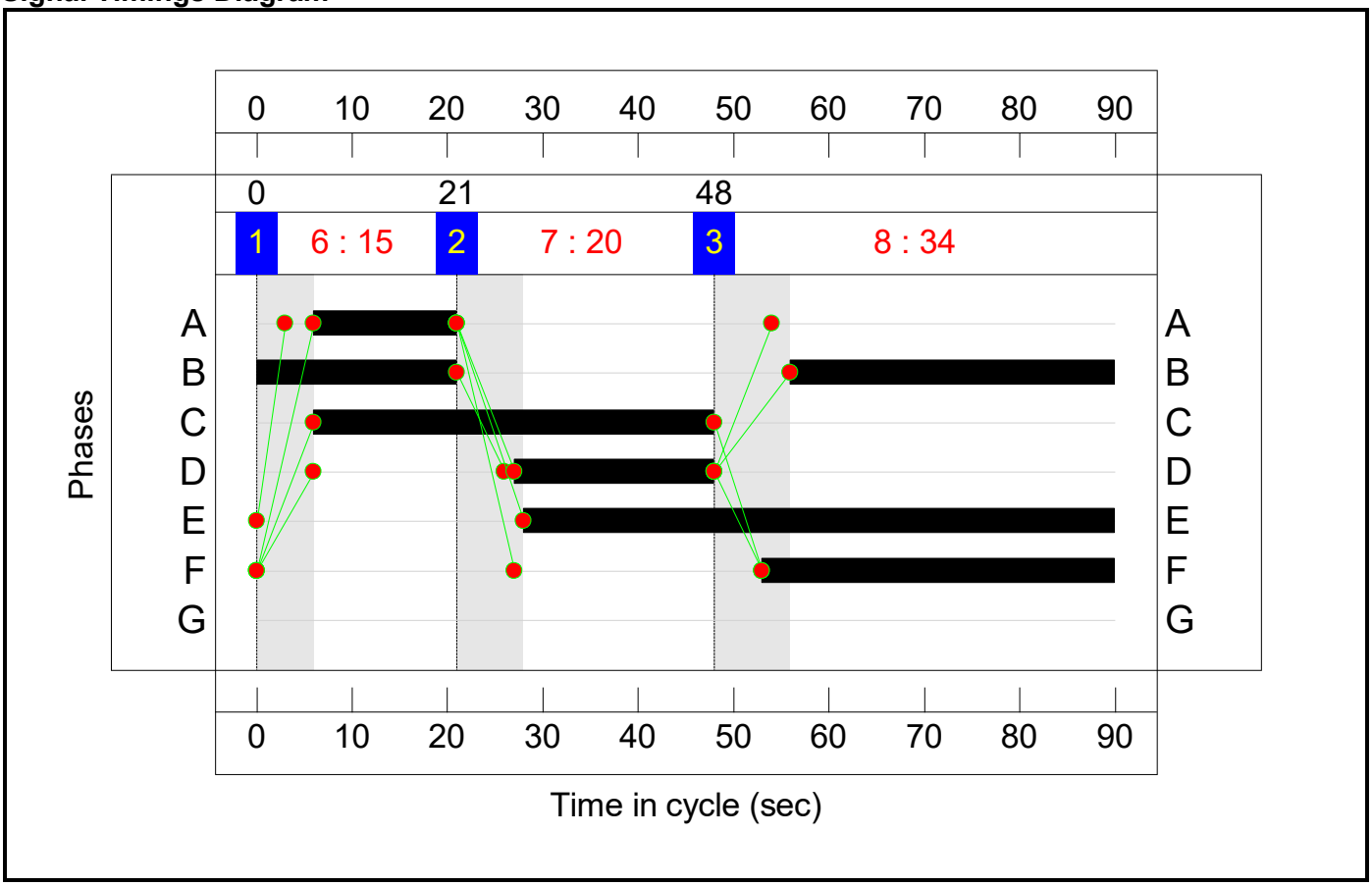
Stage Sequence Diagram



Stage Timings

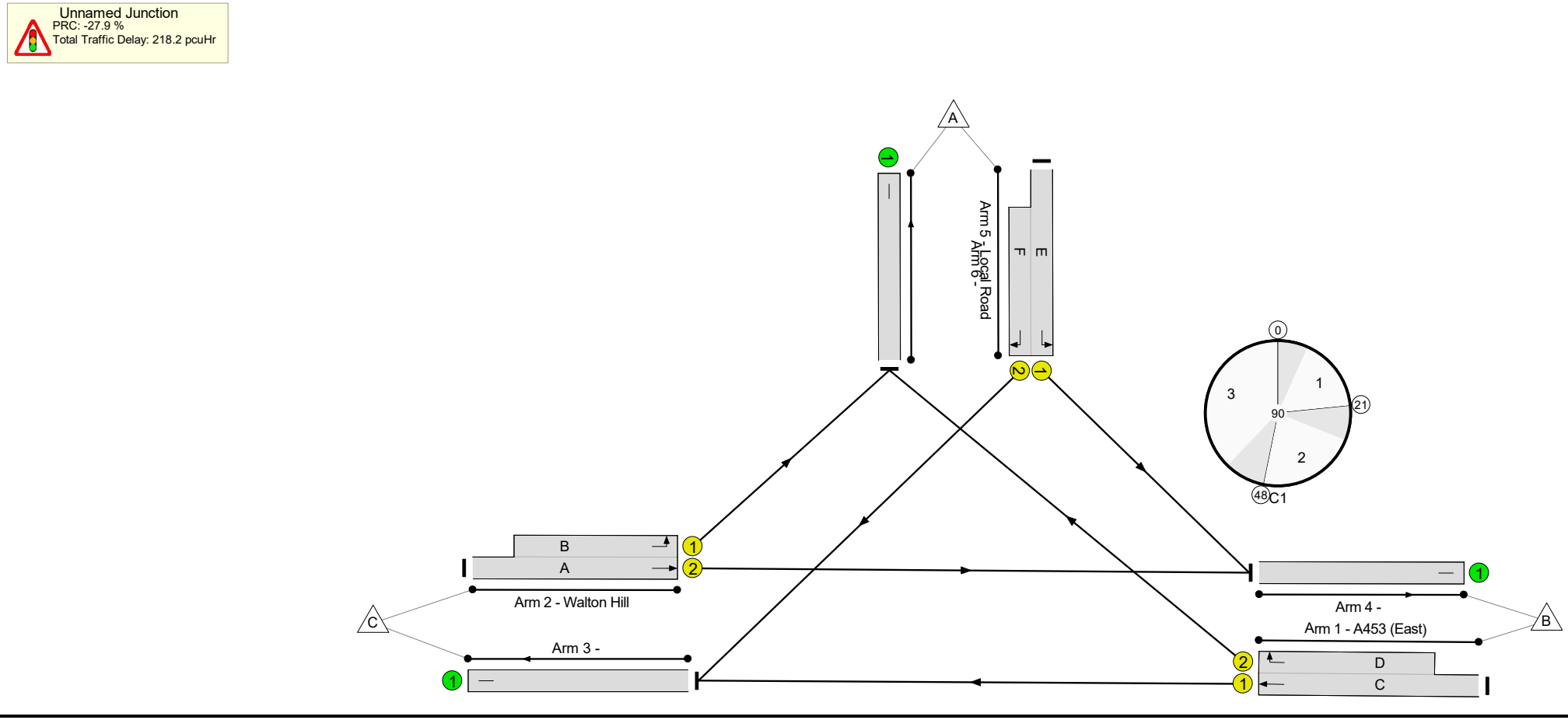
Stage	1	2	3
Duration	15	20	34
Change Point	0	21	48

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**115.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**115.1%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	42:21	-	994	1965:1828	445+447	111.4 : 111.4%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:55	-	1032	2105:1828	374+561	110.4 : 110.4%
3/1		U	N/A	N/A	-		-	-	-	1278	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	819	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:37	-	1188	1786:1828	353+679	115.1 : 115.1%
6/1		U	N/A	N/A	-		-	-	-	1117	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**27.7**	**190.6**	**0.0**	**218.2**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**27.7**	**190.6**	**0.0**	**218.2**	-	-	-	-
1/1+1/2	994	943	-	-	-	9.0	55.5	-	64.5	233.6	13.7	55.5	69.3
2/2+2/1	1032	993	-	-	-	7.7	53.3	-	61.0	212.7	11.3	53.3	64.6
3/1	1175	1175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	727	727	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1188	1032	-	-	-	11.0	81.8	-	92.8	281.1	28.2	81.8	109.9
6/1	1066	1066	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -27.9 Total Delay for Signalled Lanes (pcuHr): 218.24 Cycle Time (s): 90
PRC Over All Lanes (%): -27.9 Total Delay Over All Lanes(pcuHr): 218.24

APPENDIX 56: Junction 11: A42 Junction 14 on-slip/Top Brand/Gelscoe Lane Roundabout Stage 1A/2A Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 250619 A453_Gelscoe Lane roundabout (LS)_Stage 1a+2a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\11. A453_Gelscoe Lane_Top Brand roundabout (near A42)
Report generation date: 20/06/2025 16:53:53

»2022 | Base Flows | AM
»2022 | Base Flows | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2022 - Base Flows									
1 - A453 (N)	D1	0.4	4.64	0.20	A	D2	1.4	6.28	0.47	A
2 - Gelscoe Lane		0.1	4.19	0.04	A		0.1	5.01	0.05	A
3 - Top Brand		0.4	4.92	0.24	A		0.1	4.53	0.08	A
	[Lane Simulation] - 2028 - 2a WD Flows									
1 - A453 (N)	D11	0.9	5.91	0.32	A	D12	0.7	6.84	0.31	A
2 - Gelscoe Lane		0.2	4.70	0.10	A		0.4	5.13	0.18	A
3 - Top Brand		0.7	7.35	0.36	A		0.2	4.77	0.12	A
	[Lane Simulation] - 2028 - WD Flows									
1 - A453 (N)	D5	1.8	9.31	0.55	A	D6	1.2	7.74	0.35	A
2 - Gelscoe Lane		0.2	4.67	0.08	A		0.4	5.02	0.21	A
3 - Top Brand		0.6	6.18	0.25	A		0.2	4.37	0.09	A
	[Lane Simulation] - 2028 - WoD Flows									
1 - A453 (N)	D3	0.8	6.60	0.37	A	D4	1.0	7.31	0.35	A
2 - Gelscoe Lane		0.2	4.46	0.08	A		0.2	4.63	0.15	A
3 - Top Brand		0.5	6.35	0.23	A		0.2	4.75	0.08	A
	[Lane Simulation] - 2038 - 2a WD Flows									
1 - A453 (N)	D13	0.9	6.07	0.37	A	D14	1.3	6.74	0.36	A
2 - Gelscoe Lane		0.3	4.95	0.17	A		0.9	5.88	0.33	A
3 - Top Brand		1.5	9.83	0.51	A		0.6	6.11	0.28	A
	[Lane Simulation] - 2038 - WD Flows									
1 - A453 (N)	D9	1.8	8.76	0.57	A	D10	1.5	7.68	0.39	A
2 - Gelscoe Lane		0.3	5.06	0.15	A		1.0	6.70	0.36	A
3 - Top Brand		1.0	7.81	0.38	A		0.5	5.42	0.23	A
	[Lane Simulation] - 2038 - WoD Flows									
1 - A453 (N)	D7	1.0	6.37	0.40	A	D8	1.3	7.45	0.35	A
2 - Gelscoe Lane		0.4	4.95	0.16	A		0.4	5.02	0.19	A
3 - Top Brand		1.2	7.75	0.40	A		0.3	5.06	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. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	A453 Gelscoe Lane Top Brand roundabout
Location	
Site number	
Date	18/10/2023
Version	
Status	(new file)
Identifier	Aaiza
Client	
Jobnumber	220500
Enumerator	BWB\Aaiza.Shafiq
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			1402155294	101

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	Base Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2022 | Base Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.72	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.72	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A453 (N)		
2	Gelscoe Lane		
3	Top Brand		
4	A42		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A453 (N)	3.88	7.16	18.0	24.0	58.0	9.6		
2 - Gelscoe Lane	3.26	6.87	35.0	45.0	58.0	14.7		
3 - Top Brand	3.56	6.87	36.0	44.0	58.0	14.7		
4 - A42								✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A453 (N)	0.633	1946
2 - Gelscoe Lane	0.635	1956
3 - Top Brand	0.643	2002
4 - A42		

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A453 (N)	Evenly split	10.00
2 - Gelscoe Lane	Evenly split	10.00
3 - Top Brand	Evenly split	10.00
4 - A42	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A453 (N)	Entry	1	1	2, 3	✓	4.00			0	99999	
			2	1, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
2 - Gelscoe Lane	Entry	1	1	3, 4	✓	5.00			0	99999	
			2	1, 2	✓	5.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3 - Top Brand	Entry	1	1	1, 4	✓	5.00			0	99999	
			2	2, 3	✓	5.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
4 - A42	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A453 (N)	Entry	1	1	0.316	973
			2	0.316	973
2 - Gelscoe Lane	Entry	1	1	0.317	978
			2	0.317	978
3 - Top Brand	Entry	1	1	0.321	1001
			2	0.321	1001

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			A453 (N)	Gelscoe Lane	Top Brand	A42
1 - A453 (N)	1	1		✓	✓	
		2	✓			✓
	2	1	✓	✓	✓	✓
2 - Gelscoe Lane	1	1			✓	✓
		2	✓	✓		
	2	1	✓	✓	✓	✓
3 - Top Brand	1	1	✓			✓
		2		✓	✓	
	2	1	✓	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	246	100.000
2 - Gelscoe Lane		ONE HOUR	✓	55	100.000
3 - Top Brand		ONE HOUR	✓	232	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	43	126	77
	2 - Gelscoe Lane	19	0	12	24
	3 - Top Brand	169	23	0	40
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.20	4.64	0.4	A	228	342
2 - Gelscoe Lane	0.04	4.19	0.1	A	51	77
3 - Top Brand	0.24	4.92	0.4	A	212	318
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	186	47	15	1377	0.135	185	186	148	0.0	0.2	4.169	A
2 - Gelscoe Lane	42	11	153	1403	0.030	42	45	48	0.0	0.1	4.125	A
3 - Top Brand	179	45	92	1120	0.160	179	177	103	0.0	0.2	4.274	A
4 - A42			0					108				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	231	58	19	1383	0.167	230	228	167	0.2	0.4	4.389	A
2 - Gelscoe Lane	48	12	186	1409	0.034	48	55	63	0.1	0.0	4.130	A
3 - Top Brand	204	51	104	1073	0.190	203	213	130	0.2	0.3	4.524	A
4 - A42			0					121				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	276	69	24	1381	0.200	276	280	209	0.4	0.3	4.644	A
2 - Gelscoe Lane	59	15	228	1376	0.043	59	68	72	0.0	0.1	4.105	A
3 - Top Brand	257	64	132	1071	0.240	257	258	155	0.3	0.4	4.904	A
4 - A42			0					157				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	275	69	22	1349	0.204	278	275	202	0.3	0.2	4.528	A
2 - Gelscoe Lane	62	16	233	1392	0.045	63	66	67	0.1	0.1	4.148	A
3 - Top Brand	243	61	137	1103	0.220	243	255	159	0.4	0.4	4.923	A
4 - A42			0					156				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	218	54	22	1394	0.156	216	227	163	0.2	0.3	4.219	A
2 - Gelscoe Lane	50	12	180	1380	0.036	50	59	58	0.1	0.0	4.195	A
3 - Top Brand	209	52	110	1094	0.191	208	215	120	0.4	0.3	4.598	A
4 - A42			0					132				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	181	45	20	1370	0.132	182	190	145	0.3	0.2	4.098	A
2 - Gelscoe Lane	45	11	150	1411	0.032	46	46	52	0.0	0.0	3.947	A
3 - Top Brand	180	45	96	1076	0.167	181	183	99	0.3	0.2	4.285	A
4 - A42			0					111				

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	125	968	0.129	124	127	0.0	0.1	4.310	A
			2	1, 4	61	968	0.063	61	59	0.0	0.1	3.867	A
		2	1	(1, 2, 3, 4)	186			186	187	0.0	0.0	0.000	A
	Exit	1	1		148			148	146	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	29	929	0.031	29	30	0.0	0.0	4.209	A
			2	1, 2	13	929	0.014	13	15	0.0	0.0	3.962	A
		2	1	(1, 2, 3, 4)	42			42	46	0.0	0.0	0.000	A
	Exit	1	1		48			48	50	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	164	971	0.169	163	160	0.0	0.2	4.324	A
			2	2, 3	15	971	0.016	15	16	0.0	0.0	3.784	A
		2	1	(1, 2, 3, 4)	179			179	177	0.0	0.0	0.000	A
	Exit	1	1		103			103	104	0.0	0.0	0.000	A
4 - A42	Exit	1	1		108			108	108	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	163	967	0.169	162	159	0.1	0.3	4.599	A
			2	1, 4	68	967	0.070	68	69	0.1	0.1	3.908	A
		2	1	(1, 2, 3, 4)	231			231	229	0.0	0.0	0.001	A
	Exit	1	1		167			167	175	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	32	919	0.035	32	36	0.0	0.0	4.216	A
			2	1, 2	16	919	0.017	16	19	0.0	0.0	3.960	A
		2	1	(1, 2, 3, 4)	48			48	55	0.0	0.0	0.000	A
	Exit	1	1		63			63	62	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	184	967	0.191	184	193	0.2	0.3	4.609	A
			2	2, 3	19	967	0.020	19	21	0.0	0.0	3.720	A
		2	1	(1, 2, 3, 4)	204			204	214	0.0	0.0	0.001	A
	Exit	1	1		130			130	130	0.0	0.0	0.000	A
4 - A42	Exit	1	1		121			121	130	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	191	965	0.198	191	192	0.3	0.2	4.845	A
			2	1, 4	84	965	0.088	86	87	0.1	0.1	4.160	A
		2	1	(1, 2, 3, 4)	276			275	279	0.0	0.0	0.009	A
	Exit	1	1		209			209	212	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	41	906	0.045	41	45	0.0	0.0	4.272	A
			2	1, 2	19	906	0.021	19	22	0.0	0.0	3.767	A
		2	1	(1, 2, 3, 4)	59			59	68	0.0	0.0	0.000	A
	Exit	1	1		72			72	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	233	958	0.243	233	233	0.3	0.4	4.998	A
			2	2, 3	24	958	0.025	24	25	0.0	0.0	3.991	A
		2	1	(1, 2, 3, 4)	257			257	259	0.0	0.0	0.004	A
	Exit	1	1		155			155	159	0.0	0.0	0.000	A
4 - A42	Exit	1	1		157			157	160	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	187	966	0.194	190	189	0.2	0.1	4.719	A
			2	1, 4	87	966	0.090	89	86	0.1	0.1	4.095	A
		2	1	(1, 2, 3, 4)	275			275	275	0.0	0.0	0.009	A
	Exit	1	1		202			202	209	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	41	904	0.046	42	43	0.0	0.0	4.238	A
			2	1, 2	21	904	0.023	21	23	0.0	0.0	3.978	A
		2	1	(1, 2, 3, 4)	62			62	66	0.0	0.0	0.000	A
	Exit	1	1		67			67	72	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	221	957	0.231	221	231	0.4	0.4	5.016	A
			2	2, 3	22	957	0.023	22	24	0.0	0.0	3.933	A
		2	1	(1, 2, 3, 4)	243			243	256	0.0	0.0	0.009	A
	Exit	1	1		159			159	156	0.0	0.0	0.000	A
4 - A42	Exit	1	1		156			156	159	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	147	966	0.153	146	154	0.1	0.2	4.326	A
			2	1, 4	71	966	0.073	70	73	0.1	0.1	3.993	A
		2	1	(1, 2, 3, 4)	218			218	228	0.0	0.0	0.000	A
	Exit	1	1		163			163	173	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	35	921	0.038	35	39	0.0	0.0	4.116	A
			2	1, 2	15	921	0.016	15	19	0.0	0.0	4.355	A
		2	1	(1, 2, 3, 4)	50			50	59	0.0	0.0	0.000	A
	Exit	1	1		58			58	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	187	966	0.193	186	194	0.4	0.2	4.675	A
			2	2, 3	22	966	0.023	22	22	0.0	0.0	3.899	A
		2	1	(1, 2, 3, 4)	209			209	215	0.0	0.0	0.001	A
	Exit	1	1		120			120	127	0.0	0.0	0.000	A
4 - A42	Exit	1	1		132			132	140	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	121	967	0.125	121	129	0.2	0.2	4.209	A
			2	1, 4	60	967	0.062	61	60	0.1	0.0	3.857	A
		2	1	(1, 2, 3, 4)	181			181	189	0.0	0.0	0.001	A
	Exit	1	1		145			145	149	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	29	930	0.031	29	29	0.0	0.0	3.992	A
			2	1, 2	17	930	0.018	17	17	0.0	0.0	3.872	A
		2	1	(1, 2, 3, 4)	45			45	46	0.0	0.0	0.000	A
	Exit	1	1		52			52	51	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	160	970	0.164	161	165	0.2	0.2	4.317	A
			2	2, 3	20	970	0.021	20	18	0.0	0.0	4.004	A
		2	1	(1, 2, 3, 4)	180			180	183	0.0	0.0	0.000	A
	Exit	1	1		99			99	106	0.0	0.0	0.000	A
4 - A42	Exit	1	1		111			111	113	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	973	968	0.034	33	33	0.0	0.1	4.163	A
				3	92	23	973	968	0.095	92	94	0.0	0.1	4.362	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	61	15	973	968	0.063	61	59	0.0	0.1	3.867	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	-	-	-	33	33	0.0	0.0	0.000	A
				3	92	23	-	-	-	92	94	0.0	0.0	0.000	A
				4	61	15	-	-	-	61	59	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	910	865	0.013	11	11	0.0	0.0	4.074	A
				4	18	4	978	930	0.019	18	19	0.0	0.0	4.283	A
			2	1	13	3	968	920	0.015	13	15	0.0	0.0	3.962	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	13	3	-	-	-	13	16	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	0.000	A
				4	18	4	-	-	-	18	19	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	134	34	1001	972	0.138	134	130	0.0	0.1	4.317	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	1001	972	0.030	29	30	0.0	0.0	4.351	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	991	962	0.016	15	16	0.0	0.0	3.784	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	134	34	-	-	-	134	131	0.0	0.0	0.000	A
				2	15	4	-	-	-	15	16	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	-	-	-	30	30	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	973	967	0.045	43	41	0.1	0.1	4.686	A
				3	120	30	973	967	0.124	119	118	0.1	0.2	4.568	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	68	17	973	967	0.070	68	69	0.1	0.1	3.908	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	41	0.0	0.0	0.000	A
				3	120	30	-	-	-	120	118	0.0	0.0	0.001	A
				4	68	17	-	-	-	68	70	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	968	912	0.013	12	12	0.0	0.0	4.540	A
				4	20	5	978	921	0.022	21	24	0.0	0.0	4.052	A
			2	1	16	4	978	918	0.017	16	19	0.0	0.0	3.960	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	16	4	-	-	-	16	18	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	12	0.0	0.0	0.000	A
				4	20	5	-	-	-	20	24	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	152	38	1001	967	0.157	151	156	0.1	0.3	4.635	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	1001	968	0.033	33	37	0.0	0.0	4.495	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	991	957	0.020	19	21	0.0	0.0	3.720	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	152	38	-	-	-	152	157	0.0	0.0	0.001	A
				2	19	5	-	-	-	19	21	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	36	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	973	966	0.050	48	49	0.1	0.0	4.791	A
				3	142	36	973	965	0.148	142	143	0.2	0.1	4.863	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	84	21	973	965	0.087	86	87	0.1	0.1	4.160	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	-	-	-	48	49	0.0	0.0	0.015	A
				3	143	36	-	-	-	142	143	0.0	0.0	0.013	A
				4	84	21	-	-	-	84	87	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	968	898	0.014	12	16	0.0	0.0	4.262	A
				4	28	7	978	906	0.031	28	30	0.0	0.0	4.278	A
			2	1	19	5	978	907	0.021	19	22	0.0	0.0	3.767	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	19	5	-	-	-	19	22	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	13	16	0.0	0.0	0.000	A
				4	28	7	-	-	-	28	30	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	191	48	1001	958	0.199	190	190	0.3	0.3	4.997	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	43	11	1001	957	0.044	43	43	0.0	0.0	5.001	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1001	958	0.025	24	25	0.0	0.0	3.991	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	190	0.0	0.0	0.004	A
				2	24	6	-	-	-	24	25	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	43	11	-	-	-	43	44	0.0	0.0	0.005	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	973	966	0.046	45	48	0.0	0.0	4.716	A
				3	143	36	973	966	0.148	145	141	0.1	0.1	4.720	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	87	22	973	966	0.090	89	86	0.1	0.1	4.095	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	-	-	-	45	48	0.0	0.0	0.006	A
				3	143	36	-	-	-	143	141	0.0	0.0	0.009	A
				4	87	22	-	-	-	87	86	0.0	0.0	0.011	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	920	851	0.017	15	15	0.0	0.0	4.275	A
				4	27	7	978	905	0.030	27	28	0.0	0.0	4.219	A
			2	1	21	5	978	905	0.023	21	23	0.0	0.0	3.978	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	23	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	-	-	-	14	15	0.0	0.0	0.000	A
				4	27	7	-	-	-	27	28	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	182	45	1001	958	0.190	181	187	0.3	0.3	5.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	39	10	1001	957	0.041	40	45	0.0	0.1	5.048	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	991	948	0.023	22	24	0.0	0.0	3.933	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	182	45	-	-	-	182	187	0.0	0.0	0.012	A
				2	22	6	-	-	-	22	24	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	39	10	-	-	-	39	45	0.0	0.0	0.002	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	36	9	973	967	0.037	36	39	0.0	0.0	4.357	A
				3	111	28	973	966	0.115	110	115	0.1	0.2	4.315	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	71	18	973	966	0.073	70	73	0.1	0.1	3.993	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	36	9	-	-	-	36	39	0.0	0.0	0.000	A
				3	111	28	-	-	-	111	115	0.0	0.0	0.000	A
				4	71	18	-	-	-	71	73	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	910	857	0.012	10	12	0.0	0.0	4.267	A
				4	24	6	978	921	0.026	24	27	0.0	0.0	4.048	A
			2	1	15	4	978	919	0.016	15	19	0.0	0.0	4.355	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	15	4	-	-	-	15	19	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	12	0.0	0.0	0.000	A
				4	24	6	-	-	-	24	27	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	149	37	1001	964	0.155	149	154	0.3	0.2	4.698	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	1001	965	0.039	38	40	0.1	0.0	4.590	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	5	1001	965	0.023	22	22	0.0	0.0	3.899	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	149	37	-	-	-	149	153	0.0	0.0	0.001	A
				2	22	5	-	-	-	22	22	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	-	-	-	37	40	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	973	967	0.034	32	33	0.0	0.1	4.148	A
				3	88	22	973	967	0.091	89	97	0.2	0.1	4.230	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	60	15	973	967	0.062	61	60	0.1	0.0	3.857	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	-	-	-	33	33	0.0	0.0	0.000	A
				3	88	22	-	-	-	88	96	0.0	0.0	0.002	A
				4	60	15	-	-	-	60	60	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	881	836	0.012	10	9	0.0	0.0	4.022	A
				4	19	5	968	922	0.020	19	20	0.0	0.0	3.978	A
			2	1	17	4	968	922	0.018	17	17	0.0	0.0	3.872	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	17	4	-	-	-	17	17	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	-	-	-	10	9	0.0	0.0	0.000	A
				4	19	5	-	-	-	19	20	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	127	32	1001	971	0.131	128	131	0.2	0.1	4.337	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	1001	972	0.033	32	33	0.0	0.0	4.237	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	991	961	0.021	20	18	0.0	0.0	4.004	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	131	0.0	0.0	0.000	A
				2	20	5	-	-	-	20	18	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	33	0.0	0.0	0.000	A

2022 | Base Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.03	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	Base Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	672	100.000
2 - Gelscoe Lane		ONE HOUR	✓	55	100.000
3 - Top Brand		ONE HOUR	✓	65	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	93	273	306
	2 - Gelscoe Lane	23	0	13	19
	3 - Top Brand	56	7	0	2
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.47	6.28	1.4	A	616	924
2 - Gelscoe Lane	0.05	5.01	0.1	A	52	79
3 - Top Brand	0.08	4.53	0.1	A	63	95
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	511	128	5	1559	0.328	511	502	67	0.0	0.8	5.045	A
2 - Gelscoe Lane	44	11	436	1333	0.033	45	44	80	0.0	0.1	4.453	A
3 - Top Brand	53	13	261	1038	0.051	53	53	220	0.0	0.1	4.082	A
4 - A42			0					242				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	599	150	7	1553	0.386	601	608	71	0.8	0.7	5.424	A
2 - Gelscoe Lane	51	13	514	1310	0.039	50	56	94	0.1	0.0	4.558	A
3 - Top Brand	60	15	311	1016	0.059	59	63	254	0.1	0.1	4.393	A
4 - A42			0					292				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	741	185	7	1575	0.470	734	743	91	0.7	1.4	6.116	A
2 - Gelscoe Lane	64	16	632	1251	0.051	65	69	109	0.0	0.0	4.812	A
3 - Top Brand	76	19	385	972	0.078	76	77	312	0.1	0.0	4.529	A
4 - A42			0					363				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	727	182	7	1578	0.461	728	745	89	1.4	1.2	6.276	A
2 - Gelscoe Lane	65	16	626	1292	0.050	64	69	109	0.0	0.1	5.011	A
3 - Top Brand	70	17	388	975	0.072	70	76	303	0.0	0.1	4.510	A
4 - A42			0					362				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	612	153	8	1585	0.386	616	615	76	1.2	0.5	5.387	A
2 - Gelscoe Lane	47	12	534	1331	0.036	47	56	90	0.1	0.1	4.733	A
3 - Top Brand	67	17	314	1003	0.066	67	68	267	0.1	0.1	4.261	A
4 - A42			0					298				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	503	126	6	1565	0.322	504	502	61	0.5	0.6	5.049	A
2 - Gelscoe Lane	43	11	435	1391	0.031	42	47	75	0.1	0.0	4.551	A
3 - Top Brand	53	13	259	1059	0.050	53	55	219	0.1	0.0	4.084	A
4 - A42			0					245				

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	284	971	0.293	285	273	0.0	0.5	5.106	A
			2	1, 4	227	971	0.234	227	229	0.0	0.3	4.896	A
		2	1	(1, 2, 3, 4)	511			511	505	0.0	0.0	0.036	A
	Exit	1	1		67			67	66	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	24	839	0.029	24	24	0.0	0.0	4.529	A
			2	1, 2	20	839	0.024	20	20	0.0	0.0	4.359	A
		2	1	(1, 2, 3, 4)	44			44	44	0.0	0.0	0.000	A
	Exit	1	1		80			80	77	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	48	917	0.053	48	48	0.0	0.0	4.107	A
			2	2, 3	5	917	0.006	5	6	0.0	0.0	3.872	A
		2	1	(1, 2, 3, 4)	53			53	54	0.0	0.0	0.000	A
	Exit	1	1		220			220	211	0.0	0.0	0.000	A
4 - A42	Exit	1	1		242			242	245	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	326	971	0.335	327	333	0.5	0.4	5.562	A
			2	1, 4	274	971	0.282	274	275	0.3	0.3	5.043	A
		2	1	(1, 2, 3, 4)	599			599	608	0.0	0.0	0.097	A
	Exit	1	1		71			71	78	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	31	815	0.038	30	33	0.0	0.0	4.536	A
			2	1, 2	20	815	0.024	20	24	0.0	0.0	4.589	A
		2	1	(1, 2, 3, 4)	51			51	56	0.0	0.0	0.000	A
	Exit	1	1		94			94	92	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	53	901	0.058	52	56	0.0	0.1	4.391	A
			2	2, 3	7	901	0.008	7	7	0.0	0.0	4.410	A
		2	1	(1, 2, 3, 4)	60			60	63	0.0	0.0	0.000	A
	Exit	1	1		254			254	262	0.0	0.0	0.000	A
4 - A42	Exit	1	1		292			292	295	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	401	971	0.413	400	405	0.4	0.6	6.103	A
			2	1, 4	339	971	0.349	335	337	0.3	0.7	5.497	A
		2	1	(1, 2, 3, 4)	741			740	745	0.0	0.1	0.288	A
	Exit	1	1		91			91	96	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	39	777	0.050	40	39	0.0	0.0	4.750	A
			2	1, 2	25	777	0.032	25	29	0.0	0.0	4.894	A
		2	1	(1, 2, 3, 4)	64			64	69	0.0	0.0	0.000	A
	Exit	1	1		109			109	109	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	68	877	0.078	69	70	0.1	0.0	4.573	A
			2	2, 3	8	877	0.009	7	7	0.0	0.0	4.115	A
		2	1	(1, 2, 3, 4)	76			76	77	0.0	0.0	0.000	A
	Exit	1	1		312			312	319	0.0	0.0	0.000	A
4 - A42	Exit	1	1		363			363	365	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	389	971	0.401	391	403	0.6	0.6	6.329	A
			2	1, 4	338	971	0.348	337	342	0.7	0.6	5.614	A
		2	1	(1, 2, 3, 4)	727			727	745	0.1	0.0	0.276	A
	Exit	1	1		89			89	96	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	38	779	0.049	37	40	0.0	0.1	5.040	A
			2	1, 2	26	779	0.034	27	29	0.0	0.0	4.971	A
		2	1	(1, 2, 3, 4)	65			65	69	0.0	0.0	0.000	A
	Exit	1	1		109			109	113	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	63	876	0.072	63	69	0.0	0.1	4.526	A
			2	2, 3	7	876	0.008	7	7	0.0	0.0	4.358	A
		2	1	(1, 2, 3, 4)	70			70	77	0.0	0.0	0.000	A
	Exit	1	1		303			303	313	0.0	0.0	0.000	A
4 - A42	Exit	1	1		362			362	368	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	335	971	0.345	337	337	0.6	0.3	5.533	A
			2	1, 4	278	971	0.287	279	278	0.6	0.3	5.033	A
		2	1	(1, 2, 3, 4)	612			613	612	0.0	0.0	0.081	A
	Exit	1	1		76			76	83	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	29	808	0.036	29	32	0.1	0.0	4.713	A
			2	1, 2	18	808	0.023	18	24	0.0	0.0	4.759	A
		2	1	(1, 2, 3, 4)	47			47	56	0.0	0.0	0.000	A
	Exit	1	1		90			90	93	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	59	900	0.066	59	60	0.1	0.1	4.270	A
			2	2, 3	8	900	0.008	8	8	0.0	0.0	4.197	A
		2	1	(1, 2, 3, 4)	67			67	68	0.0	0.0	0.000	A
	Exit	1	1		267			267	265	0.0	0.0	0.000	A
4 - A42	Exit	1	1		298			298	299	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	277	971	0.285	276	273	0.3	0.4	5.117	A
			2	1, 4	226	971	0.233	228	228	0.3	0.2	4.729	A
		2	1	(1, 2, 3, 4)	503			503	502	0.0	0.0	0.109	A
	Exit	1	1		61			61	68	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	26	840	0.031	26	27	0.0	0.0	4.663	A
			2	1, 2	17	840	0.020	17	20	0.0	0.0	4.397	A
		2	1	(1, 2, 3, 4)	43			43	47	0.0	0.0	0.000	A
	Exit	1	1		75			75	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	47	918	0.051	47	50	0.1	0.0	4.080	A
			2	2, 3	6	918	0.007	6	5	0.0	0.0	4.122	A
		2	1	(1, 2, 3, 4)	53			53	55	0.0	0.0	0.000	A
	Exit	1	1		219			219	217	0.0	0.0	0.000	A
4 - A42	Exit	1	1		245			245	245	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	973	971	0.077	75	72	0.0	0.1	5.219	A
				3	209	52	973	971	0.215	209	201	0.0	0.3	5.065	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	227	57	973	971	0.234	227	229	0.0	0.3	4.896	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	-	-	-	75	72	0.0	0.0	0.070	A
				3	209	52	-	-	-	209	202	0.0	0.0	0.033	A
				4	227	57	-	-	-	227	231	0.0	0.0	0.027	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	918	785	0.013	10	10	0.0	0.0	4.156	A
				4	14	4	942	809	0.017	14	14	0.0	0.0	4.791	A
			2	1	20	5	966	831	0.024	20	20	0.0	0.0	4.359	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	20	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	-	-	-	10	10	0.0	0.0	0.000	A
				4	14	4	-	-	-	14	14	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	47	12	1001	918	0.051	47	46	0.0	0.0	4.134	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	354	323	0.004	1	2	0.0	0.0	3.301	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	5	1	781	714	0.007	5	6	0.0	0.0	3.872	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	47	12	-	-	-	47	46	0.0	0.0	0.000	A
				2	5	1	-	-	-	5	6	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	-	-	-	1	2	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	86	22	973	971	0.089	86	85	0.1	0.1	5.647	A
				3	239	60	973	971	0.246	241	248	0.3	0.3	5.533	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	274	68	973	971	0.282	274	275	0.3	0.3	5.043	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	86	22	-	-	-	86	85	0.0	0.0	0.117	A
				3	239	60	-	-	-	239	248	0.0	0.0	0.111	A
				4	274	68	-	-	-	274	275	0.0	0.0	0.079	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	966	802	0.017	13	14	0.0	0.0	4.667	A
				4	17	4	978	814	0.021	17	19	0.0	0.0	4.436	A
			2	1	20	5	978	812	0.025	20	24	0.0	0.0	4.589	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	24	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	14	0.0	0.0	0.000	A
				4	17	4	-	-	-	17	18	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	52	13	1001	901	0.057	51	55	0.0	0.1	4.382	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	305	275	0.004	1	1	0.0	0.0	4.725	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	7	2	854	773	0.009	7	7	0.0	0.0	4.410	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	52	13	-	-	-	52	55	0.0	0.0	0.000	A
				2	7	2	-	-	-	7	7	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	-	-	-	1	1	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	101	25	973	971	0.104	102	102	0.1	0.1	5.934	A
				3	299	75	973	971	0.308	298	304	0.3	0.5	6.159	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	339	85	973	971	0.349	335	337	0.3	0.7	5.497	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	25	-	-	-	101	102	0.0	0.0	0.329	A
				3	300	75	-	-	-	299	305	0.0	0.0	0.307	A
				4	340	85	-	-	-	339	339	0.0	0.0	0.258	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	966	772	0.018	14	15	0.0	0.0	5.146	A
				4	25	6	978	782	0.033	26	25	0.0	0.0	4.514	A
			2	1	25	6	978	780	0.032	25	29	0.0	0.0	4.894	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	25	6	-	-	-	25	29	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	15	0.0	0.0	0.000	A
				4	25	6	-	-	-	25	25	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	65	16	1001	878	0.074	66	67	0.1	0.0	4.583	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.73	525	462	0.006	3	3	0.0	0.0	4.336	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	8	2	818	716	0.011	7	7	0.0	0.0	4.115	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	65	16	-	-	-	65	67	0.0	0.0	0.000	A
				2	8	2	-	-	-	8	7	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.73	-	-	-	3	3	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	973	971	0.105	102	106	0.1	0.1	6.239	A
				3	287	72	973	971	0.296	288	297	0.5	0.5	6.362	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	338	84	973	971	0.348	337	342	0.7	0.6	5.614	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	-	-	-	102	106	0.0	0.0	0.271	A
				3	287	72	-	-	-	287	297	0.0	0.0	0.281	A
				4	338	84	-	-	-	338	342	0.0	0.0	0.273	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	942	745	0.020	14	16	0.0	0.0	5.072	A
				4	24	6	966	768	0.031	23	23	0.0	0.0	5.018	A
			2	1	26	7	978	777	0.034	27	29	0.0	0.0	4.971	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	26	7	-	-	-	26	29	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	17	0.0	0.0	0.000	A
				4	24	6	-	-	-	24	23	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	62	15	1001	875	0.071	62	67	0.0	0.1	4.524	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	403	353	0.003	1	2	0.0	0.0	4.591	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	7	2	793	692	0.010	7	7	0.0	0.0	4.358	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	62	15	-	-	-	62	67	0.0	0.0	0.000	A
				2	7	2	-	-	-	7	7	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.29	-	-	-	1	2	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	973	971	0.083	82	85	0.1	0.0	5.724	A
				3	254	63	973	971	0.262	255	252	0.5	0.2	5.468	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	278	70	973	970	0.287	279	278	0.6	0.3	5.033	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	-	-	-	81	85	0.0	0.0	0.117	A
				3	254	63	-	-	-	254	251	0.0	0.0	0.095	A
				4	278	70	-	-	-	278	277	0.0	0.0	0.057	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	954	790	0.015	12	13	0.0	0.0	4.615	A
				4	17	4	966	801	0.021	17	19	0.0	0.0	4.779	A
			2	1	18	5	978	809	0.023	18	24	0.0	0.0	4.759	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	18	5	-	-	-	18	24	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	13	0.0	0.0	0.000	A
				4	17	4	-	-	-	17	19	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	58	14	1001	900	0.064	58	59	0.1	0.1	4.276	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.37	354	315	0.005	1	2	0.0	0.0	4.089	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	8	2	781	702	0.011	8	8	0.0	0.0	4.197	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	58	14	-	-	-	58	58	0.0	0.0	0.000	A
				2	8	2	-	-	-	8	8	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	1	0.37	-	-	-	1	2	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	973	971	0.071	69	69	0.0	0.1	5.047	A
				3	208	52	973	971	0.214	208	205	0.2	0.3	5.141	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	226	57	973	971	0.233	228	228	0.3	0.2	4.729	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	69	0.0	0.0	0.162	A
				3	208	52	-	-	-	208	205	0.0	0.0	0.123	A
				4	226	57	-	-	-	226	228	0.0	0.0	0.079	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	966	828	0.014	11	12	0.0	0.0	4.110	A
				4	14	4	954	818	0.018	14	15	0.0	0.0	5.127	A
			2	1	17	4	966	829	0.020	17	20	0.0	0.0	4.397	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	17	4	-	-	-	17	20	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	12	0.0	0.0	0.000	A
				4	14	4	-	-	-	14	15	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	44	11	1001	918	0.048	44	48	0.1	0.0	4.089	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	439	401	0.006	3	2	0.0	0.0	3.875	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	6	2	769	704	0.009	6	5	0.0	0.0	4.122	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	44	11	-	-	-	44	48	0.0	0.0	0.000	A
				2	6	2	-	-	-	6	5	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	-	-	-	2	2	0.0	0.0	0.000	A

2028 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.21	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	409	100.000
2 - Gelscoe Lane		ONE HOUR	✓	110	100.000
3 - Top Brand		ONE HOUR	✓	258	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	171	135	103
	2 - Gelscoe Lane	47	0	19	44
	3 - Top Brand	157	59	0	42
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	29	11
	2 - Gelscoe Lane	0	0	6	5
	3 - Top Brand	24	0	0	91
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.37	6.60	0.8	A	375	563
2 - Gelscoe Lane	0.08	4.46	0.2	A	100	149
3 - Top Brand	0.23	6.35	0.5	A	232	348
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	300	75	44	1234	0.243	300	305	161	0.0	0.5	5.285	A
2 - Gelscoe Lane	87	22	181	1496	0.058	88	87	163	0.0	0.0	4.260	A
3 - Top Brand	199	50	155	1309	0.152	199	195	115	0.0	0.5	5.823	A
4 - A42			0					148				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	372	93	57	1269	0.293	375	367	173	0.5	0.5	5.735	A
2 - Gelscoe Lane	102	25	224	1416	0.072	101	104	208	0.0	0.1	4.150	A
3 - Top Brand	218	55	181	1220	0.179	218	234	144	0.5	0.4	5.528	A
4 - A42			0					169				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	458	115	61	1287	0.356	460	458	207	0.5	0.8	6.182	A
2 - Gelscoe Lane	111	28	258	1478	0.075	110	124	263	0.1	0.2	4.442	A
3 - Top Brand	266	67	200	1214	0.219	268	285	168	0.4	0.4	6.347	A
4 - A42			0					202				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	437	109	65	1172	0.373	437	451	229	0.8	0.7	6.596	A
2 - Gelscoe Lane	121	30	252	1422	0.085	121	124	250	0.2	0.1	4.461	A
3 - Top Brand	285	71	220	1258	0.227	285	294	153	0.4	0.5	6.317	A
4 - A42			0					211				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	363	91	55	1221	0.297	365	375	178	0.7	0.5	5.798	A
2 - Gelscoe Lane	98	24	212	1475	0.066	97	106	208	0.1	0.1	4.359	A
3 - Top Brand	228	57	183	1204	0.190	228	244	126	0.5	0.4	5.643	A
4 - A42			0					178				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	321	80	41	1282	0.251	319	320	149	0.5	0.6	5.293	A
2 - Gelscoe Lane	80	20	182	1548	0.052	80	89	179	0.1	0.1	4.407	A
3 - Top Brand	193	48	137	1270	0.152	196	199	126	0.4	0.3	5.558	A
4 - A42			0					141				

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	221	959	0.230	220	225	0.0	0.4	5.552	A
			2	1, 4	80	959	0.083	81	80	0.0	0.1	4.203	A
		2	1	(1, 2, 3, 4)	300			300	307	0.0	0.0	0.088	A
	Exit	1	1		161			161	150	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	48	920	0.052	49	51	0.0	0.0	4.322	A
			2	1, 2	39	920	0.042	39	36	0.0	0.0	4.176	A
		2	1	(1, 2, 3, 4)	87			87	87	0.0	0.0	0.000	A
	Exit	1	1		163			163	173	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	155	951	0.163	155	148	0.0	0.5	6.659	A
			2	2, 3	44	951	0.046	44	47	0.0	0.0	3.844	A
		2	1	(1, 2, 3, 4)	199			199	197	0.0	0.0	0.002	A
	Exit	1	1		115			115	114	0.0	0.0	0.000	A
4 - A42	Exit	1	1		148			148	151	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	276	955	0.289	279	271	0.4	0.4	5.889	A
			2	1, 4	96	955	0.100	96	96	0.1	0.1	4.559	A
		2	1	(1, 2, 3, 4)	372			371	367	0.0	0.1	0.193	A
	Exit	1	1		173			173	185	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	57	907	0.063	56	59	0.0	0.1	4.150	A
			2	1, 2	45	907	0.049	45	44	0.0	0.0	4.151	A
		2	1	(1, 2, 3, 4)	102			102	104	0.0	0.0	0.000	A
	Exit	1	1		208			208	206	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	162	943	0.171	162	177	0.5	0.3	6.125	A
			2	2, 3	57	943	0.061	57	57	0.0	0.0	4.070	A
		2	1	(1, 2, 3, 4)	218			218	233	0.0	0.0	0.025	A
	Exit	1	1		144			144	139	0.0	0.0	0.000	A
4 - A42	Exit	1	1		169			169	175	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	346	954	0.363	348	342	0.4	0.6	6.334	A
			2	1, 4	112	954	0.117	112	117	0.1	0.2	4.823	A
		2	1	(1, 2, 3, 4)	458			458	459	0.1	0.1	0.225	A
	Exit	1	1		207			207	222	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	69	896	0.077	69	74	0.1	0.1	4.667	A
			2	1, 2	42	896	0.047	42	50	0.0	0.1	4.122	A
		2	1	(1, 2, 3, 4)	111			111	124	0.0	0.0	0.002	A
	Exit	1	1		263			263	259	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	208	936	0.222	208	222	0.3	0.3	7.091	A
			2	2, 3	59	936	0.063	61	63	0.0	0.0	4.279	A
		2	1	(1, 2, 3, 4)	266			267	285	0.0	0.0	0.033	A
	Exit	1	1		168			168	169	0.0	0.0	0.000	A
4 - A42	Exit	1	1		202			202	217	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	319	952	0.335	319	331	0.6	0.5	6.614	A
			2	1, 4	116	952	0.122	118	120	0.2	0.1	4.854	A
		2	1	(1, 2, 3, 4)	437			435	450	0.1	0.2	0.449	A
	Exit	1	1		229			229	233	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	63	898	0.071	64	67	0.1	0.1	4.577	A
			2	1, 2	57	898	0.064	58	56	0.1	0.0	4.327	A
		2	1	(1, 2, 3, 4)	121			121	124	0.0	0.0	0.000	A
	Exit	1	1		250			250	259	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	220	930	0.237	220	227	0.3	0.4	6.965	A
			2	2, 3	65	930	0.070	65	67	0.0	0.1	4.165	A
		2	1	(1, 2, 3, 4)	285			285	294	0.0	0.0	0.148	A
	Exit	1	1		153			153	159	0.0	0.0	0.000	A
4 - A42	Exit	1	1		211			211	218	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	265	956	0.277	264	279	0.5	0.4	5.980	A
			2	1, 4	99	956	0.103	101	96	0.1	0.1	4.769	A
		2	1	(1, 2, 3, 4)	363			363	375	0.2	0.0	0.139	A
	Exit	1	1		178			178	193	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	56	911	0.061	56	61	0.1	0.1	4.500	A
			2	1, 2	42	911	0.046	42	45	0.0	0.1	4.177	A
		2	1	(1, 2, 3, 4)	98			98	106	0.0	0.0	0.000	A
	Exit	1	1		208			208	215	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	173	942	0.184	172	187	0.4	0.3	6.275	A
			2	2, 3	55	942	0.059	55	57	0.1	0.1	3.908	A
		2	1	(1, 2, 3, 4)	228			228	243	0.0	0.0	0.055	A
	Exit	1	1		126			126	137	0.0	0.0	0.000	A
4 - A42	Exit	1	1		178			178	179	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	246	960	0.256	247	240	0.4	0.4	5.593	A
			2	1, 4	75	960	0.078	73	80	0.1	0.2	4.233	A
		2	1	(1, 2, 3, 4)	321			321	321	0.0	0.0	0.042	A
	Exit	1	1		149			149	160	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	48	920	0.053	49	52	0.1	0.0	4.390	A
			2	1, 2	32	920	0.034	32	38	0.1	0.0	4.429	A
		2	1	(1, 2, 3, 4)	80			80	89	0.0	0.0	0.000	A
	Exit	1	1		179			179	178	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	152	957	0.159	154	156	0.3	0.3	6.227	A
			2	2, 3	41	957	0.043	41	44	0.1	0.0	3.641	A
		2	1	(1, 2, 3, 4)	193			194	199	0.0	0.0	0.041	A
	Exit	1	1		126			126	123	0.0	0.0	0.000	A
4 - A42	Exit	1	1		141			141	148	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	973	959	0.124	119	126	0.0	0.2	5.053	A
				3	102	25	973	959	0.106	101	99	0.0	0.2	6.359	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	80	20	973	959	0.083	81	80	0.0	0.1	4.203	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	-	-	-	119	126	0.0	0.0	0.102	A
				3	102	25	-	-	-	102	100	0.0	0.0	0.106	A
				4	80	20	-	-	-	80	81	0.0	0.0	0.047	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	929	874	0.016	14	15	0.0	0.0	4.722	A
				4	34	9	978	924	0.037	35	36	0.0	0.0	4.155	A
			2	1	39	10	978	918	0.042	39	36	0.0	0.0	4.176	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	39	10	-	-	-	39	36	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	15	0.0	0.0	0.000	A
				4	34	9	-	-	-	34	36	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	122	30	1001	952	0.128	122	114	0.0	0.3	6.293	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	1001	954	0.035	33	34	0.0	0.2	8.525	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	1001	952	0.046	44	47	0.0	0.0	3.844	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	122	30	-	-	-	122	115	0.0	0.0	0.003	A
				2	44	11	-	-	-	44	47	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	-	-	-	33	35	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	973	954	0.156	151	149	0.2	0.2	5.424	A
				3	127	32	973	955	0.133	128	122	0.2	0.3	6.612	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	96	24	973	954	0.100	96	96	0.1	0.1	4.559	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	149	149	0.0	0.0	0.214	A
				3	127	32	-	-	-	127	122	0.0	0.0	0.267	A
				4	96	24	-	-	-	96	96	0.0	0.0	0.074	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	978	910	0.017	15	17	0.0	0.0	4.024	A
				4	42	10	978	906	0.046	41	43	0.0	0.1	4.199	A
			2	1	45	11	978	903	0.049	45	44	0.0	0.0	4.151	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	44	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	17	0.0	0.0	0.000	A
				4	42	10	-	-	-	42	43	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	129	32	1001	944	0.137	129	141	0.3	0.3	5.780	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	1001	945	0.034	33	36	0.2	0.1	8.238	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1001	944	0.061	57	57	0.0	0.0	4.070	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	129	32	-	-	-	129	140	0.0	0.0	0.041	A
				2	57	14	-	-	-	57	57	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	36	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	973	954	0.211	202	196	0.2	0.3	5.891	A
				3	145	36	973	954	0.152	146	146	0.3	0.3	7.092	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	112	28	973	954	0.117	112	117	0.1	0.2	4.823	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	-	-	-	201	196	0.0	0.1	0.237	A
				3	145	36	-	-	-	145	146	0.0	0.0	0.280	A
				4	112	28	-	-	-	112	117	0.0	0.0	0.145	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	978	895	0.024	22	23	0.0	0.0	4.476	A
				4	47	12	978	895	0.053	47	51	0.1	0.1	4.755	A
			2	1	42	11	978	895	0.047	42	50	0.0	0.1	4.122	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	42	11	-	-	-	42	50	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	-	-	-	22	23	0.0	0.0	0.009	A
				4	47	12	-	-	-	47	51	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	165	41	1001	936	0.176	164	172	0.3	0.3	6.681	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	1001	937	0.046	43	49	0.1	0.1	9.337	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1001	934	0.064	61	63	0.0	0.0	4.279	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	164	41	-	-	-	165	172	0.0	0.0	0.039	A
				2	59	15	-	-	-	59	63	0.0	0.0	0.022	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	49	0.0	0.0	0.032	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	973	952	0.195	185	193	0.3	0.3	6.260	A
				3	133	33	973	953	0.139	134	139	0.3	0.2	7.239	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	116	29	973	952	0.122	118	120	0.2	0.1	4.854	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	186	47	-	-	-	185	193	0.1	0.1	0.519	A
				3	133	33	-	-	-	133	138	0.0	0.1	0.526	A
				4	117	29	-	-	-	116	119	0.0	0.0	0.247	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	978	897	0.021	19	20	0.0	0.0	4.218	A
				4	44	11	978	896	0.049	44	47	0.1	0.1	4.729	A
			2	1	57	14	978	899	0.064	58	56	0.1	0.0	4.327	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	57	14	-	-	-	57	56	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	20	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	47	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	172	43	1001	931	0.184	172	176	0.3	0.3	6.521	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	1001	932	0.052	49	51	0.1	0.1	9.378	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	1001	930	0.070	65	67	0.0	0.1	4.165	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	172	43	-	-	-	172	177	0.0	0.0	0.162	A
				2	65	16	-	-	-	65	67	0.0	0.0	0.101	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	-	-	-	48	51	0.0	0.0	0.193	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	973	955	0.160	153	158	0.3	0.2	5.582	A
				3	111	28	973	956	0.116	111	121	0.2	0.2	6.645	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	99	25	973	955	0.103	101	96	0.1	0.1	4.769	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	158	0.1	0.0	0.167	A
				3	111	28	-	-	-	111	121	0.1	0.0	0.137	A
				4	99	25	-	-	-	99	96	0.0	0.0	0.090	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	962	895	0.017	15	16	0.0	0.0	4.896	A
				4	41	10	978	912	0.045	40	45	0.1	0.1	4.361	A
			2	1	42	10	978	912	0.046	42	45	0.0	0.1	4.177	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	42	10	-	-	-	42	45	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	16	0.0	0.0	0.000	A
				4	41	10	-	-	-	41	45	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	135	34	1001	942	0.143	136	148	0.3	0.2	5.900	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	984	926	0.040	36	38	0.1	0.2	8.522	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	1001	942	0.059	55	57	0.1	0.1	3.908	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	135	34	-	-	-	135	148	0.0	0.0	0.074	A
				2	55	14	-	-	-	55	57	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	37	9	-	-	-	37	39	0.0	0.0	0.101	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	973	960	0.143	138	134	0.2	0.2	5.242	A
				3	108	27	973	960	0.113	109	106	0.2	0.2	6.154	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	75	19	973	961	0.078	73	80	0.1	0.2	4.233	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	-	-	-	137	134	0.0	0.0	0.063	A
				3	108	27	-	-	-	108	106	0.0	0.0	0.026	A
				4	75	19	-	-	-	75	81	0.0	0.0	0.023	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	962	905	0.019	17	17	0.0	0.0	4.833	A
				4	31	8	978	921	0.034	31	34	0.1	0.0	4.171	A
			2	1	32	8	978	923	0.034	32	38	0.1	0.0	4.429	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	38	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	17	0.0	0.0	0.000	A
				4	31	8	-	-	-	31	34	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	117	29	1001	957	0.122	118	122	0.2	0.2	5.816	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	984	938	0.038	36	33	0.2	0.1	8.545	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	1001	957	0.043	41	44	0.1	0.0	3.641	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	117	29	-	-	-	117	122	0.0	0.0	0.045	A
				2	41	10	-	-	-	41	43	0.0	0.0	0.051	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	33	0.0	0.0	0.000	A

2028 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.35	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	425	100.000
2 - Gelscoe Lane		ONE HOUR	✓	133	100.000
3 - Top Brand		ONE HOUR	✓	113	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	169	106	150
	2 - Gelscoe Lane	23	0	45	65
	3 - Top Brand	46	63	0	4
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	16	49	49
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	24	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.35	7.31	1.0	A	390	585
2 - Gelscoe Lane	0.15	4.63	0.2	A	122	183
3 - Top Brand	0.08	4.75	0.2	A	103	154
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	322	81	48	1363	0.236	322	317	46	0.0	0.8	6.586	A
2 - Gelscoe Lane	96	24	195	1118	0.086	97	96	175	0.0	0.1	4.239	A
3 - Top Brand	83	21	178	1494	0.056	82	84	114	0.0	0.2	4.210	A
4 - A42			0					166				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	392	98	55	1385	0.283	392	395	66	0.8	0.6	7.053	A
2 - Gelscoe Lane	124	31	240	1096	0.113	122	125	207	0.1	0.2	4.504	A
3 - Top Brand	103	26	228	1540	0.067	103	111	134	0.2	0.1	4.491	A
4 - A42			0					210				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	464	116	68	1382	0.336	470	474	73	0.6	1.0	6.978	A
2 - Gelscoe Lane	150	37	284	1028	0.146	149	153	252	0.2	0.2	4.542	A
3 - Top Brand	117	29	265	1443	0.081	116	130	168	0.1	0.2	4.420	A
4 - A42			0					242				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	458	115	73	1316	0.348	461	469	73	1.0	1.0	7.313	A
2 - Gelscoe Lane	142	35	281	1100	0.129	143	153	252	0.2	0.2	4.628	A
3 - Top Brand	124	31	263	1499	0.083	125	133	161	0.2	0.1	4.561	A
4 - A42			0					243				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	392	98	58	1367	0.287	391	393	65	1.0	1.0	6.718	A
2 - Gelscoe Lane	120	30	237	1102	0.109	121	127	211	0.2	0.1	4.566	A
3 - Top Brand	107	27	220	1512	0.071	107	108	138	0.1	0.1	4.753	A
4 - A42			0					203				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	313	78	46	1362	0.230	311	333	51	1.0	0.6	6.234	A
2 - Gelscoe Lane	101	25	190	1121	0.090	100	104	166	0.1	0.1	4.167	A
3 - Top Brand	81	20	175	1496	0.054	80	91	116	0.1	0.1	4.350	A
4 - A42			0					158				

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	211	958	0.220	210	208	0.0	0.6	6.355	A
			2	1, 4	111	958	0.116	112	109	0.0	0.2	6.319	A
		2	1	(1, 2, 3, 4)	322			323	320	0.0	0.0	0.239	A
	Exit	1	1		46			46	52	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	82	916	0.089	82	79	0.0	0.1	4.389	A
			2	1, 2	14	916	0.016	14	17	0.0	0.0	3.550	A
		2	1	(1, 2, 3, 4)	96			96	96	0.0	0.0	0.000	A
	Exit	1	1		175			175	173	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	35	944	0.037	34	37	0.0	0.1	4.506	A
			2	2, 3	49	944	0.052	48	48	0.0	0.1	4.020	A
		2	1	(1, 2, 3, 4)	83			83	85	0.0	0.0	0.000	A
	Exit	1	1		114			114	114	0.0	0.0	0.000	A
4 - A42	Exit	1	1		166			166	158	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	245	956	0.256	244	254	0.6	0.4	6.871	A
			2	1, 4	147	956	0.154	148	141	0.2	0.2	6.615	A
		2	1	(1, 2, 3, 4)	392			392	394	0.0	0.0	0.267	A
	Exit	1	1		66			66	71	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	103	902	0.114	101	102	0.1	0.2	4.608	A
			2	1, 2	21	902	0.023	21	23	0.0	0.0	4.046	A
		2	1	(1, 2, 3, 4)	124			124	125	0.0	0.0	0.000	A
	Exit	1	1		207			207	215	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	47	927	0.051	48	51	0.1	0.0	5.079	A
			2	2, 3	56	927	0.060	55	60	0.1	0.1	4.077	A
		2	1	(1, 2, 3, 4)	103			103	110	0.0	0.0	0.000	A
	Exit	1	1		134			134	140	0.0	0.0	0.000	A
4 - A42	Exit	1	1		210			210	206	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	299	952	0.315	301	305	0.4	0.5	6.730	A
			2	1, 4	164	952	0.172	167	169	0.2	0.4	6.766	A
		2	1	(1, 2, 3, 4)	464			464	475	0.0	0.0	0.235	A
	Exit	1	1		73			73	78	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	123	888	0.139	121	125	0.2	0.2	4.650	A
			2	1, 2	27	888	0.030	27	28	0.0	0.0	4.055	A
		2	1	(1, 2, 3, 4)	150			150	153	0.0	0.0	0.000	A
	Exit	1	1		252			252	264	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	48	916	0.053	48	55	0.0	0.0	4.829	A
			2	2, 3	69	916	0.075	68	75	0.1	0.1	4.169	A
		2	1	(1, 2, 3, 4)	117			117	131	0.0	0.0	0.000	A
	Exit	1	1		168			168	168	0.0	0.0	0.000	A
4 - A42	Exit	1	1		242			242	248	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	290	950	0.305	294	301	0.5	0.4	6.813	A
			2	1, 4	167	950	0.176	167	168	0.4	0.5	7.046	A
		2	1	(1, 2, 3, 4)	458			457	469	0.0	0.1	0.425	A
	Exit	1	1		73			73	81	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	118	889	0.133	120	127	0.2	0.1	4.756	A
			2	1, 2	24	889	0.027	23	26	0.0	0.1	4.004	A
		2	1	(1, 2, 3, 4)	142			142	153	0.0	0.0	0.000	A
	Exit	1	1		252			252	257	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	51	916	0.056	53	60	0.0	0.1	4.892	A
			2	2, 3	73	916	0.080	73	74	0.1	0.1	4.342	A
		2	1	(1, 2, 3, 4)	124			124	133	0.0	0.0	0.000	A
	Exit	1	1		161			161	170	0.0	0.0	0.000	A
4 - A42	Exit	1	1		243			243	246	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	256	955	0.268	253	252	0.4	0.6	6.658	A
			2	1, 4	136	955	0.142	136	141	0.5	0.3	6.278	A
		2	1	(1, 2, 3, 4)	392			392	393	0.1	0.0	0.184	A
	Exit	1	1		65			65	69	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	99	903	0.110	100	104	0.1	0.1	4.619	A
			2	1, 2	21	903	0.023	21	23	0.1	0.0	4.315	A
		2	1	(1, 2, 3, 4)	120			120	127	0.0	0.0	0.000	A
	Exit	1	1		211			211	216	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	50	930	0.054	49	50	0.1	0.1	5.255	A
			2	2, 3	57	930	0.061	58	58	0.1	0.0	4.389	A
		2	1	(1, 2, 3, 4)	107			107	108	0.0	0.0	0.000	A
	Exit	1	1		138			138	138	0.0	0.0	0.000	A
4 - A42	Exit	1	1		203			203	206	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	205	959	0.213	202	218	0.6	0.4	6.143	A
			2	1, 4	109	959	0.114	109	115	0.3	0.2	6.149	A
		2	1	(1, 2, 3, 4)	313			313	332	0.0	0.0	0.089	A
2 - Gelscoe Lane	Entry	1	1	3, 4	82	918	0.090	82	86	0.1	0.1	4.160	A
			2	1, 2	19	918	0.020	18	18	0.0	0.0	4.200	A
		2	1	(1, 2, 3, 4)	101			101	104	0.0	0.0	0.000	A
	Exit	1	1		166			166	185	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	36	945	0.038	35	38	0.1	0.1	4.948	A
			2	2, 3	46	945	0.048	46	52	0.0	0.1	3.993	A
		2	1	(1, 2, 3, 4)	81			81	91	0.0	0.0	0.000	A
	Exit	1	1		116			116	120	0.0	0.0	0.000	A
4 - A42	Exit	1	1		158			158	169	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	973	958	0.133	127	126	0.0	0.2	5.728	A
				3	83	21	973	957	0.087	83	82	0.0	0.4	7.597	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	111	28	973	958	0.116	112	109	0.0	0.2	6.319	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	127	0.0	0.0	0.261	A
				3	83	21	-	-	-	83	83	0.0	0.0	0.262	A
				4	111	28	-	-	-	111	110	0.0	0.0	0.189	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	978	917	0.033	31	32	0.0	0.0	4.447	A
				4	51	13	978	917	0.056	51	46	0.0	0.1	4.349	A
			2	1	14	4	961	901	0.016	14	17	0.0	0.0	3.550	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	14	4	-	-	-	14	17	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	-	-	-	31	32	0.0	0.0	0.000	A
				4	51	13	-	-	-	51	47	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	32	8	1001	946	0.034	31	35	0.0	0.1	4.550	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	407	383	0.007	3	2	0.0	0.0	3.888	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1001	947	0.051	48	48	0.0	0.1	4.020	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	35	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	48	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	-	-	-	3	2	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	973	955	0.160	152	155	0.2	0.2	6.363	A
				3	91	23	973	955	0.096	92	99	0.4	0.2	7.919	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	147	37	973	955	0.154	148	141	0.2	0.2	6.615	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	155	0.0	0.0	0.276	A
				3	91	23	-	-	-	91	98	0.0	0.0	0.329	A
				4	147	37	-	-	-	147	141	0.0	0.0	0.212	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	44	11	978	902	0.048	43	41	0.0	0.1	4.649	A
				4	59	15	978	900	0.066	59	61	0.1	0.1	4.579	A
			2	1	21	5	961	889	0.024	21	23	0.0	0.0	4.046	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	23	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	44	11	-	-	-	44	41	0.0	0.0	0.000	A
				4	59	15	-	-	-	59	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	45	11	1001	929	0.048	45	48	0.1	0.0	5.158	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.71	560	521	0.005	3	4	0.0	0.0	4.254	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	1001	927	0.060	55	60	0.1	0.1	4.077	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	47	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	60	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.71	-	-	-	3	4	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	973	951	0.194	184	189	0.2	0.3	6.237	A
				3	116	29	973	950	0.122	117	117	0.2	0.2	7.769	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	164	41	973	951	0.172	167	169	0.2	0.4	6.766	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	185	46	-	-	-	185	189	0.0	0.0	0.258	A
				3	116	29	-	-	-	116	117	0.0	0.0	0.282	A
				4	164	41	-	-	-	164	170	0.0	0.0	0.170	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	978	888	0.058	50	51	0.1	0.1	4.666	A
				4	72	18	978	887	0.081	71	74	0.1	0.1	4.639	A
			2	1	27	7	978	888	0.030	27	28	0.0	0.0	4.055	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	27	7	-	-	-	27	28	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	-	-	-	51	51	0.0	0.0	0.000	A
				4	72	18	-	-	-	72	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	45	11	1001	913	0.050	45	51	0.0	0.0	4.945	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	645	588	0.005	3	5	0.0	0.0	3.847	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	1001	915	0.075	68	75	0.1	0.1	4.169	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	51	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	75	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	-	-	-	3	5	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	178	45	973	950	0.188	180	183	0.3	0.3	6.296	A
				3	112	28	973	949	0.118	114	118	0.2	0.1	7.862	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	167	42	973	950	0.176	167	168	0.4	0.5	7.046	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	179	45	-	-	-	178	183	0.0	0.1	0.474	A
				3	112	28	-	-	-	112	117	0.0	0.0	0.388	A
				4	167	42	-	-	-	167	168	0.0	0.0	0.382	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	978	888	0.051	47	53	0.1	0.0	4.633	A
				4	73	18	978	890	0.082	73	75	0.1	0.1	4.842	A
			2	1	24	6	978	890	0.027	23	26	0.0	0.1	4.004	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	24	6	-	-	-	24	26	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	-	-	-	45	52	0.0	0.0	0.000	A
				4	73	18	-	-	-	73	75	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	48	12	1001	917	0.053	50	56	0.0	0.1	4.944	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	628	575	0.005	3	4	0.0	0.0	4.277	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	1001	917	0.080	73	74	0.1	0.1	4.342	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	48	12	-	-	-	48	56	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	74	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.76	-	-	-	3	4	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	156	39	973	954	0.163	154	158	0.3	0.5	6.149	A
				3	100	25	973	955	0.105	100	94	0.1	0.1	7.739	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	136	34	973	955	0.142	136	141	0.5	0.3	6.278	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	156	39	-	-	-	156	159	0.1	0.0	0.230	A
				3	100	25	-	-	-	100	95	0.0	0.0	0.178	A
				4	136	34	-	-	-	136	140	0.0	0.0	0.122	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	978	903	0.041	38	44	0.0	0.0	4.644	A
				4	62	15	978	903	0.068	62	61	0.1	0.1	4.602	A
			2	1	21	5	978	905	0.023	21	23	0.1	0.0	4.315	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	22	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	-	-	-	37	43	0.0	0.0	0.000	A
				4	62	15	-	-	-	62	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	45	11	1001	929	0.049	45	46	0.1	0.1	5.400	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	746	692	0.006	4	4	0.0	0.0	4.031	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1001	930	0.061	58	58	0.1	0.0	4.389	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	45	11	-	-	-	45	46	0.0	0.0	0.000	A
				2	57	14	-	-	-	57	58	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	4	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	973	959	0.128	121	132	0.5	0.2	5.724	A
				3	82	20	973	957	0.085	81	86	0.1	0.2	6.972	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	109	27	973	958	0.114	109	115	0.3	0.2	6.149	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	-	-	-	123	131	0.0	0.0	0.089	A
				3	82	20	-	-	-	82	86	0.0	0.0	0.139	A
				4	109	27	-	-	-	109	114	0.0	0.0	0.051	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	915	0.038	35	34	0.0	0.0	4.112	A
				4	47	12	978	916	0.052	47	52	0.1	0.1	4.193	A
			2	1	19	5	961	901	0.021	18	18	0.0	0.0	4.200	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	19	5	-	-	-	19	18	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	34	0.0	0.0	0.000	A
				4	47	12	-	-	-	47	51	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	34	8	1001	944	0.036	33	35	0.1	0.1	4.970	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.46	526	493	0.004	2	3	0.0	0.0	4.729	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	1001	944	0.048	46	52	0.0	0.1	3.993	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	34	8	-	-	-	34	35	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	53	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.46	-	-	-	2	3	0.0	0.0	0.000	A

2028 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.86	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	573	100.000
2 - Gelscoe Lane		ONE HOUR	✓	113	100.000
3 - Top Brand		ONE HOUR	✓	286	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	328	136	109
	2 - Gelscoe Lane	55	0	17	41
	3 - Top Brand	162	83	0	41
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	27	11
	2 - Gelscoe Lane	0	0	6	5
	3 - Top Brand	23	0	0	95
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.55	9.31	1.8	A	525	788
2 - Gelscoe Lane	0.08	4.67	0.2	A	102	154
3 - Top Brand	0.25	6.18	0.6	A	263	394
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	435	109	64	1163	0.374	435	435	173	0.0	0.8	6.117	A
2 - Gelscoe Lane	86	22	200	1483	0.058	87	87	296	0.0	0.1	4.455	A
3 - Top Brand	219	55	156	1366	0.160	216	225	131	0.0	0.5	5.685	A
4 - A42			0					136				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	520	130	69	1193	0.436	519	532	192	0.8	1.1	6.941	A
2 - Gelscoe Lane	102	26	233	1531	0.067	102	109	356	0.1	0.1	4.106	A
3 - Top Brand	256	64	185	1296	0.198	255	257	150	0.5	0.6	5.555	A
4 - A42			0					179				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	626	157	92	1165	0.538	626	632	245	1.1	1.7	8.921	A
2 - Gelscoe Lane	121	30	271	1482	0.082	121	133	447	0.1	0.2	4.524	A
3 - Top Brand	322	80	219	1276	0.252	323	334	173	0.6	0.4	6.183	A
4 - A42			0					206				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	631	158	90	1151	0.548	630	633	247	1.7	1.8	9.312	A
2 - Gelscoe Lane	118	30	270	1463	0.081	118	132	449	0.2	0.1	4.673	A
3 - Top Brand	321	80	220	1265	0.254	322	318	169	0.4	0.4	5.639	A
4 - A42			0					206				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	506	126	74	1189	0.425	513	531	190	1.8	0.6	7.464	A
2 - Gelscoe Lane	103	26	219	1469	0.070	104	110	367	0.1	0.1	4.421	A
3 - Top Brand	250	63	179	1309	0.191	250	261	143	0.4	0.3	5.765	A
4 - A42			0					167				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	435	109	64	1195	0.364	434	435	160	0.6	0.6	6.174	A
2 - Gelscoe Lane	84	21	174	1496	0.056	84	93	324	0.1	0.1	4.382	A
3 - Top Brand	209	52	150	1342	0.156	208	217	108	0.3	0.3	5.135	A
4 - A42			0					134				

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	354	953	0.372	353	356	0.0	0.7	6.184	A
			2	1, 4	80	953	0.083	80	79	0.0	0.1	4.662	A
		2	1	(1, 2, 3, 4)	435			434	438	0.0	0.1	0.191	A
	Exit	1	1		173			173	170	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	37	914	0.041	37	41	0.0	0.0	4.829	A
			2	1, 2	49	914	0.054	50	45	0.0	0.0	4.136	A
		2	1	(1, 2, 3, 4)	86			86	87	0.0	0.0	0.000	A
	Exit	1	1		296			296	312	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	155	951	0.163	152	158	0.0	0.4	6.591	A
			2	2, 3	64	951	0.067	64	67	0.0	0.0	3.963	A
		2	1	(1, 2, 3, 4)	219			219	227	0.0	0.0	0.034	A
	Exit	1	1		131			131	122	0.0	0.0	0.000	A
4 - A42	Exit	1	1		136			136	142	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	421	951	0.443	422	433	0.7	0.9	6.880	A
			2	1, 4	99	951	0.104	98	99	0.1	0.2	4.349	A
		2	1	(1, 2, 3, 4)	520			520	533	0.1	0.1	0.522	A
	Exit	1	1		192			192	198	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	54	904	0.060	54	55	0.0	0.1	4.288	A
			2	1, 2	48	904	0.053	48	54	0.0	0.1	3.933	A
		2	1	(1, 2, 3, 4)	102			102	110	0.0	0.0	0.000	A
	Exit	1	1		356			356	373	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	188	941	0.199	185	182	0.4	0.5	6.312	A
			2	2, 3	69	941	0.073	69	75	0.0	0.1	4.096	A
		2	1	(1, 2, 3, 4)	256			256	257	0.0	0.0	0.030	A
	Exit	1	1		150			150	150	0.0	0.0	0.000	A
4 - A42	Exit	1	1		179			179	176	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	508	944	0.538	509	512	0.9	1.2	8.244	A
			2	1, 4	117	944	0.124	117	120	0.2	0.2	4.902	A
		2	1	(1, 2, 3, 4)	626			626	633	0.1	0.3	1.284	A
	Exit	1	1		245			245	254	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	61	892	0.069	62	68	0.1	0.1	4.536	A
			2	1, 2	60	892	0.067	59	65	0.1	0.1	4.512	A
		2	1	(1, 2, 3, 4)	121			121	133	0.0	0.0	0.000	A
	Exit	1	1		447			447	453	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	231	930	0.249	232	241	0.5	0.4	7.029	A
			2	2, 3	91	930	0.098	92	94	0.1	0.1	4.456	A
		2	1	(1, 2, 3, 4)	322			322	334	0.0	0.0	0.037	A
	Exit	1	1		173			173	172	0.0	0.0	0.000	A
4 - A42	Exit	1	1		206			206	219	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	508	945	0.538	510	514	1.2	1.1	8.274	A
			2	1, 4	121	945	0.128	120	119	0.2	0.2	5.244	A
		2	1	(1, 2, 3, 4)	631			629	633	0.3	0.5	1.592	A
	Exit	1	1		247			247	246	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	63	892	0.070	62	67	0.1	0.1	4.938	A
			2	1, 2	55	892	0.062	56	65	0.1	0.1	4.416	A
		2	1	(1, 2, 3, 4)	118			118	132	0.0	0.0	0.000	A
	Exit	1	1		449			449	461	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	232	930	0.250	233	222	0.4	0.4	6.241	A
			2	2, 3	89	930	0.095	90	96	0.1	0.1	4.437	A
		2	1	(1, 2, 3, 4)	321			321	318	0.0	0.0	0.052	A
	Exit	1	1		169			169	168	0.0	0.0	0.000	A
4 - A42	Exit	1	1		206			206	209	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	415	950	0.437	421	430	1.1	0.4	7.083	A
			2	1, 4	92	950	0.096	91	101	0.2	0.2	4.830	A
		2	1	(1, 2, 3, 4)	506			507	528	0.5	0.0	0.810	A
	Exit	1	1		190			190	200	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	53	908	0.059	53	58	0.1	0.1	4.581	A
			2	1, 2	50	908	0.055	50	52	0.1	0.0	4.256	A
		2	1	(1, 2, 3, 4)	103			103	110	0.0	0.0	0.000	A
	Exit	1	1		367			367	379	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	176	943	0.187	176	183	0.4	0.2	6.514	A
			2	2, 3	74	943	0.079	74	78	0.1	0.1	4.393	A
		2	1	(1, 2, 3, 4)	250			250	260	0.0	0.0	0.015	A
	Exit	1	1		143			143	144	0.0	0.0	0.000	A
4 - A42	Exit	1	1		167			167	178	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	354	953	0.372	354	352	0.4	0.5	6.165	A
			2	1, 4	81	953	0.084	80	83	0.2	0.1	4.747	A
		2	1	(1, 2, 3, 4)	435			435	435	0.0	0.0	0.268	A
	Exit	1	1		160			160	169	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	38	923	0.042	38	46	0.1	0.0	4.477	A
			2	1, 2	46	923	0.050	46	47	0.0	0.1	4.293	A
		2	1	(1, 2, 3, 4)	84			84	93	0.0	0.0	0.000	A
	Exit	1	1		324			324	315	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	145	953	0.152	144	153	0.2	0.2	5.702	A
			2	2, 3	64	953	0.067	64	64	0.1	0.1	4.078	A
		2	1	(1, 2, 3, 4)	209			209	216	0.0	0.0	0.010	A
	Exit	1	1		108			108	115	0.0	0.0	0.000	A
4 - A42	Exit	1	1		134			134	146	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	234	59	973	953	0.246	233	245	0.0	0.4	5.997	A
				3	120	30	973	954	0.126	120	111	0.0	0.2	6.708	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	80	20	973	954	0.083	80	79	0.0	0.1	4.662	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	235	59	-	-	-	234	247	0.0	0.1	0.192	A
				3	120	30	-	-	-	120	112	0.0	0.0	0.249	A
				4	80	20	-	-	-	80	79	0.0	0.0	0.113	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	873	820	0.013	11	11	0.0	0.0	5.019	A
				4	27	7	978	915	0.029	26	30	0.0	0.0	4.761	A
			2	1	49	12	978	918	0.053	50	45	0.0	0.0	4.136	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	49	12	-	-	-	49	46	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	0.000	A
				4	27	7	-	-	-	27	30	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	125	31	1001	951	0.132	123	125	0.0	0.4	6.082	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	983	932	0.032	29	33	0.0	0.1	9.611	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	1001	951	0.067	64	67	0.0	0.0	3.963	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	125	31	-	-	-	125	127	0.0	0.0	0.023	A
				2	64	16	-	-	-	64	67	0.0	0.0	0.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	-	-	-	30	33	0.0	0.0	0.026	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	286	72	973	951	0.301	286	298	0.4	0.6	6.580	A
				3	135	34	973	950	0.142	136	135	0.2	0.3	7.736	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	99	25	973	950	0.104	98	99	0.1	0.2	4.349	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	287	72	-	-	-	286	299	0.1	0.1	0.601	A
				3	135	34	-	-	-	135	136	0.0	0.0	0.449	A
				4	99	25	-	-	-	99	99	0.0	0.0	0.342	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	925	859	0.016	14	15	0.0	0.0	4.500	A
				4	40	10	978	905	0.044	39	40	0.0	0.1	4.209	A
			2	1	48	12	978	906	0.053	48	54	0.0	0.1	3.933	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	48	12	-	-	-	48	55	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	15	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	40	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	145	36	1001	941	0.154	144	144	0.4	0.3	5.849	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	1001	941	0.045	42	38	0.1	0.2	9.096	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	1001	941	0.073	69	75	0.0	0.1	4.096	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	145	36	-	-	-	145	144	0.0	0.0	0.045	A
				2	69	17	-	-	-	69	75	0.0	0.0	0.004	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	-	-	-	42	38	0.0	0.0	0.045	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	355	89	973	944	0.376	355	360	0.6	0.8	7.979	A
				3	153	38	973	944	0.163	154	152	0.3	0.4	9.048	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	117	29	973	944	0.124	117	120	0.2	0.2	4.902	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	354	89	-	-	-	355	361	0.1	0.2	1.339	A
				3	154	39	-	-	-	153	152	0.0	0.1	1.289	A
				4	118	29	-	-	-	117	120	0.0	0.1	1.094	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	978	894	0.021	18	20	0.0	0.1	4.299	A
				4	43	11	978	891	0.048	43	48	0.1	0.1	4.634	A
			2	1	60	15	978	897	0.067	59	65	0.1	0.1	4.512	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	60	15	-	-	-	60	65	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	20	0.0	0.0	0.000	A
				4	43	11	-	-	-	43	48	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	186	47	1001	931	0.200	186	189	0.3	0.3	6.537	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	45	11	1001	932	0.048	46	51	0.2	0.0	9.947	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	91	23	1001	931	0.098	92	94	0.1	0.1	4.456	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	186	47	-	-	-	186	189	0.0	0.0	0.049	A
				2	91	23	-	-	-	91	94	0.0	0.0	0.016	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	45	11	-	-	-	45	51	0.0	0.0	0.039	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	358	90	973	944	0.379	359	365	0.8	0.7	8.000	A
				3	150	37	973	944	0.159	150	149	0.4	0.4	9.113	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	121	30	973	945	0.128	120	119	0.2	0.2	5.244	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	358	90	-	-	-	358	364	0.2	0.2	1.598	A
				3	150	38	-	-	-	150	149	0.1	0.1	1.764	A
				4	123	31	-	-	-	121	120	0.1	0.1	1.379	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	925	846	0.023	18	18	0.1	0.0	5.134	A
				4	44	11	978	895	0.049	44	48	0.1	0.1	4.863	A
			2	1	55	14	978	892	0.062	56	65	0.1	0.1	4.416	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	55	14	-	-	-	55	65	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	18	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	48	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	191	48	1001	931	0.205	191	180	0.3	0.3	5.960	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	10	1001	929	0.045	42	42	0.0	0.0	8.191	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	89	22	1001	930	0.095	90	96	0.1	0.1	4.437	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	180	0.0	0.0	0.066	A
				2	89	22	-	-	-	89	96	0.0	0.0	0.027	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	10	-	-	-	42	42	0.0	0.0	0.076	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	290	73	973	950	0.306	293	302	0.7	0.3	6.735	A
				3	125	31	973	950	0.132	128	128	0.4	0.1	8.153	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	92	23	973	951	0.096	91	101	0.2	0.2	4.830	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	290	73	-	-	-	290	300	0.2	0.0	0.811	A
				3	125	31	-	-	-	125	127	0.1	0.0	1.021	A
				4	91	23	-	-	-	92	101	0.1	0.0	0.581	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	943	873	0.018	16	17	0.0	0.0	4.647	A
				4	38	9	978	903	0.042	38	41	0.1	0.1	4.555	A
			2	1	50	12	978	908	0.055	50	52	0.1	0.0	4.256	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	50	12	-	-	-	50	52	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	17	0.0	0.0	0.000	A
				4	38	9	-	-	-	38	41	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	140	35	1001	943	0.148	140	148	0.3	0.2	6.111	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	1001	940	0.039	37	35	0.0	0.0	9.210	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	74	19	1001	942	0.079	74	78	0.1	0.1	4.393	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	140	35	-	-	-	140	147	0.0	0.0	0.024	A
				2	74	19	-	-	-	74	78	0.0	0.0	0.003	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	35	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	260	65	973	953	0.273	260	252	0.3	0.3	5.794	A
				3	94	23	973	953	0.099	94	101	0.1	0.2	7.348	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	81	20	973	953	0.084	80	83	0.2	0.1	4.747	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	260	65	-	-	-	260	252	0.0	0.0	0.266	A
				3	94	23	-	-	-	94	101	0.0	0.0	0.288	A
				4	81	20	-	-	-	81	82	0.0	0.0	0.253	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	908	853	0.016	14	14	0.0	0.0	4.470	A
				4	24	6	978	922	0.026	24	32	0.1	0.0	4.479	A
			2	1	46	12	978	923	0.050	46	47	0.0	0.1	4.293	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	46	12	-	-	-	46	47	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	14	0.0	0.0	0.000	A
				4	24	6	-	-	-	24	32	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	115	29	1001	953	0.120	114	122	0.2	0.2	5.398	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	965	919	0.033	30	31	0.0	0.1	7.607	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	1001	953	0.067	64	64	0.1	0.1	4.078	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	115	29	-	-	-	115	122	0.0	0.0	0.014	A
				2	64	16	-	-	-	64	64	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	8	-	-	-	30	31	0.0	0.0	0.025	A

2028 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.50	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	404	100.000
2 - Gelscoe Lane		ONE HOUR	✓	194	100.000
3 - Top Brand		ONE HOUR	✓	100	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	173	107	124
	2 - Gelscoe Lane	26	0	70	98
	3 - Top Brand	26	70	0	4
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	15	46	47
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	8	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.35	7.74	1.2	A	373	560
2 - Gelscoe Lane	0.21	5.02	0.4	A	179	269
3 - Top Brand	0.09	4.37	0.2	A	94	140
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	306	76	51	1253	0.244	306	297	43	0.0	0.5	6.078	A
2 - Gelscoe Lane	150	37	178	1052	0.142	149	148	179	0.0	0.3	4.501	A
3 - Top Brand	78	20	194	1284	0.061	78	75	134	0.0	0.1	4.373	A
4 - A42			0					176				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	376	94	59	1337	0.281	371	386	43	0.5	1.0	6.581	A
2 - Gelscoe Lane	179	45	211	1072	0.167	179	178	219	0.3	0.2	4.653	A
3 - Top Brand	83	21	227	1314	0.063	83	94	162	0.1	0.1	4.328	A
4 - A42			0					208				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	457	114	79	1304	0.350	454	455	63	1.0	1.2	7.743	A
2 - Gelscoe Lane	208	52	255	1099	0.189	209	224	278	0.2	0.3	4.868	A
3 - Top Brand	114	29	275	1293	0.088	113	119	189	0.1	0.2	4.341	A
4 - A42			0					247				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	447	112	82	1296	0.345	448	448	61	1.2	1.1	7.653	A
2 - Gelscoe Lane	214	54	251	1026	0.209	213	222	278	0.3	0.4	5.016	A
3 - Top Brand	113	28	273	1261	0.090	114	118	190	0.2	0.1	4.353	A
4 - A42			0					245				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	354	89	65	1295	0.273	352	367	51	1.1	0.8	6.639	A
2 - Gelscoe Lane	170	42	205	1050	0.162	171	178	212	0.4	0.2	4.783	A
3 - Top Brand	96	24	214	1275	0.075	96	100	162	0.1	0.1	4.177	A
4 - A42			0					194				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	301	75	54	1260	0.239	298	306	42	0.8	0.7	6.106	A
2 - Gelscoe Lane	154	39	174	1082	0.143	154	153	178	0.2	0.1	4.441	A
3 - Top Brand	77	19	193	1330	0.058	76	81	135	0.1	0.1	4.067	A
4 - A42			0					173				

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	210	957	0.220	210	209	0.0	0.3	6.057	A
			2	1, 4	97	957	0.101	96	88	0.0	0.2	5.877	A
		2	1	(1, 2, 3, 4)	306			306	299	0.0	0.0	0.070	A
	Exit	1	1		43			43	40	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	129	921	0.140	128	127	0.0	0.2	4.558	A
			2	1, 2	21	921	0.023	21	20	0.0	0.0	4.146	A
		2	1	(1, 2, 3, 4)	150			150	149	0.0	0.0	0.000	A
	Exit	1	1		179			179	182	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	27	939	0.028	26	22	0.0	0.0	4.775	A
			2	2, 3	52	939	0.055	51	52	0.0	0.1	4.211	A
		2	1	(1, 2, 3, 4)	78			78	75	0.0	0.0	0.000	A
	Exit	1	1		134			134	131	0.0	0.0	0.000	A
4 - A42	Exit	1	1		176			176	168	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	259	955	0.271	257	269	0.3	0.6	6.306	A
			2	1, 4	115	955	0.121	113	117	0.2	0.3	6.235	A
		2	1	(1, 2, 3, 4)	376			375	388	0.0	0.1	0.291	A
	Exit	1	1		43			43	48	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	155	911	0.170	155	153	0.2	0.1	4.743	A
			2	1, 2	24	911	0.026	24	25	0.0	0.0	4.105	A
		2	1	(1, 2, 3, 4)	179			179	178	0.0	0.0	0.000	A
	Exit	1	1		219			219	232	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	25	928	0.026	25	28	0.0	0.1	4.202	A
			2	2, 3	59	928	0.063	59	67	0.1	0.0	4.378	A
		2	1	(1, 2, 3, 4)	83			83	94	0.0	0.0	0.000	A
	Exit	1	1		162			162	165	0.0	0.0	0.000	A
4 - A42	Exit	1	1		208			208	213	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	320	948	0.337	316	309	0.6	0.9	7.308	A
			2	1, 4	137	948	0.145	137	146	0.3	0.3	6.711	A
		2	1	(1, 2, 3, 4)	457			457	456	0.1	0.0	0.604	A
	Exit	1	1		63			63	64	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	175	897	0.196	176	191	0.1	0.2	4.989	A
			2	1, 2	32	897	0.036	33	33	0.0	0.0	4.167	A
		2	1	(1, 2, 3, 4)	208			208	224	0.0	0.0	0.000	A
	Exit	1	1		278			278	274	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	35	912	0.039	34	35	0.1	0.1	4.060	A
			2	2, 3	79	912	0.086	79	84	0.0	0.1	4.449	A
		2	1	(1, 2, 3, 4)	114			114	119	0.0	0.0	0.000	A
	Exit	1	1		189			189	196	0.0	0.0	0.000	A
4 - A42	Exit	1	1		247			247	264	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	317	947	0.335	315	312	0.9	0.8	7.149	A
			2	1, 4	131	947	0.138	132	136	0.3	0.3	6.804	A
		2	1	(1, 2, 3, 4)	447			449	448	0.0	0.0	0.600	A
	Exit	1	1		61			61	61	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	182	898	0.203	181	191	0.2	0.4	5.176	A
			2	1, 2	32	898	0.036	32	31	0.0	0.0	4.023	A
		2	1	(1, 2, 3, 4)	214			214	222	0.0	0.0	0.000	A
	Exit	1	1		278			278	276	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	32	913	0.035	33	35	0.1	0.0	4.405	A
			2	2, 3	81	913	0.089	82	83	0.1	0.1	4.334	A
		2	1	(1, 2, 3, 4)	113			113	117	0.0	0.0	0.000	A
	Exit	1	1		190			190	197	0.0	0.0	0.000	A
4 - A42	Exit	1	1		245			245	253	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	246	952	0.259	245	260	0.8	0.5	6.499	A
			2	1, 4	108	952	0.113	106	107	0.3	0.3	6.205	A
		2	1	(1, 2, 3, 4)	354			354	366	0.0	0.0	0.220	A
	Exit	1	1		51			51	49	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	146	913	0.159	147	154	0.4	0.2	4.961	A
			2	1, 2	24	913	0.026	24	24	0.0	0.0	3.627	A
		2	1	(1, 2, 3, 4)	170			170	177	0.0	0.0	0.000	A
	Exit	1	1		212			212	233	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	31	932	0.034	31	29	0.0	0.0	4.181	A
			2	2, 3	65	932	0.069	65	71	0.1	0.1	4.176	A
		2	1	(1, 2, 3, 4)	96			96	100	0.0	0.0	0.000	A
	Exit	1	1		162			162	164	0.0	0.0	0.000	A
4 - A42	Exit	1	1		194			194	198	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	206	956	0.215	204	212	0.5	0.5	5.919	A
			2	1, 4	94	956	0.099	95	94	0.3	0.1	6.035	A
		2	1	(1, 2, 3, 4)	301			300	306	0.0	0.1	0.159	A
	Exit	1	1		42			42	40	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	132	923	0.143	132	133	0.2	0.1	4.512	A
			2	1, 2	22	923	0.024	22	20	0.0	0.0	3.970	A
		2	1	(1, 2, 3, 4)	154			154	153	0.0	0.0	0.000	A
	Exit	1	1		178			178	186	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	23	939	0.024	23	24	0.0	0.1	4.348	A
			2	2, 3	54	939	0.058	54	57	0.1	0.0	3.956	A
		2	1	(1, 2, 3, 4)	77			77	81	0.0	0.0	0.000	A
	Exit	1	1		135			135	142	0.0	0.0	0.000	A
4 - A42	Exit	1	1		173			173	172	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	973	957	0.133	127	130	0.0	0.2	5.542	A
				3	82	21	973	957	0.086	83	79	0.0	0.1	7.107	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	97	24	973	957	0.101	96	88	0.0	0.2	5.877	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	130	0.0	0.0	0.081	A
				3	82	20	-	-	-	82	80	0.0	0.0	0.111	A
				4	97	24	-	-	-	97	89	0.0	0.0	0.012	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	978	923	0.056	52	51	0.0	0.1	4.579	A
				4	77	19	978	921	0.084	77	76	0.0	0.1	4.543	A
			2	1	21	5	964	908	0.023	21	20	0.0	0.0	4.146	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	21	5	-	-	-	21	21	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	-	-	-	51	52	0.0	0.0	0.000	A
				4	77	19	-	-	-	77	77	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	23	6	986	926	0.024	22	19	0.0	0.0	4.816	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	545	512	0.008	4	3	0.0	0.0	4.530	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1001	937	0.055	51	52	0.0	0.1	4.211	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	23	6	-	-	-	23	20	0.0	0.0	0.000	A
				2	52	13	-	-	-	52	52	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	3	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	973	954	0.166	160	166	0.2	0.3	5.966	A
				3	100	25	973	954	0.105	97	103	0.1	0.4	7.008	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	115	29	973	954	0.121	113	117	0.2	0.3	6.235	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	-	-	-	159	166	0.0	0.0	0.252	A
				3	100	25	-	-	-	100	104	0.0	0.0	0.420	A
				4	116	29	-	-	-	115	117	0.0	0.0	0.249	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	978	911	0.071	65	62	0.1	0.1	4.686	A
				4	91	23	978	911	0.100	91	91	0.1	0.1	4.782	A
			2	1	24	6	978	911	0.026	24	25	0.0	0.0	4.105	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	24	6	-	-	-	24	25	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	-	-	-	64	62	0.0	0.0	0.000	A
				4	91	23	-	-	-	91	91	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	20	5	1001	927	0.021	20	23	0.0	0.0	4.292	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	692	639	0.007	5	5	0.0	0.0	3.779	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1001	927	0.063	59	67	0.1	0.0	4.378	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	23	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	66	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	-	-	-	5	5	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	973	948	0.212	199	190	0.3	0.5	6.769	A
				3	119	30	973	947	0.126	118	119	0.4	0.4	8.412	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	137	34	973	947	0.145	137	146	0.3	0.3	6.711	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	201	50	-	-	-	201	191	0.0	0.0	0.577	A
				3	119	30	-	-	-	119	119	0.0	0.0	0.812	A
				4	137	34	-	-	-	137	146	0.0	0.0	0.477	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	17	978	895	0.078	70	77	0.1	0.1	4.925	A
				4	106	26	978	896	0.118	106	114	0.1	0.2	5.031	A
			2	1	32	8	978	892	0.036	33	33	0.0	0.0	4.167	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	33	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	17	-	-	-	70	77	0.0	0.0	0.000	A
				4	106	26	-	-	-	106	115	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	31	8	1001	910	0.035	31	31	0.0	0.1	4.164	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.97	618	560	0.007	4	4	0.0	0.0	3.331	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	1001	911	0.086	79	84	0.0	0.1	4.449	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	31	8	-	-	-	31	31	0.0	0.0	0.000	A
				2	79	20	-	-	-	79	84	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.97	-	-	-	4	4	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	196	49	973	947	0.207	197	193	0.5	0.4	6.807	A
				3	121	30	973	947	0.128	119	119	0.4	0.4	7.846	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	131	33	973	947	0.138	132	136	0.3	0.3	6.804	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	196	49	-	-	-	196	193	0.0	0.0	0.634	A
				3	120	30	-	-	-	121	119	0.0	0.0	0.756	A
				4	131	33	-	-	-	131	136	0.0	0.0	0.401	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	978	898	0.079	72	78	0.1	0.1	5.174	A
				4	111	28	978	899	0.123	109	113	0.2	0.3	5.177	A
			2	1	32	8	978	899	0.036	32	31	0.0	0.0	4.023	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	31	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	-	-	-	71	78	0.0	0.0	0.000	A
				4	111	28	-	-	-	111	114	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	28	7	1001	913	0.031	29	30	0.1	0.0	4.537	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	648	586	0.007	4	4	0.0	0.0	3.546	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	1001	914	0.089	82	83	0.1	0.1	4.334	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	28	7	-	-	-	28	30	0.0	0.0	0.000	A
				2	81	20	-	-	-	81	83	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	4	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	973	953	0.156	147	162	0.4	0.4	6.184	A
				3	98	25	973	953	0.103	99	97	0.4	0.1	7.165	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	108	27	973	954	0.113	106	107	0.3	0.3	6.205	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	149	162	0.0	0.0	0.235	A
				3	98	24	-	-	-	98	96	0.0	0.0	0.183	A
				4	108	27	-	-	-	108	107	0.0	0.0	0.223	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	16	978	914	0.068	63	67	0.1	0.1	4.947	A
				4	83	21	978	913	0.091	84	87	0.3	0.1	4.972	A
			2	1	24	6	964	901	0.027	24	24	0.0	0.0	3.627	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	24	6	-	-	-	24	24	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	16	-	-	-	62	67	0.0	0.0	0.000	A
				4	83	21	-	-	-	83	87	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	28	7	1001	934	0.030	27	25	0.0	0.0	4.198	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.93	603	558	0.007	4	4	0.0	0.0	4.065	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	1001	933	0.069	65	71	0.1	0.1	4.176	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	28	7	-	-	-	28	25	0.0	0.0	0.000	A
				2	65	16	-	-	-	65	71	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	0.93	-	-	-	4	4	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	973	956	0.130	124	128	0.4	0.3	5.437	A
				3	81	20	973	956	0.085	80	83	0.1	0.3	6.854	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	94	24	973	956	0.099	95	94	0.3	0.1	6.035	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	-	-	-	125	128	0.0	0.1	0.130	A
				3	81	20	-	-	-	81	84	0.0	0.0	0.278	A
				4	94	24	-	-	-	94	94	0.0	0.0	0.101	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	55	14	978	923	0.059	55	59	0.1	0.0	4.679	A
				4	77	19	978	922	0.084	76	74	0.1	0.1	4.379	A
			2	1	22	5	964	909	0.024	22	20	0.0	0.0	3.970	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	22	5	-	-	-	22	20	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	55	14	-	-	-	55	59	0.0	0.0	0.000	A
				4	77	19	-	-	-	77	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	20	5	1001	942	0.022	20	21	0.0	0.0	4.410	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	545	511	0.005	2	3	0.0	0.0	3.983	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	14	1001	939	0.058	54	57	0.1	0.0	3.956	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	20	5	-	-	-	20	21	0.0	0.0	0.000	A
				2	54	14	-	-	-	54	57	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.66	-	-	-	3	3	0.0	0.0	0.000	A

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.62	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.62	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	487	100.000
2 - Gelscoe Lane		ONE HOUR	✓	196	100.000
3 - Top Brand		ONE HOUR	✓	388	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	152	179	156
	2 - Gelscoe Lane	79	0	37	80
	3 - Top Brand	271	73	0	44
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	15	9
	2 - Gelscoe Lane	0	0	3	3
	3 - Top Brand	12	0	0	83
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.40	6.37	1.0	A	449	674
2 - Gelscoe Lane	0.16	4.95	0.4	A	177	266
3 - Top Brand	0.40	7.75	1.2	A	356	535
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	365	91	54	1341	0.272	364	364	256	0.0	0.5	5.242	A
2 - Gelscoe Lane	142	35	250	1388	0.102	142	148	168	0.0	0.1	4.487	A
3 - Top Brand	293	73	242	1165	0.251	289	290	150	0.0	0.7	5.972	A
4 - A42			0					221				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	454	113	70	1386	0.327	450	450	316	0.5	0.9	5.959	A
2 - Gelscoe Lane	175	44	302	1392	0.126	175	185	218	0.1	0.2	4.765	A
3 - Top Brand	351	88	287	1080	0.325	354	355	191	0.7	0.5	6.559	A
4 - A42			0					255				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	536	134	78	1334	0.401	540	550	394	0.9	0.8	6.365	A
2 - Gelscoe Lane	218	54	376	1356	0.160	216	222	242	0.2	0.4	4.865	A
3 - Top Brand	431	108	350	1087	0.396	430	432	242	0.5	1.1	7.554	A
4 - A42			0					308				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	531	133	82	1375	0.386	530	540	371	0.8	1.0	6.374	A
2 - Gelscoe Lane	212	53	369	1358	0.156	212	216	242	0.4	0.3	4.945	A
3 - Top Brand	417	104	351	1060	0.393	414	428	230	1.1	1.2	7.754	A
4 - A42			0					313				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	444	111	67	1356	0.327	445	443	312	1.0	0.6	5.720	A
2 - Gelscoe Lane	173	43	310	1430	0.121	173	185	202	0.3	0.2	4.825	A
3 - Top Brand	347	87	273	1106	0.313	347	354	210	1.2	0.6	6.912	A
4 - A42			0					242				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	58	1345	0.273	367	371	271	0.6	0.6	5.427	A
2 - Gelscoe Lane	145	36	251	1430	0.101	146	153	174	0.2	0.1	4.461	A
3 - Top Brand	301	75	225	1168	0.258	300	301	171	0.6	0.6	6.041	A
4 - A42			0					196				

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	239	956	0.250	239	246	0.0	0.3	5.496	A
			2	1, 4	126	956	0.132	125	118	0.0	0.2	4.571	A
		2	1	(1, 2, 3, 4)	365			365	366	0.0	0.0	0.042	A
	Exit	1	1		256			256	261	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	86	898	0.096	86	89	0.0	0.1	4.688	A
			2	1, 2	56	898	0.062	56	59	0.0	0.0	4.197	A
		2	1	(1, 2, 3, 4)	142			142	149	0.0	0.0	0.000	A
	Exit	1	1		168			168	170	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	239	923	0.259	235	235	0.0	0.6	6.378	A
			2	2, 3	54	923	0.058	54	55	0.0	0.0	4.329	A
		2	1	(1, 2, 3, 4)	293			293	293	0.0	0.0	0.034	A
	Exit	1	1		150			150	160	0.0	0.0	0.000	A
4 - A42	Exit	1	1		221			221	211	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	310	951	0.326	308	305	0.3	0.7	6.108	A
			2	1, 4	143	951	0.150	142	145	0.2	0.2	5.102	A
		2	1	(1, 2, 3, 4)	454			453	451	0.0	0.0	0.172	A
	Exit	1	1		316			316	325	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	102	882	0.115	102	109	0.1	0.1	4.999	A
			2	1, 2	73	882	0.083	74	76	0.0	0.1	4.438	A
		2	1	(1, 2, 3, 4)	175			175	185	0.0	0.0	0.000	A
	Exit	1	1		218			218	209	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	281	909	0.309	284	287	0.6	0.5	6.997	A
			2	2, 3	70	909	0.077	70	68	0.0	0.0	4.395	A
		2	1	(1, 2, 3, 4)	351			351	354	0.0	0.0	0.130	A
	Exit	1	1		191			191	196	0.0	0.0	0.000	A
4 - A42	Exit	1	1		255			255	258	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	363	948	0.383	365	373	0.7	0.6	6.525	A
			2	1, 4	172	948	0.182	176	176	0.2	0.1	5.074	A
		2	1	(1, 2, 3, 4)	536			535	550	0.0	0.1	0.300	A
	Exit	1	1		394			394	393	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	129	859	0.151	128	132	0.1	0.2	4.945	A
			2	1, 2	88	859	0.103	88	90	0.1	0.1	4.738	A
		2	1	(1, 2, 3, 4)	218			218	222	0.0	0.0	0.005	A
	Exit	1	1		242			242	251	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	353	888	0.398	352	351	0.5	1.0	8.023	A
			2	2, 3	78	888	0.087	78	81	0.0	0.1	4.505	A
		2	1	(1, 2, 3, 4)	431			431	434	0.0	0.0	0.282	A
	Exit	1	1		242			242	245	0.0	0.0	0.000	A
4 - A42	Exit	1	1		308			308	315	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	353	947	0.373	353	363	0.6	0.8	6.579	A
			2	1, 4	177	947	0.187	177	177	0.1	0.3	5.221	A
		2	1	(1, 2, 3, 4)	531			531	541	0.1	0.0	0.239	A
	Exit	1	1		371			371	386	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	128	861	0.149	128	128	0.2	0.2	5.237	A
			2	1, 2	84	861	0.098	84	89	0.1	0.1	4.531	A
		2	1	(1, 2, 3, 4)	212			212	216	0.0	0.0	0.002	A
	Exit	1	1		242			242	246	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	333	888	0.375	333	346	1.0	1.0	8.282	A
			2	2, 3	84	888	0.094	82	82	0.1	0.2	4.614	A
		2	1	(1, 2, 3, 4)	417			417	428	0.0	0.1	0.274	A
	Exit	1	1		230			230	238	0.0	0.0	0.000	A
4 - A42	Exit	1	1		313			313	313	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	308	952	0.324	310	305	0.8	0.5	5.969	A
			2	1, 4	135	952	0.142	135	138	0.3	0.1	4.739	A
		2	1	(1, 2, 3, 4)	444			444	441	0.0	0.0	0.133	A
	Exit	1	1		312			312	321	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	106	879	0.120	106	111	0.2	0.2	4.956	A
			2	1, 2	67	879	0.076	67	74	0.1	0.1	4.629	A
		2	1	(1, 2, 3, 4)	173			173	185	0.0	0.0	0.002	A
	Exit	1	1		202			202	206	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	280	913	0.307	280	285	1.0	0.6	7.416	A
			2	2, 3	67	913	0.074	67	69	0.2	0.1	4.388	A
		2	1	(1, 2, 3, 4)	347			347	352	0.1	0.0	0.176	A
	Exit	1	1		210			210	204	0.0	0.0	0.000	A
4 - A42	Exit	1	1		242			242	251	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	257	955	0.269	256	254	0.5	0.4	5.660	A
			2	1, 4	111	955	0.116	110	117	0.1	0.2	4.711	A
		2	1	(1, 2, 3, 4)	367			367	371	0.0	0.0	0.065	A
	Exit	1	1		271			271	270	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	85	898	0.095	85	90	0.2	0.1	4.550	A
			2	1, 2	60	898	0.067	61	62	0.1	0.0	4.335	A
		2	1	(1, 2, 3, 4)	145			145	152	0.0	0.0	0.000	A
	Exit	1	1		174			174	173	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	243	928	0.262	242	242	0.6	0.5	6.483	A
			2	2, 3	58	928	0.062	58	59	0.1	0.1	4.053	A
		2	1	(1, 2, 3, 4)	301			301	301	0.0	0.0	0.102	A
	Exit	1	1		171			171	171	0.0	0.0	0.000	A
4 - A42	Exit	1	1		196			196	212	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	973	956	0.119	114	115	0.0	0.1	5.223	A
				3	125	31	973	956	0.130	125	131	0.0	0.2	5.769	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	126	31	973	956	0.132	125	118	0.0	0.2	4.571	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	-	-	-	114	116	0.0	0.0	0.034	A
				3	125	31	-	-	-	125	132	0.0	0.0	0.059	A
				4	126	31	-	-	-	126	118	0.0	0.0	0.034	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	978	900	0.029	26	29	0.0	0.1	4.871	A
				4	60	15	978	900	0.067	61	60	0.0	0.0	4.599	A
			2	1	56	14	978	900	0.062	56	59	0.0	0.0	4.197	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	56	14	-	-	-	56	60	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	-	-	-	26	29	0.0	0.0	0.000	A
				4	60	15	-	-	-	60	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	203	51	1001	923	0.220	200	202	0.0	0.5	6.090	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	991	917	0.039	35	33	0.0	0.1	9.245	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	54	13	1001	925	0.058	54	55	0.0	0.0	4.329	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	203	51	-	-	-	203	204	0.0	0.0	0.048	A
				2	54	13	-	-	-	54	55	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	34	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	148	37	973	951	0.156	148	142	0.1	0.3	5.788	A
				3	162	40	973	951	0.170	160	163	0.2	0.4	6.426	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	143	36	973	951	0.150	142	145	0.2	0.2	5.102	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	148	142	0.0	0.0	0.202	A
				3	162	40	-	-	-	162	164	0.0	0.0	0.203	A
				4	143	36	-	-	-	143	145	0.0	0.0	0.107	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	978	881	0.035	30	33	0.1	0.0	5.029	A
				4	71	18	978	881	0.081	71	76	0.0	0.1	4.986	A
			2	1	73	18	978	881	0.083	74	76	0.0	0.1	4.438	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	73	18	-	-	-	73	76	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	-	-	-	31	33	0.0	0.0	0.000	A
				4	71	18	-	-	-	71	76	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	240	60	1001	908	0.264	242	250	0.5	0.4	6.777	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	41	10	1001	909	0.046	41	38	0.1	0.1	9.384	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	17	1001	909	0.077	70	68	0.0	0.0	4.395	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	240	60	-	-	-	240	249	0.0	0.0	0.154	A
				2	70	17	-	-	-	70	68	0.0	0.0	0.060	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	41	10	-	-	-	41	38	0.0	0.0	0.109	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	162	41	973	948	0.171	164	170	0.3	0.2	6.100	A
				3	200	50	973	949	0.211	200	203	0.4	0.4	6.932	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	172	43	973	949	0.182	176	176	0.2	0.1	5.074	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	162	41	-	-	-	162	170	0.0	0.0	0.331	A
				3	201	50	-	-	-	200	203	0.0	0.0	0.386	A
				4	172	43	-	-	-	172	176	0.0	0.0	0.174	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	42	10	978	858	0.049	41	41	0.0	0.1	4.989	A
				4	88	22	978	859	0.102	87	91	0.1	0.2	4.925	A
			2	1	88	22	978	856	0.103	88	90	0.1	0.1	4.738	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	88	22	-	-	-	88	90	0.0	0.0	0.004	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	42	10	-	-	-	42	42	0.0	0.0	0.000	A
				4	88	22	-	-	-	88	91	0.0	0.0	0.009	A
3 - Top Brand	Entry	1	1	1	306	77	1001	888	0.345	306	303	0.4	0.7	7.762	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	47	12	1001	890	0.053	46	48	0.1	0.3	10.698	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	19	1001	890	0.087	78	81	0.0	0.1	4.505	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	306	77	-	-	-	306	305	0.0	0.0	0.328	A
				2	77	19	-	-	-	78	81	0.0	0.0	0.119	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	47	12	-	-	-	47	48	0.0	0.0	0.306	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	160	40	973	947	0.169	161	165	0.2	0.3	6.371	A
				3	193	48	973	947	0.204	192	198	0.4	0.4	6.776	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	177	44	973	947	0.187	177	177	0.1	0.3	5.221	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	160	40	-	-	-	160	165	0.0	0.0	0.283	A
				3	193	48	-	-	-	193	198	0.0	0.0	0.266	A
				4	177	44	-	-	-	177	178	0.0	0.0	0.167	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	978	859	0.045	38	40	0.1	0.1	5.213	A
				4	89	22	978	860	0.104	90	87	0.2	0.1	5.249	A
			2	1	84	21	978	859	0.098	84	89	0.1	0.1	4.531	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	84	21	-	-	-	84	88	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	-	-	-	39	40	0.0	0.0	0.008	A
				4	89	22	-	-	-	89	87	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	289	72	1001	888	0.326	287	298	0.7	0.8	8.007	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	1001	890	0.050	46	48	0.3	0.1	11.075	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	84	21	1001	888	0.094	82	82	0.1	0.2	4.614	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	289	72	-	-	-	289	298	0.0	0.0	0.301	A
				2	84	21	-	-	-	84	82	0.0	0.0	0.180	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	43	11	-	-	-	44	48	0.0	0.0	0.284	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	133	33	973	951	0.140	135	137	0.3	0.1	5.738	A
				3	175	44	973	952	0.184	175	168	0.4	0.3	6.184	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	135	34	973	952	0.142	135	138	0.3	0.1	4.739	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	133	33	-	-	-	133	136	0.0	0.0	0.138	A
				3	175	44	-	-	-	175	168	0.0	0.0	0.171	A
				4	135	34	-	-	-	135	137	0.0	0.0	0.085	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	881	0.040	35	36	0.1	0.1	5.202	A
				4	70	18	978	880	0.080	71	75	0.1	0.1	4.839	A
			2	1	67	17	978	881	0.076	67	74	0.1	0.1	4.629	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	67	17	-	-	-	67	74	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	36	0.0	0.0	0.000	A
				4	70	18	-	-	-	70	75	0.0	0.0	0.003	A
3 - Top Brand	Entry	1	1	1	245	61	1001	913	0.268	245	247	0.8	0.5	7.169	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	1001	910	0.039	36	38	0.1	0.1	10.047	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	1001	912	0.074	67	69	0.2	0.1	4.388	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	244	61	-	-	-	245	246	0.0	0.0	0.204	A
				2	67	17	-	-	-	67	69	0.0	0.0	0.097	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	38	0.0	0.0	0.139	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	115	29	973	955	0.121	116	114	0.1	0.1	5.360	A
				3	141	35	973	955	0.148	141	140	0.3	0.3	5.944	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	111	28	973	955	0.116	110	117	0.1	0.2	4.711	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	115	29	-	-	-	115	114	0.0	0.0	0.101	A
				3	141	35	-	-	-	141	140	0.0	0.0	0.057	A
				4	111	28	-	-	-	111	117	0.0	0.0	0.036	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	978	897	0.034	30	31	0.1	0.0	4.570	A
				4	55	14	978	899	0.061	55	59	0.1	0.1	4.540	A
			2	1	60	15	978	899	0.067	61	62	0.1	0.0	4.335	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	60	15	-	-	-	60	62	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	-	-	-	30	31	0.0	0.0	0.000	A
				4	55	14	-	-	-	55	59	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	211	53	1001	928	0.227	211	207	0.5	0.4	6.226	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	981	911	0.035	31	35	0.1	0.1	9.043	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	14	1001	927	0.063	58	59	0.1	0.1	4.053	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	211	53	-	-	-	211	207	0.0	0.0	0.111	A
				2	58	14	-	-	-	58	59	0.0	0.0	0.067	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	32	8	-	-	-	32	35	0.0	0.0	0.118	A

2038 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.28	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.28	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	457	100.000
2 - Gelscoe Lane		ONE HOUR	✓	213	100.000
3 - Top Brand		ONE HOUR	✓	221	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	90	191	176
	2 - Gelscoe Lane	74	0	64	75
	3 - Top Brand	165	48	0	8
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	26	32	39
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	1	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.35	7.45	1.3	A	419	629
2 - Gelscoe Lane	0.19	5.02	0.4	A	196	293
3 - Top Brand	0.22	5.06	0.3	A	203	304
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	343	86	38	1466	0.234	341	338	172	0.0	0.7	6.423	A
2 - Gelscoe Lane	153	38	273	1314	0.117	152	160	106	0.0	0.2	4.480	A
3 - Top Brand	165	41	240	1202	0.137	166	166	185	0.0	0.2	4.361	A
4 - A42			0					195				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	413	103	48	1382	0.299	412	415	210	0.7	0.8	6.482	A
2 - Gelscoe Lane	187	47	332	1298	0.144	188	196	128	0.2	0.3	4.653	A
3 - Top Brand	197	49	300	1151	0.171	199	202	220	0.2	0.2	4.777	A
4 - A42			0					241				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	510	127	52	1450	0.351	508	511	264	0.8	1.1	7.453	A
2 - Gelscoe Lane	237	59	410	1267	0.187	236	238	150	0.3	0.4	4.971	A
3 - Top Brand	240	60	359	1167	0.206	243	246	287	0.2	0.2	5.016	A
4 - A42			0					286				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	500	125	57	1412	0.354	496	511	265	1.1	1.3	7.362	A
2 - Gelscoe Lane	236	59	394	1255	0.188	234	244	158	0.4	0.4	5.017	A
3 - Top Brand	249	62	358	1122	0.222	250	252	271	0.2	0.2	5.063	A
4 - A42			0					285				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	409	102	39	1434	0.285	408	417	216	1.3	0.9	6.730	A
2 - Gelscoe Lane	192	48	331	1322	0.145	191	200	116	0.4	0.2	4.774	A
3 - Top Brand	198	49	291	1151	0.172	196	203	231	0.2	0.3	4.715	A
4 - A42			0					232				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	341	85	37	1392	0.245	338	354	186	0.9	0.7	6.312	A
2 - Gelscoe Lane	169	42	274	1322	0.128	170	171	101	0.2	0.2	4.555	A
3 - Top Brand	166	42	256	1210	0.138	168	173	187	0.3	0.2	4.552	A
4 - A42			0					201				

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	210	961	0.219	208	205	0.0	0.5	6.147	A
			2	1, 4	132	961	0.138	133	134	0.0	0.2	6.178	A
		2	1	(1, 2, 3, 4)	343			343	341	0.0	0.0	0.264	A
	Exit	1	1		172			172	181	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	101	891	0.114	101	104	0.0	0.1	4.597	A
			2	1, 2	52	891	0.058	51	57	0.0	0.1	4.268	A
		2	1	(1, 2, 3, 4)	153			153	161	0.0	0.0	0.000	A
	Exit	1	1		106			106	102	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	127	924	0.138	128	130	0.0	0.2	4.491	A
			2	2, 3	38	924	0.041	38	36	0.0	0.0	3.892	A
		2	1	(1, 2, 3, 4)	165			165	167	0.0	0.0	0.000	A
	Exit	1	1		185			185	185	0.0	0.0	0.000	A
4 - A42	Exit	1	1		195			195	197	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	249	958	0.260	248	252	0.5	0.5	6.248	A
			2	1, 4	164	958	0.171	164	163	0.2	0.4	6.510	A
		2	1	(1, 2, 3, 4)	413			413	415	0.0	0.0	0.137	A
	Exit	1	1		210			210	218	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	123	873	0.141	123	129	0.1	0.2	4.732	A
			2	1, 2	65	873	0.074	65	67	0.1	0.1	4.501	A
		2	1	(1, 2, 3, 4)	187			187	196	0.0	0.0	0.000	A
	Exit	1	1		128			128	126	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	150	904	0.165	151	158	0.2	0.2	4.980	A
			2	2, 3	48	904	0.053	48	44	0.0	0.1	4.057	A
		2	1	(1, 2, 3, 4)	197			197	202	0.0	0.0	0.000	A
	Exit	1	1		220			220	229	0.0	0.0	0.000	A
4 - A42	Exit	1	1		241			241	241	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	314	956	0.328	310	316	0.5	0.7	7.233	A
			2	1, 4	194	956	0.203	197	195	0.4	0.3	6.499	A
		2	1	(1, 2, 3, 4)	510			509	512	0.0	0.1	0.487	A
	Exit	1	1		264			264	267	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	155	848	0.183	155	154	0.2	0.2	5.065	A
			2	1, 2	82	848	0.097	81	84	0.1	0.2	4.801	A
		2	1	(1, 2, 3, 4)	237			237	239	0.0	0.0	0.000	A
	Exit	1	1		150			150	155	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	2	2, 3	52	885	0.059	52	54	0.1	0.1	4.208	A
		2	1	(1, 2, 3, 4)	240			240	246	0.0	0.0	0.003	A
	Exit	1	1		287			287	287	0.0	0.0	0.000	A
4 - A42	Exit	1	1		286			286	285	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	304	955	0.318	303	310	0.7	0.8	7.035	A
			2	1, 4	196	955	0.205	193	201	0.3	0.6	6.839	A
		2	1	(1, 2, 3, 4)	500			500	512	0.1	0.0	0.404	A
	Exit	1	1		265			265	272	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	154	853	0.181	152	159	0.2	0.3	5.130	A
			2	1, 2	82	853	0.096	82	85	0.2	0.1	4.803	A
		2	1	(1, 2, 3, 4)	236			236	244	0.0	0.0	0.000	A
	Exit	1	1		158			158	156	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	192	886	0.217	193	197	0.2	0.2	5.253	A
			2	2, 3	57	886	0.064	57	56	0.1	0.1	4.389	A
		2	1	(1, 2, 3, 4)	249			249	252	0.0	0.0	0.002	A
	Exit	1	1		271			271	285	0.0	0.0	0.000	A
4 - A42	Exit	1	1		285			285	295	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	254	961	0.264	252	260	0.8	0.6	6.602	A
			2	1, 4	155	961	0.161	156	158	0.6	0.3	6.092	A
		2	1	(1, 2, 3, 4)	409			409	416	0.0	0.0	0.304	A
	Exit	1	1		216			216	222	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	125	873	0.143	124	129	0.3	0.2	4.911	A
			2	1, 2	67	873	0.077	67	71	0.1	0.0	4.526	A
		2	1	(1, 2, 3, 4)	192			192	199	0.0	0.0	0.000	A
	Exit	1	1		116			116	127	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	159	907	0.175	157	159	0.2	0.3	4.928	A
			2	2, 3	39	907	0.043	39	44	0.1	0.0	3.952	A
		2	1	(1, 2, 3, 4)	198			198	203	0.0	0.0	0.000	A
	Exit	1	1		231			231	237	0.0	0.0	0.000	A
4 - A42	Exit	1	1		232			232	235	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	203	961	0.212	202	215	0.6	0.4	6.281	A
			2	1, 4	137	961	0.142	136	140	0.3	0.3	6.015	A
		2	1	(1, 2, 3, 4)	341			340	354	0.0	0.0	0.141	A
	Exit	1	1		186			186	188	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	109	891	0.122	110	112	0.2	0.1	4.660	A
			2	1, 2	60	891	0.067	60	59	0.0	0.0	4.356	A
		2	1	(1, 2, 3, 4)	169			169	171	0.0	0.0	0.000	A
	Exit	1	1		101			101	105	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	129	918	0.141	131	136	0.3	0.1	4.719	A
			2	2, 3	37	918	0.040	37	37	0.0	0.0	3.951	A
		2	1	(1, 2, 3, 4)	166			166	172	0.0	0.0	0.000	A
	Exit	1	1		187			187	198	0.0	0.0	0.000	A
4 - A42	Exit	1	1		201			201	206	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	973	961	0.072	68	66	0.0	0.2	6.058	A
				3	141	35	973	961	0.146	140	138	0.0	0.3	6.191	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	132	33	973	961	0.138	133	134	0.0	0.2	6.178	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	67	0.0	0.0	0.158	A
				3	141	35	-	-	-	141	139	0.0	0.0	0.257	A
				4	132	33	-	-	-	132	134	0.0	0.0	0.328	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	978	891	0.051	45	46	0.0	0.0	4.599	A
				4	56	14	978	890	0.063	56	57	0.0	0.1	4.595	A
			2	1	52	13	978	891	0.058	51	57	0.0	0.1	4.268	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	52	13	-	-	-	52	57	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	45	11	-	-	-	45	47	0.0	0.0	0.000	A
				4	56	14	-	-	-	56	58	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	120	30	1001	923	0.130	121	124	0.0	0.1	4.495	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	743	688	0.010	7	6	0.0	0.0	4.421	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	1001	923	0.041	38	36	0.0	0.0	3.892	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	120	30	-	-	-	120	125	0.0	0.0	0.000	A
				2	38	9	-	-	-	38	36	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	6	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	973	958	0.083	80	82	0.2	0.1	5.979	A
				3	170	42	973	958	0.177	167	171	0.3	0.4	6.378	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	164	41	973	958	0.171	164	163	0.2	0.4	6.510	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	-	-	-	79	81	0.0	0.0	0.142	A
				3	170	42	-	-	-	170	171	0.0	0.0	0.159	A
				4	164	41	-	-	-	164	163	0.0	0.0	0.110	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	978	875	0.060	52	58	0.0	0.1	4.617	A
				4	70	17	978	873	0.080	71	71	0.1	0.1	4.827	A
			2	1	65	16	978	874	0.074	65	67	0.1	0.1	4.501	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	65	16	-	-	-	65	67	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	-	-	-	53	58	0.0	0.0	0.000	A
				4	70	17	-	-	-	70	70	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	143	36	1001	906	0.158	145	151	0.1	0.1	4.992	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	2	882	798	0.008	6	7	0.0	0.0	4.751	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1001	904	0.053	48	44	0.0	0.1	4.057	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	143	36	-	-	-	143	151	0.0	0.0	0.000	A
				2	48	12	-	-	-	48	44	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	2	-	-	-	6	7	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	99	25	973	956	0.103	98	101	0.1	0.3	7.138	A
				3	215	54	973	957	0.225	213	215	0.4	0.4	7.279	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	194	49	973	956	0.203	197	195	0.4	0.3	6.499	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	99	25	-	-	-	99	102	0.0	0.0	0.570	A
				3	216	54	-	-	-	215	215	0.0	0.0	0.485	A
				4	194	49	-	-	-	194	195	0.0	0.0	0.442	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	18	978	849	0.087	74	72	0.1	0.1	4.918	A
				4	81	20	978	850	0.095	81	82	0.1	0.2	5.194	A
			2	1	82	21	978	849	0.097	81	84	0.1	0.2	4.801	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	82	21	-	-	-	82	84	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	18	-	-	-	74	72	0.0	0.0	0.000	A
				4	81	20	-	-	-	81	82	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	180	45	1001	885	0.203	183	183	0.1	0.2	5.253	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	922	819	0.010	8	9	0.0	0.0	5.023	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1001	886	0.059	52	54	0.1	0.1	4.208	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	180	45	-	-	-	180	183	0.0	0.0	0.001	A
				2	52	13	-	-	-	52	54	0.0	0.0	0.003	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	-	-	-	8	8	0.0	0.0	0.026	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	25	973	956	0.107	102	100	0.3	0.2	6.718	A
				3	202	51	973	955	0.212	201	210	0.4	0.5	7.193	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	196	49	973	955	0.205	193	201	0.3	0.6	6.839	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	25	-	-	-	102	100	0.0	0.0	0.426	A
				3	202	51	-	-	-	202	210	0.0	0.0	0.395	A
				4	196	49	-	-	-	196	202	0.0	0.0	0.400	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	18	978	851	0.083	70	75	0.1	0.1	5.013	A
				4	84	21	978	852	0.099	83	85	0.2	0.2	5.234	A
			2	1	82	20	978	852	0.096	82	85	0.2	0.1	4.803	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	82	20	-	-	-	82	85	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	70	18	-	-	-	70	75	0.0	0.0	0.000	A
				4	84	21	-	-	-	84	85	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	183	46	1001	886	0.206	184	187	0.2	0.2	5.242	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	892	788	0.012	10	9	0.0	0.0	5.473	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1001	886	0.064	57	56	0.1	0.1	4.389	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	183	46	-	-	-	183	187	0.0	0.0	0.003	A
				2	57	14	-	-	-	57	56	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	-	-	-	9	9	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	973	961	0.081	77	82	0.2	0.2	6.676	A
				3	175	44	973	961	0.183	175	177	0.5	0.4	6.566	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	155	39	973	961	0.161	156	158	0.6	0.3	6.092	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	-	-	-	78	82	0.0	0.0	0.363	A
				3	176	44	-	-	-	175	177	0.0	0.0	0.310	A
				4	155	39	-	-	-	155	157	0.0	0.0	0.264	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	978	871	0.064	56	60	0.1	0.1	4.995	A
				4	69	17	978	871	0.079	68	69	0.2	0.1	4.839	A
			2	1	67	17	978	872	0.077	67	71	0.1	0.0	4.526	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	67	17	-	-	-	67	71	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	-	-	-	56	59	0.0	0.0	0.000	A
				4	69	17	-	-	-	69	69	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	150	38	1001	906	0.166	149	151	0.2	0.2	4.913	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	922	834	0.010	8	8	0.0	0.0	5.196	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1001	906	0.043	39	44	0.1	0.0	3.952	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	150	38	-	-	-	150	151	0.0	0.0	0.000	A
				2	39	10	-	-	-	39	44	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	-	-	-	9	8	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	973	961	0.068	64	68	0.2	0.1	6.180	A
				3	138	35	973	962	0.144	138	146	0.4	0.2	6.330	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	137	34	973	961	0.142	136	140	0.3	0.3	6.015	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	-	-	-	65	68	0.0	0.0	0.140	A
				3	138	35	-	-	-	138	146	0.0	0.0	0.164	A
				4	137	34	-	-	-	137	140	0.0	0.0	0.115	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	978	889	0.055	49	52	0.1	0.1	4.650	A
				4	60	15	978	890	0.068	60	60	0.1	0.1	4.668	A
			2	1	60	15	978	889	0.067	60	59	0.0	0.0	4.356	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	60	15	-	-	-	60	59	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	-	-	-	49	52	0.0	0.0	0.000	A
				4	60	15	-	-	-	60	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	124	31	1001	920	0.135	126	129	0.2	0.1	4.727	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	753	692	0.008	5	6	0.0	0.0	4.542	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	37	9	1001	920	0.040	37	37	0.0	0.0	3.951	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	124	31	-	-	-	124	129	0.0	0.0	0.000	A
				2	37	9	-	-	-	37	37	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	-	-	-	5	6	0.0	0.0	0.000	A

2038 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	626	100.000
2 - Gelscoe Lane		ONE HOUR	✓	203	100.000
3 - Top Brand		ONE HOUR	✓	430	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	292	175	159
	2 - Gelscoe Lane	93	0	33	77
	3 - Top Brand	274	113	0	43
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	16	7
	2 - Gelscoe Lane	0	0	3	3
	3 - Top Brand	13	0	0	87
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.57	8.76	1.8	A	576	864
2 - Gelscoe Lane	0.15	5.06	0.3	A	183	274
3 - Top Brand	0.38	7.81	1.0	A	394	591
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	478	120	85	1237	0.387	478	464	288	0.0	0.8	5.855	A
2 - Gelscoe Lane	148	37	260	1505	0.098	146	150	303	0.0	0.3	4.339	A
3 - Top Brand	335	84	240	1239	0.270	338	321	167	0.0	0.4	5.812	A
4 - A42			0					205				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	559	140	104	1272	0.439	559	564	326	0.8	1.0	6.988	A
2 - Gelscoe Lane	175	44	292	1422	0.123	175	185	371	0.3	0.3	4.694	A
3 - Top Brand	384	96	286	1295	0.297	390	389	180	0.4	0.5	6.268	A
4 - A42			0					247				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	679	170	124	1193	0.569	679	689	391	1.0	1.7	8.763	A
2 - Gelscoe Lane	213	53	357	1428	0.149	212	229	446	0.3	0.3	4.900	A
3 - Top Brand	468	117	350	1230	0.381	467	481	218	0.5	1.0	7.348	A
4 - A42			0					304				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	694	173	124	1242	0.558	692	702	392	1.7	1.8	8.623	A
2 - Gelscoe Lane	218	55	365	1430	0.153	217	230	451	0.3	0.3	5.057	A
3 - Top Brand	469	117	356	1239	0.379	467	488	227	1.0	0.9	7.809	A
4 - A42			0					306				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	576	144	97	1235	0.466	576	573	334	1.8	1.1	7.019	A
2 - Gelscoe Lane	184	46	307	1479	0.125	184	186	365	0.3	0.2	4.767	A
3 - Top Brand	391	98	304	1249	0.313	386	395	187	0.9	1.0	6.509	A
4 - A42			0					259				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	469	117	92	1268	0.370	470	470	268	1.1	0.6	6.132	A
2 - Gelscoe Lane	158	39	256	1435	0.110	157	161	307	0.2	0.2	4.578	A
3 - Top Brand	318	79	261	1287	0.247	319	334	152	1.0	0.5	5.879	A
4 - A42			0					219				

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	361	946	0.382	361	348	0.0	0.7	6.006	A
			2	1, 4	117	946	0.124	117	116	0.0	0.1	4.680	A
		2	1	(1, 2, 3, 4)	478			478	467	0.0	0.0	0.178	A
	Exit	1	1		288			288	275	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	77	895	0.086	76	81	0.0	0.2	4.396	A
			2	1, 2	71	895	0.080	70	69	0.0	0.1	4.274	A
		2	1	(1, 2, 3, 4)	148			148	151	0.0	0.0	0.000	A
	Exit	1	1		303			303	300	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	250	924	0.270	253	237	0.0	0.4	6.321	A
			2	2, 3	85	924	0.092	85	84	0.0	0.1	4.506	A
		2	1	(1, 2, 3, 4)	335			335	323	0.0	0.0	0.029	A
	Exit	1	1		167			167	155	0.0	0.0	0.000	A
4 - A42	Exit	1	1		205			205	204	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	421	940	0.447	420	422	0.7	0.8	7.150	A
			2	1, 4	139	940	0.147	139	141	0.1	0.2	4.692	A
		2	1	(1, 2, 3, 4)	559			559	564	0.0	0.0	0.445	A
	Exit	1	1		326			326	330	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	95	885	0.107	94	99	0.2	0.1	4.665	A
			2	1, 2	81	885	0.091	80	86	0.1	0.1	4.726	A
		2	1	(1, 2, 3, 4)	175			175	185	0.0	0.0	0.000	A
	Exit	1	1		371			371	368	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	283	909	0.312	286	285	0.4	0.4	6.723	A
			2	2, 3	102	909	0.112	104	103	0.1	0.1	4.451	A
		2	1	(1, 2, 3, 4)	384			385	389	0.0	0.0	0.230	A
	Exit	1	1		180			180	187	0.0	0.0	0.000	A
4 - A42	Exit	1	1		247			247	252	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	502	934	0.537	503	514	0.8	1.1	8.264	A
			2	1, 4	176	934	0.189	176	175	0.2	0.3	5.205	A
		2	1	(1, 2, 3, 4)	679			678	691	0.0	0.3	1.256	A
	Exit	1	1		391			391	411	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	113	865	0.131	112	121	0.1	0.2	5.118	A
			2	1, 2	99	865	0.115	100	108	0.1	0.1	4.637	A
		2	1	(1, 2, 3, 4)	213			213	229	0.0	0.0	0.010	A
	Exit	1	1		446			446	452	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	345	888	0.388	343	352	0.4	0.9	8.072	A
			2	2, 3	123	888	0.139	124	128	0.1	0.1	4.849	A
		2	1	(1, 2, 3, 4)	468			468	483	0.0	0.0	0.252	A
	Exit	1	1		218			218	229	0.0	0.0	0.000	A
4 - A42	Exit	1	1		304			304	307	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	516	934	0.553	516	521	1.1	1.3	8.091	A
			2	1, 4	177	934	0.189	177	181	0.3	0.2	5.001	A
		2	1	(1, 2, 3, 4)	694			693	702	0.3	0.2	1.322	A
	Exit	1	1		392			392	420	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	118	862	0.136	117	122	0.2	0.2	5.092	A
			2	1, 2	101	862	0.117	100	107	0.1	0.2	5.018	A
		2	1	(1, 2, 3, 4)	218			218	230	0.0	0.0	0.000	A
	Exit	1	1		451			451	453	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	344	887	0.388	343	363	0.9	0.6	8.548	A
			2	2, 3	125	887	0.141	124	125	0.1	0.3	4.771	A
		2	1	(1, 2, 3, 4)	469			469	487	0.0	0.0	0.370	A
	Exit	1	1		227			227	230	0.0	0.0	0.000	A
4 - A42	Exit	1	1		306			306	316	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	428	942	0.454	428	429	1.3	0.8	7.099	A
			2	1, 4	148	942	0.157	148	144	0.2	0.2	5.052	A
		2	1	(1, 2, 3, 4)	576			576	571	0.2	0.1	0.435	A
	Exit	1	1		334			334	339	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	99	880	0.112	98	99	0.2	0.2	4.752	A
			2	1, 2	85	880	0.097	86	86	0.2	0.0	4.785	A
		2	1	(1, 2, 3, 4)	184			184	185	0.0	0.0	0.000	A
	Exit	1	1		365			365	370	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	293	903	0.324	289	293	0.6	0.8	7.192	A
			2	2, 3	98	903	0.108	97	102	0.3	0.2	4.463	A
		2	1	(1, 2, 3, 4)	391			391	396	0.0	0.0	0.117	A
	Exit	1	1		187			187	191	0.0	0.0	0.000	A
4 - A42	Exit	1	1		259			259	254	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	341	944	0.361	341	353	0.8	0.5	6.265	A
			2	1, 4	128	944	0.135	129	117	0.2	0.1	4.766	A
		2	1	(1, 2, 3, 4)	469			469	469	0.1	0.0	0.247	A
	Exit	1	1		268			268	281	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	87	897	0.098	87	88	0.2	0.2	4.686	A
			2	1, 2	70	897	0.078	70	74	0.0	0.1	4.456	A
		2	1	(1, 2, 3, 4)	158			158	161	0.0	0.0	0.000	A
	Exit	1	1		307			307	316	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	227	917	0.247	227	241	0.8	0.4	6.468	A
			2	2, 3	92	917	0.100	92	93	0.2	0.1	4.268	A
		2	1	(1, 2, 3, 4)	318			318	332	0.0	0.0	0.108	A
	Exit	1	1		152			152	156	0.0	0.0	0.000	A
4 - A42	Exit	1	1		219			219	213	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	217	54	973	946	0.229	218	216	0.0	0.3	5.787	A
				3	145	36	973	946	0.153	143	132	0.0	0.4	6.423	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	117	29	973	946	0.124	117	116	0.0	0.1	4.680	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	217	54	-	-	-	217	218	0.0	0.0	0.189	A
				3	145	36	-	-	-	145	133	0.0	0.0	0.200	A
				4	117	29	-	-	-	117	116	0.0	0.0	0.132	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	978	897	0.026	23	24	0.0	0.0	4.284	A
				4	53	13	978	896	0.060	53	57	0.0	0.1	4.442	A
			2	1	71	18	978	897	0.079	70	69	0.0	0.1	4.274	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	71	18	-	-	-	71	70	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	-	-	-	24	24	0.0	0.0	0.000	A
				4	53	13	-	-	-	53	58	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	217	54	1001	923	0.235	218	206	0.0	0.3	5.998	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	988	910	0.036	34	31	0.0	0.1	9.825	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	85	21	1001	922	0.092	85	84	0.0	0.1	4.506	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	217	54	-	-	-	217	207	0.0	0.0	0.037	A
				2	85	21	-	-	-	85	84	0.0	0.0	0.007	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	33	8	-	-	-	33	31	0.0	0.0	0.048	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	266	67	973	940	0.283	267	265	0.3	0.4	7.019	A
				3	154	39	973	940	0.164	153	157	0.4	0.4	7.403	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	139	35	973	939	0.147	139	141	0.1	0.2	4.692	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	266	67	-	-	-	266	265	0.0	0.0	0.470	A
				3	154	39	-	-	-	154	157	0.0	0.0	0.535	A
				4	139	35	-	-	-	139	142	0.0	0.0	0.303	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	978	888	0.031	27	30	0.0	0.0	4.676	A
				4	67	17	978	887	0.076	67	70	0.1	0.1	4.661	A
			2	1	81	20	978	885	0.091	80	86	0.1	0.1	4.726	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	81	20	-	-	-	81	86	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	-	-	-	27	29	0.0	0.0	0.000	A
				4	67	17	-	-	-	67	70	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	243	61	1001	909	0.268	245	244	0.3	0.4	6.422	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	1001	910	0.044	41	41	0.1	0.0	9.707	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	1001	909	0.112	104	103	0.1	0.1	4.451	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	243	61	-	-	-	243	245	0.0	0.0	0.281	A
				2	102	25	-	-	-	102	103	0.0	0.0	0.112	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	41	0.0	0.0	0.283	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	321	80	973	934	0.344	322	324	0.4	0.7	8.115	A
				3	181	45	973	933	0.194	181	190	0.4	0.4	8.558	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	176	44	973	935	0.189	176	175	0.2	0.3	5.205	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	321	80	-	-	-	321	325	0.0	0.1	1.310	A
				3	182	45	-	-	-	181	191	0.0	0.1	1.452	A
				4	176	44	-	-	-	176	175	0.0	0.0	0.950	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	978	864	0.043	37	38	0.0	0.1	5.104	A
				4	76	19	978	864	0.088	75	83	0.1	0.2	5.125	A
			2	1	99	25	978	865	0.115	100	108	0.1	0.1	4.637	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	99	25	-	-	-	99	107	0.0	0.0	0.009	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	-	-	-	37	39	0.0	0.0	0.000	A
				4	76	19	-	-	-	76	83	0.0	0.0	0.018	A
3 - Top Brand	Entry	1	1	1	293	73	1001	889	0.330	291	303	0.4	0.8	7.802	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	1001	885	0.058	52	49	0.0	0.1	10.848	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	1001	887	0.139	124	128	0.1	0.1	4.849	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	293	73	-	-	-	293	305	0.0	0.0	0.279	A
				2	123	31	-	-	-	123	129	0.0	0.0	0.178	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	-	-	-	52	49	0.0	0.0	0.334	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	326	82	973	935	0.349	327	328	0.7	0.7	7.861	A
				3	190	48	973	934	0.204	189	193	0.4	0.6	8.546	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	177	44	973	934	0.189	177	181	0.3	0.2	5.001	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	327	82	-	-	-	326	328	0.1	0.1	1.494	A
				3	190	48	-	-	-	190	194	0.1	0.0	1.314	A
				4	177	44	-	-	-	177	180	0.0	0.0	0.993	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	38	9	978	863	0.044	37	37	0.1	0.1	5.061	A
				4	80	20	978	864	0.093	80	85	0.2	0.1	5.106	A
			2	1	101	25	978	861	0.117	100	107	0.1	0.2	5.018	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	101	25	-	-	-	101	108	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	38	9	-	-	-	38	37	0.0	0.0	0.000	A
				4	80	20	-	-	-	80	85	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	294	73	1001	886	0.332	293	313	0.8	0.6	8.302	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	13	1001	887	0.057	50	51	0.1	0.0	11.050	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	125	31	1001	886	0.141	124	125	0.1	0.3	4.771	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	294	73	-	-	-	294	312	0.0	0.0	0.419	A
				2	125	31	-	-	-	125	125	0.0	0.0	0.232	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	13	-	-	-	50	50	0.0	0.0	0.514	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	270	68	973	942	0.287	269	268	0.7	0.5	6.920	A
				3	158	40	973	942	0.168	159	161	0.6	0.3	7.447	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	148	37	973	942	0.157	148	144	0.2	0.2	5.052	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	270	68	-	-	-	270	267	0.1	0.1	0.493	A
				3	158	40	-	-	-	158	160	0.0	0.0	0.462	A
				4	148	37	-	-	-	148	143	0.0	0.0	0.292	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	978	880	0.033	28	30	0.1	0.1	4.683	A
				4	70	18	978	879	0.080	70	70	0.1	0.1	4.781	A
			2	1	85	21	978	880	0.097	86	86	0.2	0.0	4.785	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	85	21	-	-	-	85	86	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	-	-	-	29	30	0.0	0.0	0.000	A
				4	70	18	-	-	-	70	69	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	250	62	1001	902	0.277	247	253	0.6	0.7	6.882	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	1001	906	0.047	41	41	0.0	0.1	10.365	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	98	24	1001	903	0.108	97	102	0.3	0.2	4.463	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	250	62	-	-	-	250	253	0.0	0.0	0.142	A
				2	98	24	-	-	-	98	102	0.0	0.0	0.069	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	-	-	-	42	41	0.0	0.0	0.087	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	215	54	973	944	0.228	215	223	0.5	0.4	5.944	A
				3	126	32	973	944	0.134	126	130	0.3	0.2	6.905	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	128	32	973	945	0.135	129	117	0.2	0.1	4.766	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	215	54	-	-	-	215	222	0.1	0.0	0.286	A
				3	126	32	-	-	-	126	130	0.0	0.0	0.282	A
				4	128	32	-	-	-	128	117	0.0	0.0	0.134	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	978	899	0.029	26	26	0.1	0.1	4.851	A
				4	61	15	978	898	0.068	61	62	0.1	0.1	4.617	A
			2	1	70	18	978	899	0.078	70	74	0.0	0.1	4.456	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	70	18	-	-	-	70	74	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	-	-	-	26	26	0.0	0.0	0.000	A
				4	61	15	-	-	-	61	62	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	198	49	1001	917	0.215	198	207	0.7	0.3	6.193	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	29	7	1001	921	0.031	29	34	0.1	0.1	9.250	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	1001	918	0.100	92	93	0.2	0.1	4.268	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	198	49	-	-	-	198	206	0.0	0.0	0.114	A
				2	92	23	-	-	-	92	93	0.0	0.0	0.081	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	29	7	-	-	-	29	33	0.0	0.0	0.187	A

2038 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.90	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	496	100.000
2 - Gelscoe Lane		ONE HOUR	✓	371	100.000
3 - Top Brand		ONE HOUR	✓	208	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	86	193	217
	2 - Gelscoe Lane	99	0	113	159
	3 - Top Brand	147	51	0	10
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	26	32	34
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	1	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.39	7.68	1.5	A	453	680
2 - Gelscoe Lane	0.36	6.70	1.0	A	342	513
3 - Top Brand	0.23	5.42	0.5	A	191	287
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	388	97	38	1474	0.263	386	385	177	0.0	0.8	6.256	A
2 - Gelscoe Lane	282	70	327	1224	0.230	281	275	97	0.0	0.4	5.288	A
3 - Top Brand	151	38	375	1164	0.129	151	158	233	0.0	0.2	4.642	A
4 - A42			0					311				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	426	107	45	1410	0.302	430	456	213	0.8	0.8	7.052	A
2 - Gelscoe Lane	328	82	356	1201	0.273	330	343	119	0.4	0.4	5.413	A
3 - Top Brand	185	46	424	1112	0.166	183	193	261	0.2	0.3	4.882	A
4 - A42			0					350				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	530	133	60	1441	0.368	533	548	264	0.8	0.9	7.682	A
2 - Gelscoe Lane	410	102	454	1153	0.355	407	418	140	0.4	1.0	6.698	A
3 - Top Brand	230	57	530	1139	0.202	227	235	331	0.3	0.5	5.415	A
4 - A42			0					432				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	551	138	62	1417	0.389	550	545	272	0.9	1.5	7.430	A
2 - Gelscoe Lane	409	102	459	1160	0.353	412	416	153	1.0	0.5	6.566	A
3 - Top Brand	240	60	545	1055	0.228	243	238	327	0.5	0.3	5.364	A
4 - A42			0					454				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	458	114	45	1405	0.326	455	460	219	1.5	1.1	7.057	A
2 - Gelscoe Lane	332	83	387	1087	0.305	332	344	114	0.5	0.3	5.463	A
3 - Top Brand	184	46	425	1201	0.153	182	186	294	0.3	0.5	5.237	A
4 - A42			0					342				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	40	1431	0.257	363	372	185	1.1	0.8	6.578	A
2 - Gelscoe Lane	290	73	305	1152	0.252	291	292	99	0.3	0.4	5.102	A
3 - Top Brand	157	39	357	1180	0.133	157	160	237	0.5	0.2	4.890	A
4 - A42			0					290				

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	206	961	0.214	207	215	0.0	0.5	6.110	A
			2	1, 4	182	961	0.189	179	170	0.0	0.3	6.233	A
		2	1	(1, 2, 3, 4)	388			388	388	0.0	0.0	0.093	A
	Exit	1	1		177			177	184	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	211	874	0.241	210	203	0.0	0.3	5.421	A
			2	1, 2	71	874	0.081	71	72	0.0	0.0	4.910	A
		2	1	(1, 2, 3, 4)	282			282	277	0.0	0.0	0.001	A
	Exit	1	1		97			97	102	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	113	881	0.128	113	120	0.0	0.1	4.784	A
			2	2, 3	38	881	0.043	38	39	0.0	0.0	4.207	A
		2	1	(1, 2, 3, 4)	151			151	159	0.0	0.0	0.000	A
	Exit	1	1		233			233	234	0.0	0.0	0.000	A
4 - A42	Exit	1	1		311			311	299	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	228	959	0.238	229	251	0.5	0.4	6.890	A
			2	1, 4	198	959	0.206	200	205	0.3	0.4	6.707	A
		2	1	(1, 2, 3, 4)	426			426	456	0.0	0.0	0.242	A
	Exit	1	1		213			213	228	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	245	865	0.284	246	253	0.3	0.3	5.731	A
			2	1, 2	83	865	0.096	84	90	0.0	0.1	4.511	A
		2	1	(1, 2, 3, 4)	328			328	343	0.0	0.0	0.001	A
	Exit	1	1		119			119	127	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	139	865	0.161	138	145	0.1	0.2	5.014	A
			2	2, 3	46	865	0.053	45	48	0.0	0.1	4.483	A
		2	1	(1, 2, 3, 4)	185			185	194	0.0	0.0	0.000	A
	Exit	1	1		261			261	278	0.0	0.0	0.000	A
4 - A42	Exit	1	1		350			350	360	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	288	954	0.301	291	300	0.4	0.4	7.331	A
			2	1, 4	243	954	0.255	243	248	0.4	0.5	6.953	A
		2	1	(1, 2, 3, 4)	530			531	549	0.0	0.0	0.520	A
	Exit	1	1		264			264	278	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	299	834	0.358	299	304	0.3	0.8	7.165	A
			2	1, 2	111	834	0.133	109	114	0.1	0.2	4.967	A
		2	1	(1, 2, 3, 4)	410			410	420	0.0	0.0	0.131	A
	Exit	1	1		140			140	149	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	170	831	0.204	167	176	0.2	0.4	5.720	A
			2	2, 3	60	831	0.072	60	58	0.1	0.1	4.497	A
		2	1	(1, 2, 3, 4)	230			230	235	0.0	0.0	0.000	A
	Exit	1	1		331			331	334	0.0	0.0	0.000	A
4 - A42	Exit	1	1		432			432	439	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	298	954	0.313	298	308	0.4	0.9	7.227	A
			2	1, 4	253	954	0.265	253	237	0.5	0.5	6.301	A
		2	1	(1, 2, 3, 4)	551			551	547	0.0	0.1	0.591	A
	Exit	1	1		272			272	279	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	306	832	0.368	309	305	0.8	0.4	6.987	A
			2	1, 2	103	832	0.124	104	111	0.2	0.1	5.104	A
		2	1	(1, 2, 3, 4)	409			409	414	0.0	0.0	0.083	A
	Exit	1	1		153			153	154	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	179	826	0.217	181	179	0.4	0.2	5.553	A
			2	2, 3	61	826	0.074	62	59	0.1	0.1	4.791	A
		2	1	(1, 2, 3, 4)	240			240	237	0.0	0.0	0.000	A
	Exit	1	1		327			327	338	0.0	0.0	0.000	A
4 - A42	Exit	1	1		454			454	429	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	256	959	0.267	255	262	0.9	0.5	6.794	A
			2	1, 4	200	959	0.208	200	198	0.5	0.5	6.617	A
		2	1	(1, 2, 3, 4)	458			457	459	0.1	0.0	0.344	A
	Exit	1	1		219			219	226	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	242	855	0.282	242	251	0.4	0.2	5.732	A
			2	1, 2	91	855	0.106	91	93	0.1	0.1	4.730	A
		2	1	(1, 2, 3, 4)	332			332	343	0.0	0.0	0.002	A
	Exit	1	1		114			114	121	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	140	864	0.162	137	142	0.2	0.4	5.372	A
			2	2, 3	45	864	0.051	45	44	0.1	0.0	4.802	A
		2	1	(1, 2, 3, 4)	184			184	187	0.0	0.0	0.000	A
	Exit	1	1		294			294	290	0.0	0.0	0.000	A
4 - A42	Exit	1	1		342			342	353	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	207	961	0.215	204	205	0.5	0.5	6.435	A
			2	1, 4	160	961	0.166	160	167	0.5	0.3	6.294	A
		2	1	(1, 2, 3, 4)	367			367	371	0.0	0.0	0.204	A
	Exit	1	1		185			185	189	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	218	881	0.247	216	216	0.2	0.3	5.435	A
			2	1, 2	73	881	0.083	74	77	0.1	0.1	4.164	A
		2	1	(1, 2, 3, 4)	290			290	293	0.0	0.0	0.000	A
	Exit	1	1		99			99	104	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	119	886	0.134	117	119	0.4	0.2	5.115	A
			2	2, 3	38	886	0.043	40	41	0.0	0.0	4.250	A
		2	1	(1, 2, 3, 4)	157			157	159	0.0	0.0	0.000	A
	Exit	1	1		237			237	233	0.0	0.0	0.000	A
4 - A42	Exit	1	1		290			290	299	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	973	961	0.061	59	63	0.0	0.1	6.103	A
				3	147	37	973	961	0.153	148	152	0.0	0.4	6.114	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	182	45	973	961	0.189	179	170	0.0	0.3	6.233	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	64	0.0	0.0	0.100	A
				3	147	37	-	-	-	147	153	0.0	0.0	0.107	A
				4	182	45	-	-	-	182	171	0.0	0.0	0.077	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	85	21	978	877	0.097	85	82	0.0	0.1	5.578	A
				4	126	31	978	876	0.143	125	121	0.0	0.2	5.315	A
			2	1	71	18	978	877	0.081	71	72	0.0	0.0	4.910	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	71	18	-	-	-	71	72	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	85	21	-	-	-	85	83	0.0	0.0	0.000	A
				4	126	31	-	-	-	126	122	0.0	0.0	0.001	A
3 - Top Brand	Entry	1	1	1	105	26	1001	883	0.119	106	112	0.0	0.1	4.768	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	876	779	0.009	8	8	0.0	0.0	5.015	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	1001	884	0.043	38	39	0.0	0.0	4.207	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	105	26	-	-	-	105	112	0.0	0.0	0.000	A
				2	38	10	-	-	-	38	39	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	8	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	973	958	0.078	74	80	0.1	0.1	6.817	A
				3	154	38	973	958	0.160	155	172	0.4	0.3	6.925	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	198	49	973	958	0.206	200	205	0.3	0.4	6.707	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	-	-	-	75	79	0.0	0.0	0.228	A
				3	154	38	-	-	-	154	172	0.0	0.0	0.227	A
				4	198	49	-	-	-	198	205	0.0	0.0	0.260	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	978	865	0.122	106	106	0.1	0.1	5.629	A
				4	140	35	978	862	0.162	140	148	0.2	0.2	5.805	A
			2	1	83	21	978	862	0.096	84	90	0.0	0.1	4.511	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	83	21	-	-	-	83	90	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	-	-	-	105	106	0.0	0.0	0.002	A
				4	140	35	-	-	-	140	148	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	131	33	1001	865	0.151	129	138	0.1	0.2	5.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	876	755	0.011	9	8	0.0	0.0	5.122	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	1001	867	0.053	45	48	0.0	0.1	4.483	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	131	33	-	-	-	131	138	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	48	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	9	2	-	-	-	9	8	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	973	954	0.083	79	91	0.1	0.1	7.445	A
				3	209	52	973	954	0.219	211	209	0.3	0.3	7.280	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	243	61	973	954	0.255	243	248	0.4	0.5	6.953	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	-	-	-	79	91	0.0	0.0	0.649	A
				3	209	52	-	-	-	209	209	0.0	0.0	0.496	A
				4	243	61	-	-	-	243	249	0.0	0.0	0.492	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	121	30	978	833	0.145	120	125	0.1	0.3	7.492	A
				4	178	45	978	833	0.214	179	179	0.2	0.5	6.935	A
			2	1	111	28	978	832	0.133	109	114	0.1	0.2	4.967	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	111	28	-	-	-	111	114	0.0	0.0	0.082	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	121	30	-	-	-	121	126	0.0	0.0	0.147	A
				4	178	45	-	-	-	178	180	0.0	0.0	0.151	A
3 - Top Brand	Entry	1	1	1	158	40	1001	830	0.190	156	165	0.2	0.3	5.684	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	12	3	917	763	0.015	11	12	0.0	0.0	6.212	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	1001	829	0.072	60	58	0.1	0.1	4.497	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	158	40	-	-	-	158	165	0.0	0.0	0.000	A
				2	60	15	-	-	-	60	58	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	12	3	-	-	-	12	12	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	973	955	0.097	91	95	0.1	0.2	7.024	A
				3	206	51	973	954	0.216	206	213	0.3	0.7	7.319	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	253	63	973	955	0.265	253	237	0.5	0.5	6.301	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	-	-	-	92	96	0.0	0.0	0.475	A
				3	206	52	-	-	-	206	215	0.0	0.1	0.678	A
				4	252	63	-	-	-	253	237	0.0	0.0	0.558	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	119	30	978	833	0.143	120	125	0.3	0.1	7.046	A
				4	188	47	978	832	0.225	188	180	0.5	0.3	6.946	A
			2	1	103	26	978	834	0.123	104	111	0.2	0.1	5.104	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	103	26	-	-	-	103	111	0.0	0.0	0.049	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	119	30	-	-	-	119	124	0.0	0.0	0.110	A
				4	188	47	-	-	-	188	179	0.0	0.0	0.085	A
3 - Top Brand	Entry	1	1	1	166	42	1001	826	0.201	168	168	0.3	0.2	5.573	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	13	3	959	795	0.016	13	12	0.0	0.0	5.272	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	1001	828	0.074	62	59	0.1	0.1	4.791	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	166	42	-	-	-	166	167	0.0	0.0	0.000	A
				2	61	15	-	-	-	61	59	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	13	3	-	-	-	13	12	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	973	960	0.072	69	77	0.2	0.1	6.477	A
				3	187	47	973	959	0.195	187	185	0.7	0.4	6.933	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	200	50	973	959	0.208	200	198	0.5	0.5	6.617	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	77	0.0	0.0	0.490	A
				3	187	47	-	-	-	187	184	0.1	0.0	0.310	A
				4	200	50	-	-	-	200	198	0.0	0.0	0.317	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	978	856	0.125	107	105	0.1	0.1	5.792	A
				4	135	34	978	857	0.157	135	146	0.3	0.1	5.688	A
			2	1	91	23	978	856	0.106	91	93	0.1	0.1	4.730	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	91	23	-	-	-	91	93	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	-	-	-	107	105	0.0	0.0	0.001	A
				4	135	34	-	-	-	135	146	0.0	0.0	0.003	A
3 - Top Brand	Entry	1	1	1	132	33	1001	865	0.152	129	133	0.2	0.4	5.401	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	897	771	0.011	8	9	0.0	0.0	4.938	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	45	11	1001	864	0.052	45	44	0.1	0.0	4.802	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	132	33	-	-	-	132	134	0.0	0.0	0.000	A
				2	45	11	-	-	-	45	44	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	8	2	-	-	-	8	9	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	973	961	0.062	59	63	0.1	0.1	6.274	A
				3	147	37	973	961	0.153	145	143	0.4	0.5	6.512	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	160	40	973	961	0.166	160	167	0.5	0.3	6.294	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	-	-	-	60	62	0.0	0.0	0.242	A
				3	147	37	-	-	-	147	143	0.0	0.0	0.213	A
				4	160	40	-	-	-	160	165	0.0	0.0	0.181	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	978	881	0.106	93	91	0.1	0.1	5.576	A
				4	125	31	978	884	0.141	124	125	0.1	0.2	5.333	A
			2	1	73	18	978	882	0.082	74	77	0.1	0.1	4.164	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	73	18	-	-	-	73	77	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	93	23	-	-	-	93	91	0.0	0.0	0.000	A
				4	125	31	-	-	-	125	126	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	111	28	1001	886	0.126	110	112	0.4	0.1	5.090	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	855	751	0.010	7	7	0.0	0.0	5.532	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	10	1001	889	0.043	40	41	0.0	0.0	4.250	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	111	28	-	-	-	111	111	0.0	0.0	0.000	A
				2	38	10	-	-	-	38	41	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	7	0.0	0.0	0.000	A

2028 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.33	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	384	100.000
2 - Gelscoe Lane		ONE HOUR	✓	111	100.000
3 - Top Brand		ONE HOUR	✓	345	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	75	183	126
	2 - Gelscoe Lane	41	0	23	47
	3 - Top Brand	260	45	0	40
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	20	8
	2 - Gelscoe Lane	0	0	5	4
	3 - Top Brand	14	0	0	82
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.32	5.91	0.9	A	361	541
2 - Gelscoe Lane	0.10	4.70	0.2	A	104	156
3 - Top Brand	0.36	7.35	0.7	A	312	468
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	286	72	31	1384	0.207	285	289	238	0.0	0.5	5.159	A
2 - Gelscoe Lane	86	22	231	1398	0.062	88	88	85	0.0	0.1	4.224	A
3 - Top Brand	269	67	162	1103	0.244	273	266	157	0.0	0.4	6.211	A
4 - A42			0					165				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	369	92	39	1343	0.275	371	365	265	0.5	0.3	5.643	A
2 - Gelscoe Lane	90	23	299	1394	0.065	90	100	111	0.1	0.1	4.408	A
3 - Top Brand	302	76	182	1100	0.275	306	317	206	0.4	0.3	6.256	A
4 - A42			0					185				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	419	105	47	1330	0.315	416	424	315	0.3	0.9	5.909	A
2 - Gelscoe Lane	128	32	335	1374	0.093	129	131	128	0.1	0.1	4.651	A
3 - Top Brand	358	89	245	1028	0.348	359	374	219	0.3	0.7	6.526	A
4 - A42			0					243				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	438	110	59	1389	0.316	439	436	338	0.9	0.6	5.825	A
2 - Gelscoe Lane	135	34	356	1314	0.103	135	131	142	0.1	0.2	4.661	A
3 - Top Brand	394	99	245	1090	0.362	396	392	247	0.7	0.7	7.352	A
4 - A42			0					244				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	365	91	42	1360	0.268	365	365	262	0.6	0.5	5.221	A
2 - Gelscoe Lane	95	24	298	1328	0.072	94	106	109	0.2	0.2	4.701	A
3 - Top Brand	300	75	205	1109	0.270	299	315	187	0.7	0.7	6.288	A
4 - A42			0					200				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	286	72	31	1388	0.206	287	298	217	0.5	0.4	5.067	A
2 - Gelscoe Lane	90	22	231	1391	0.065	89	91	87	0.2	0.1	4.453	A
3 - Top Brand	249	62	160	1129	0.221	251	262	161	0.7	0.3	5.578	A
4 - A42			0					161				

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	191	963	0.199	191	196	0.0	0.3	5.273	A
			2	1, 4	95	963	0.098	94	93	0.0	0.2	4.880	A
		2	1	(1, 2, 3, 4)	286			286	291	0.0	0.0	0.017	A
	Exit	1	1		238			238	232	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	54	905	0.060	55	55	0.0	0.0	4.213	A
			2	1, 2	32	905	0.035	33	32	0.0	0.0	4.241	A
		2	1	(1, 2, 3, 4)	86			86	88	0.0	0.0	0.000	A
	Exit	1	1		85			85	89	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	239	949	0.252	242	233	0.0	0.4	6.383	A
			2	2, 3	32	949	0.034	31	33	0.0	0.0	4.058	A
		2	1	(1, 2, 3, 4)	269			271	268	0.0	0.0	0.169	A
	Exit	1	1		157			157	158	0.0	0.0	0.000	A
4 - A42	Exit	1	1		165			165	163	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	260	961	0.271	263	252	0.3	0.2	5.916	A
			2	1, 4	109	961	0.114	108	112	0.2	0.1	4.645	A
		2	1	(1, 2, 3, 4)	369			369	364	0.0	0.0	0.134	A
	Exit	1	1		265			265	281	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	56	883	0.063	56	61	0.0	0.1	4.637	A
			2	1, 2	34	883	0.039	34	39	0.0	0.0	4.059	A
		2	1	(1, 2, 3, 4)	90			90	100	0.0	0.0	0.000	A
	Exit	1	1		111			111	114	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	263	942	0.280	268	277	0.4	0.3	6.572	A
			2	2, 3	39	942	0.042	39	40	0.0	0.0	3.968	A
		2	1	(1, 2, 3, 4)	302			303	317	0.0	0.0	0.068	A
	Exit	1	1		206			206	198	0.0	0.0	0.000	A
4 - A42	Exit	1	1		185			185	189	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	278	958	0.290	276	287	0.2	0.7	6.310	A
			2	1, 4	141	958	0.147	140	136	0.1	0.2	4.675	A
		2	1	(1, 2, 3, 4)	419			419	426	0.0	0.0	0.135	A
	Exit	1	1		315			315	330	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	82	872	0.094	83	82	0.1	0.1	4.776	A
			2	1, 2	46	872	0.053	46	50	0.0	0.0	4.454	A
		2	1	(1, 2, 3, 4)	128			128	132	0.0	0.0	0.000	A
	Exit	1	1		128			128	131	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	309	922	0.336	312	325	0.3	0.6	6.855	A
			2	2, 3	48	922	0.052	47	49	0.0	0.1	3.945	A
		2	1	(1, 2, 3, 4)	358			359	375	0.0	0.0	0.112	A
	Exit	1	1		219			219	231	0.0	0.0	0.000	A
4 - A42	Exit	1	1		243			243	238	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	298	954	0.312	299	297	0.7	0.4	6.209	A
			2	1, 4	140	954	0.147	140	139	0.2	0.1	4.478	A
		2	1	(1, 2, 3, 4)	438			438	435	0.0	0.0	0.194	A
	Exit	1	1		338			338	341	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	86	865	0.100	85	83	0.1	0.2	4.800	A
			2	1, 2	49	865	0.057	49	48	0.0	0.0	4.431	A
		2	1	(1, 2, 3, 4)	135			135	131	0.0	0.0	0.000	A
	Exit	1	1		142			142	138	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	336	922	0.364	337	339	0.6	0.6	7.665	A
			2	2, 3	59	922	0.064	59	53	0.1	0.0	4.226	A
		2	1	(1, 2, 3, 4)	394			394	392	0.0	0.0	0.232	A
	Exit	1	1		247			247	240	0.0	0.0	0.000	A
4 - A42	Exit	1	1		244			244	241	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	234	960	0.244	235	243	0.4	0.3	5.563	A
			2	1, 4	131	960	0.136	130	122	0.1	0.2	4.390	A
		2	1	(1, 2, 3, 4)	365			365	365	0.0	0.0	0.070	A
	Exit	1	1		262			262	280	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	62	883	0.070	61	67	0.2	0.1	4.808	A
			2	1, 2	33	883	0.038	33	38	0.0	0.0	4.520	A
		2	1	(1, 2, 3, 4)	95			95	105	0.0	0.0	0.000	A
	Exit	1	1		109			109	107	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	257	935	0.275	257	276	0.6	0.6	6.572	A
			2	2, 3	43	935	0.046	42	39	0.0	0.1	3.883	A
		2	1	(1, 2, 3, 4)	300			300	314	0.0	0.0	0.100	A
	Exit	1	1		187			187	197	0.0	0.0	0.000	A
4 - A42	Exit	1	1		200			200	202	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	194	963	0.202	196	201	0.3	0.2	5.375	A
			2	1, 4	92	963	0.095	91	97	0.2	0.1	4.374	A
		2	1	(1, 2, 3, 4)	286			286	297	0.0	0.0	0.032	A
	Exit	1	1		217			217	229	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	59	905	0.066	60	59	0.1	0.0	4.484	A
			2	1, 2	30	905	0.034	30	32	0.0	0.0	4.398	A
		2	1	(1, 2, 3, 4)	90			90	90	0.0	0.0	0.000	A
	Exit	1	1		87			87	95	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	218	949	0.230	219	226	0.6	0.3	5.871	A
			2	2, 3	31	949	0.033	31	35	0.1	0.0	3.925	A
		2	1	(1, 2, 3, 4)	249			249	261	0.0	0.0	0.021	A
	Exit	1	1		161			161	161	0.0	0.0	0.000	A
4 - A42	Exit	1	1		161			161	166	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	973	962	0.057	54	56	0.0	0.1	4.733	A
				3	136	34	973	962	0.142	137	140	0.0	0.2	5.534	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	95	24	973	962	0.099	94	93	0.0	0.2	4.880	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	57	0.0	0.0	0.032	A
				3	136	34	-	-	-	136	141	0.0	0.0	0.014	A
				4	95	24	-	-	-	95	94	0.0	0.0	0.012	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	962	892	0.023	20	19	0.0	0.0	4.465	A
				4	34	9	978	905	0.038	35	37	0.0	0.0	4.086	A
			2	1	32	8	978	905	0.035	33	32	0.0	0.0	4.241	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	32	8	-	-	-	32	32	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	19	0.0	0.0	0.000	A
				4	34	9	-	-	-	34	37	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	204	51	1001	948	0.215	205	200	0.0	0.3	6.154	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	984	935	0.038	36	33	0.0	0.1	8.615	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	32	8	1001	946	0.034	31	33	0.0	0.0	4.058	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	203	51	-	-	-	204	201	0.0	0.0	0.170	A
				2	32	8	-	-	-	32	33	0.0	0.0	0.137	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	-	-	-	35	33	0.0	0.0	0.218	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	973	961	0.074	72	74	0.1	0.1	5.323	A
				3	189	47	973	961	0.196	190	179	0.2	0.1	6.209	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	109	27	973	961	0.114	108	112	0.2	0.1	4.645	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	-	-	-	71	74	0.0	0.0	0.150	A
				3	188	47	-	-	-	189	178	0.0	0.0	0.184	A
				4	109	27	-	-	-	109	112	0.0	0.0	0.053	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	978	884	0.018	16	20	0.0	0.0	4.962	A
				4	40	10	978	882	0.046	40	41	0.0	0.1	4.483	A
			2	1	34	9	978	883	0.039	34	39	0.0	0.0	4.059	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	34	9	-	-	-	34	39	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	20	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	42	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	227	57	1001	943	0.241	230	242	0.3	0.2	6.389	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	984	925	0.039	37	35	0.1	0.1	8.507	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1001	941	0.042	39	40	0.0	0.0	3.968	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	227	57	-	-	-	227	242	0.0	0.0	0.060	A
				2	39	10	-	-	-	39	40	0.0	0.0	0.060	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	36	9	-	-	-	36	35	0.0	0.0	0.166	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	973	958	0.084	81	82	0.1	0.1	5.897	A
				3	198	49	973	958	0.207	195	205	0.1	0.6	6.502	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	141	35	973	957	0.147	140	136	0.1	0.2	4.675	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	-	-	-	80	82	0.0	0.0	0.165	A
				3	198	50	-	-	-	198	207	0.0	0.0	0.169	A
				4	141	35	-	-	-	141	137	0.0	0.0	0.070	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	978	868	0.027	24	25	0.0	0.0	4.593	A
				4	58	15	978	872	0.067	59	56	0.1	0.1	4.859	A
			2	1	46	12	978	874	0.053	46	50	0.0	0.0	4.454	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	46	12	-	-	-	46	50	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	-	-	-	24	25	0.0	0.0	0.000	A
				4	58	15	-	-	-	58	56	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	266	66	1001	922	0.288	269	280	0.2	0.5	6.655	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	984	908	0.048	44	46	0.1	0.1	8.834	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1001	922	0.052	47	49	0.0	0.1	3.945	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	265	66	-	-	-	266	281	0.0	0.0	0.121	A
				2	48	12	-	-	-	48	49	0.0	0.0	0.059	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	44	11	-	-	-	44	46	0.0	0.0	0.123	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	21	973	955	0.086	83	84	0.1	0.1	5.819	A
				3	216	54	973	955	0.226	216	213	0.6	0.3	6.396	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	140	35	973	955	0.147	140	139	0.2	0.1	4.478	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	21	-	-	-	82	84	0.0	0.0	0.234	A
				3	216	54	-	-	-	216	212	0.0	0.0	0.243	A
				4	140	35	-	-	-	140	139	0.0	0.0	0.102	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	7	978	865	0.035	30	28	0.0	0.0	4.663	A
				4	56	14	978	866	0.065	55	55	0.1	0.2	4.868	A
			2	1	49	12	978	865	0.057	49	48	0.0	0.0	4.431	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	49	12	-	-	-	49	48	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	7	-	-	-	30	28	0.0	0.0	0.000	A
				4	56	14	-	-	-	56	55	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	287	72	1001	922	0.312	288	293	0.5	0.5	7.376	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	1001	925	0.052	48	46	0.1	0.1	10.525	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	1001	922	0.064	59	53	0.1	0.0	4.226	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	287	72	-	-	-	287	293	0.0	0.0	0.259	A
				2	59	15	-	-	-	59	53	0.0	0.0	0.140	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	48	12	-	-	-	48	46	0.0	0.0	0.158	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	973	960	0.070	67	69	0.1	0.1	5.205	A
				3	167	42	973	960	0.174	168	175	0.3	0.3	5.730	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	131	33	973	960	0.136	130	122	0.1	0.2	4.390	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	-	-	-	67	69	0.0	0.0	0.053	A
				3	167	42	-	-	-	167	175	0.0	0.0	0.103	A
				4	131	33	-	-	-	131	122	0.0	0.0	0.037	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	978	883	0.022	19	22	0.0	0.0	5.236	A
				4	42	10	978	884	0.047	41	45	0.2	0.1	4.600	A
			2	1	33	8	978	885	0.038	33	38	0.0	0.0	4.520	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	33	8	-	-	-	33	38	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	22	0.0	0.0	0.000	A
				4	42	10	-	-	-	42	45	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	227	57	1001	935	0.243	229	241	0.5	0.4	6.333	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	984	923	0.032	28	35	0.1	0.1	9.140	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	1001	937	0.046	42	39	0.0	0.1	3.883	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	227	57	-	-	-	227	241	0.0	0.0	0.106	A
				2	43	11	-	-	-	43	39	0.0	0.0	0.080	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	30	7	-	-	-	30	35	0.0	0.0	0.075	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	973	963	0.058	56	59	0.1	0.1	4.608	A
				3	138	35	973	963	0.144	140	142	0.3	0.2	5.758	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	92	23	973	963	0.095	91	97	0.2	0.1	4.374	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	59	0.0	0.0	0.044	A
				3	138	35	-	-	-	138	141	0.0	0.0	0.035	A
				4	92	23	-	-	-	92	97	0.0	0.0	0.019	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	978	905	0.023	21	19	0.0	0.0	4.440	A
				4	39	10	978	908	0.043	39	39	0.1	0.0	4.505	A
			2	1	30	8	978	906	0.034	30	32	0.0	0.0	4.398	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	30	8	-	-	-	30	32	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	19	0.0	0.0	0.000	A
				4	39	10	-	-	-	39	39	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	187	47	1001	950	0.197	187	197	0.4	0.2	5.696	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	31	8	984	931	0.033	32	30	0.1	0.1	7.735	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1001	948	0.033	31	35	0.1	0.0	3.925	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	187	47	-	-	-	187	196	0.0	0.0	0.018	A
				2	31	8	-	-	-	31	35	0.0	0.0	0.026	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	31	8	-	-	-	31	29	0.0	0.0	0.042	A

2028 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.00	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	388	100.000
2 - Gelscoe Lane		ONE HOUR	✓	223	100.000
3 - Top Brand		ONE HOUR	✓	106	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	53	154	181
	2 - Gelscoe Lane	93	0	53	77
	3 - Top Brand	91	12	0	3
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	37	37	37
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	2	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.31	6.84	0.7	A	360	541
2 - Gelscoe Lane	0.18	5.13	0.4	A	210	315
3 - Top Brand	0.12	4.77	0.2	A	97	145
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	286	71	10	1452	0.197	288	299	138	0.0	0.5	6.504	A
2 - Gelscoe Lane	166	42	248	1507	0.110	168	169	51	0.0	0.2	4.483	A
3 - Top Brand	77	19	258	1045	0.074	78	81	157	0.0	0.0	4.191	A
4 - A42			0					187				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	13	1426	0.257	371	359	166	0.5	0.7	6.489	A
2 - Gelscoe Lane	200	50	326	1455	0.137	199	200	57	0.2	0.2	4.524	A
3 - Top Brand	96	24	332	1020	0.094	96	102	193	0.0	0.1	4.279	A
4 - A42			0					249				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	431	108	13	1392	0.310	429	439	220	0.7	0.7	6.802	A
2 - Gelscoe Lane	254	64	370	1396	0.182	254	254	72	0.2	0.3	4.954	A
3 - Top Brand	120	30	395	982	0.122	121	121	229	0.1	0.1	4.771	A
4 - A42			0					283				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	440	110	13	1434	0.307	441	451	208	0.7	0.7	6.839	A
2 - Gelscoe Lane	258	64	382	1396	0.185	257	248	73	0.3	0.4	5.128	A
3 - Top Brand	117	29	410	978	0.119	116	122	228	0.1	0.2	4.623	A
4 - A42			0					306				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	349	87	11	1458	0.240	350	360	175	0.7	0.6	6.628	A
2 - Gelscoe Lane	211	53	301	1454	0.145	211	208	60	0.4	0.2	4.788	A
3 - Top Brand	97	24	327	990	0.098	97	102	185	0.2	0.2	4.638	A
4 - A42			0					238				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	289	72	8	1429	0.202	288	297	140	0.6	0.6	5.871	A
2 - Gelscoe Lane	171	43	252	1478	0.116	171	175	44	0.2	0.2	4.367	A
3 - Top Brand	76	19	264	1041	0.073	75	83	158	0.2	0.1	4.426	A
4 - A42			0					192				

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	157	970	0.162	157	163	0.0	0.3	6.428	A
			2	1, 4	129	970	0.133	131	136	0.0	0.2	6.219	A
		2	1	(1, 2, 3, 4)	286			286	301	0.0	0.0	0.172	A
	Exit	1	1		138			138	140	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	93	899	0.104	94	98	0.0	0.2	4.588	A
			2	1, 2	73	899	0.081	74	71	0.0	0.1	4.339	A
		2	1	(1, 2, 3, 4)	166			166	170	0.0	0.0	0.000	A
	Exit	1	1		51			51	52	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	67	918	0.073	68	71	0.0	0.0	4.193	A
			2	2, 3	10	918	0.011	10	10	0.0	0.0	4.180	A
		2	1	(1, 2, 3, 4)	77			77	81	0.0	0.0	0.000	A
	Exit	1	1		157			157	163	0.0	0.0	0.000	A
4 - A42	Exit	1	1		187			187	195	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	190	969	0.197	191	188	0.3	0.4	6.617	A
			2	1, 4	177	969	0.182	179	172	0.2	0.3	6.083	A
		2	1	(1, 2, 3, 4)	367			367	360	0.0	0.0	0.130	A
	Exit	1	1		166			166	171	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	114	874	0.130	113	117	0.2	0.2	4.719	A
			2	1, 2	86	874	0.098	86	83	0.1	0.1	4.249	A
		2	1	(1, 2, 3, 4)	200			200	200	0.0	0.0	0.000	A
	Exit	1	1		57			57	59	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	84	894	0.093	83	90	0.0	0.1	4.326	A
			2	2, 3	12	894	0.014	13	12	0.0	0.0	3.940	A
		2	1	(1, 2, 3, 4)	96			96	103	0.0	0.0	0.000	A
	Exit	1	1		193			193	188	0.0	0.0	0.000	A
4 - A42	Exit	1	1		249			249	244	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	232	969	0.239	232	235	0.4	0.4	6.807	A
			2	1, 4	199	969	0.205	197	205	0.3	0.4	6.151	A
		2	1	(1, 2, 3, 4)	431			431	440	0.0	0.0	0.303	A
	Exit	1	1		220			220	211	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	139	860	0.162	139	147	0.2	0.2	5.145	A
			2	1, 2	115	860	0.133	114	106	0.1	0.2	4.688	A
		2	1	(1, 2, 3, 4)	254			254	254	0.0	0.0	0.001	A
	Exit	1	1		72			72	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	106	874	0.122	108	108	0.1	0.1	4.850	A
			2	2, 3	13	874	0.015	13	13	0.0	0.0	4.142	A
		2	1	(1, 2, 3, 4)	120			120	121	0.0	0.0	0.000	A
	Exit	1	1		229			229	237	0.0	0.0	0.000	A
4 - A42	Exit	1	1		283			283	292	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	229	969	0.237	227	239	0.4	0.5	6.887	A
			2	1, 4	212	969	0.219	214	211	0.4	0.3	6.220	A
		2	1	(1, 2, 3, 4)	440			440	451	0.0	0.0	0.264	A
	Exit	1	1		208			208	207	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	150	857	0.175	148	146	0.2	0.3	5.152	A
			2	1, 2	108	857	0.126	109	102	0.2	0.1	5.094	A
		2	1	(1, 2, 3, 4)	258			258	248	0.0	0.0	0.000	A
	Exit	1	1		73			73	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	103	869	0.119	103	109	0.1	0.2	4.754	A
			2	2, 3	13	869	0.015	13	13	0.0	0.0	3.554	A
		2	1	(1, 2, 3, 4)	117			117	122	0.0	0.0	0.000	A
	Exit	1	1		228			228	236	0.0	0.0	0.000	A
4 - A42	Exit	1	1		306			306	303	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	186	970	0.192	186	194	0.5	0.3	6.588	A
			2	1, 4	163	970	0.169	164	167	0.3	0.3	6.257	A
		2	1	(1, 2, 3, 4)	349			350	360	0.0	0.0	0.194	A
	Exit	1	1		175			175	177	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	120	882	0.136	120	121	0.3	0.1	4.972	A
			2	1, 2	91	882	0.103	91	87	0.1	0.1	4.532	A
		2	1	(1, 2, 3, 4)	211			211	208	0.0	0.0	0.000	A
	Exit	1	1		60			60	59	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	87	896	0.097	86	92	0.2	0.2	4.690	A
			2	2, 3	10	896	0.012	11	10	0.0	0.0	4.190	A
		2	1	(1, 2, 3, 4)	97			97	102	0.0	0.0	0.000	A
	Exit	1	1		185			185	195	0.0	0.0	0.000	A
4 - A42	Exit	1	1		238			238	240	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	156	971	0.161	154	158	0.3	0.4	6.051	A
			2	1, 4	132	971	0.136	133	139	0.3	0.2	5.470	A
		2	1	(1, 2, 3, 4)	289			289	297	0.0	0.0	0.091	A
	Exit	1	1		140			140	148	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	97	898	0.108	96	100	0.1	0.1	4.484	A
			2	1, 2	74	898	0.083	74	75	0.1	0.1	4.213	A
		2	1	(1, 2, 3, 4)	171			171	175	0.0	0.0	0.000	A
	Exit	1	1		44			44	49	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	68	916	0.074	68	74	0.2	0.1	4.509	A
			2	2, 3	8	916	0.009	8	8	0.0	0.0	3.703	A
		2	1	(1, 2, 3, 4)	76			76	82	0.0	0.0	0.000	A
	Exit	1	1		158			158	158	0.0	0.0	0.000	A
4 - A42	Exit	1	1		192			192	201	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	973	970	0.042	40	41	0.0	0.1	6.284	A
				3	116	29	973	970	0.120	117	122	0.0	0.2	6.478	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	129	32	973	969	0.133	131	136	0.0	0.2	6.219	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	-	-	-	41	42	0.0	0.0	0.187	A
				3	116	29	-	-	-	116	123	0.0	0.0	0.220	A
				4	129	32	-	-	-	129	137	0.0	0.0	0.125	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	978	898	0.044	40	41	0.0	0.0	4.303	A
				4	54	14	978	902	0.060	54	57	0.0	0.1	4.795	A
			2	1	73	18	978	900	0.081	74	71	0.0	0.1	4.339	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	73	18	-	-	-	73	71	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	39	10	-	-	-	39	41	0.0	0.0	0.000	A
				4	54	14	-	-	-	54	57	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	64	16	1001	918	0.070	65	69	0.0	0.0	4.186	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.69	449	408	0.007	3	2	0.0	0.0	4.421	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	10	3	924	845	0.012	10	10	0.0	0.0	4.180	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	64	16	-	-	-	64	69	0.0	0.0	0.000	A
				2	10	3	-	-	-	10	10	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.69	-	-	-	3	2	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	973	969	0.047	44	47	0.1	0.2	6.741	A
				3	145	36	973	969	0.150	147	141	0.2	0.2	6.577	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	177	44	973	969	0.182	179	172	0.2	0.3	6.083	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	47	0.0	0.0	0.139	A
				3	145	36	-	-	-	145	141	0.0	0.0	0.170	A
				4	176	44	-	-	-	177	172	0.0	0.0	0.096	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	978	876	0.053	46	48	0.0	0.1	4.741	A
				4	68	17	978	879	0.077	67	70	0.1	0.1	4.704	A
			2	1	86	21	978	877	0.098	86	83	0.1	0.1	4.249	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	86	21	-	-	-	86	83	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	-	-	-	46	48	0.0	0.0	0.000	A
				4	68	17	-	-	-	68	70	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	81	20	1001	896	0.091	81	88	0.0	0.1	4.308	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.58	462	417	0.006	2	2	0.0	0.0	5.023	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	962	866	0.014	13	12	0.0	0.0	3.940	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	81	20	-	-	-	81	88	0.0	0.0	0.000	A
				2	12	3	-	-	-	12	12	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.58	-	-	-	2	2	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	973	969	0.060	59	61	0.2	0.1	6.847	A
				3	173	43	973	969	0.178	173	174	0.2	0.3	6.793	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	199	50	973	969	0.205	197	205	0.3	0.4	6.151	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	61	0.0	0.0	0.327	A
				3	173	43	-	-	-	173	174	0.0	0.0	0.350	A
				4	199	50	-	-	-	199	205	0.0	0.0	0.257	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	978	861	0.065	56	63	0.1	0.1	5.072	A
				4	83	21	978	861	0.096	83	84	0.1	0.1	5.199	A
			2	1	115	29	978	862	0.133	114	106	0.1	0.2	4.688	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	115	29	-	-	-	115	107	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	-	-	-	56	63	0.0	0.0	0.002	A
				4	83	21	-	-	-	83	84	0.0	0.0	0.003	A
3 - Top Brand	Entry	1	1	1	104	26	1001	875	0.119	106	105	0.1	0.1	4.848	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.65	526	460	0.006	3	3	0.0	0.0	4.887	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1001	876	0.015	13	13	0.0	0.0	4.142	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	104	26	-	-	-	104	104	0.0	0.0	0.000	A
				2	13	3	-	-	-	13	13	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	3	0.65	-	-	-	3	3	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	973	969	0.062	59	61	0.1	0.1	7.027	A
				3	170	42	973	969	0.175	167	178	0.3	0.4	6.839	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	212	53	973	969	0.219	214	211	0.4	0.3	6.220	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	-	-	-	60	61	0.0	0.0	0.225	A
				3	170	42	-	-	-	170	179	0.0	0.0	0.306	A
				4	212	53	-	-	-	212	211	0.0	0.0	0.239	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	61	15	978	857	0.071	61	58	0.1	0.1	5.209	A
				4	89	22	978	856	0.104	87	88	0.1	0.2	5.114	A
			2	1	108	27	978	857	0.126	109	102	0.2	0.1	5.094	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	108	27	-	-	-	108	102	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	61	15	-	-	-	61	58	0.0	0.0	0.000	A
				4	89	22	-	-	-	89	88	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	99	25	1001	869	0.114	99	105	0.1	0.1	4.725	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	642	559	0.007	4	4	0.0	0.0	5.537	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	975	850	0.016	13	13	0.0	0.0	3.554	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	99	25	-	-	-	99	105	0.0	0.0	0.000	A
				2	13	3	-	-	-	13	13	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	4	1	-	-	-	4	4	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	12	973	970	0.051	49	49	0.1	0.2	7.048	A
				3	137	34	973	970	0.141	137	145	0.4	0.1	6.428	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	163	41	973	970	0.169	164	167	0.3	0.3	6.257	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	12	-	-	-	50	49	0.0	0.0	0.251	A
				3	137	34	-	-	-	137	144	0.0	0.0	0.239	A
				4	163	41	-	-	-	163	167	0.0	0.0	0.139	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	978	882	0.055	48	50	0.1	0.1	4.920	A
				4	72	18	978	883	0.081	72	71	0.2	0.1	5.009	A
			2	1	91	23	978	879	0.104	91	87	0.1	0.1	4.532	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	91	23	-	-	-	91	87	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	-	-	-	49	50	0.0	0.0	0.000	A
				4	72	18	-	-	-	72	71	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	84	21	1001	895	0.094	83	90	0.1	0.2	4.673	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	449	403	0.006	2	2	0.0	0.0	5.382	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	10	3	950	851	0.012	11	10	0.0	0.0	4.190	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	84	21	-	-	-	84	90	0.0	0.0	0.000	A
				2	10	3	-	-	-	10	10	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.62	-	-	-	2	2	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	973	971	0.039	36	40	0.2	0.2	5.906	A
				3	118	30	973	971	0.122	118	117	0.1	0.3	6.100	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	132	33	973	971	0.136	133	139	0.3	0.2	5.470	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	38	9	-	-	-	38	40	0.0	0.0	0.076	A
				3	118	30	-	-	-	118	118	0.0	0.0	0.131	A
				4	132	33	-	-	-	132	139	0.0	0.0	0.061	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	40	10	978	897	0.044	40	40	0.1	0.1	4.321	A
				4	57	14	978	898	0.063	57	59	0.1	0.1	4.594	A
			2	1	74	19	978	899	0.083	74	75	0.1	0.1	4.213	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	74	19	-	-	-	74	75	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	40	10	-	-	-	40	40	0.0	0.0	0.000	A
				4	57	14	-	-	-	57	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	66	16	1001	915	0.072	65	72	0.2	0.1	4.493	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.54	423	386	0.006	2	2	0.0	0.0	5.047	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	8	2	885	811	0.010	8	8	0.0	0.0	3.703	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	66	16	-	-	-	66	72	0.0	0.0	0.000	A
				2	8	2	-	-	-	8	8	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	2	0.54	-	-	-	2	2	0.0	0.0	0.000	A

2038 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.49	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	469	100.000
2 - Gelscoe Lane		ONE HOUR	✓	187	100.000
3 - Top Brand		ONE HOUR	✓	486	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	90	226	153
	2 - Gelscoe Lane	70	0	39	78
	3 - Top Brand	369	65	0	52
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	1	13	4
	2 - Gelscoe Lane	0	0	2	2
	3 - Top Brand	8	0	0	72
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.37	6.07	0.9	A	428	642
2 - Gelscoe Lane	0.17	4.95	0.3	A	170	255
3 - Top Brand	0.51	9.83	1.5	A	445	667
4 - A42						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	367	92	51	1392	0.263	365	361	337	0.0	0.6	5.243	A
2 - Gelscoe Lane	141	35	293	1359	0.104	141	144	123	0.0	0.2	4.323	A
3 - Top Brand	373	93	228	1106	0.337	369	370	206	0.0	0.8	6.499	A
4 - A42			0					210				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	410	103	61	1391	0.295	411	424	396	0.6	0.6	5.611	A
2 - Gelscoe Lane	163	41	338	1371	0.119	165	172	134	0.2	0.1	4.689	A
3 - Top Brand	440	110	272	1115	0.395	440	450	232	0.8	1.1	7.455	A
4 - A42			0					255				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	512	128	70	1424	0.360	512	518	479	0.6	0.9	6.070	A
2 - Gelscoe Lane	207	52	415	1271	0.163	208	219	168	0.1	0.3	4.952	A
3 - Top Brand	530	133	335	1042	0.509	532	534	287	1.1	1.5	8.925	A
4 - A42			0					318				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	512	128	68	1374	0.373	514	518	475	0.9	0.9	5.971	A
2 - Gelscoe Lane	204	51	412	1215	0.168	204	211	170	0.3	0.2	4.942	A
3 - Top Brand	526	132	321	1040	0.506	531	542	295	1.5	1.2	9.828	A
4 - A42			0					308				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	425	106	52	1363	0.312	423	431	396	0.9	0.8	5.375	A
2 - Gelscoe Lane	165	41	342	1368	0.121	166	178	133	0.2	0.2	4.790	A
3 - Top Brand	435	109	271	1046	0.416	438	446	237	1.2	0.8	7.450	A
4 - A42			0					260				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	341	85	46	1364	0.250	339	355	327	0.8	0.6	5.373	A
2 - Gelscoe Lane	139	35	269	1410	0.099	139	147	116	0.2	0.1	4.586	A
3 - Top Brand	362	91	218	1067	0.340	363	372	191	0.8	0.6	6.767	A
4 - A42			0					207				

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	248	957	0.259	247	245	0.0	0.4	5.543	A
			2	1, 4	118	957	0.123	118	115	0.0	0.1	4.272	A
		2	1	(1, 2, 3, 4)	367			366	363	0.0	0.0	0.118	A
	Exit	1	1		337			337	338	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	88	885	0.100	88	90	0.0	0.1	4.495	A
			2	1, 2	53	885	0.060	53	54	0.0	0.1	4.044	A
		2	1	(1, 2, 3, 4)	141			141	145	0.0	0.0	0.000	A
	Exit	1	1		123			123	120	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	322	927	0.347	319	320	0.0	0.7	6.709	A
			2	2, 3	50	927	0.054	51	49	0.0	0.0	3.955	A
		2	1	(1, 2, 3, 4)	373			372	373	0.0	0.1	0.189	A
	Exit	1	1		206			206	205	0.0	0.0	0.000	A
4 - A42	Exit	1	1		210			210	212	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	269	954	0.282	270	284	0.4	0.4	5.895	A
			2	1, 4	141	954	0.148	141	140	0.1	0.2	4.735	A
		2	1	(1, 2, 3, 4)	410			410	424	0.0	0.0	0.116	A
	Exit	1	1		396			396	403	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	103	871	0.118	104	107	0.1	0.1	4.933	A
			2	1, 2	61	871	0.070	61	65	0.1	0.1	4.295	A
		2	1	(1, 2, 3, 4)	163			163	172	0.0	0.0	0.000	A
	Exit	1	1		134			134	144	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	379	914	0.415	379	387	0.7	1.0	7.721	A
			2	2, 3	61	914	0.067	61	63	0.0	0.1	4.038	A
		2	1	(1, 2, 3, 4)	440			440	451	0.1	0.0	0.311	A
	Exit	1	1		232			232	238	0.0	0.0	0.000	A
4 - A42	Exit	1	1		255			255	260	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	336	951	0.354	338	347	0.4	0.5	6.430	A
			2	1, 4	176	951	0.185	174	170	0.2	0.4	4.758	A
		2	1	(1, 2, 3, 4)	512			512	519	0.0	0.0	0.205	A
	Exit	1	1		479			479	485	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	133	846	0.158	134	141	0.1	0.2	5.052	A
			2	1, 2	74	846	0.087	73	78	0.1	0.1	4.776	A
		2	1	(1, 2, 3, 4)	207			207	219	0.0	0.0	0.000	A
	Exit	1	1		168			168	172	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	460	893	0.515	462	462	1.0	1.3	8.845	A
			2	2, 3	71	893	0.079	70	71	0.1	0.1	4.325	A
		2	1	(1, 2, 3, 4)	530			530	535	0.0	0.1	0.747	A
	Exit	1	1		287			287	295	0.0	0.0	0.000	A
4 - A42	Exit	1	1		318			318	318	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	348	951	0.365	350	346	0.5	0.6	6.318	A
			2	1, 4	165	951	0.173	164	172	0.4	0.2	4.744	A
		2	1	(1, 2, 3, 4)	512			512	518	0.0	0.0	0.196	A
	Exit	1	1		475			475	488	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	132	847	0.156	133	134	0.2	0.1	4.995	A
			2	1, 2	72	847	0.085	71	77	0.1	0.1	4.852	A
		2	1	(1, 2, 3, 4)	204			204	211	0.0	0.0	0.000	A
	Exit	1	1		170			170	169	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	460	898	0.512	462	472	1.3	1.1	9.517	A
			2	2, 3	68	898	0.075	68	71	0.1	0.0	4.334	A
		2	1	(1, 2, 3, 4)	526			528	542	0.1	0.0	1.068	A
	Exit	1	1		295			295	293	0.0	0.0	0.000	A
4 - A42	Exit	1	1		308			308	321	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	284	956	0.297	282	289	0.6	0.6	5.712	A
			2	1, 4	140	956	0.147	141	142	0.2	0.2	4.473	A
		2	1	(1, 2, 3, 4)	425			425	431	0.0	0.0	0.082	A
	Exit	1	1		396			396	408	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	104	869	0.120	105	112	0.1	0.1	4.859	A
			2	1, 2	61	869	0.070	61	66	0.1	0.1	4.678	A
		2	1	(1, 2, 3, 4)	165			165	178	0.0	0.0	0.000	A
	Exit	1	1		133			133	140	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	384	914	0.421	385	389	1.1	0.8	7.636	A
			2	2, 3	52	914	0.057	52	57	0.0	0.1	4.520	A
		2	1	(1, 2, 3, 4)	435			436	445	0.0	0.0	0.262	A
	Exit	1	1		237			237	244	0.0	0.0	0.000	A
4 - A42	Exit	1	1		260			260	264	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	233	958	0.243	232	240	0.6	0.4	5.642	A
			2	1, 4	107	958	0.112	107	114	0.2	0.2	4.478	A
		2	1	(1, 2, 3, 4)	341			341	354	0.0	0.0	0.118	A
	Exit	1	1		327			327	338	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	88	892	0.098	88	92	0.1	0.1	4.818	A
			2	1, 2	51	892	0.058	51	55	0.1	0.1	4.200	A
		2	1	(1, 2, 3, 4)	139			139	147	0.0	0.0	0.000	A
	Exit	1	1		116			116	115	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	316	931	0.339	317	325	0.8	0.5	7.004	A
			2	2, 3	47	931	0.050	46	47	0.1	0.1	4.063	A
		2	1	(1, 2, 3, 4)	362			362	371	0.0	0.0	0.178	A
	Exit	1	1		191			191	203	0.0	0.0	0.000	A
4 - A42	Exit	1	1		207			207	218	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	973	958	0.076	72	71	0.0	0.1	5.262	A
				3	175	44	973	957	0.183	175	174	0.0	0.3	5.671	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	118	29	973	958	0.123	118	115	0.0	0.1	4.272	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	71	0.0	0.0	0.171	A
				3	175	44	-	-	-	175	176	0.0	0.0	0.131	A
				4	118	30	-	-	-	118	116	0.0	0.0	0.067	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	978	887	0.034	30	30	0.0	0.0	4.563	A
				4	58	14	978	887	0.065	58	60	0.0	0.1	4.461	A
			2	1	53	13	978	887	0.060	53	54	0.0	0.1	4.044	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	53	13	-	-	-	53	54	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	-	-	-	30	30	0.0	0.0	0.000	A
				4	58	14	-	-	-	58	60	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	287	72	1001	927	0.309	284	284	0.0	0.6	6.522	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	1001	926	0.038	35	37	0.0	0.1	8.987	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	13	1001	927	0.054	51	49	0.0	0.0	3.955	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	287	72	-	-	-	287	286	0.0	0.1	0.211	A
				2	50	13	-	-	-	50	50	0.0	0.0	0.122	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	35	9	-	-	-	35	37	0.0	0.0	0.075	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	973	954	0.077	73	82	0.1	0.1	5.658	A
				3	196	49	973	953	0.206	197	202	0.3	0.3	6.002	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	141	35	973	954	0.148	141	140	0.1	0.2	4.735	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	82	0.0	0.0	0.165	A
				3	196	49	-	-	-	196	202	0.0	0.0	0.134	A
				4	141	35	-	-	-	141	140	0.0	0.0	0.062	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	871	0.040	35	36	0.0	0.0	4.707	A
				4	67	17	978	870	0.078	69	71	0.1	0.1	5.047	A
			2	1	61	15	978	870	0.070	61	65	0.1	0.1	4.295	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	61	15	-	-	-	61	65	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	36	0.0	0.0	0.000	A
				4	67	17	-	-	-	67	71	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	333	83	1001	913	0.365	335	338	0.6	0.8	7.485	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	46	12	1001	915	0.051	45	49	0.1	0.2	10.300	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	1001	914	0.067	61	63	0.0	0.1	4.038	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	333	83	-	-	-	333	339	0.1	0.0	0.357	A
				2	61	15	-	-	-	61	63	0.0	0.0	0.086	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	46	12	-	-	-	46	49	0.0	0.0	0.308	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	973	950	0.102	97	100	0.1	0.2	6.199	A
				3	239	60	973	951	0.251	241	247	0.3	0.4	6.535	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	176	44	973	950	0.185	174	170	0.2	0.4	4.758	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	-	-	-	97	101	0.0	0.0	0.254	A
				3	239	60	-	-	-	239	247	0.0	0.0	0.251	A
				4	176	44	-	-	-	176	171	0.0	0.0	0.112	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	978	847	0.055	46	48	0.0	0.1	5.075	A
				4	87	22	978	845	0.103	88	92	0.1	0.1	5.040	A
			2	1	74	18	978	845	0.087	73	78	0.1	0.1	4.776	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	74	18	-	-	-	74	78	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	46	12	-	-	-	46	49	0.0	0.0	0.000	A
				4	87	22	-	-	-	87	92	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	404	101	1001	894	0.452	406	407	0.8	1.1	8.588	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	56	14	1001	893	0.063	56	56	0.2	0.2	11.842	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	1001	892	0.079	70	71	0.1	0.1	4.325	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	403	101	-	-	-	404	408	0.0	0.0	0.780	A
				2	71	18	-	-	-	71	71	0.0	0.0	0.564	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	56	14	-	-	-	56	55	0.0	0.0	0.764	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	973	951	0.105	101	98	0.2	0.1	6.083	A
				3	248	62	973	951	0.260	248	248	0.4	0.5	6.423	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	165	41	973	952	0.173	164	172	0.4	0.2	4.744	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	-	-	-	100	98	0.0	0.0	0.210	A
				3	247	62	-	-	-	248	248	0.0	0.0	0.245	A
				4	165	41	-	-	-	165	172	0.0	0.0	0.123	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	47	12	978	845	0.055	47	45	0.1	0.0	4.946	A
				4	85	21	978	845	0.101	85	89	0.1	0.1	5.020	A
			2	1	72	18	978	845	0.085	71	77	0.1	0.1	4.852	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	72	18	-	-	-	72	77	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	47	12	-	-	-	47	45	0.0	0.0	0.000	A
				4	85	21	-	-	-	85	89	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	402	100	1001	898	0.448	403	412	1.1	1.0	9.275	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	58	14	1001	897	0.065	59	60	0.2	0.1	12.196	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	68	17	1001	898	0.075	68	71	0.1	0.0	4.334	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	401	100	-	-	-	402	411	0.0	0.0	1.077	A
				2	67	17	-	-	-	68	71	0.0	0.0	1.030	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	58	15	-	-	-	58	60	0.0	0.0	1.054	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	973	956	0.084	81	82	0.1	0.1	5.349	A
				3	203	51	973	956	0.213	201	207	0.5	0.5	5.873	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	140	35	973	956	0.147	141	142	0.2	0.2	4.473	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	-	-	-	81	82	0.0	0.0	0.092	A
				3	204	51	-	-	-	203	207	0.0	0.0	0.109	A
				4	140	35	-	-	-	140	142	0.0	0.0	0.041	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	978	869	0.040	35	38	0.0	0.0	5.018	A
				4	70	17	978	869	0.080	70	74	0.1	0.1	4.779	A
			2	1	61	15	978	870	0.070	61	66	0.1	0.1	4.678	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	61	15	-	-	-	61	66	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	35	9	-	-	-	35	37	0.0	0.0	0.000	A
				4	70	17	-	-	-	70	74	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	334	84	1001	913	0.366	335	342	1.0	0.7	7.413	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	12	1001	910	0.054	50	48	0.1	0.1	10.182	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1001	914	0.057	52	57	0.0	0.1	4.520	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	334	83	-	-	-	334	341	0.0	0.0	0.273	A
				2	52	13	-	-	-	52	57	0.0	0.0	0.121	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	12	-	-	-	50	47	0.0	0.0	0.426	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	973	958	0.074	69	68	0.1	0.2	5.432	A
				3	163	41	973	958	0.170	162	173	0.5	0.3	5.734	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	107	27	973	958	0.112	107	114	0.2	0.2	4.478	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	71	18	-	-	-	71	68	0.0	0.0	0.115	A
				3	163	41	-	-	-	163	172	0.0	0.0	0.154	A
				4	107	27	-	-	-	107	114	0.0	0.0	0.070	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	978	893	0.032	29	31	0.0	0.0	4.953	A
				4	59	15	978	892	0.066	59	62	0.1	0.0	4.751	A
			2	1	51	13	978	890	0.058	51	55	0.1	0.1	4.200	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	51	13	-	-	-	51	55	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	-	-	-	29	31	0.0	0.0	0.000	A
				4	59	15	-	-	-	59	62	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	275	69	1001	931	0.296	276	283	0.7	0.5	6.796	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	991	921	0.044	41	42	0.1	0.1	9.205	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1001	930	0.050	46	47	0.1	0.1	4.063	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	275	69	-	-	-	275	282	0.0	0.0	0.191	A
				2	47	12	-	-	-	47	47	0.0	0.0	0.103	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	-	-	-	40	42	0.0	0.0	0.188	A

2038 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Gelscoe Lane - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - Top Brand - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.29	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A453 (N)		ONE HOUR	✓	458	100.000
2 - Gelscoe Lane		ONE HOUR	✓	394	100.000
3 - Top Brand		ONE HOUR	✓	228	100.000
4 - A42					

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	62	181	215
	2 - Gelscoe Lane	165	0	93	136
	3 - Top Brand	195	26	0	7
	4 - A42	0	0	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	23	23	23
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	3	0	0	0
	4 - A42	0	0	0	0

Cyclist %

		To			
		1 - A453 (N)	2 - Gelscoe Lane	3 - Top Brand	4 - A42
From	1 - A453 (N)	0	0	0	0
	2 - Gelscoe Lane	0	0	0	0
	3 - Top Brand	0	0	0	0
	4 - A42	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)
1 - A453 (N)	0.36	6.74	1.3	A	419	629
2 - Gelscoe Lane	0.33	5.88	0.9	A	357	536
3 - Top Brand	0.28	6.11	0.6	A	210	315
4 - A42						

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	335	84	18	1502	0.223	335	345	274	0.0	0.6	5.550	A
2 - Gelscoe Lane	298	74	292	1477	0.202	299	297	61	0.0	0.5	4.941	A
3 - Top Brand	171	43	390	982	0.175	170	170	202	0.0	0.3	5.099	A
4 - A42			0					268				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	418	104	21	1451	0.288	414	420	327	0.6	1.0	6.051	A
2 - Gelscoe Lane	350	87	360	1404	0.249	350	361	75	0.5	0.5	5.195	A
3 - Top Brand	210	52	458	956	0.220	210	216	252	0.3	0.3	5.256	A
4 - A42			0					322				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	510	127	28	1417	0.360	506	510	391	1.0	1.3	6.745	A
2 - Gelscoe Lane	419	105	433	1431	0.292	418	437	101	0.5	0.7	5.730	A
3 - Top Brand	250	62	556	919	0.272	249	257	295	0.3	0.6	5.915	A
4 - A42			0					386				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	502	125	28	1442	0.348	503	517	390	1.3	1.1	6.373	A
2 - Gelscoe Lane	431	108	444	1307	0.330	427	438	88	0.7	0.9	5.876	A
3 - Top Brand	248	62	562	900	0.275	249	253	309	0.6	0.4	6.106	A
4 - A42			0					394				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	407	102	21	1484	0.274	406	420	326	1.1	0.7	6.116	A
2 - Gelscoe Lane	356	89	349	1419	0.251	356	360	78	0.9	0.5	5.422	A
3 - Top Brand	203	51	465	995	0.204	203	211	241	0.4	0.3	5.796	A
4 - A42			0					320				

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	344	86	20	1486	0.232	347	349	271	0.7	0.4	5.634	A
2 - Gelscoe Lane	290	72	303	1423	0.203	288	300	64	0.5	0.5	4.952	A
3 - Top Brand	178	45	390	983	0.181	178	181	201	0.3	0.3	5.197	A
4 - A42			0					278				

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	173	967	0.179	173	179	0.0	0.4	5.665	A
			2	1, 4	162	967	0.167	162	165	0.0	0.2	5.256	A
		2	1	(1, 2, 3, 4)	335			335	347	0.0	0.0	0.082	A
	Exit	1	1		274			274	269	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	171	885	0.193	172	174	0.0	0.3	5.036	A
			2	1, 2	127	885	0.143	127	123	0.0	0.2	4.808	A
		2	1	(1, 2, 3, 4)	298			298	299	0.0	0.0	0.000	A
	Exit	1	1		61			61	61	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	153	876	0.175	152	152	0.0	0.3	5.216	A
			2	2, 3	18	876	0.021	18	18	0.0	0.0	4.118	A
		2	1	(1, 2, 3, 4)	171			171	171	0.0	0.0	0.001	A
	Exit	1	1		202			202	206	0.0	0.0	0.000	A
4 - A42	Exit	1	1		268			268	275	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	224	966	0.231	222	227	0.4	0.6	6.099	A
			2	1, 4	194	966	0.200	192	193	0.2	0.4	5.637	A
		2	1	(1, 2, 3, 4)	418			417	421	0.0	0.0	0.164	A
	Exit	1	1		327			327	338	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	206	864	0.239	206	209	0.3	0.3	5.380	A
			2	1, 2	144	864	0.166	144	152	0.2	0.2	4.930	A
		2	1	(1, 2, 3, 4)	350			350	361	0.0	0.0	0.004	A
	Exit	1	1		75			75	81	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	188	854	0.221	189	192	0.3	0.2	5.405	A
			2	2, 3	21	854	0.025	21	23	0.0	0.0	4.057	A
		2	1	(1, 2, 3, 4)	210			210	215	0.0	0.0	0.000	A
	Exit	1	1		252			252	253	0.0	0.0	0.000	A
4 - A42	Exit	1	1		322			322	324	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	274	964	0.284	272	274	0.6	0.6	6.500	A
			2	1, 4	235	964	0.244	234	235	0.4	0.6	6.310	A
		2	1	(1, 2, 3, 4)	510			509	511	0.0	0.1	0.333	A
	Exit	1	1		391			391	405	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	240	840	0.285	241	253	0.3	0.4	5.870	A
			2	1, 2	179	840	0.213	177	185	0.2	0.3	5.529	A
		2	1	(1, 2, 3, 4)	419			419	438	0.0	0.0	0.004	A
	Exit	1	1		101			101	101	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	221	822	0.269	221	228	0.2	0.5	6.128	A
			2	2, 3	29	822	0.035	28	29	0.0	0.1	4.237	A
		2	1	(1, 2, 3, 4)	250			250	258	0.0	0.0	0.005	A
	Exit	1	1		295			295	305	0.0	0.0	0.000	A
4 - A42	Exit	1	1		386			386	393	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	261	964	0.271	263	267	0.6	0.5	6.110	A
			2	1, 4	240	964	0.249	240	250	0.6	0.5	6.111	A
		2	1	(1, 2, 3, 4)	502			501	517	0.1	0.1	0.264	A
	Exit	1	1		390			390	397	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	255	837	0.305	252	257	0.4	0.6	6.179	A
			2	1, 2	176	837	0.210	176	181	0.3	0.3	5.430	A
		2	1	(1, 2, 3, 4)	431			431	439	0.0	0.0	0.004	A
	Exit	1	1		88			88	95	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	219	820	0.268	221	223	0.5	0.3	6.308	A
			2	2, 3	28	820	0.034	28	30	0.1	0.0	4.212	A
		2	1	(1, 2, 3, 4)	248			248	253	0.0	0.0	0.051	A
	Exit	1	1		309			309	309	0.0	0.0	0.000	A
4 - A42	Exit	1	1		394			394	407	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	216	966	0.223	215	223	0.5	0.3	6.091	A
			2	1, 4	191	966	0.198	191	197	0.5	0.4	5.890	A
		2	1	(1, 2, 3, 4)	407			407	419	0.1	0.0	0.121	A
	Exit	1	1		326			326	333	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	206	867	0.238	206	210	0.6	0.3	5.578	A
			2	1, 2	150	867	0.173	150	151	0.3	0.2	5.191	A
		2	1	(1, 2, 3, 4)	356			356	358	0.0	0.0	0.006	A
	Exit	1	1		78			78	78	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	181	852	0.213	181	188	0.3	0.3	5.910	A
			2	2, 3	22	852	0.025	21	22	0.0	0.0	4.705	A
		2	1	(1, 2, 3, 4)	203			203	210	0.0	0.0	0.019	A
	Exit	1	1		241			241	251	0.0	0.0	0.000	A
4 - A42	Exit	1	1		320			320	328	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	2, 3	181	967	0.187	184	187	0.3	0.2	5.609	A
			2	1, 4	163	967	0.169	163	162	0.4	0.3	5.487	A
		2	1	(1, 2, 3, 4)	344			344	348	0.0	0.0	0.082	A
	Exit	1	1		271			271	282	0.0	0.0	0.000	A
2 - Gelscoe Lane	Entry	1	1	3, 4	171	882	0.194	170	172	0.3	0.4	5.096	A
			2	1, 2	119	882	0.135	118	128	0.2	0.2	4.757	A
		2	1	(1, 2, 3, 4)	290			290	301	0.0	0.0	0.000	A
	Exit	1	1		64			64	68	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1, 4	158	876	0.181	158	160	0.3	0.2	5.345	A
			2	2, 3	20	876	0.023	20	21	0.0	0.1	4.106	A
		2	1	(1, 2, 3, 4)	178			178	181	0.0	0.0	0.000	A
	Exit	1	1		201			201	206	0.0	0.0	0.000	A
4 - A42	Exit	1	1		278			278	274	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	973	967	0.044	42	43	0.0	0.1	5.119	A
				3	130	32	973	967	0.134	131	136	0.0	0.3	5.836	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	162	40	973	967	0.167	162	165	0.0	0.2	5.256	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	-	-	-	43	43	0.0	0.0	0.064	A
				3	130	32	-	-	-	130	137	0.0	0.0	0.119	A
				4	162	40	-	-	-	162	166	0.0	0.0	0.056	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	978	884	0.081	72	70	0.0	0.1	5.139	A
				4	99	25	978	884	0.112	100	103	0.0	0.2	4.967	A
			2	1	127	32	978	885	0.143	127	123	0.0	0.2	4.808	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	127	32	-	-	-	127	124	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	-	-	-	72	71	0.0	0.0	0.000	A
				4	99	25	-	-	-	99	104	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	147	37	1001	877	0.168	147	146	0.0	0.3	5.241	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	812	708	0.008	6	6	0.0	0.0	4.665	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	5	1001	876	0.021	18	18	0.0	0.0	4.118	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	147	37	-	-	-	147	147	0.0	0.0	0.001	A
				2	18	5	-	-	-	18	18	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	-	-	-	6	6	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	973	966	0.057	54	58	0.1	0.1	6.173	A
				3	169	42	973	967	0.175	168	169	0.3	0.4	6.074	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	194	48	973	966	0.200	192	193	0.2	0.4	5.637	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	58	0.0	0.0	0.189	A
				3	169	42	-	-	-	169	170	0.0	0.0	0.170	A
				4	194	48	-	-	-	194	194	0.0	0.0	0.152	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	978	864	0.098	84	83	0.1	0.1	5.250	A
				4	122	30	978	863	0.141	122	125	0.2	0.2	5.467	A
			2	1	144	36	978	863	0.166	144	152	0.2	0.2	4.930	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	144	36	-	-	-	144	152	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	-	-	-	84	83	0.0	0.0	0.008	A
				4	122	30	-	-	-	122	125	0.0	0.0	0.004	A
3 - Top Brand	Entry	1	1	1	182	45	1001	854	0.213	183	186	0.3	0.2	5.395	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	836	713	0.009	7	7	0.0	0.0	5.691	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	1001	853	0.025	21	23	0.0	0.0	4.057	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	182	45	-	-	-	182	186	0.0	0.0	0.000	A
				2	21	5	-	-	-	21	23	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	6	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	973	965	0.076	73	72	0.1	0.1	6.553	A
				3	201	50	973	964	0.208	199	203	0.4	0.4	6.481	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	973	964	0.244	234	235	0.4	0.6	6.310	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	-	-	-	73	72	0.0	0.0	0.332	A
				3	201	50	-	-	-	201	203	0.0	0.0	0.308	A
				4	236	59	-	-	-	235	236	0.0	0.0	0.354	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	94	24	978	840	0.112	95	103	0.1	0.1	5.807	A
				4	145	36	978	842	0.173	145	150	0.2	0.2	5.914	A
			2	1	179	45	978	842	0.213	177	185	0.2	0.3	5.529	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	179	45	-	-	-	179	185	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	94	24	-	-	-	94	103	0.0	0.0	0.010	A
				4	145	36	-	-	-	145	150	0.0	0.0	0.006	A
3 - Top Brand	Entry	1	1	1	213	53	1001	823	0.259	213	220	0.2	0.5	6.134	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	860	707	0.011	7	8	0.0	0.0	5.966	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	29	7	1001	826	0.035	28	29	0.0	0.1	4.237	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	213	53	-	-	-	213	221	0.0	0.0	0.006	A
				2	29	7	-	-	-	29	29	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	8	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	973	963	0.061	59	65	0.1	0.1	6.040	A
				3	202	51	973	964	0.210	204	202	0.4	0.4	6.133	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	240	60	973	964	0.249	240	250	0.6	0.5	6.111	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	59	15	-	-	-	59	65	0.0	0.0	0.219	A
				3	202	51	-	-	-	202	202	0.0	0.0	0.266	A
				4	241	60	-	-	-	240	250	0.0	0.1	0.274	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	978	839	0.127	105	107	0.1	0.3	6.175	A
				4	148	37	978	839	0.177	147	151	0.2	0.3	6.182	A
			2	1	176	44	978	839	0.210	176	181	0.3	0.3	5.430	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	176	44	-	-	-	176	180	0.0	0.0	0.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	107	27	-	-	-	107	107	0.0	0.0	0.009	A
				4	148	37	-	-	-	148	151	0.0	0.0	0.004	A
3 - Top Brand	Entry	1	1	1	213	53	1001	821	0.259	214	217	0.5	0.3	6.312	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	871	714	0.010	7	7	0.0	0.0	6.190	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	28	7	1001	817	0.034	28	30	0.1	0.0	4.212	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	212	53	-	-	-	213	216	0.0	0.0	0.056	A
				2	28	7	-	-	-	28	30	0.0	0.0	0.020	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	7	2	-	-	-	7	7	0.0	0.0	0.035	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	973	967	0.059	57	56	0.1	0.1	6.009	A
				3	159	40	973	966	0.164	158	167	0.4	0.2	6.118	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	191	48	973	966	0.198	191	197	0.5	0.4	5.890	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	-	-	-	57	56	0.0	0.0	0.089	A
				3	159	40	-	-	-	159	166	0.0	0.0	0.114	A
				4	191	48	-	-	-	191	197	0.1	0.0	0.136	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	21	978	865	0.095	82	84	0.3	0.1	5.598	A
				4	124	31	978	866	0.143	124	125	0.3	0.1	5.564	A
			2	1	150	37	978	865	0.173	150	151	0.3	0.2	5.191	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	150	37	-	-	-	150	150	0.0	0.0	0.006	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	21	-	-	-	82	84	0.0	0.0	0.002	A
				4	124	31	-	-	-	124	124	0.0	0.0	0.010	A
3 - Top Brand	Entry	1	1	1	176	44	1001	851	0.207	176	183	0.3	0.3	5.916	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	742	628	0.009	5	6	0.0	0.0	5.717	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	5	1001	849	0.025	21	22	0.0	0.0	4.705	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	176	44	-	-	-	176	183	0.0	0.0	0.021	A
				2	22	5	-	-	-	22	22	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	5	1	-	-	-	5	5	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A453 (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	973	967	0.045	44	47	0.1	0.0	5.612	A
				3	138	34	973	967	0.142	140	140	0.2	0.1	5.608	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	163	41	973	967	0.169	163	162	0.4	0.3	5.487	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	47	0.0	0.0	0.096	A
				3	138	34	-	-	-	138	139	0.0	0.0	0.088	A
				4	163	41	-	-	-	163	162	0.0	0.0	0.072	A
2 - Gelscoe Lane	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	978	882	0.071	62	66	0.1	0.2	4.970	A
				4	108	27	978	882	0.123	109	106	0.1	0.2	5.176	A
			2	1	119	30	978	883	0.134	118	128	0.2	0.2	4.757	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	119	30	-	-	-	119	128	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	-	-	-	63	67	0.0	0.0	0.000	A
				4	108	27	-	-	-	108	106	0.0	0.0	0.000	A
3 - Top Brand	Entry	1	1	1	153	38	1001	876	0.174	152	154	0.3	0.2	5.355	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	812	705	0.008	6	6	0.0	0.0	5.089	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1001	878	0.023	20	21	0.0	0.1	4.106	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	153	38	-	-	-	153	154	0.0	0.0	0.000	A
				2	20	5	-	-	-	20	21	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	6	1	-	-	-	6	6	0.0	0.0	0.000	A

APPENDIX 57: Junction 12: M1 Junction 23 Stage 1A/2A Modelling Results

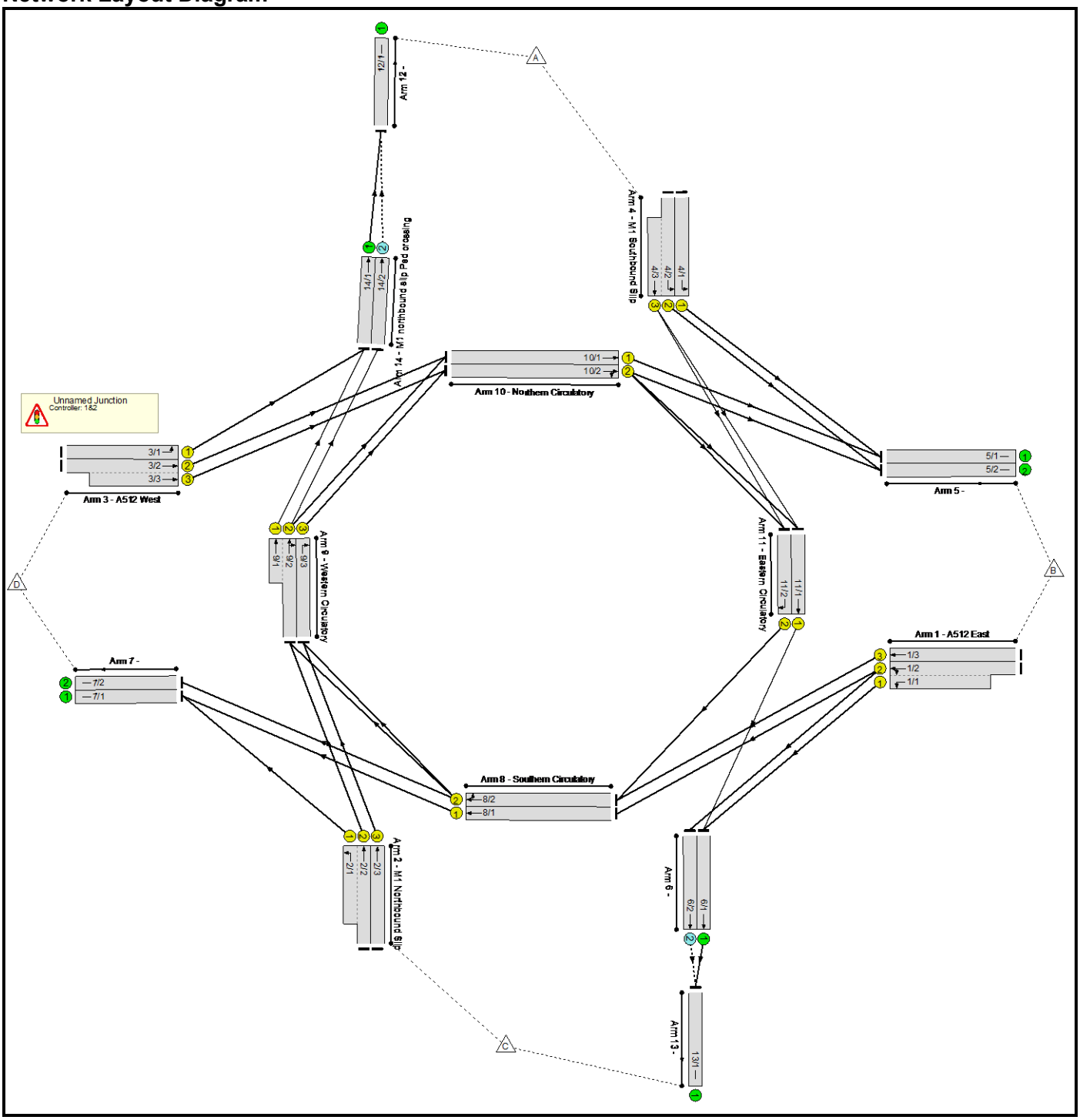
Full Input Data And Results

User and Project Details

Project:	**East Midlands Gateway 2**
Title:	**M1 Junction 23**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 12
Date Started:	26/10/23
Checked By:	Vibeeshan Devaharan
Additional detail:	
File name:	250619 M1 Junction 23_Stage 1a+2a.lsg3x
Author:	Charlie Cresswell
Company:	BWB
Address:	

Full Input Data And Results

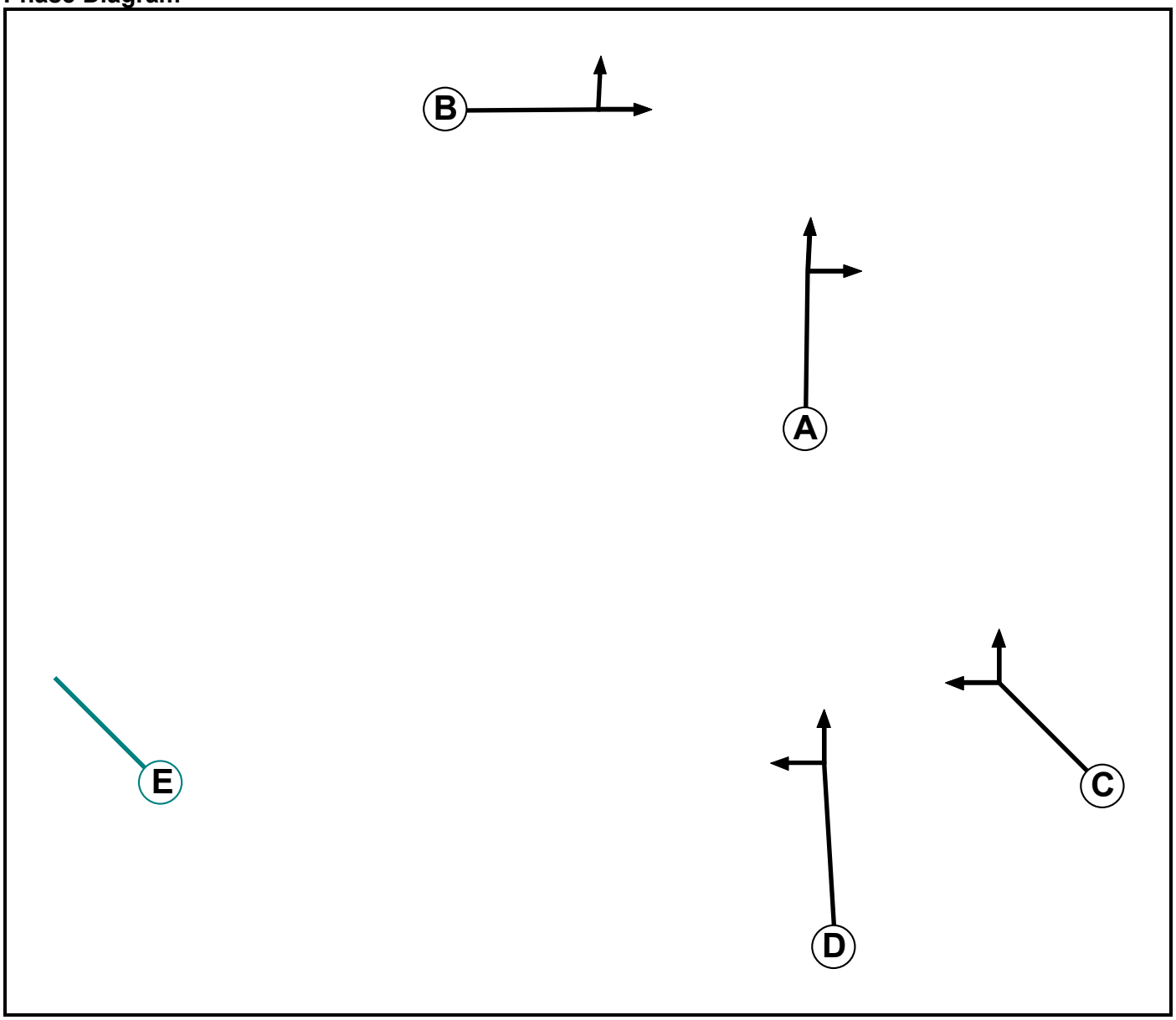
Network Layout Diagram



Full Input Data And Results

Controller :C1 - Westside 25911

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Dummy		4	4

Full Input Data And Results

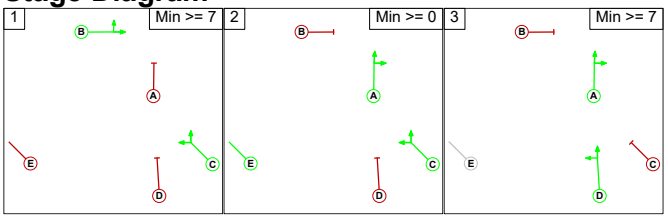
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		6	-	-	-
	B	6		-	-	6
	C	-	-		6	-
	D	-	-	7		-
	E	-	1	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	B C
2	A C E
3	A D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	A	Losing	7	7

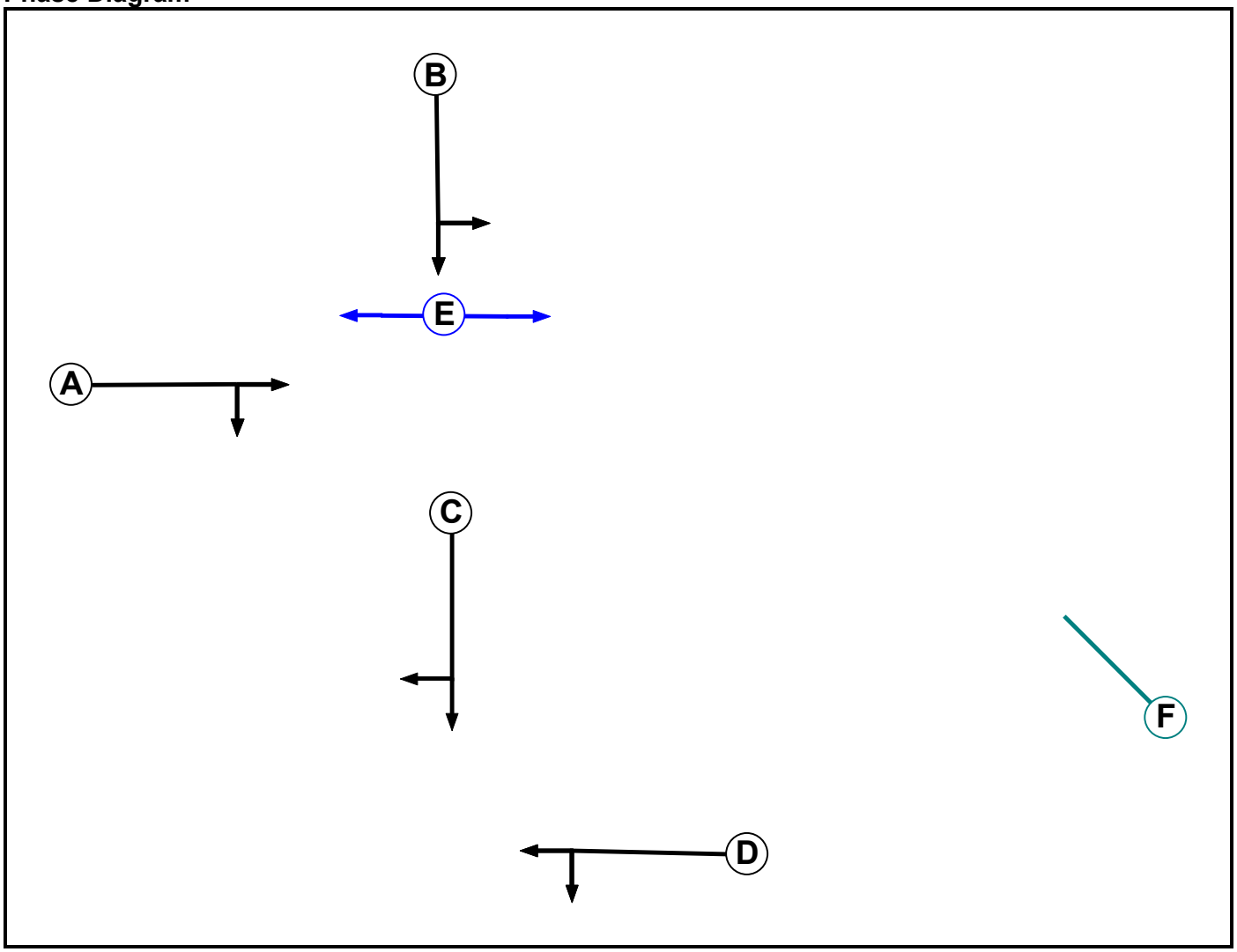
Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		6	6
	2	6		6
	3	13	7	

Full Input Data And Results

Controller :C2 - Eastside 25921

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		9	9
F	Dummy		4	4

Full Input Data And Results

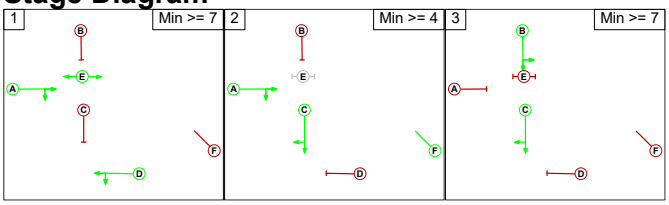
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
	A	B	C	D	E	F
A		6	-	-	-	-
B	7		-	-	5	7
C	-	-		6	-	-
D	-	-	6		-	6
E	-	10	-	-		-
F	-	1	-	1	-	

Phases in Stage

Stage No.	Phases in Stage
1	A D E
2	A C F
3	B C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	C	Losing	7	7

Prohibited Stage Change

From Stage	To Stage			
	1	2	3
1		6	10
2	6		6
3	13	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
6/2	13/1 (Ahead)	715	0	6/1	0.22	All	-	-	-	-	-
14/2 (M1 northbound slip Ped crossing)	12/1 (Ahead)	715	0	14/1	0.22	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A512 East)	U	D	2	3	16.0	Geom	-	3.75	0.00	Y	Arm 6 Left	110.00
1/2 (A512 East)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 6 Left Arm 8 Ahead	Inf 71.00
1/3 (A512 East)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 8 Ahead	85.00
2/1 (M1 Northbound Slip)	U	D	2	3	13.9	Geom	-	3.75	0.00	Y	Arm 7 Left	110.00
2/2 (M1 Northbound Slip)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 9 Ahead	170.00
2/3 (M1 Northbound Slip)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 9 Ahead	276.00
3/1 (A512 West)	U	B	2	3	18.3	Geom	-	3.75	0.00	Y	Arm 14 Left	45.00
3/2 (A512 West)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 10 Ahead	55.00
3/3 (A512 West)	U	B	2	3	10.4	Geom	-	3.75	0.00	Y	Arm 10 Ahead	60.00
4/1 (M1 Southbound Slip)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	55.00
4/2 (M1 Southbound Slip)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	65.00
4/3 (M1 Southbound Slip)	U	B	2	3	14.8	Geom	-	3.75	0.00	Y	Arm 11 Ahead	70.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 13 Ahead	Inf
6/2	O		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 13 Ahead	Inf
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Southern Circulatory)	U	C	2	3	28.3	Geom	-	3.75	0.00	Y	Arm 7 Ahead	100.00

Full Input Data And Results

8/2 (Southern Circulatory)	U	C	2	3	28.0	Geom	-	3.75	0.00	Y	Arm 7 Ahead	100.00
											Arm 9 Right	45.00
9/1 (Western Circulatory)	U	A	2	3	4.9	Geom	-	3.75	0.00	Y	Arm 14 Ahead	60.00
9/2 (Western Circulatory)	U	A	2	3	12.8	Geom	-	3.75	0.00	Y	Arm 10 Right	45.00
											Arm 14 Ahead	45.00
9/3 (Western Circulatory)	U	A	2	3	11.6	Geom	-	3.75	0.00	Y	Arm 10 Right	50.00
10/1 (Northern Circulatory)	U	A	2	3	30.5	Geom	-	3.75	0.00	Y	Arm 5 Ahead	80.00
10/2 (Northern Circulatory)	U	A	2	3	29.1	Geom	-	3.75	0.00	Y	Arm 5 Ahead	55.00
											Arm 11 Right	55.00
11/1 (Eastern Circulatory)	U	C	2	3	14.9	Geom	-	4.25	0.00	Y	Arm 6 Ahead	70.00
11/2 (Eastern Circulatory)	U	C	2	3	13.3	Geom	-	4.25	0.00	Y	Arm 8 Right	65.00
12/1	U		2	3	60.0	Inf	-	-	-	-	-	-
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (M1 northbound slip Ped crossing)	U		2	3	11.3	Geom	-	3.25	0.00	Y	Arm 12 Ahead	Inf
14/2 (M1 northbound slip Ped crossing)	O		2	3	11.1	Geom	-	3.25	0.00	Y	Arm 12 Ahead	Inf

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Am'	07:45	08:45	01:00	
2: '2022 Pm'	17:00	18:00	01:00	
3: '2028 Without Development Flows (AM)'	07:45	08:45	01:00	
4: '2028 Without Development Flows (PM)'	17:00	18:00	01:00	
5: '2028 With Development Flows (AM)'	07:45	08:45	01:00	
6: '2028 With Development Flows (PM)'	17:00	18:00	01:00	
7: '2038 Without Development Flows (AM)'	07:45	08:45	01:00	
8: '2038 Without Development Flows (PM)'	17:00	18:00	01:00	
9: '2038 With Development Flows (AM)'	07:45	08:45	01:00	
10: '2038 With Development Flows (PM)'	17:00	18:00	01:00	
11: '2a 2028 With Development Flows (AM)'	07:45	08:45	01:00	
12: '2a 2028 With Development Flows (PM)'	17:00	18:00	01:00	
13: '2a 2038 With Development Flows (AM)'	07:45	08:45	01:00	
14: '2a 2038 With Development Flows (PM)'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: '2022 Am', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	795	0	377	1172
	B	494	0	161	378	1033
	C	0	423	0	44	467
	D	290	735	132	0	1157
	Tot.	784	1953	293	799	3829

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Unnamed Junction	
1/1 (short)	161
1/2 (with short)	539(In) 378(Out)
1/3	494
2/1 (short)	44
2/2 (with short)	237(In) 193(Out)
2/3	230
3/1	290
3/2 (with short)	867(In) 504(Out)
3/3 (short)	363
4/1	343
4/2 (with short)	829(In) 452(Out)
4/3 (short)	377
5/1	1040
5/2	913
6/1	293
6/2	0
7/1	422
7/2	377
8/1	378
8/2	871
9/1 (short)	423
9/2 (with short)	687(In) 264(Out)
9/3	230
10/1	697
10/2	593
11/1	132
11/2	377
12/1	784
13/1	293
14/1	713
14/2	71

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	43.3 %	1941	1941
				Arm 9 Right	45.00	56.7 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	73.1 %	1926	1926
				Arm 14 Ahead	45.00	26.9 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	77.7 %	1937	1937
				Arm 11 Right	55.00	22.3 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 2: 'PM Base' (FG2: '2022 Pm', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	408	0	187	595
	B	491	0	351	520	1362
	C	0	203	0	168	371
	D	218	389	118	0	725
	Tot.	709	1000	469	875	3053

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Unnamed Junction	
1/1 (short)	351
1/2 (with short)	871(In) 520(Out)
1/3	491
2/1 (short)	168
2/2 (with short)	232(In) 64(Out)
2/3	139
3/1	218
3/2 (with short)	507(In) 226(Out)
3/3 (short)	281
4/1	167
4/2 (with short)	428(In) 241(Out)
4/3 (short)	187
5/1	457
5/2	543
6/1	469
6/2	0
7/1	688
7/2	187
8/1	520
8/2	678
9/1 (short)	410
9/2 (with short)	555(In) 145(Out)
9/3	139
10/1	290
10/2	420
11/1	118
11/2	187
12/1	709
13/1	469
14/1	628
14/2	81

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	27.6 %	1935	1935
				Arm 9 Right	45.00	72.4 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	44.1 %	1926	1926
				Arm 14 Ahead	45.00	55.9 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	71.9 %	1937	1937
				Arm 11 Right	55.00	28.1 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 3: '2028 Without Development Flows (AM)' (FG3: '2028 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	841	0	496	1337
	B	557	0	193	526	1276
	C	0	472	0	46	518
	D	365	902	173	0	1440
	Tot.	922	2215	366	1068	4571

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2028 Without Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	193
1/2 (with short)	719(In) 526(Out)
1/3	557
2/1 (short)	46
2/2 (with short)	279(In) 233(Out)
2/3	239
3/1	365
3/2 (with short)	1075(In) 537(Out)
3/3 (short)	538
4/1	384
4/2 (with short)	953(In) 457(Out)
4/3 (short)	496
5/1	1154
5/2	1061
6/1	366
6/2	0
7/1	572
7/2	496
8/1	526
8/2	1053
9/1 (short)	502
9/2 (with short)	790(In) 288(Out)
9/3	239
10/1	770
10/2	777
11/1	173
11/2	496
12/1	922
13/1	366
14/1	867
14/2	55

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	47.1 %	1942	1942
				Arm 9 Right	45.00	52.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	80.9 %	1926	1926
				Arm 14 Ahead	45.00	19.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	77.7 %	1937	1937
				Arm 11 Right	55.00	22.3 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 4: '2028 Without Development Flows (PM)' (FG4: '2028 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	558	0	320	878
	B	532	0	381	749	1662
	C	0	229	0	212	441
	D	351	707	192	0	1250
	Tot.	883	1494	573	1281	4231

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2028 Without Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	381
1/2 (with short)	1066(In) 685(Out)
1/3	596
2/1 (short)	212
2/2 (with short)	244(In) 32(Out)
2/3	197
3/1	351
3/2 (with short)	899(In) 452(Out)
3/3 (short)	447
4/1	238
4/2 (with short)	640(In) 320(Out)
4/3 (short)	320
5/1	722
5/2	772
6/1	573
6/2	0
7/1	897
7/2	384
8/1	685
8/2	916
9/1 (short)	455
9/2 (with short)	564(In) 109(Out)
9/3	197
10/1	484
10/2	644
11/1	192
11/2	320
12/1	883
13/1	573
14/1	806
14/2	77

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	41.9 %	1940	1940
				Arm 9 Right	45.00	58.1 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	29.4 %	1926	1926
				Arm 14 Ahead	45.00	70.6 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	70.2 %	1937	1937
				Arm 11 Right	55.00	29.8 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 5: '2028 With Development Flows (AM)' (FG5: '2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	858	0	498	1356
	B	598	0	196	542	1336
	C	0	457	0	48	505
	D	383	938	173	0	1494
	Tot.	981	2253	369	1088	4691

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2028 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	196
1/2 (with short)	738(In) 542(Out)
1/3	598
2/1 (short)	48
2/2 (with short)	271(In) 223(Out)
2/3	234
3/1	383
3/2 (with short)	1111(In) 558(Out)
3/3 (short)	553
4/1	392
4/2 (with short)	964(In) 466(Out)
4/3 (short)	498
5/1	1173
5/2	1080
6/1	369
6/2	0
7/1	590
7/2	498
8/1	542
8/2	1096
9/1 (short)	547
9/2 (with short)	821(In) 274(Out)
9/3	234
10/1	781
10/2	787
11/1	173
11/2	498
12/1	981
13/1	369
14/1	930
14/2	51

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	45.4 %	1941	1941
				Arm 9 Right	45.00	54.6 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.4 %	1926	1926
				Arm 14 Ahead	45.00	18.6 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	78.0 %	1937	1937
				Arm 11 Right	55.00	22.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 6: '2028 With Development Flows (PM)' (FG6: '2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	583	0	341	924
	B	488	0	352	705	1545
	C	0	206	0	209	415
	D	352	651	193	0	1196
	Tot.	840	1440	545	1255	4080

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	352
1/2 (with short)	996(In) 644(Out)
1/3	549
2/1 (short)	209
2/2 (with short)	218(In) 9(Out)
2/3	197
3/1	352
3/2 (with short)	844(In) 430(Out)
3/3 (short)	414
4/1	244
4/2 (with short)	680(In) 339(Out)
4/3 (short)	341
5/1	683
5/2	757
6/1	545
6/2	0
7/1	853
7/2	402
8/1	644
8/2	890
9/1 (short)	406
9/2 (with short)	497(In) 91(Out)
9/3	197
10/1	439
10/2	611
11/1	193
11/2	341
12/1	840
13/1	545
14/1	758
14/2	82

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	45.2 %	1941	1941
				Arm 9 Right	45.00	54.8 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	9.9 %	1926	1926
				Arm 14 Ahead	45.00	90.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	68.4 %	1937	1937
				Arm 11 Right	55.00	31.6 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 7: '2038 Without Development Flows (AM)' (FG7: '2038 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	905	0	742	1647
	B	616	0	271	791	1678
	C	0	590	0	58	648
	D	472	1170	285	0	1927
	Tot.	1088	2665	556	1591	5900

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2038 Without Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	271
1/2 (with short)	989(In) 718(Out)
1/3	689
2/1 (short)	58
2/2 (with short)	353(In) 295(Out)
2/3	295
3/1	472
3/2 (with short)	1455(In) 732(Out)
3/3 (short)	723
4/1	727
4/2 (with short)	920(In) 178(Out)
4/3 (short)	742
5/1	1754
5/2	911
6/1	556
6/2	0
7/1	776
7/2	815
8/1	718
8/2	1431
9/1 (short)	600
9/2 (with short)	911(In) 311(Out)
9/3	295
10/1	1027
10/2	1018
11/1	285
11/2	742
12/1	1088
13/1	556
14/1	1072
14/2	16

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	57.0 %	1945	1945
				Arm 9 Right	45.00	43.0 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	94.9 %	1926	1926
				Arm 14 Ahead	45.00	5.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.0 %	1937	1937
				Arm 11 Right	55.00	28.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 8: '2038 Without Development Flows (PM)' (FG8: '2038 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	621	0	305	926
	B	640	0	501	924	2065
	C	0	365	0	291	656
	D	456	1023	273	0	1752
	Tot.	1096	2009	774	1520	5399

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 Without Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	501
1/2 (with short)	1307(In) 806(Out)
1/3	758
2/1 (short)	291
2/2 (with short)	370(In) 79(Out)
2/3	286
3/1	456
3/2 (with short)	1296(In) 687(Out)
3/3 (short)	609
4/1	269
4/2 (with short)	657(In) 352(Out)
4/3 (short)	305
5/1	1035
5/2	974
6/1	774
6/2	0
7/1	1097
7/2	423
8/1	806
8/2	1063
9/1 (short)	589
9/2 (with short)	719(In) 130(Out)
9/3	286
10/1	766
10/2	895
11/1	273
11/2	305
12/1	1096
13/1	774
14/1	1045
14/2	51

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	39.8 %	1939	1939
				Arm 9 Right	45.00	60.2 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	60.8 %	1926	1926
				Arm 14 Ahead	45.00	39.2 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	69.5 %	1937	1937
				Arm 11 Right	55.00	30.5 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 9: '2038 With Development Flows (AM)' (FG9: '2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	917	0	728	1645
	B	648	0	273	801	1722
	C	0	575	0	58	633
	D	485	1199	283	0	1967
	Tot.	1133	2691	556	1587	5967

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2038 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	273
1/2 (with short)	1006(In) 733(Out)
1/3	716
2/1 (short)	58
2/2 (with short)	346(In) 288(Out)
2/3	287
3/1	485
3/2 (with short)	1482(In) 745(Out)
3/3 (short)	737
4/1	714
4/2 (with short)	931(In) 203(Out)
4/3 (short)	728
5/1	1747
5/2	944
6/1	556
6/2	0
7/1	791
7/2	796
8/1	733
8/2	1444
9/1 (short)	574
9/2 (with short)	936(In) 362(Out)
9/3	287
10/1	1033
10/2	1024
11/1	283
11/2	728
12/1	1133
13/1	556
14/1	1059
14/2	74

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	55.1 %	1945	1945
				Arm 9 Right	45.00	44.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	79.6 %	1926	1926
				Arm 14 Ahead	45.00	20.4 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.4 %	1937	1937
				Arm 11 Right	55.00	27.6 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 10: '2038 With Development Flows (PM)' (FG10: '2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	653	0	339	992
	B	651	0	486	943	2080
	C	0	356	0	296	652
	D	470	1013	269	0	1752
	Tot.	1121	2022	755	1578	5476

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	486
1/2 (with short)	1308(In) 822(Out)
1/3	772
2/1 (short)	296
2/2 (with short)	358(In) 62(Out)
2/3	294
3/1	470
3/2 (with short)	1282(In) 680(Out)
3/3 (short)	602
4/1	298
4/2 (with short)	694(In) 355(Out)
4/3 (short)	339
5/1	1040
5/2	982
6/1	755
6/2	0
7/1	1118
7/2	460
8/1	822
8/2	1111
9/1 (short)	602
9/2 (with short)	713(In) 111(Out)
9/3	294
10/1	742
10/2	896
11/1	269
11/2	339
12/1	1121
13/1	755
14/1	1072
14/2	49

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	41.4 %	1940	1940
				Arm 9 Right	45.00	58.6 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	55.9 %	1926	1926
				Arm 14 Ahead	45.00	44.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	70.0 %	1937	1937
				Arm 11 Right	55.00	30.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 11: '2a 2028 With Development Flows (AM)' (FG11: '2a 2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	840	0	469	1309
	B	592	0	200	543	1335
	C	0	458	0	46	504
	D	371	953	177	0	1501
	Tot.	963	2251	377	1058	4649

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2a 2028 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	200
1/2 (with short)	743(In) 543(Out)
1/3	592
2/1 (short)	46
2/2 (with short)	270(In) 224(Out)
2/3	234
3/1	371
3/2 (with short)	1130(In) 567(Out)
3/3 (short)	563
4/1	375
4/2 (with short)	934(In) 465(Out)
4/3 (short)	469
5/1	1166
5/2	1085
6/1	377
6/2	0
7/1	589
7/2	469
8/1	543
8/2	1061
9/1 (short)	541
9/2 (with short)	816(In) 275(Out)
9/3	234
10/1	791
10/2	797
11/1	177
11/2	469
12/1	963
13/1	377
14/1	912
14/2	51

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	44.2 %	1941	1941
				Arm 9 Right	45.00	55.8 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.5 %	1926	1926
				Arm 14 Ahead	45.00	18.5 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	77.8 %	1937	1937
				Arm 11 Right	55.00	22.2 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 12: '2a 2028 With Development Flows (PM)' (FG12: '2a 2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	540	0	291	831
	B	494	0	362	690	1546
	C	0	219	0	199	418
	D	329	650	186	0	1165
	Tot.	823	1409	548	1180	3960

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2a 2028 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	362
1/2 (with short)	997(In) 635(Out)
1/3	549
2/1 (short)	199
2/2 (with short)	240(In) 41(Out)
2/3	178
3/1	329
3/2 (with short)	836(In) 418(Out)
3/3 (short)	418
4/1	213
4/2 (with short)	618(In) 327(Out)
4/3 (short)	291
5/1	672
5/2	737
6/1	548
6/2	0
7/1	834
7/2	346
8/1	635
8/2	840
9/1 (short)	413
9/2 (with short)	535(In) 122(Out)
9/3	178
10/1	459
10/2	596
11/1	186
11/2	291
12/1	823
13/1	548
14/1	742
14/2	81

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	41.2 %	1940	1940
				Arm 9 Right	45.00	58.8 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	33.6 %	1926	1926
				Arm 14 Ahead	45.00	66.4 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	68.8 %	1937	1937
				Arm 11 Right	55.00	31.2 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 13: '2a 2038 With Development Flows (AM)' (FG13: '2a 2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	914	0	737	1651
	B	617	0	267	796	1680
	C	0	561	0	58	619
	D	480	1219	289	0	1988
	Tot.	1097	2694	556	1591	5938

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2a 2038 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	267
1/2 (with short)	987(In) 720(Out)
1/3	693
2/1 (short)	58
2/2 (with short)	338(In) 280(Out)
2/3	281
3/1	480
3/2 (with short)	1508(In) 758(Out)
3/3 (short)	750
4/1	722
4/2 (with short)	929(In) 192(Out)
4/3 (short)	737
5/1	1760
5/2	934
6/1	556
6/2	0
7/1	778
7/2	813
8/1	720
8/2	1430
9/1 (short)	554
9/2 (with short)	897(In) 343(Out)
9/3	281
10/1	1038
10/2	1031
11/1	289
11/2	737
12/1	1097
13/1	556
14/1	1034
14/2	63

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	56.9 %	1945	1945
				Arm 9 Right	45.00	43.1 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.6 %	1926	1926
				Arm 14 Ahead	45.00	18.4 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.0 %	1937	1937
				Arm 11 Right	55.00	28.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 14: '2a 2038 With Development Flows (PM)' (FG14: '2a 2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	624	0	301	925
	B	654	0	487	934	2075
	C	0	369	0	287	656
	D	450	1027	256	0	1733
	Tot.	1104	2020	743	1522	5389

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 2a 2038 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	487
1/2 (with short)	1302(In) 815(Out)
1/3	773
2/1 (short)	287
2/2 (with short)	372(In) 85(Out)
2/3	284
3/1	450
3/2 (with short)	1283(In) 674(Out)
3/3 (short)	609
4/1	269
4/2 (with short)	656(In) 355(Out)
4/3 (short)	301
5/1	1028
5/2	992
6/1	743
6/2	0
7/1	1102
7/2	420
8/1	815
8/2	1074
9/1 (short)	606
9/2 (with short)	739(In) 133(Out)
9/3	284
10/1	759
10/2	893
11/1	256
11/2	301
12/1	1104
13/1	743
14/1	1056
14/2	48

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	39.1 %	1939	1939
				Arm 9 Right	45.00	60.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	63.9 %	1926	1926
				Arm 14 Ahead	45.00	36.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

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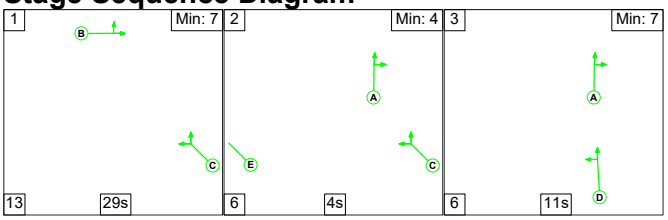
10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	71.3 %	1937	1937
				Arm 11 Right	55.00	28.7 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 1: 'AM Base' (FG1: '2022 Am', Plan 1: 'Network Control Plan 1')
Controller :C1 - Westside 25911

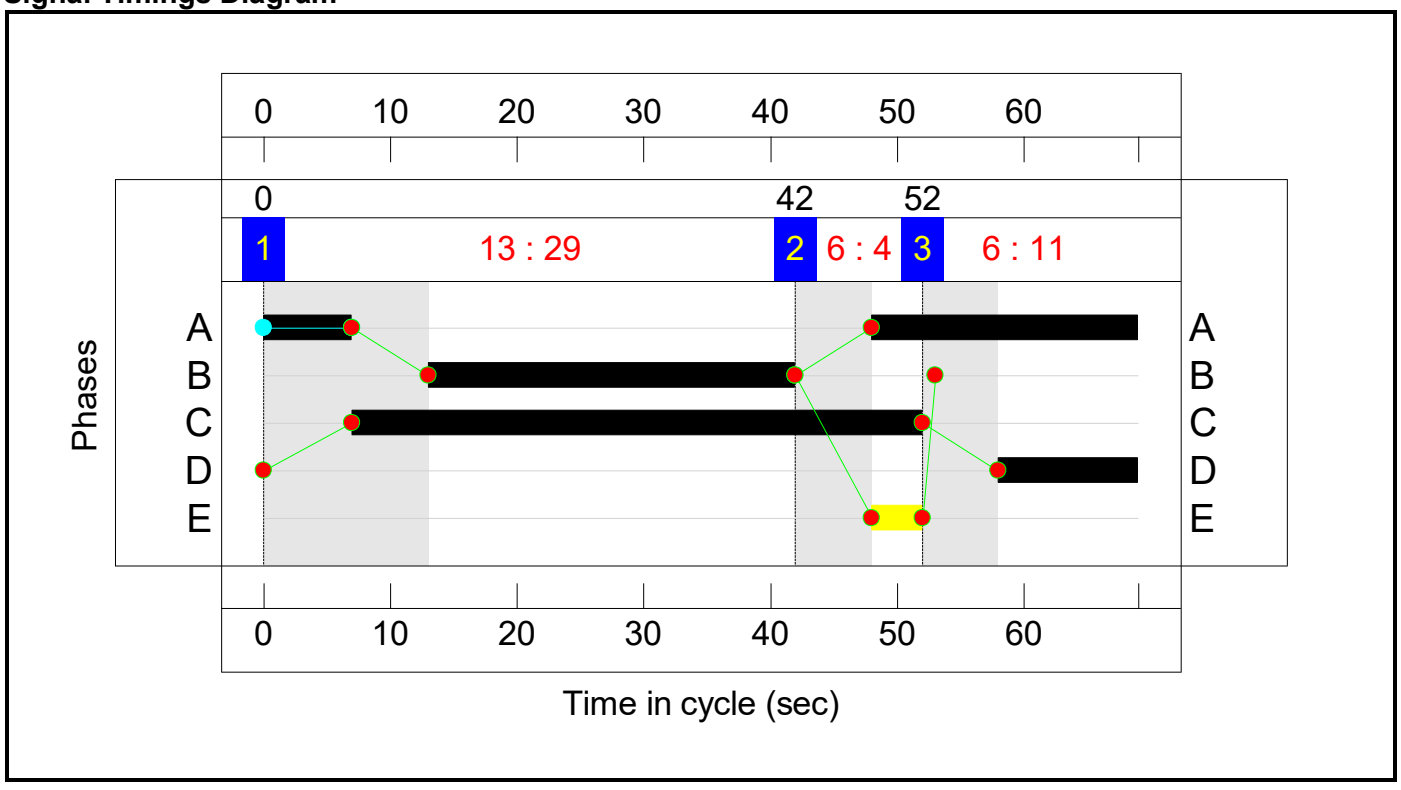
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	29	4	11
Change Point	0	42	52

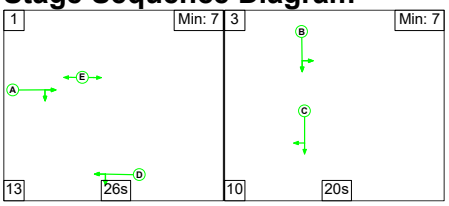
Signal Timings Diagram



Full Input Data And Results

Controller :C2 - Eastside 25921

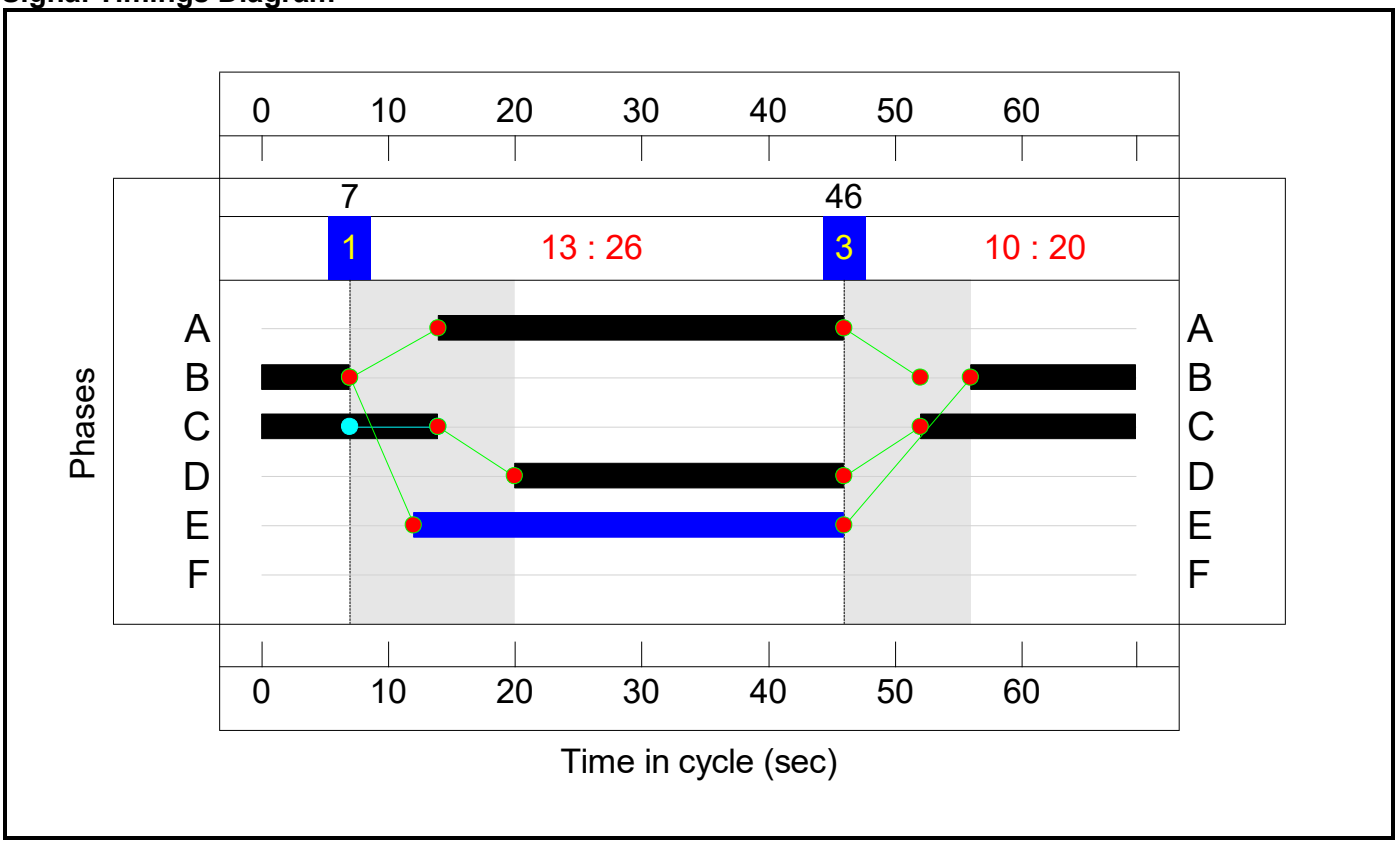
Stage Sequence Diagram



Stage Timings

Stage	1	3
Duration	26	20
Change Point	7	46

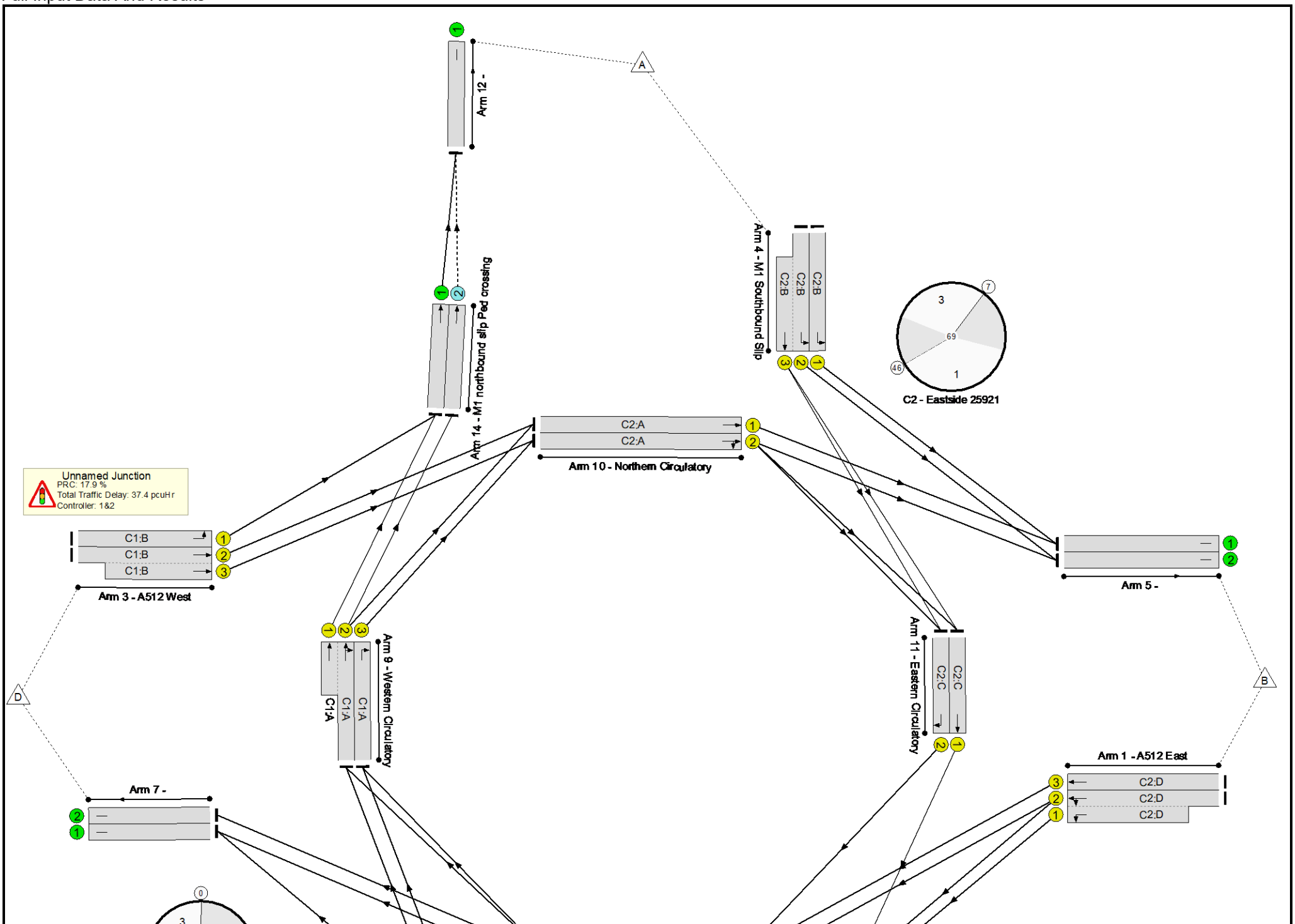
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.4%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.4%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	539	1949:1963	763+325	49.6 : 49.6%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	494	1955	765	64.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	11	-	237	1973:1963	343+78	56.2 : 56.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	11	-	230	1979	344	66.8%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	290	1926	837	34.6%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	867	1937:1941	718+517	70.2 : 70.2%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	343	1937	590	58.2%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	829	1945:1948	592+545	76.4 : 69.2%
5/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	293	1980	1980	14.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	976	0.0%
7/1		U	N/A	N/A	-		-	-	-	422	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	45	-	378	1961	1307	28.9%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	45	-	871	1941	1294	67.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	687	1926:1941	388+621	68.1 : 68.1%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	230	1932	812	28.3%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	697	1953	934	74.6%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	593	1937	926	64.0%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	132	1997	926	14.3%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	377	1994	925	40.8%
12/1		U	N/A	N/A	-		-	-	-	784	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	713	1940	1940	36.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	71	1940	558	12.7%

Full Input Data And Results

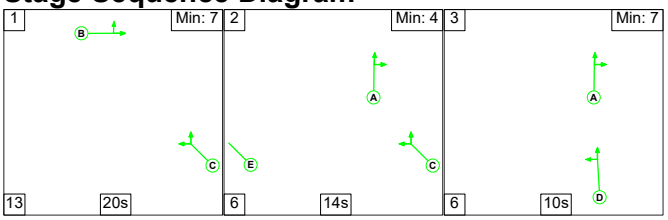
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**71**	**0**	**0**	**25.2**	**12.2**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**71**	**0**	**0**	**25.2**	**12.2**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
1/2+1/1	539	539	-	-	-	2.3	0.5	-	2.8	18.6	5.5	0.5	6.0
1/3	494	494	-	-	-	2.3	0.9	-	3.3	23.7	7.7	0.9	8.6
2/2+2/1	237	237	-	-	-	1.7	0.6	-	2.3	35.4	3.4	0.6	4.0
2/3	230	230	-	-	-	1.7	1.0	-	2.7	42.1	4.1	1.0	5.1
3/1	290	290	-	-	-	1.0	0.3	-	1.3	16.3	3.6	0.3	3.9
3/2+3/3	867	867	-	-	-	3.5	1.2	-	4.6	19.2	7.3	1.2	8.5
4/1	343	343	-	-	-	1.9	0.7	-	2.6	27.6	5.5	0.7	6.2
4/2+4/3	829	829	-	-	-	4.9	1.3	-	6.2	27.1	7.8	1.3	9.1
5/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	293	293	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	422	422	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	378	378	-	-	-	0.4	0.2	-	0.6	6.0	1.7	0.2	1.9
8/2	871	871	-	-	-	0.7	1.0	-	1.7	7.2	3.9	1.0	4.9
9/2+9/1	687	687	-	-	-	1.7	1.1	-	2.7	14.3	8.7	1.1	9.7
9/3	230	230	-	-	-	0.1	0.2	-	0.3	4.9	0.2	0.2	0.4
10/1	697	697	-	-	-	1.4	1.5	-	2.8	14.7	5.7	1.5	7.1
10/2	593	593	-	-	-	1.0	0.9	-	1.8	11.2	5.2	0.9	6.0
11/1	132	132	-	-	-	0.5	0.1	-	0.6	15.9	2.4	0.1	2.5
11/2	377	377	-	-	-	0.1	0.3	-	0.4	4.1	0.2	0.3	0.5
12/1	784	784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	713	713	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	71	71	71	0	0	0.0	0.1	-	0.1	3.7	0.0	0.1	0.1

C1 - Westside 25911	PRC for Signalled Lanes (%):	28.2	Total Delay for Signalled Lanes (pcuHr):	16.38	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	17.9	Total Delay for Signalled Lanes (pcuHr):	20.59	Cycle Time (s):	69
	PRC Over All Lanes (%):	17.9	Total Delay Over All Lanes(pcuHr):	37.42		

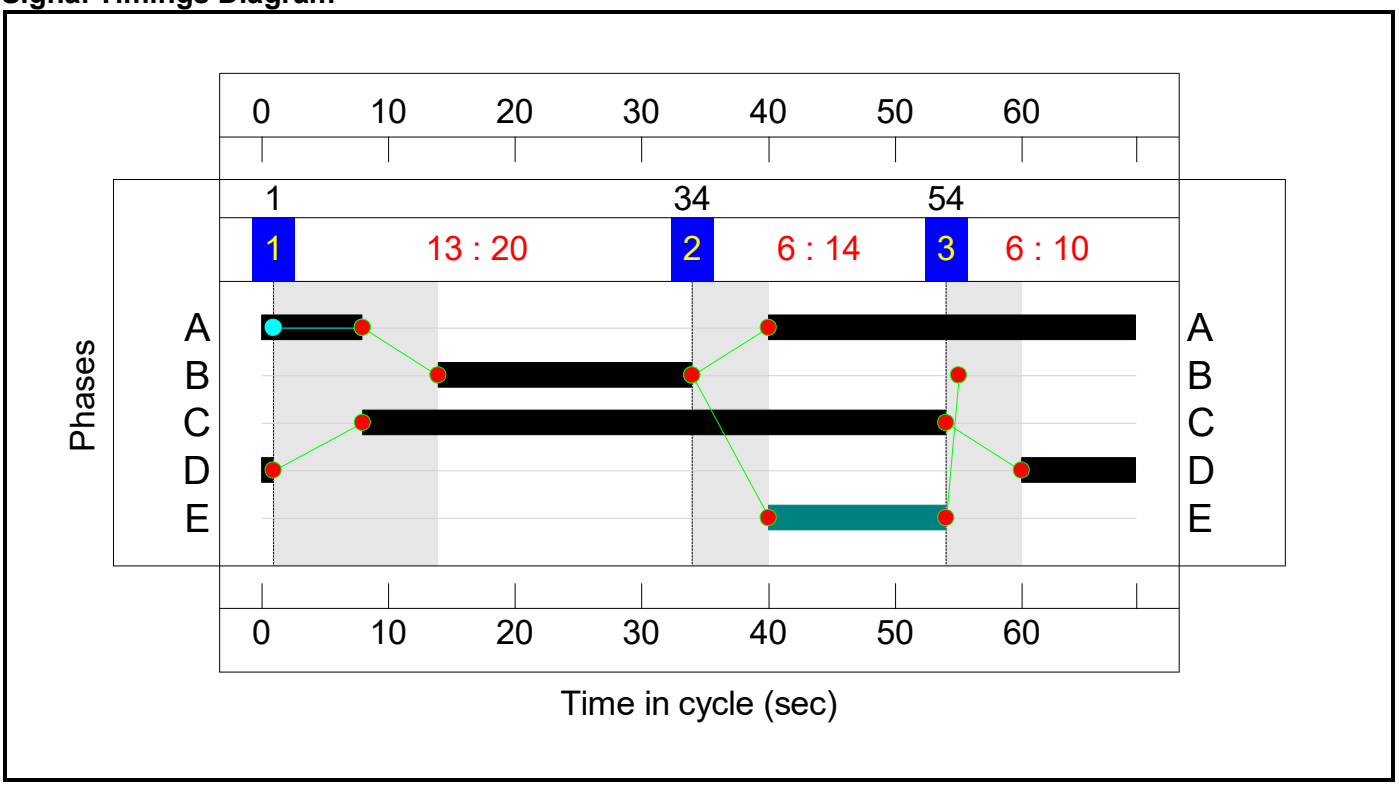
Full Input Data And Results
Scenario 2: 'PM Base' (FG2: '2022 Pm', Plan 1: 'Network Control Plan 1')
Controller :C1 - Westside 25911
Stage Sequence Diagram



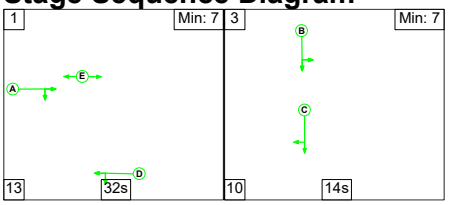
Stage Timings

Stage	1	2	3
Duration	20	14	10
Change Point	1	34	54

Signal Timings Diagram



Controller :C2 - Eastside 25921
Stage Sequence Diagram

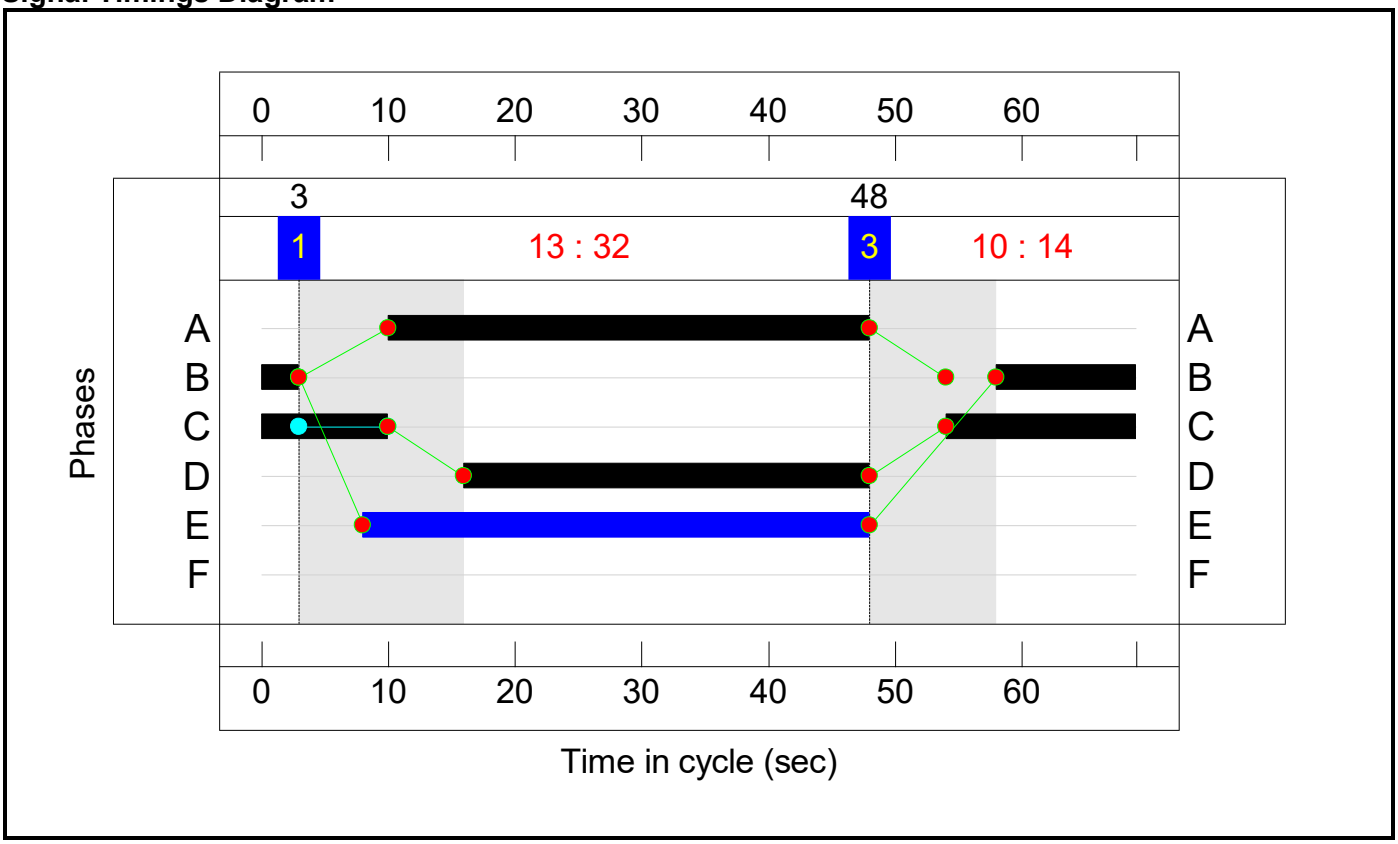


Stage Timings

Stage	1	3
Duration	32	14
Change Point	3	48

Full Input Data And Results

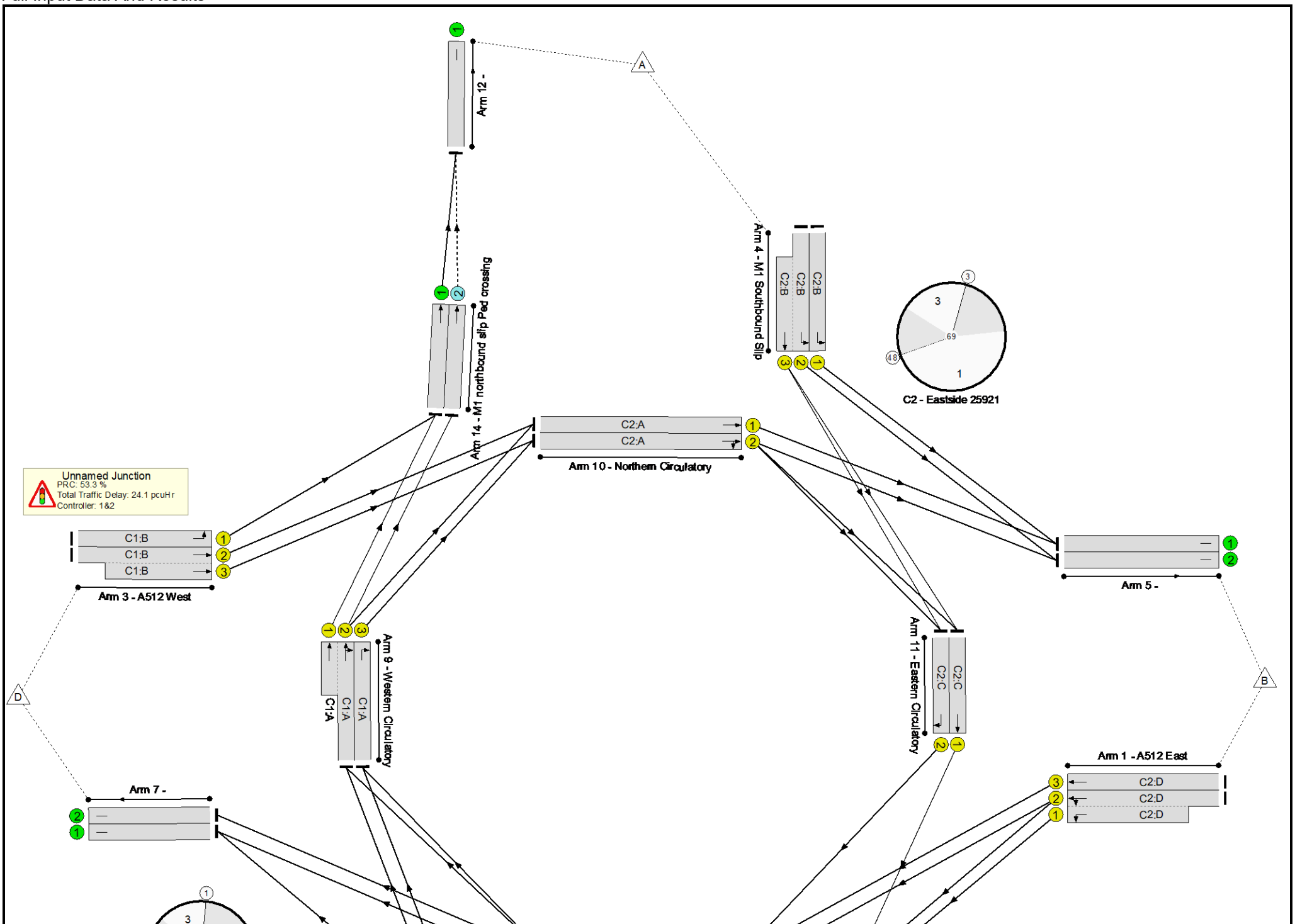
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	32	-	871	1949:1963	886+598	58.7 : 58.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	32	-	491	1955	935	52.5%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	232	1973:1963	119+313	53.7 : 53.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	139	1979	315	44.1%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	20	-	218	1926	586	37.2%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	20	-	507	1937:1941	458+570	49.3 : 49.3%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	14	-	167	1937	421	39.7%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	14	-	428	1945:1948	423+423	57.0 : 44.2%
5/1		U	N/A	N/A	-		-	-	-	457	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	469	1980	1980	23.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	612	0.0%
7/1		U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	520	1961	1336	38.9%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	678	1935	1318	51.4%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	37	-	555	1926:1941	311+881	46.6 : 46.6%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	37	-	139	1932	1064	13.1%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	38	-	290	1953	1104	26.3%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	38	-	420	1937	1095	38.4%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	25	-	118	1997	752	15.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	25	-	187	1994	751	24.9%
12/1		U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	628	1940	1940	32.4%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	81	1940	577	14.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**81**	**0**	**0**	**17.7**	**6.4**	**0.0**	**24.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**81**	**0**	**0**	**17.7**	**6.4**	**0.0**	**24.1**	**-**	**-**	**-**	**-**
1/2+1/1	871	871	-	-	-	3.0	0.7	-	3.7	15.2	7.1	0.7	7.8
1/3	491	491	-	-	-	1.7	0.6	-	2.3	16.6	6.5	0.6	7.1
2/2+2/1	232	232	-	-	-	1.7	0.6	-	2.3	35.2	2.9	0.6	3.5
2/3	139	139	-	-	-	1.0	0.4	-	1.4	36.4	2.4	0.4	2.8
3/1	218	218	-	-	-	1.1	0.3	-	1.4	23.7	3.3	0.3	3.6
3/2+3/3	507	507	-	-	-	2.7	0.5	-	3.2	22.7	4.4	0.5	4.9
4/1	167	167	-	-	-	1.1	0.3	-	1.4	30.2	2.7	0.3	3.1
4/2+4/3	428	428	-	-	-	2.8	0.5	-	3.3	28.1	4.1	0.5	4.6
5/1	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	469	469	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	688	688	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	520	520	-	-	-	0.5	0.3	-	0.8	5.6	2.0	0.3	2.3
8/2	678	678	-	-	-	0.5	0.5	-	1.0	5.3	2.2	0.5	2.7
9/2+9/1	555	555	-	-	-	0.7	0.4	-	1.1	7.4	3.4	0.4	3.8
9/3	139	139	-	-	-	0.0	0.1	-	0.1	3.0	0.1	0.1	0.2
10/1	290	290	-	-	-	0.2	0.2	-	0.3	4.2	0.4	0.2	0.6
10/2	420	420	-	-	-	0.2	0.3	-	0.5	4.6	0.6	0.3	1.0
11/1	118	118	-	-	-	0.4	0.1	-	0.5	15.0	2.2	0.1	2.3
11/2	187	187	-	-	-	0.1	0.2	-	0.2	4.2	0.1	0.2	0.3
12/1	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	628	628	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
14/2	81	81	81	0	0	0.0	0.1	-	0.1	3.6	0.0	0.1	0.1

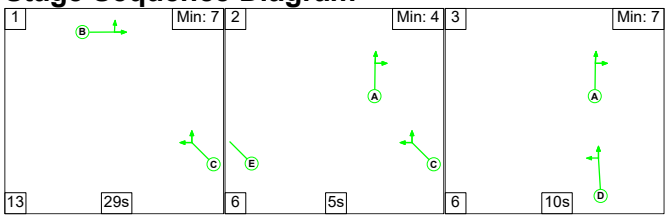
C1 - Westside 25911	PRC for Signalled Lanes (%):	67.6	Total Delay for Signalled Lanes (pcuHr):	11.37	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	53.3	Total Delay for Signalled Lanes (pcuHr):	12.26	Cycle Time (s):	69
	PRC Over All Lanes (%):	53.3	Total Delay Over All Lanes(pcuHr):	24.11		

Full Input Data And Results

Scenario 3: '2028 Without Development Flows (AM)' (FG3: '2028 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

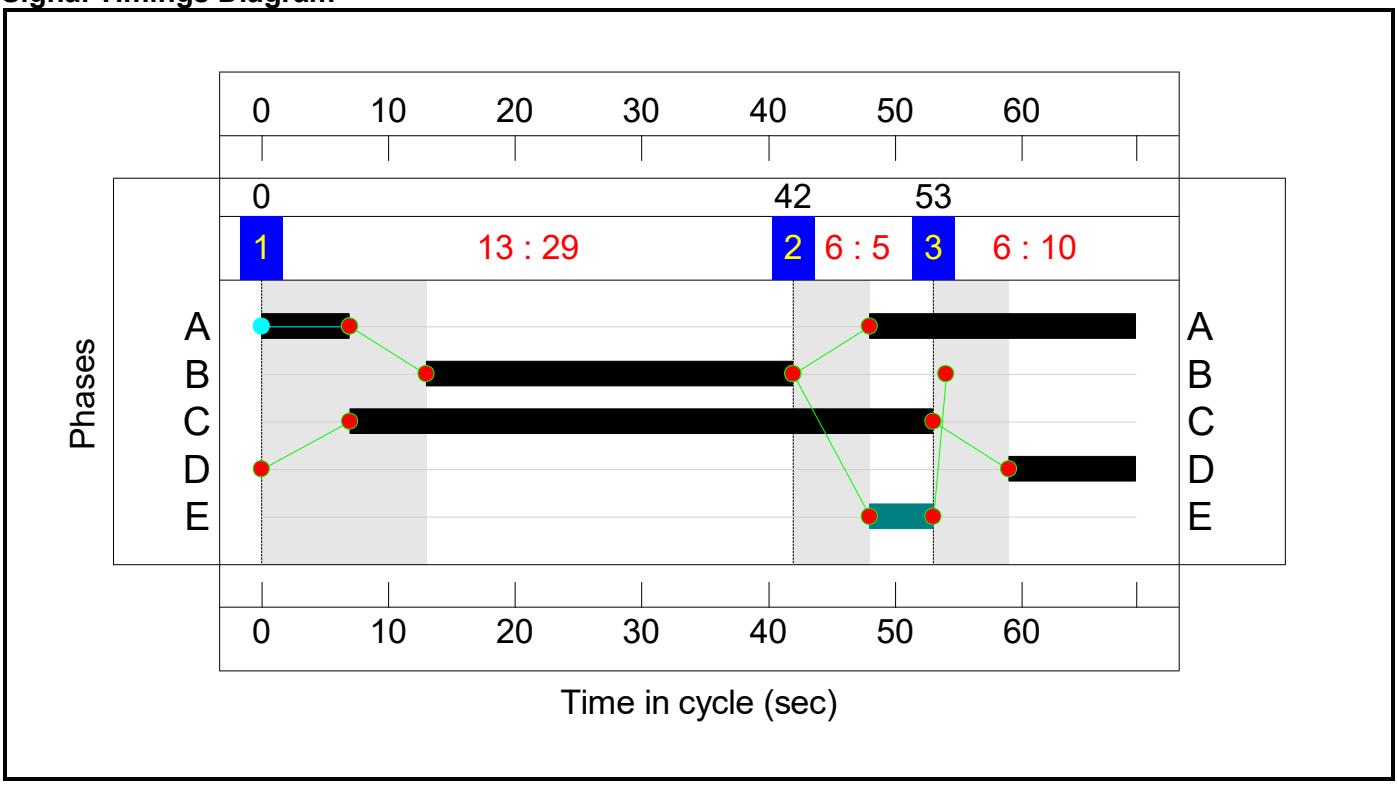
Stage Sequence Diagram



Stage Timings

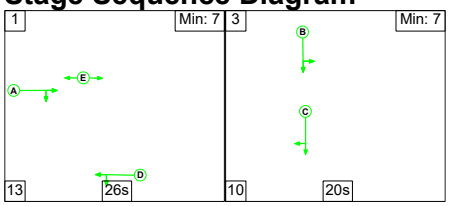
Stage	1	2	3
Duration	29	5	10
Change Point	0	42	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

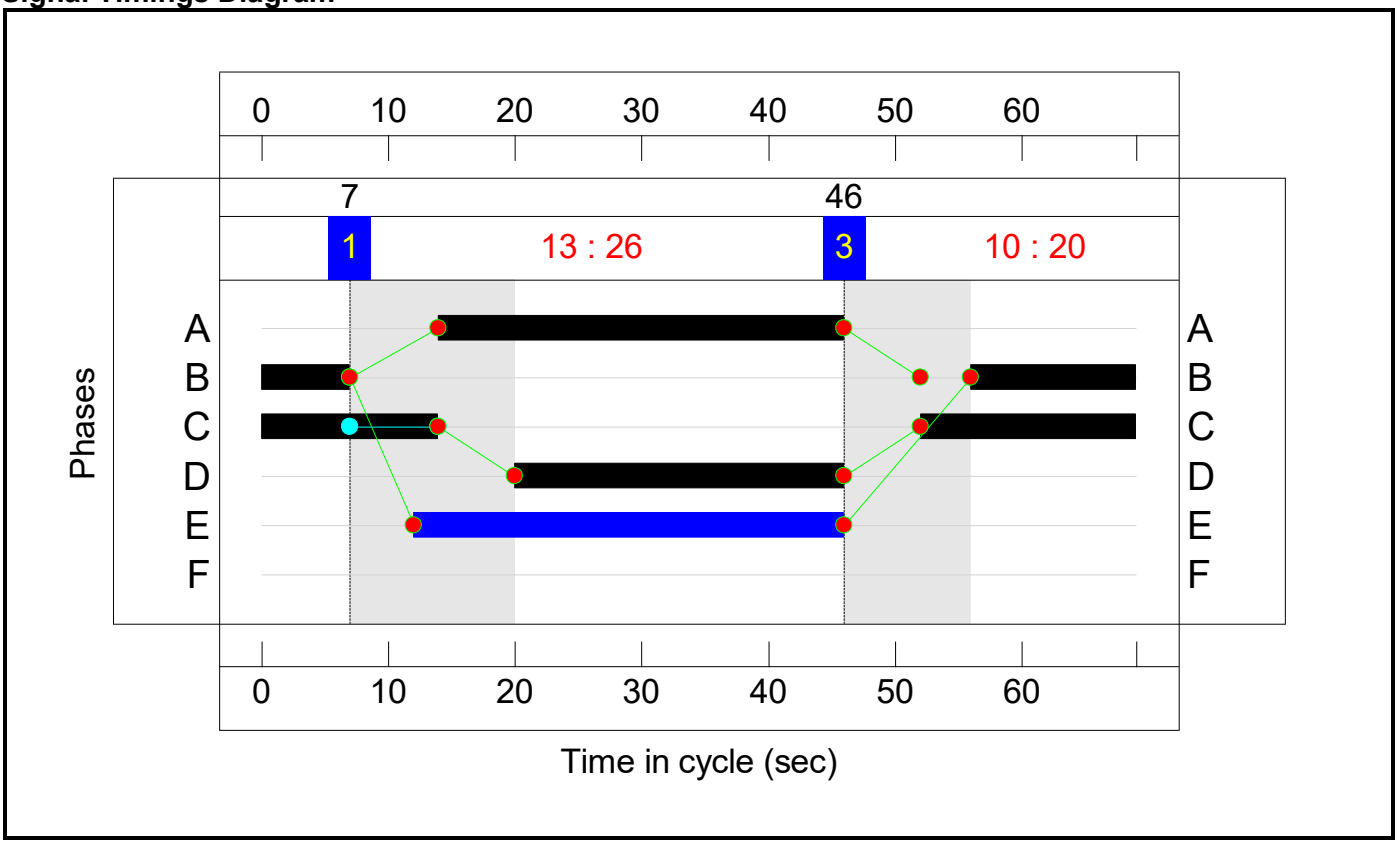


Stage Timings

Stage	1	3
Duration	26	20
Change Point	7	46

Full Input Data And Results

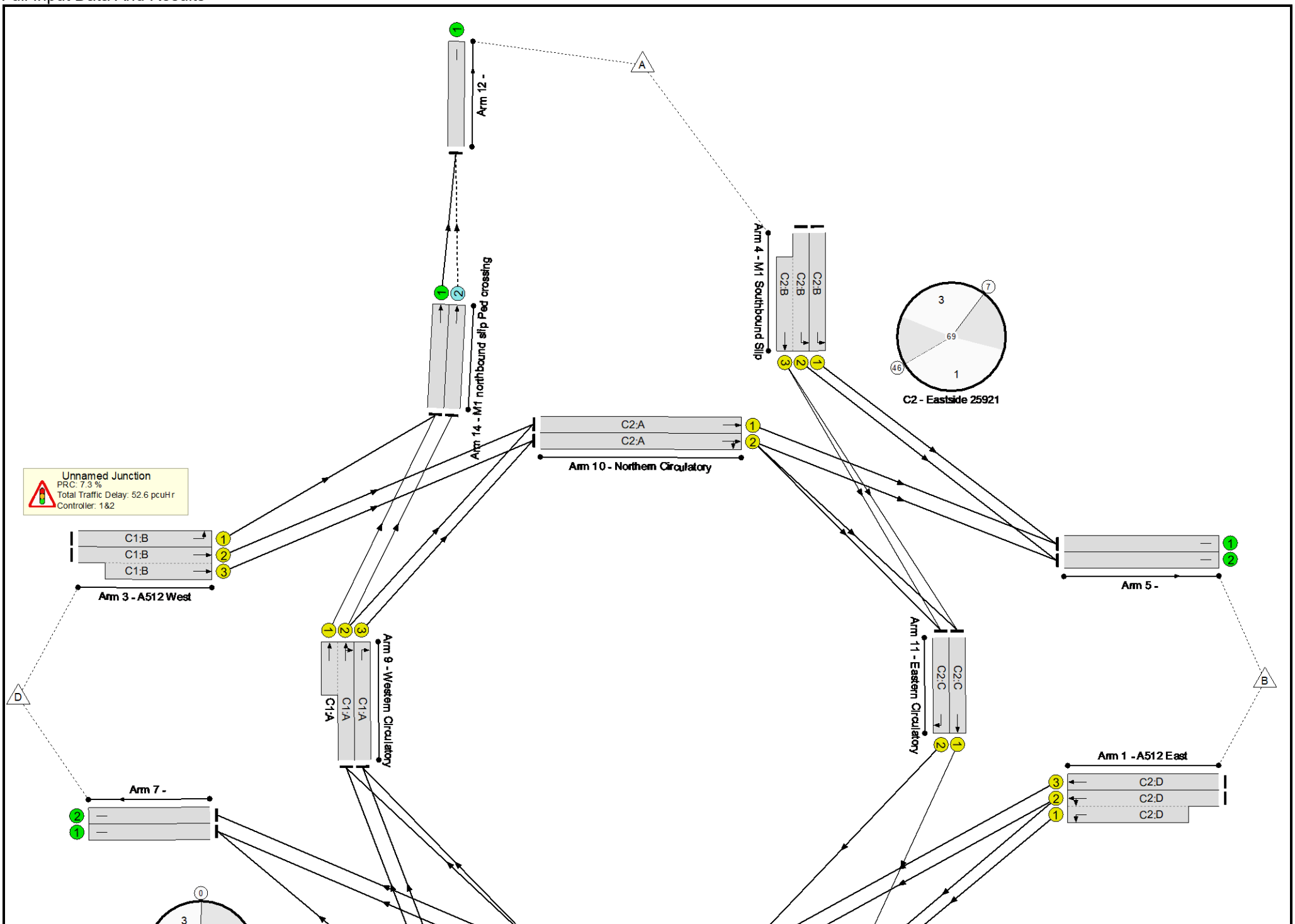
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.9%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	719	1949:1963	763+280	69.0 : 69.0%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	557	1955	765	72.8%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	279	1973:1963	315+62	74.1 : 74.1%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	239	1979	315	75.8%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	365	1926	837	43.6%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	1075	1937:1941	691+692	77.7 : 77.7%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	384	1937	590	65.1%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	953	1945:1948	592+593	77.2 : 83.7%
5/1		U	N/A	N/A	-		-	-	-	1154	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1061	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	366	1980	1980	18.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	634	0.0%
7/1		U	N/A	N/A	-		-	-	-	572	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	526	1961	1336	39.4%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1053	1942	1323	79.6%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	790	1926:1941	363+633	79.4 : 79.4%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	239	1932	812	29.4%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	770	1953	934	82.4%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	777	1937	926	83.9%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	173	1997	926	18.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	496	1994	925	53.6%
12/1		U	N/A	N/A	-		-	-	-	922	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	867	1940	1940	44.7%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	55	1940	524	10.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**55**	**0**	**0**	**31.8**	**20.8**	**0.0**	**52.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**55**	**0**	**0**	**31.8**	**20.8**	**0.0**	**52.6**	**-**	**-**	**-**	**-**
1/2+1/1	719	719	-	-	-	3.3	1.1	-	4.4	22.1	8.3	1.1	9.4
1/3	557	557	-	-	-	2.8	1.3	-	4.1	26.4	9.0	1.3	10.3
2/2+2/1	279	279	-	-	-	2.1	1.4	-	3.5	45.1	4.2	1.4	5.6
2/3	239	239	-	-	-	1.8	1.5	-	3.3	50.4	4.3	1.5	5.8
3/1	365	365	-	-	-	1.4	0.4	-	1.8	17.4	4.9	0.4	5.3
3/2+3/3	1075	1075	-	-	-	4.6	1.7	-	6.3	21.0	7.9	1.7	9.6
4/1	384	384	-	-	-	2.2	0.9	-	3.1	29.5	6.3	0.9	7.2
4/2+4/3	953	953	-	-	-	5.9	2.0	-	7.9	29.8	8.8	2.0	10.8
5/1	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1061	1061	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	366	366	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	572	572	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	526	526	-	-	-	0.6	0.3	-	1.0	6.7	2.5	0.3	2.8
8/2	1053	1053	-	-	-	0.8	1.9	-	2.8	9.4	5.4	1.9	7.4
9/2+9/1	790	790	-	-	-	2.0	1.9	-	3.9	17.9	10.1	1.9	12.0
9/3	239	239	-	-	-	0.2	0.2	-	0.4	5.6	0.3	0.2	0.5
10/1	770	770	-	-	-	1.6	2.3	-	3.9	18.1	6.7	2.3	9.0
10/2	777	777	-	-	-	1.7	2.5	-	4.2	19.3	6.8	2.5	9.3
11/1	173	173	-	-	-	0.7	0.1	-	0.8	16.1	3.2	0.1	3.3
11/2	496	496	-	-	-	0.1	0.6	-	0.7	5.3	0.3	0.6	0.9
12/1	922	922	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	867	867	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	55	55	55	0	0	0.0	0.1	-	0.1	3.8	0.0	0.1	0.1

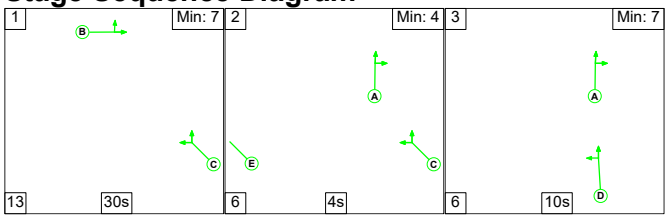
C1 - Westside 25911	PRC for Signalled Lanes (%):	13.1	Total Delay for Signalled Lanes (pcuHr):	22.92	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	7.3	Total Delay for Signalled Lanes (pcuHr):	29.07	Cycle Time (s):	69
	PRC Over All Lanes (%):	7.3	Total Delay Over All Lanes(pcuHr):	52.57		

Full Input Data And Results

Scenario 4: '2028 Without Development Flows (PM)' (FG4: '2028 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

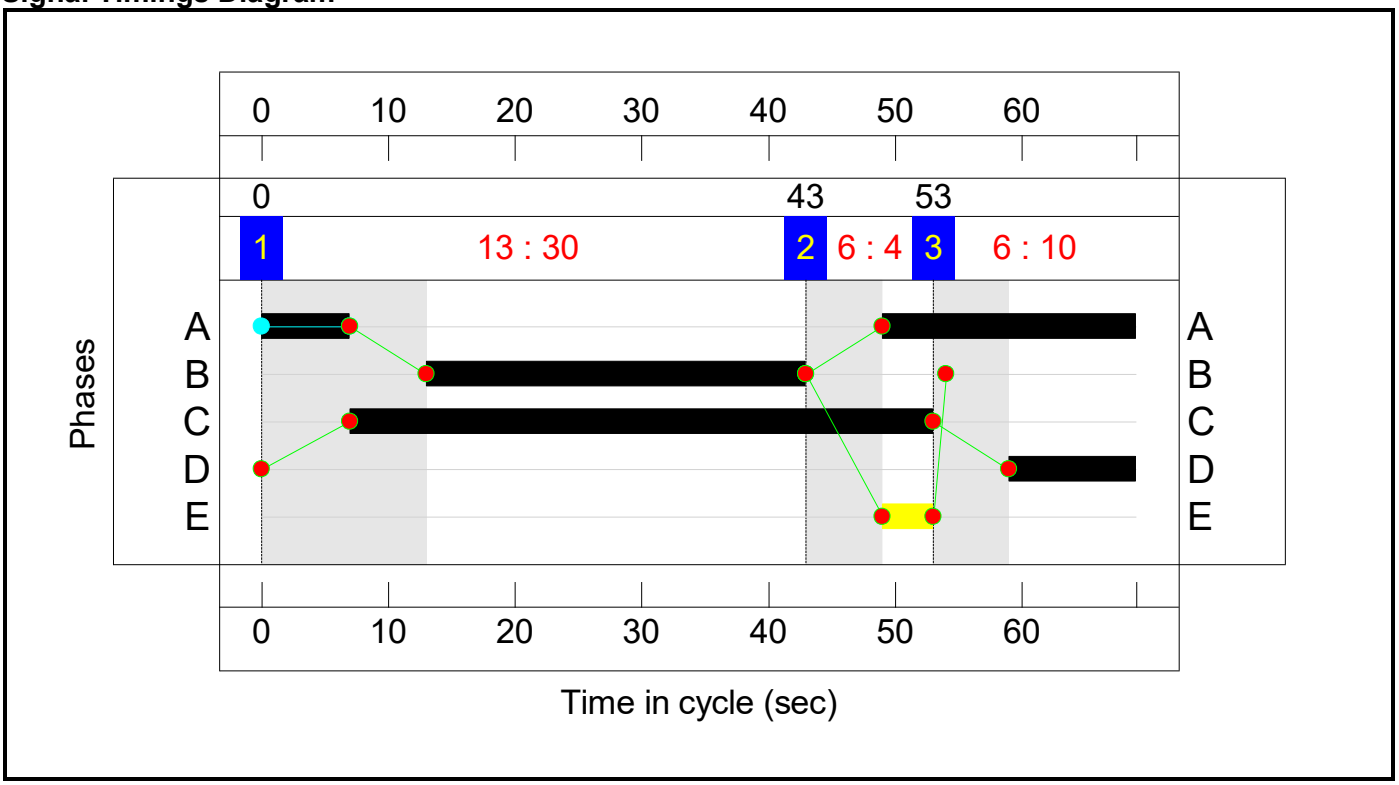
Stage Sequence Diagram



Stage Timings

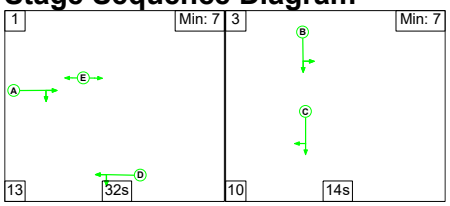
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

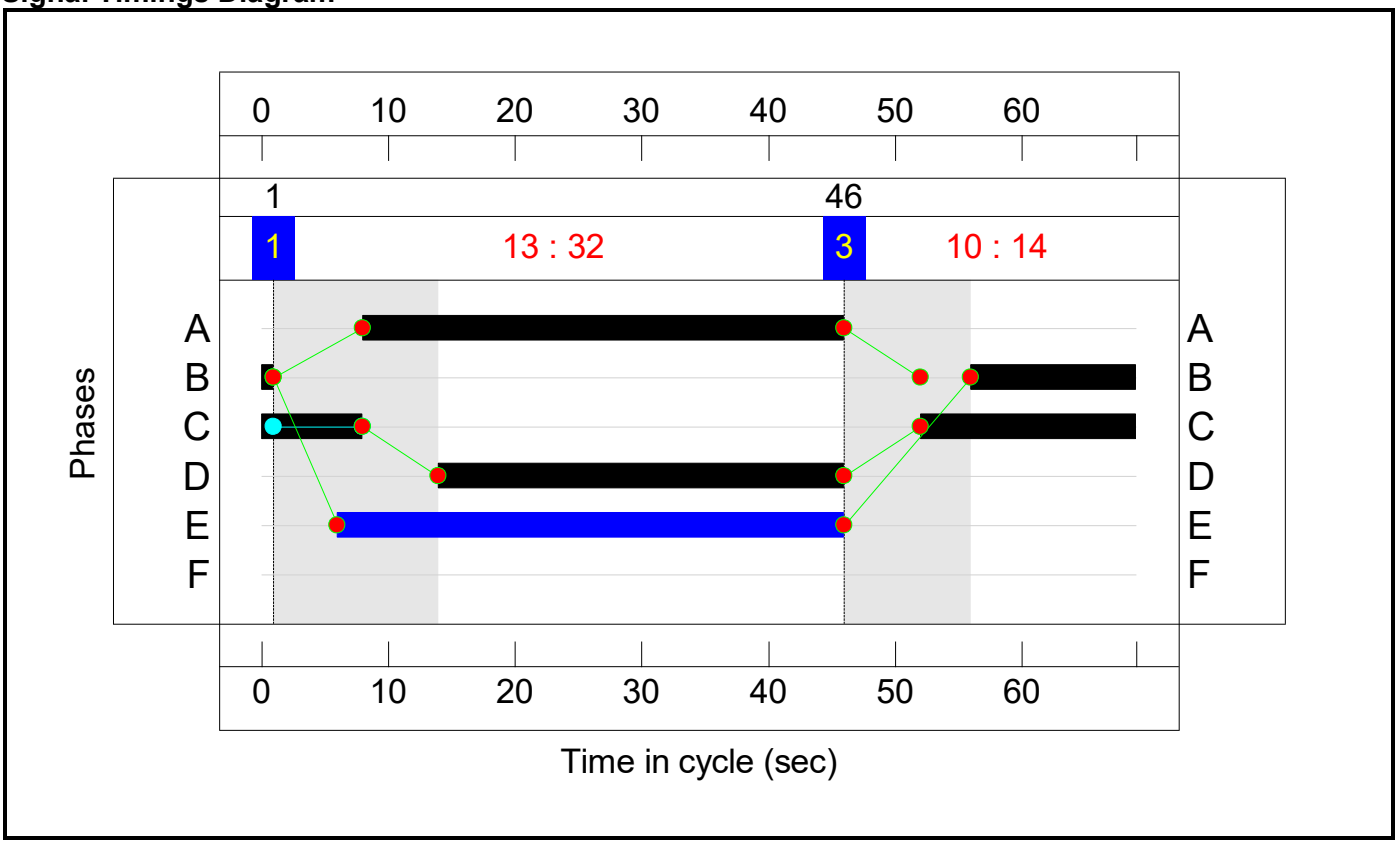


Stage Timings

Stage	1	3
Duration	32	14
Change Point	1	46

Full Input Data And Results

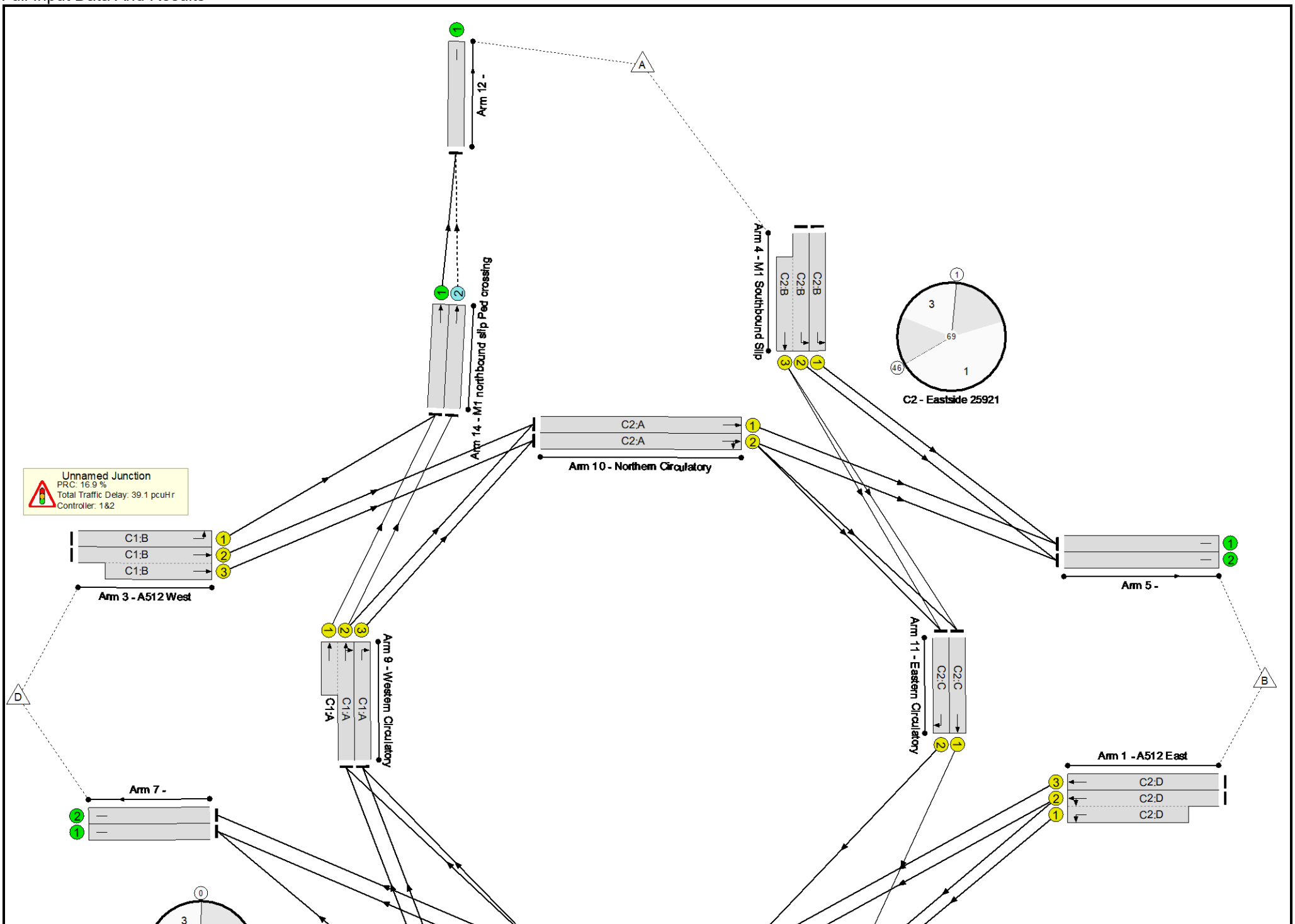
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	32	-	1066	1949:1963	889+495	77.0 : 77.0%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	32	-	596	1955	935	63.7%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	244	1973:1963	47+313	67.7 : 67.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	197	1979	315	62.4%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	351	1926	865	40.6%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	899	1937:1941	708+700	63.8 : 63.8%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	14	-	238	1937	421	56.5%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	14	-	640	1945:1948	423+423	75.7 : 75.6%
5/1		U	N/A	N/A	-		-	-	-	722	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	772	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	573	1980	1980	28.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	589	0.0%
7/1		U	N/A	N/A	-		-	-	-	897	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	685	1961	1336	51.3%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	916	1940	1321	69.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	564	1926:1941	170+712	63.9 : 63.9%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	197	1932	784	25.1%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	38	-	484	1953	1104	43.8%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	38	-	644	1937	1095	58.8%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	25	-	192	1997	752	25.5%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	25	-	320	1994	751	42.6%
12/1		U	N/A	N/A	-		-	-	-	883	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	573	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	806	1940	1940	41.5%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	77	1940	538	14.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**77**	**0**	**0**	**26.4**	**12.8**	**0.0**	**39.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**77**	**0**	**0**	**26.4**	**12.8**	**0.0**	**39.1**	**-**	**-**	**-**	**-**
1/2+1/1	1066	1066	-	-	-	4.0	1.7	-	5.6	19.1	10.5	1.7	12.1
1/3	596	596	-	-	-	2.2	0.9	-	3.1	18.8	8.4	0.9	9.3
2/2+2/1	244	244	-	-	-	1.8	1.0	-	2.9	42.2	3.8	1.0	4.9
2/3	197	197	-	-	-	1.5	0.8	-	2.3	42.1	3.5	0.8	4.3
3/1	351	351	-	-	-	1.2	0.3	-	1.6	16.3	4.5	0.3	4.8
3/2+3/3	899	899	-	-	-	3.4	0.9	-	4.3	17.1	6.2	0.9	7.0
4/1	238	238	-	-	-	1.6	0.6	-	2.2	33.9	4.0	0.6	4.7
4/2+4/3	640	640	-	-	-	4.5	1.5	-	6.0	33.9	5.7	1.5	7.2
5/1	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	772	772	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	573	573	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	897	897	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	685	685	-	-	-	0.7	0.5	-	1.2	6.5	2.7	0.5	3.3
8/2	916	916	-	-	-	0.6	1.1	-	1.7	6.8	3.3	1.1	4.5
9/2+9/1	564	564	-	-	-	2.0	0.9	-	2.9	18.4	9.3	0.9	10.2
9/3	197	197	-	-	-	0.1	0.2	-	0.3	5.0	0.2	0.2	0.4
10/1	484	484	-	-	-	0.8	0.4	-	1.2	9.0	2.4	0.4	2.8
10/2	644	644	-	-	-	0.8	0.7	-	1.6	8.7	2.7	0.7	3.4
11/1	192	192	-	-	-	0.9	0.2	-	1.0	19.4	3.6	0.2	3.8
11/2	320	320	-	-	-	0.1	0.4	-	0.5	5.8	0.2	0.4	0.6
12/1	883	883	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	573	573	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	806	806	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	77	77	77	0	0	0.0	0.1	-	0.1	3.9	0.4	0.1	0.4

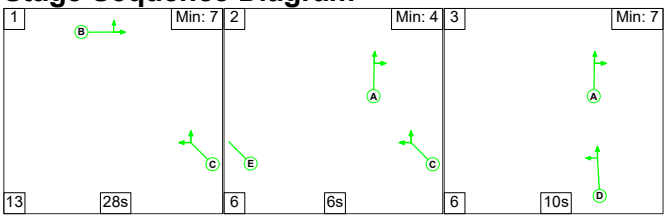
C1 - Westside 25911	PRC for Signalled Lanes (%):	29.8	Total Delay for Signalled Lanes (pcuHr):	17.16	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	16.9	Total Delay for Signalled Lanes (pcuHr):	21.34	Cycle Time (s):	69
	PRC Over All Lanes (%):	16.9	Total Delay Over All Lanes(pcuHr):	39.14		

Full Input Data And Results

Scenario 5: '2028 With Development Flows (AM)' (FG5: '2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

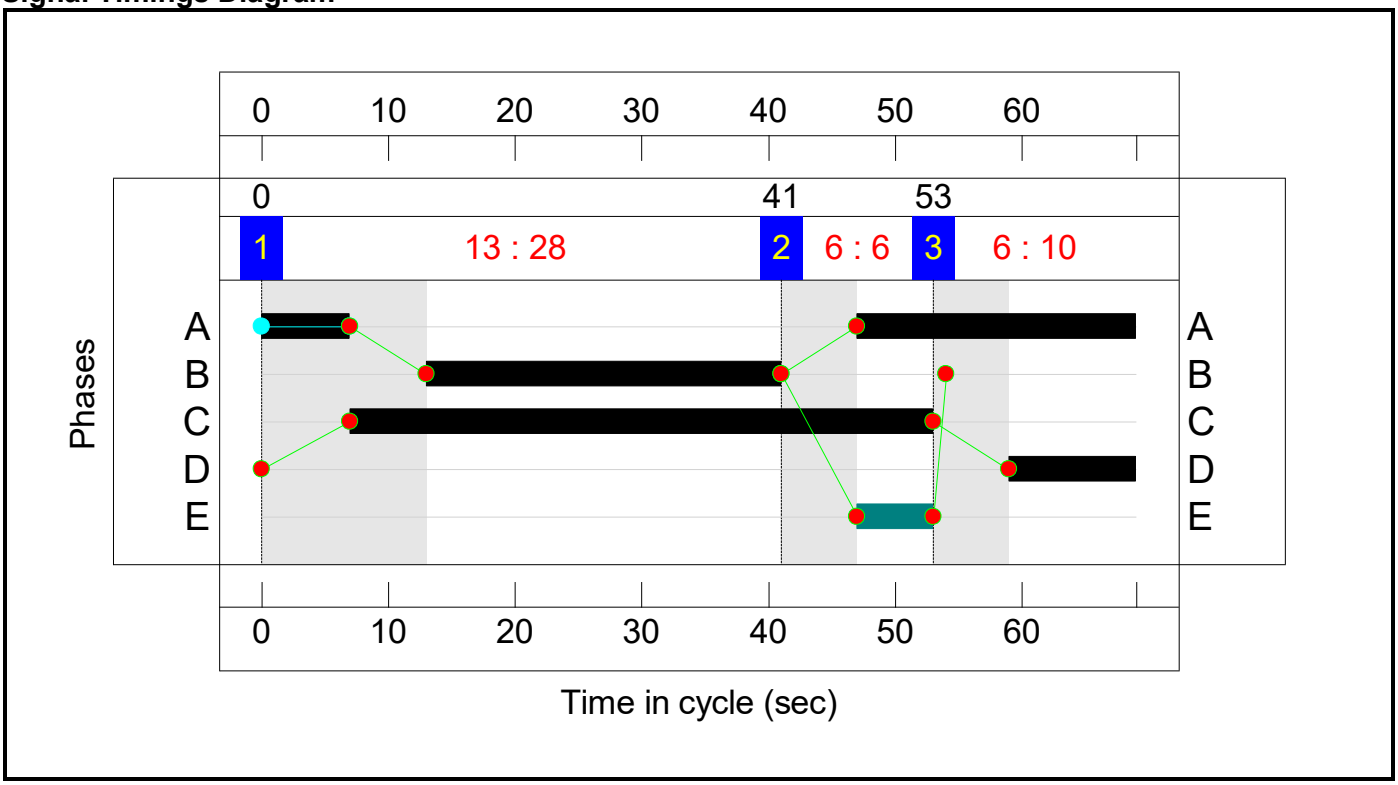
Stage Sequence Diagram



Stage Timings

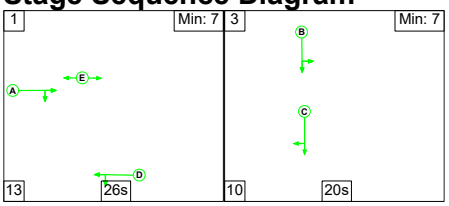
Stage	1	2	3
Duration	28	6	10
Change Point	0	41	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

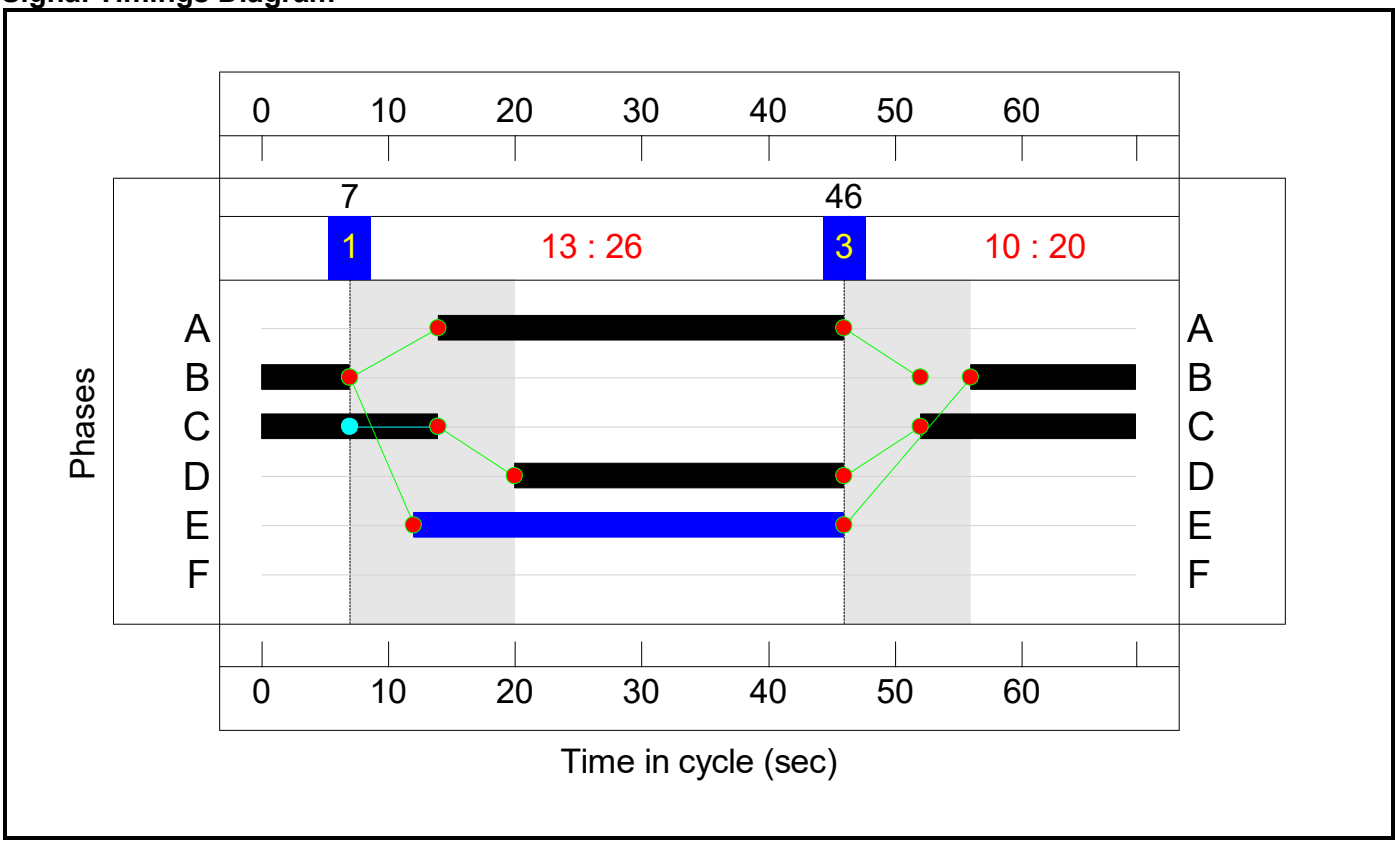


Stage Timings

Stage	1	3
Duration	26	20
Change Point	7	46

Full Input Data And Results

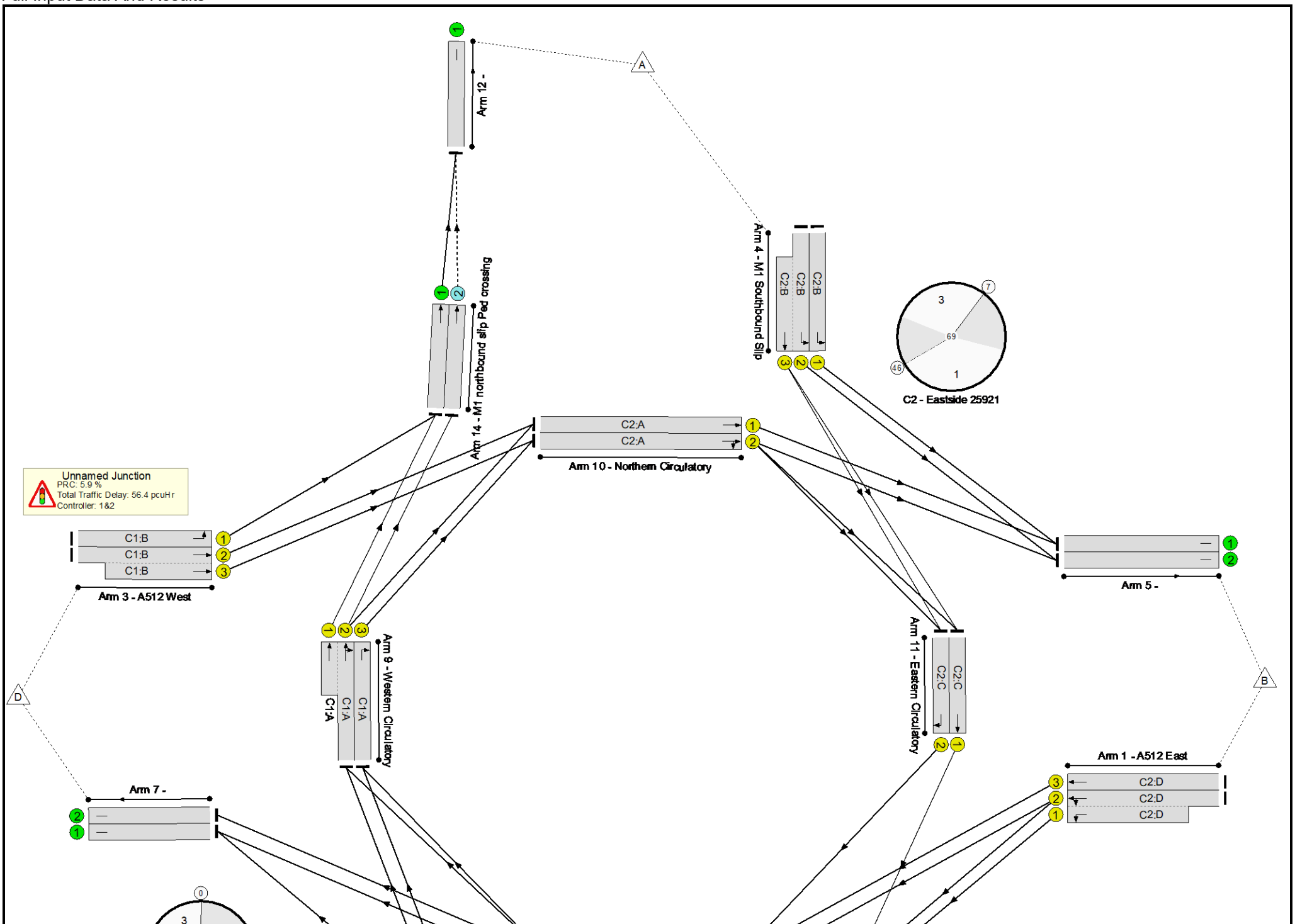
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.0%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	738	1949:1963	763+276	71.1 : 71.1%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	598	1955	765	78.2%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	271	1973:1963	315+68	70.9 : 70.9%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	234	1979	315	74.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	383	1926	809	47.3%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1111	1937:1941	680+674	82.1 : 82.1%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	392	1937	590	66.5%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	964	1945:1948	592+593	78.7 : 84.0%
5/1		U	N/A	N/A	-		-	-	-	1173	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1080	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	369	1980	1980	18.6%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	634	0.0%
7/1		U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	542	1961	1336	40.6%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1096	1941	1322	82.9%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	821	1926:1941	335+670	81.7 : 81.7%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	234	1932	840	27.9%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	781	1953	934	83.6%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	787	1937	926	85.0%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	173	1997	926	18.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	498	1994	925	53.9%
12/1		U	N/A	N/A	-		-	-	-	981	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	369	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	930	1940	1940	47.9%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	51	1940	510	10.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**51**	**0**	**0**	**33.4**	**23.0**	**0.0**	**56.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**51**	**0**	**0**	**33.4**	**23.0**	**0.0**	**56.4**	**-**	**-**	**-**	**-**
1/2+1/1	738	738	-	-	-	3.4	1.2	-	4.7	22.7	8.7	1.2	10.0
1/3	598	598	-	-	-	3.1	1.8	-	4.8	29.0	10.0	1.8	11.7
2/2+2/1	271	271	-	-	-	2.0	1.2	-	3.2	42.9	4.0	1.2	5.2
2/3	234	234	-	-	-	1.8	1.4	-	3.2	49.0	4.2	1.4	5.6
3/1	383	383	-	-	-	1.5	0.4	-	2.0	18.7	5.2	0.4	5.7
3/2+3/3	1111	1111	-	-	-	5.0	2.3	-	7.3	23.5	8.7	2.3	10.9
4/1	392	392	-	-	-	2.3	1.0	-	3.3	30.0	6.5	1.0	7.5
4/2+4/3	964	964	-	-	-	5.9	2.1	-	8.1	30.2	8.9	2.1	11.0
5/1	1173	1173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1080	1080	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	369	369	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	498	498	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	542	542	-	-	-	0.7	0.3	-	1.0	6.9	2.6	0.3	3.0
8/2	1096	1096	-	-	-	1.1	2.4	-	3.4	11.3	9.2	2.4	11.6
9/2+9/1	821	821	-	-	-	2.2	2.2	-	4.4	19.4	11.0	2.2	13.2
9/3	234	234	-	-	-	0.2	0.2	-	0.3	5.3	0.3	0.2	0.5
10/1	781	781	-	-	-	1.7	2.5	-	4.1	19.0	6.6	2.5	9.1
10/2	787	787	-	-	-	1.7	2.7	-	4.4	20.2	6.8	2.7	9.5
11/1	173	173	-	-	-	0.6	0.1	-	0.8	15.9	3.2	0.1	3.3
11/2	498	498	-	-	-	0.2	0.6	-	0.7	5.3	0.3	0.6	0.9
12/1	981	981	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	369	369	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	930	930	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
14/2	51	51	51	0	0	0.0	0.1	-	0.1	3.9	0.0	0.1	0.1

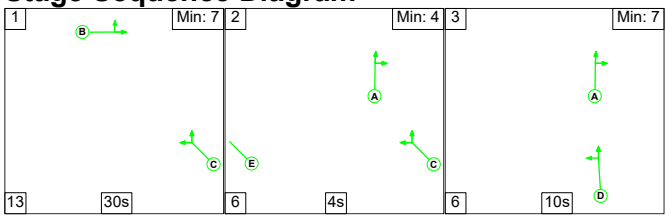
C1 - Westside 25911	PRC for Signalled Lanes (%):	8.6	Total Delay for Signalled Lanes (pcuHr):	24.90	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	5.9	Total Delay for Signalled Lanes (pcuHr):	30.85	Cycle Time (s):	69
	PRC Over All Lanes (%):	5.9	Total Delay Over All Lanes(pcuHr):	56.38		

Full Input Data And Results

Scenario 6: '2028 With Development Flows (PM)' (FG6: '2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

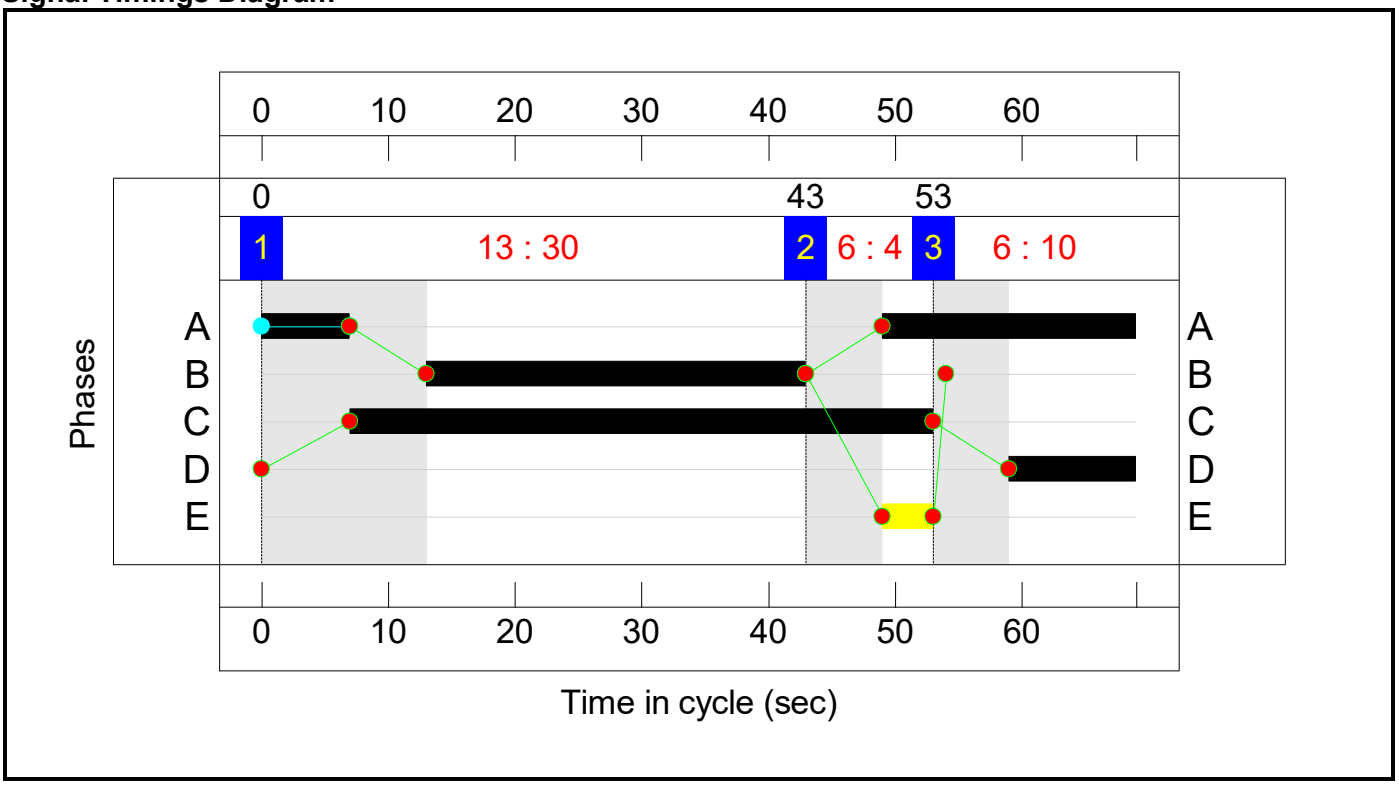
Stage Sequence Diagram



Stage Timings

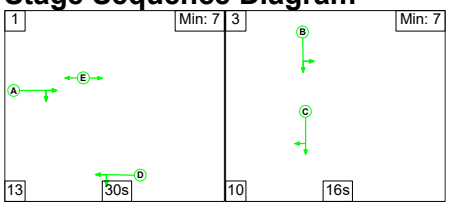
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

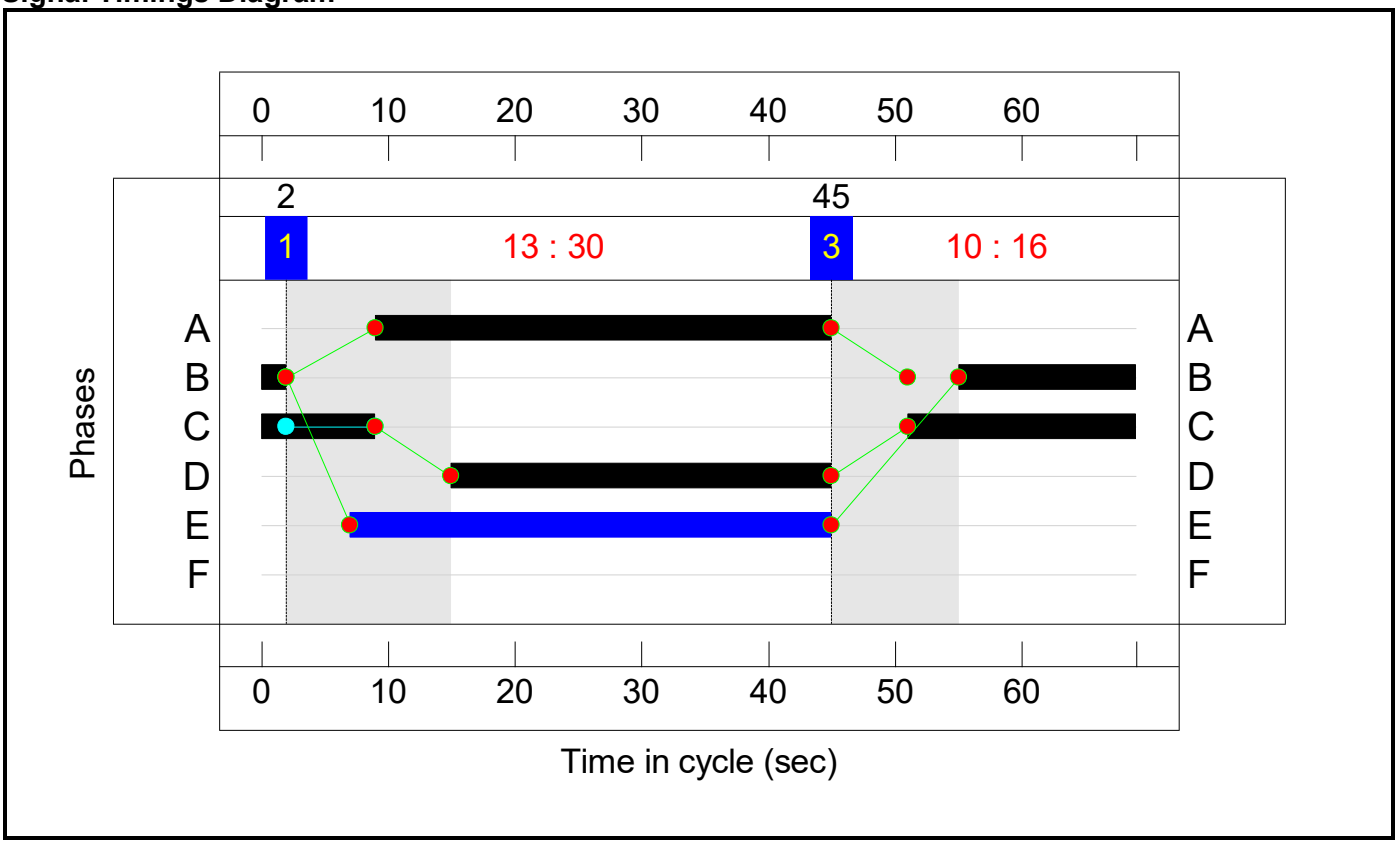


Stage Timings

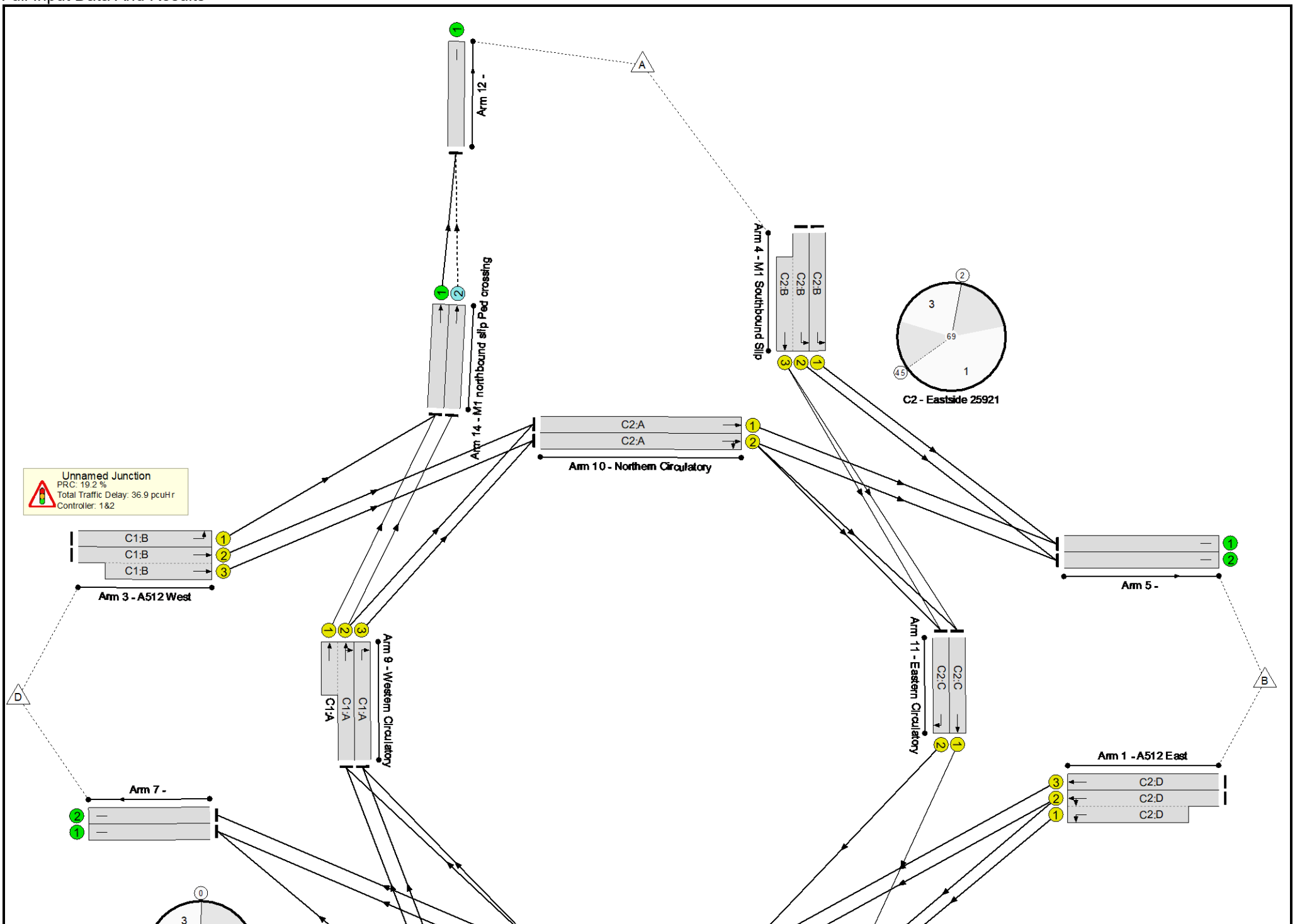
Stage	1	3
Duration	30	16
Change Point	2	45

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.5%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	30	-	996	1949:1963	853+466	75.5 : 75.5%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	30	-	549	1955	878	62.5%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	218	1973:1963	13+313	66.8 : 66.8%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	197	1979	315	62.4%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	352	1926	865	40.7%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	844	1937:1941	711+684	60.5 : 60.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	16	-	244	1937	477	51.1%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	16	-	680	1945:1948	479+480	70.7 : 71.1%
5/1		U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	757	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	545	1980	1980	27.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	595	0.0%
7/1		U	N/A	N/A	-		-	-	-	853	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	402	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	644	1961	1336	48.2%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	890	1941	1322	67.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	497	1926:1941	161+717	56.6 : 56.6%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	197	1932	784	25.1%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	36	-	439	1953	1047	41.9%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	36	-	611	1937	1039	58.8%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	27	-	193	1997	810	23.8%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	27	-	341	1994	809	42.1%
12/1		U	N/A	N/A	-		-	-	-	840	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	758	1940	1940	39.1%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	82	1940	548	15.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**82**	**0**	**0**	**25.4**	**11.5**	**0.0**	**36.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**82**	**0**	**0**	**25.4**	**11.5**	**0.0**	**36.9**	**-**	**-**	**-**	**-**
1/2+1/1	996	996	-	-	-	4.0	1.5	-	5.6	20.1	10.0	1.5	11.5
1/3	549	549	-	-	-	2.2	0.8	-	3.0	20.0	7.9	0.8	8.8
2/2+2/1	218	218	-	-	-	1.6	1.0	-	2.6	43.5	3.7	1.0	4.7
2/3	197	197	-	-	-	1.5	0.8	-	2.3	42.1	3.5	0.8	4.3
3/1	352	352	-	-	-	1.3	0.3	-	1.6	16.3	4.5	0.3	4.8
3/2+3/3	844	844	-	-	-	3.1	0.8	-	3.9	16.6	5.7	0.8	6.5
4/1	244	244	-	-	-	1.5	0.5	-	2.0	30.1	4.0	0.5	4.5
4/2+4/3	680	680	-	-	-	4.5	1.2	-	5.7	30.1	6.0	1.2	7.2
5/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	757	757	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	545	545	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	853	853	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	644	644	-	-	-	0.6	0.5	-	1.1	6.2	2.5	0.5	2.9
8/2	890	890	-	-	-	0.5	1.0	-	1.6	6.3	3.3	1.0	4.3
9/2+9/1	497	497	-	-	-	1.6	0.6	-	2.3	16.4	8.3	0.6	8.9
9/3	197	197	-	-	-	0.1	0.2	-	0.3	5.0	0.2	0.2	0.4
10/1	439	439	-	-	-	0.9	0.4	-	1.2	10.2	2.4	0.4	2.8
10/2	611	611	-	-	-	0.9	0.7	-	1.6	9.5	2.9	0.7	3.6
11/1	193	193	-	-	-	0.8	0.2	-	1.0	18.7	3.6	0.2	3.8
11/2	341	341	-	-	-	0.1	0.4	-	0.5	5.0	0.2	0.4	0.6
12/1	840	840	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	758	758	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	82	82	82	0	0	0.0	0.1	-	0.1	4.0	0.6	0.1	0.7

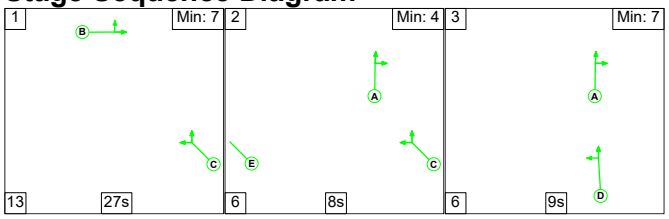
C1 - Westside 25911	PRC for Signalled Lanes (%):	33.7	Total Delay for Signalled Lanes (pcuHr):	15.64	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	19.2	Total Delay for Signalled Lanes (pcuHr):	20.68	Cycle Time (s):	69
	PRC Over All Lanes (%):	19.2	Total Delay Over All Lanes(pcuHr):	36.92		

Full Input Data And Results

Scenario 7: '2038 Without Development Flows (AM)' (FG7: '2038 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

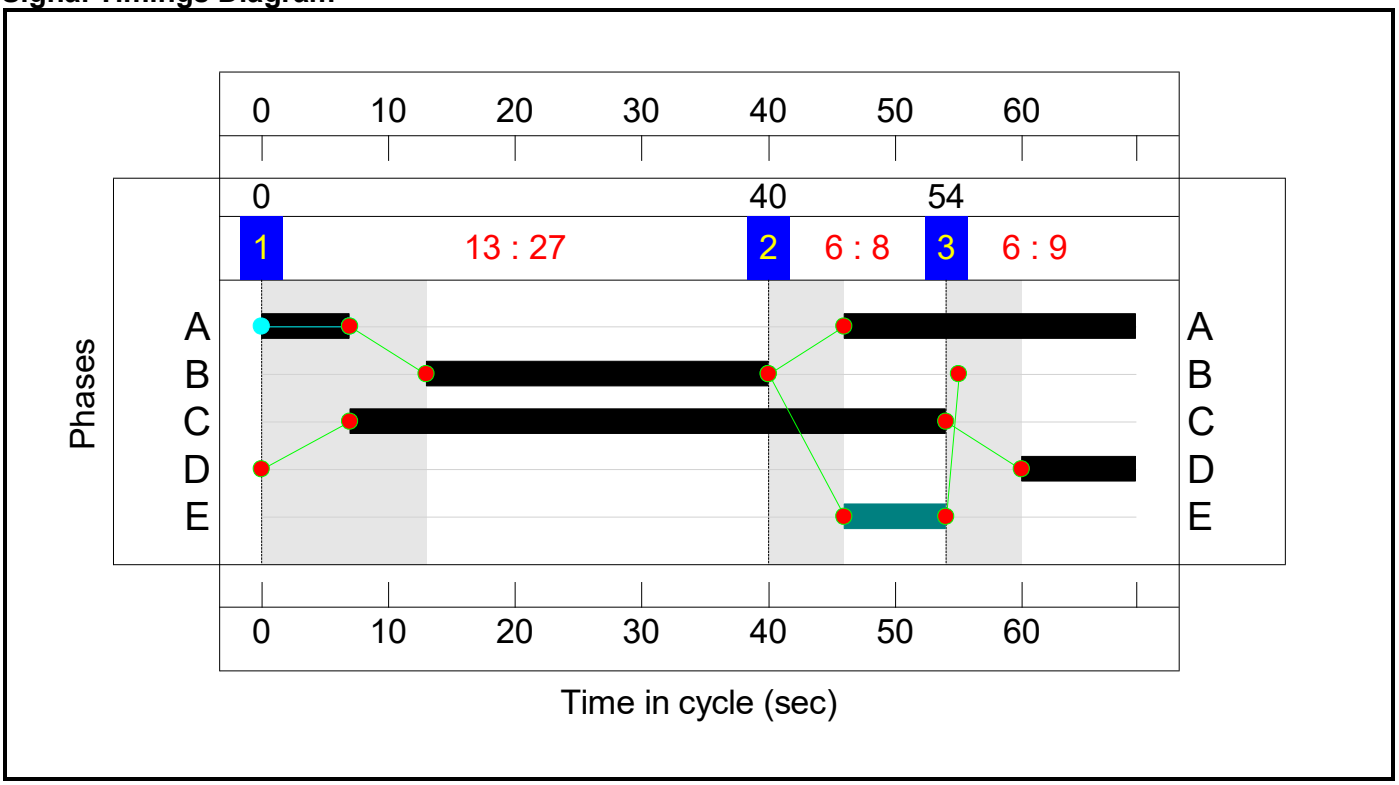
Stage Sequence Diagram



Stage Timings

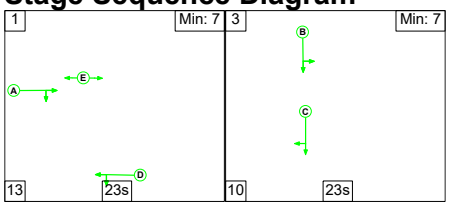
Stage	1	2	3
Duration	27	8	9
Change Point	0	40	54

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

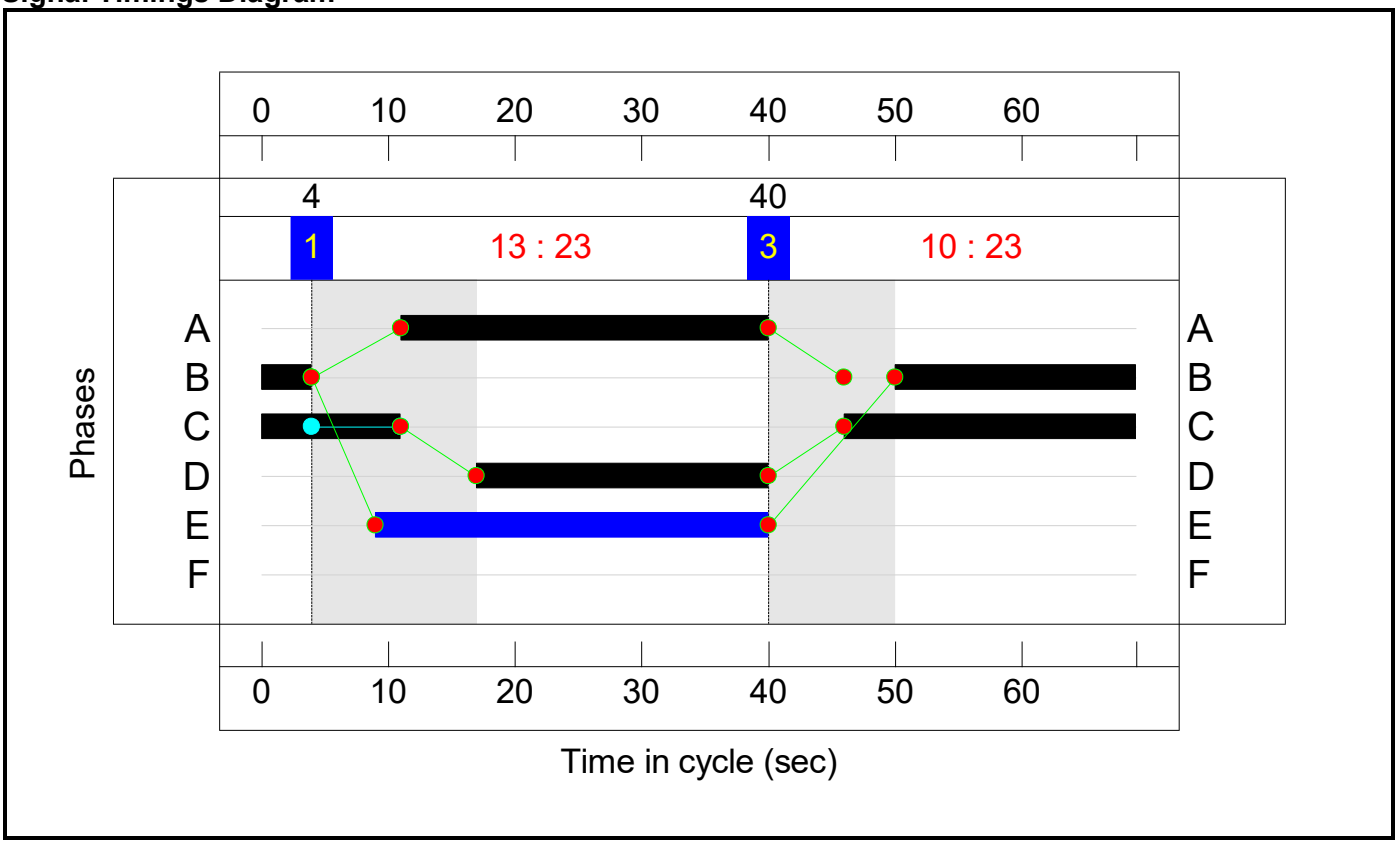


Stage Timings

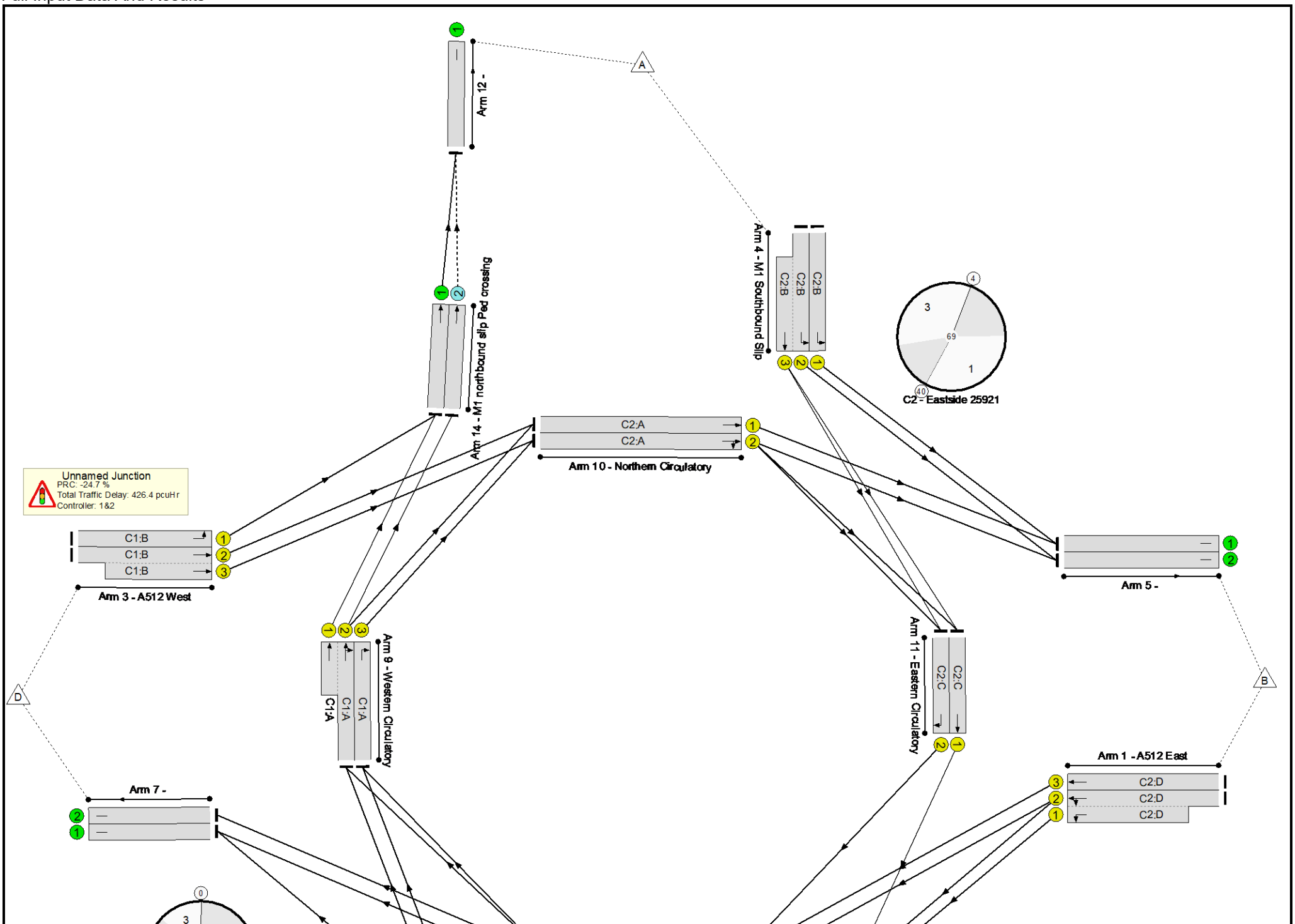
Stage	1	3
Duration	23	23
Change Point	4	40

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.2%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	23	-	989	1949:1963	678+256	105.9 : 105.9%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	23	-	689	1955	680	101.3%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	9	-	353	1973:1963	286+56	103.2 : 103.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	9	-	295	1979	287	102.9%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	27	-	472	1926	782	60.4%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	27	-	1455	1937:1941	666+658	109.9 : 109.9%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	23	-	727	1937	674	107.9%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	23	-	920	1945:1948	163+678	109.5 : 109.5%
5/1		U	N/A	N/A	-		-	-	-	1754	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	911	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	556	1980	1980	24.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	607	0.0%
7/1		U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	815	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	47	-	718	1961	1364	49.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	47	-	1431	1945	1353	100.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	30	-	911	1926:1941	354+683	85.2 : 86.1%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	30	-	295	1932	868	33.0%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	29	-	1027	1953	849	112.1%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	29	-	1018	1937	842	112.2%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	34	-	285	1997	1013	21.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	34	-	742	1994	1011	67.0%
12/1		U	N/A	N/A	-		-	-	-	1088	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1072	1940	1940	54.7%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	16	1940	482	3.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**16**	**0**	**0**	**67.5**	**358.8**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**16**	**0**	**0**	**67.5**	**358.8**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
1/2+1/1	989	949	-	-	-	7.0	34.7	-	41.7	151.8	14.5	34.7	49.3
1/3	689	680	-	-	-	4.6	15.6	-	20.1	105.2	13.4	15.6	28.9
2/2+2/1	353	344	-	-	-	3.0	12.5	-	15.5	158.1	5.7	12.5	18.1
2/3	295	287	-	-	-	2.7	10.9	-	13.6	166.1	5.8	10.9	16.7
3/1	472	472	-	-	-	2.1	0.8	-	2.9	21.9	7.1	0.8	7.8
3/2+3/3	1455	1324	-	-	-	11.6	70.6	-	82.2	203.4	23.8	70.6	94.4
4/1	727	674	-	-	-	6.7	32.3	-	38.9	192.8	15.0	32.3	47.2
4/2+4/3	920	856	-	-	-	7.0	45.1	-	52.0	203.6	15.3	45.1	60.4
5/1	1523	1523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	493	493	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	678	678	-	-	-	0.7	0.5	-	1.2	6.3	2.6	0.5	3.1
8/2	1358	1353	-	-	-	2.1	19.6	-	21.7	57.4	26.1	19.6	45.7
9/2+9/1	890	890	-	-	-	2.1	2.9	-	5.0	20.3	11.5	2.9	14.4
9/3	287	287	-	-	-	0.4	0.2	-	0.6	8.1	0.8	0.2	1.0
10/1	952	849	-	-	-	8.1	55.8	-	63.9	241.6	20.2	55.8	76.0
10/2	945	842	-	-	-	8.0	55.6	-	63.6	242.3	20.1	55.6	75.7
11/1	222	222	-	-	-	1.1	0.1	-	1.2	20.3	4.2	0.1	4.3
11/2	678	678	-	-	-	0.4	1.0	-	1.4	7.3	0.8	1.0	1.8
12/1	1076	1076	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1060	1060	-	-	-	0.0	0.6	-	0.6	2.0	0.5	0.6	1.1
14/2	16	16	16	0	0	0.0	0.0	-	0.0	3.9	0.0	0.0	0.0

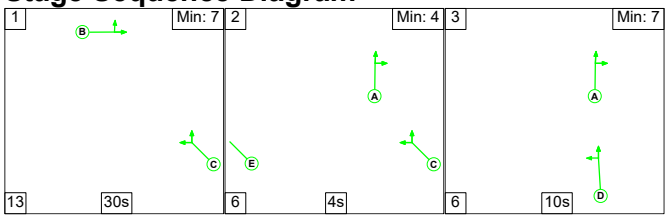
C1 - Westside 25911	PRC for Signalled Lanes (%):	-22.1	Total Delay for Signalled Lanes (pcuHr):	142.70	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-24.7	Total Delay for Signalled Lanes (pcuHr):	282.91	Cycle Time (s):	69
	PRC Over All Lanes (%):	-24.7	Total Delay Over All Lanes(pcuHr):	426.39		

Full Input Data And Results

Scenario 8: '2038 Without Development Flows (PM)' (FG8: '2038 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

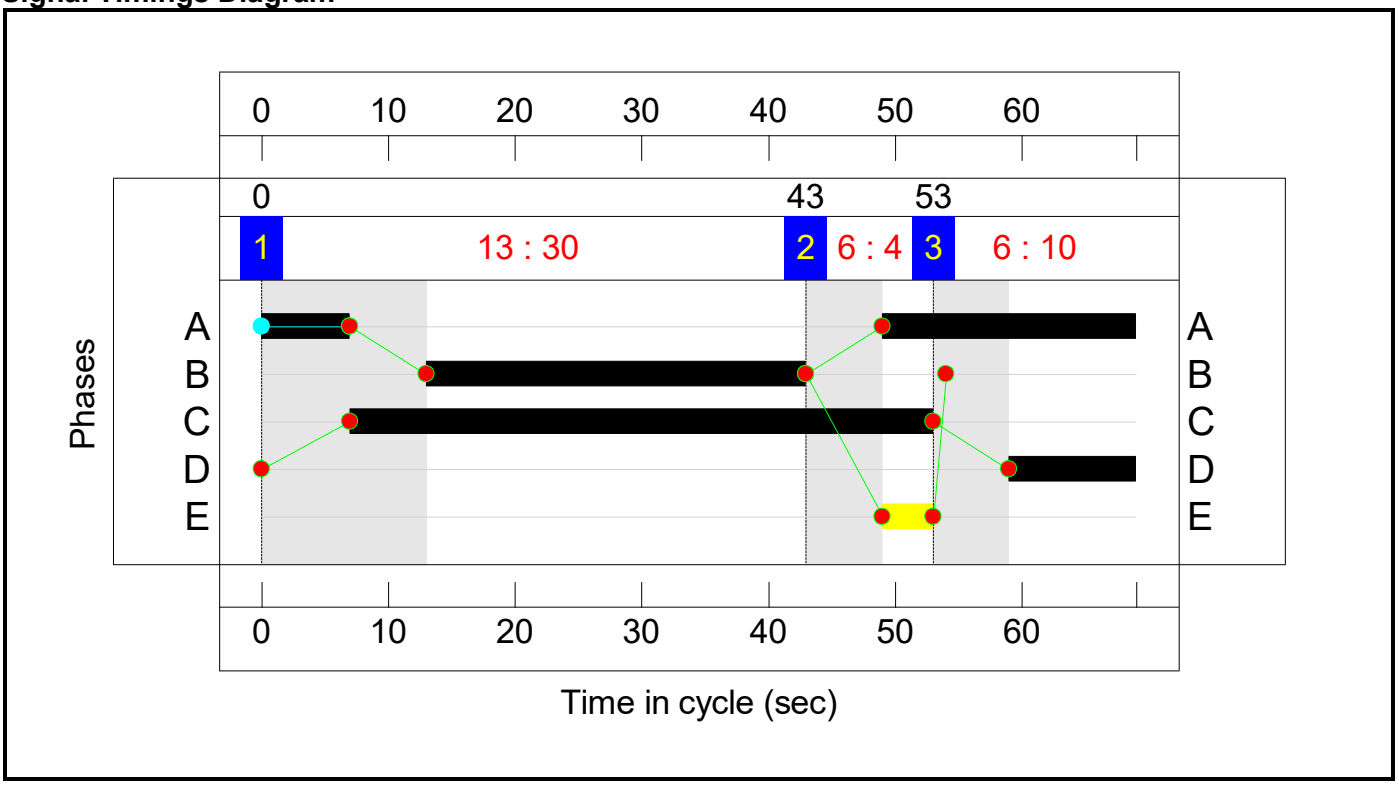
Stage Sequence Diagram



Stage Timings

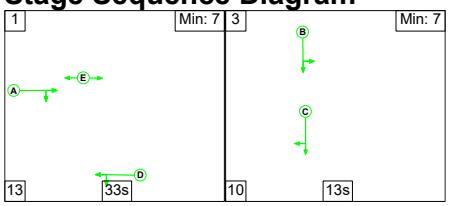
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

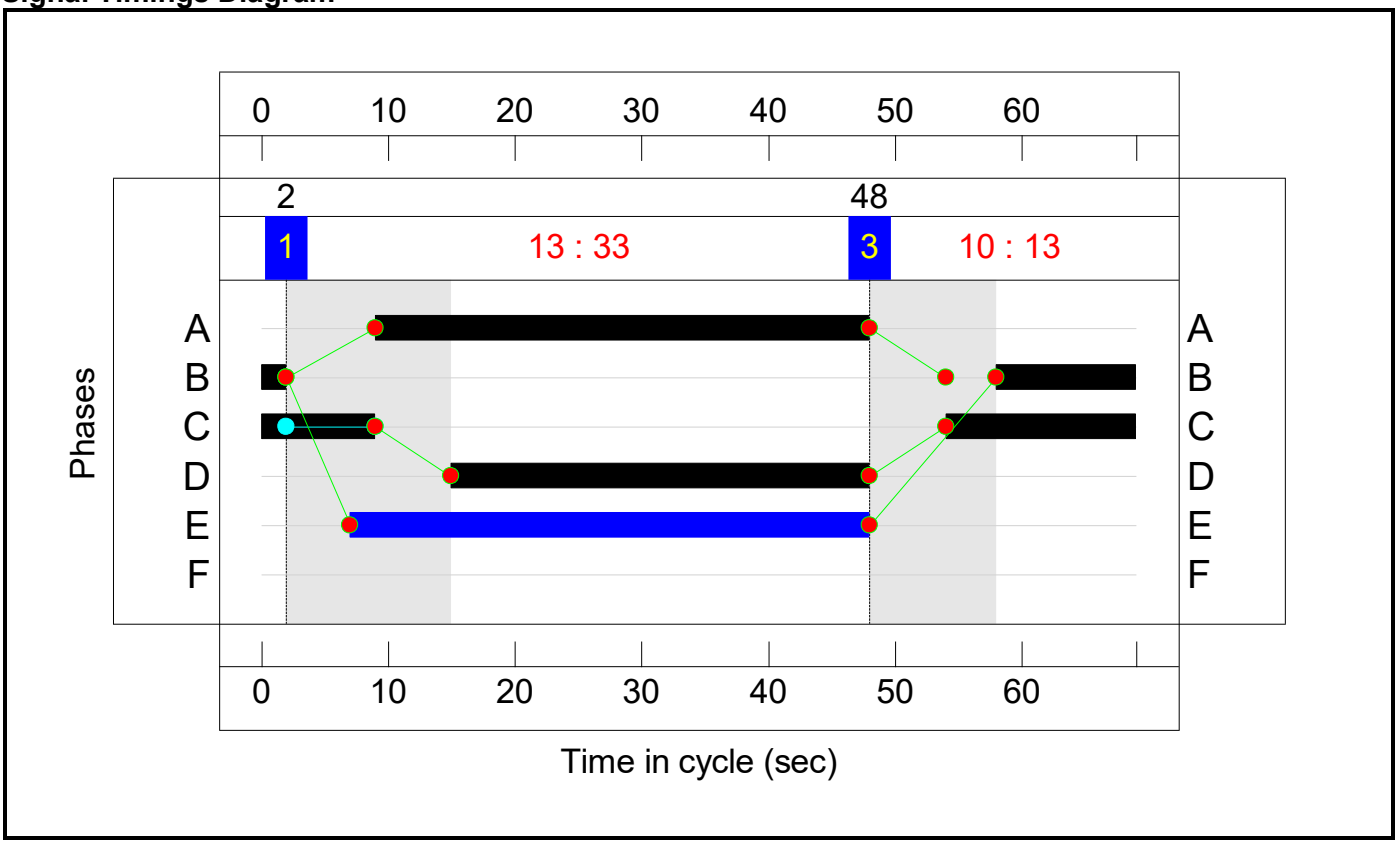


Stage Timings

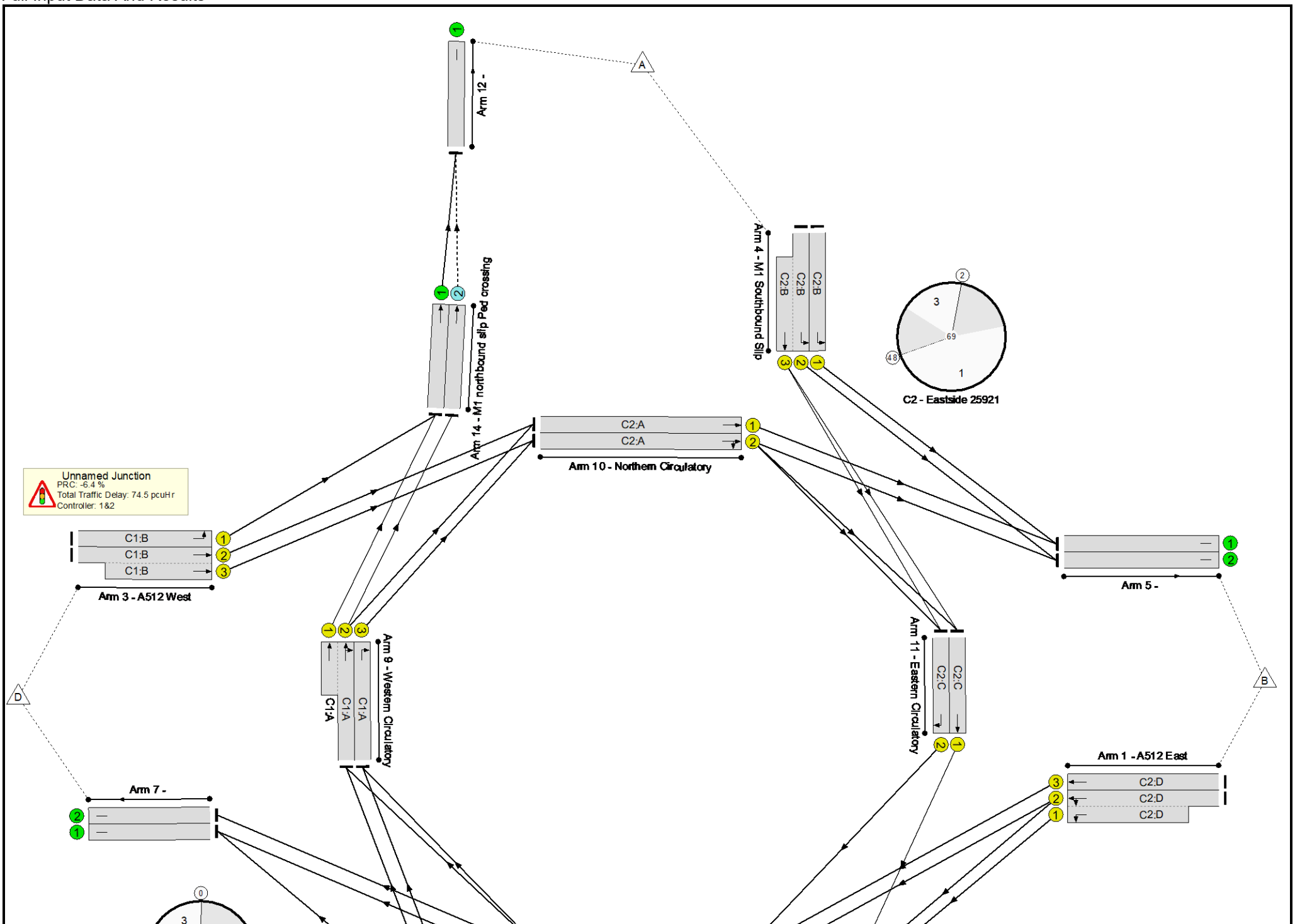
Stage	1	3
Duration	33	13
Change Point	2	48

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.8%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1307	1949:1963	905+562	89.1 : 89.1%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	758	1955	963	78.7%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	370	1973:1963	85+313	93.0 : 93.0%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	286	1979	315	90.7%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	456	1926	865	52.7%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1296	1937:1941	717+636	95.8 : 95.8%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	269	1937	393	68.4%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	657	1945:1948	395+395	89.2 : 77.2%
5/1		U	N/A	N/A	-		-	-	-	1035	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	974	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	774	1980	1980	39.1%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	545	0.0%
7/1		U	N/A	N/A	-		-	-	-	1097	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	806	1961	1336	60.3%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1063	1939	1321	80.5%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	719	1926:1941	159+719	82.0 : 82.0%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	286	1932	784	36.5%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	766	1953	1132	67.7%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	895	1937	1123	79.7%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	273	1997	724	37.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	305	1994	722	42.2%
12/1		U	N/A	N/A	-		-	-	-	1096	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1045	1940	1940	53.9%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	51	1940	485	10.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**51**	**0**	**0**	**37.5**	**37.0**	**0.0**	**74.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**51**	**0**	**0**	**37.5**	**37.0**	**0.0**	**74.5**	**-**	**-**	**-**	**-**
1/2+1/1	1307	1307	-	-	-	5.0	3.9	-	8.9	24.6	13.2	3.9	17.1
1/3	758	758	-	-	-	3.1	1.8	-	4.9	23.1	12.0	1.8	13.8
2/2+2/1	370	370	-	-	-	2.9	4.9	-	7.8	75.7	5.5	4.9	10.4
2/3	286	286	-	-	-	2.3	3.8	-	6.1	76.9	5.3	3.8	9.2
3/1	456	456	-	-	-	1.7	0.6	-	2.3	18.1	6.2	0.6	6.8
3/2+3/3	1296	1296	-	-	-	5.7	8.7	-	14.4	39.9	13.3	8.7	21.9
4/1	269	269	-	-	-	1.9	1.1	-	3.0	39.7	4.7	1.1	5.8
4/2+4/3	657	657	-	-	-	4.8	2.4	-	7.2	39.5	6.6	2.4	8.9
5/1	1035	1035	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	974	974	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	774	774	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1097	1097	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	806	806	-	-	-	1.3	0.8	-	2.0	9.0	4.5	0.8	5.3
8/2	1063	1063	-	-	-	1.1	2.0	-	3.1	10.6	6.0	2.0	8.1
9/2+9/1	719	719	-	-	-	3.0	2.2	-	5.2	26.1	13.1	2.2	15.3
9/3	286	286	-	-	-	0.3	0.3	-	0.6	7.3	0.5	0.3	0.8
10/1	766	766	-	-	-	1.5	1.0	-	2.6	12.1	4.5	1.0	5.5
10/2	895	895	-	-	-	1.4	1.9	-	3.3	13.3	6.6	1.9	8.5
11/1	273	273	-	-	-	1.4	0.3	-	1.7	21.9	5.2	0.3	5.5
11/2	305	305	-	-	-	0.2	0.4	-	0.5	6.2	0.3	0.4	0.6
12/1	1096	1096	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1045	1045	-	-	-	0.0	0.6	-	0.6	2.0	0.5	0.6	1.1
14/2	51	51	51	0	0	0.0	0.1	-	0.1	4.1	0.0	0.1	0.1

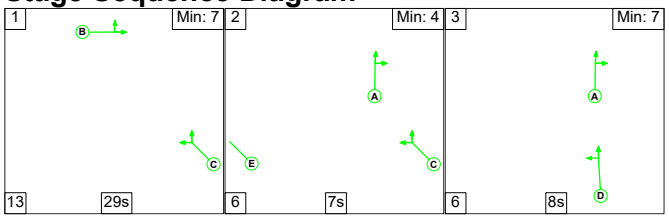
C1 - Westside 25911	PRC for Signalled Lanes (%):	-6.4	Total Delay for Signalled Lanes (pcuHr):	41.51	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	32.05	Cycle Time (s):	69
	PRC Over All Lanes (%):	-6.4	Total Delay Over All Lanes(pcuHr):	74.52		

Full Input Data And Results

Scenario 9: '2038 With Development Flows (AM)' (FG9: '2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

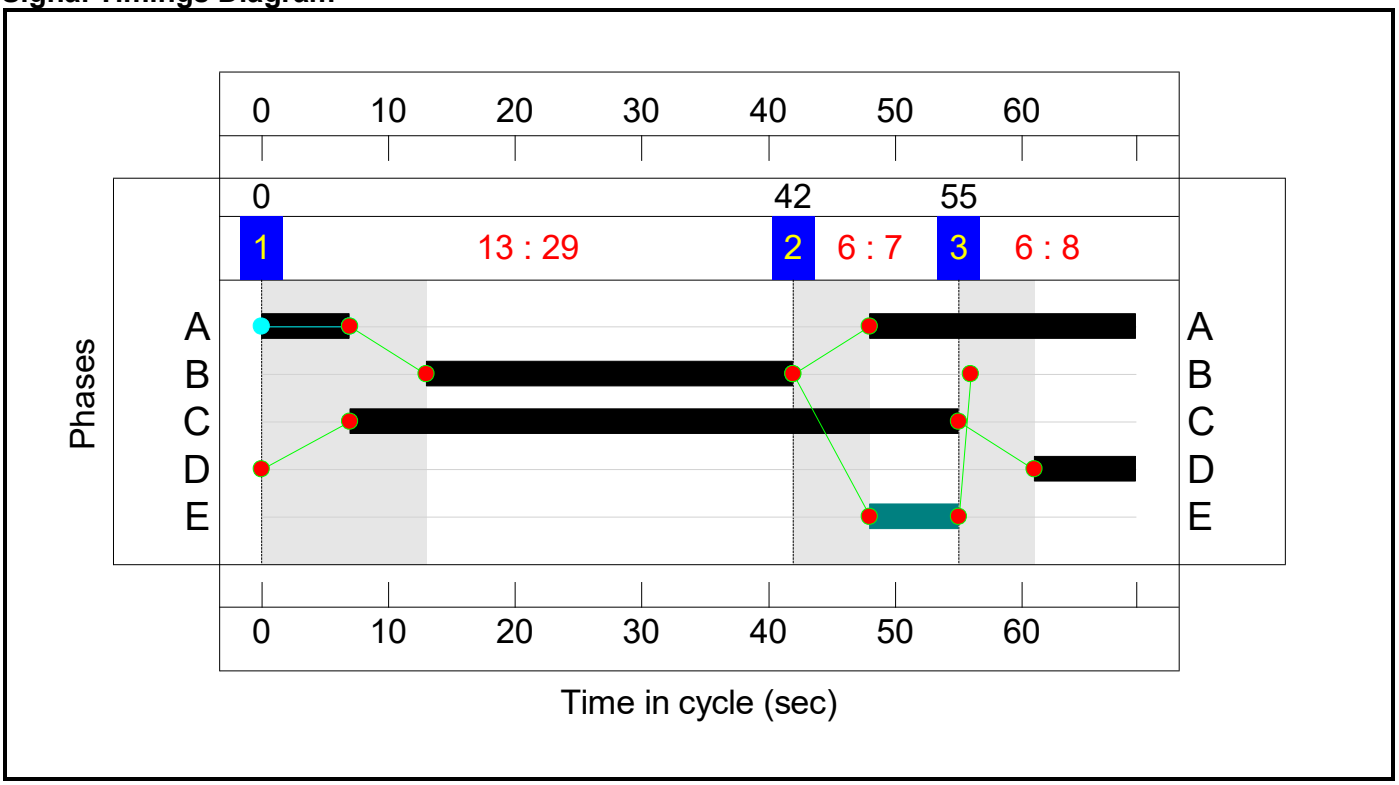
Stage Sequence Diagram



Stage Timings

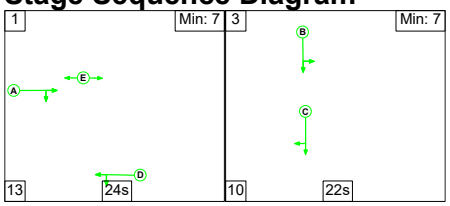
Stage	1	2	3
Duration	29	7	8
Change Point	0	42	55

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

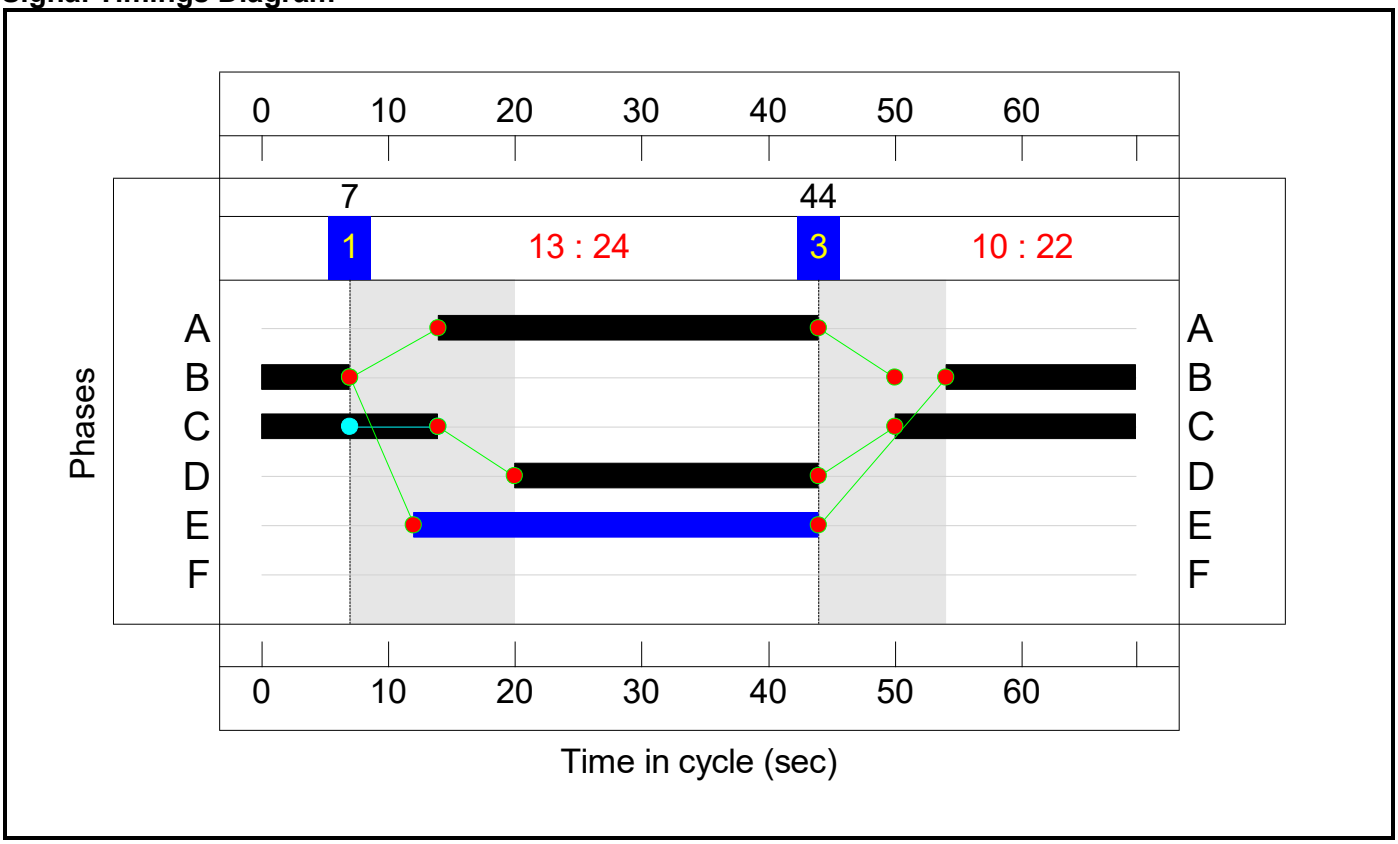


Stage Timings

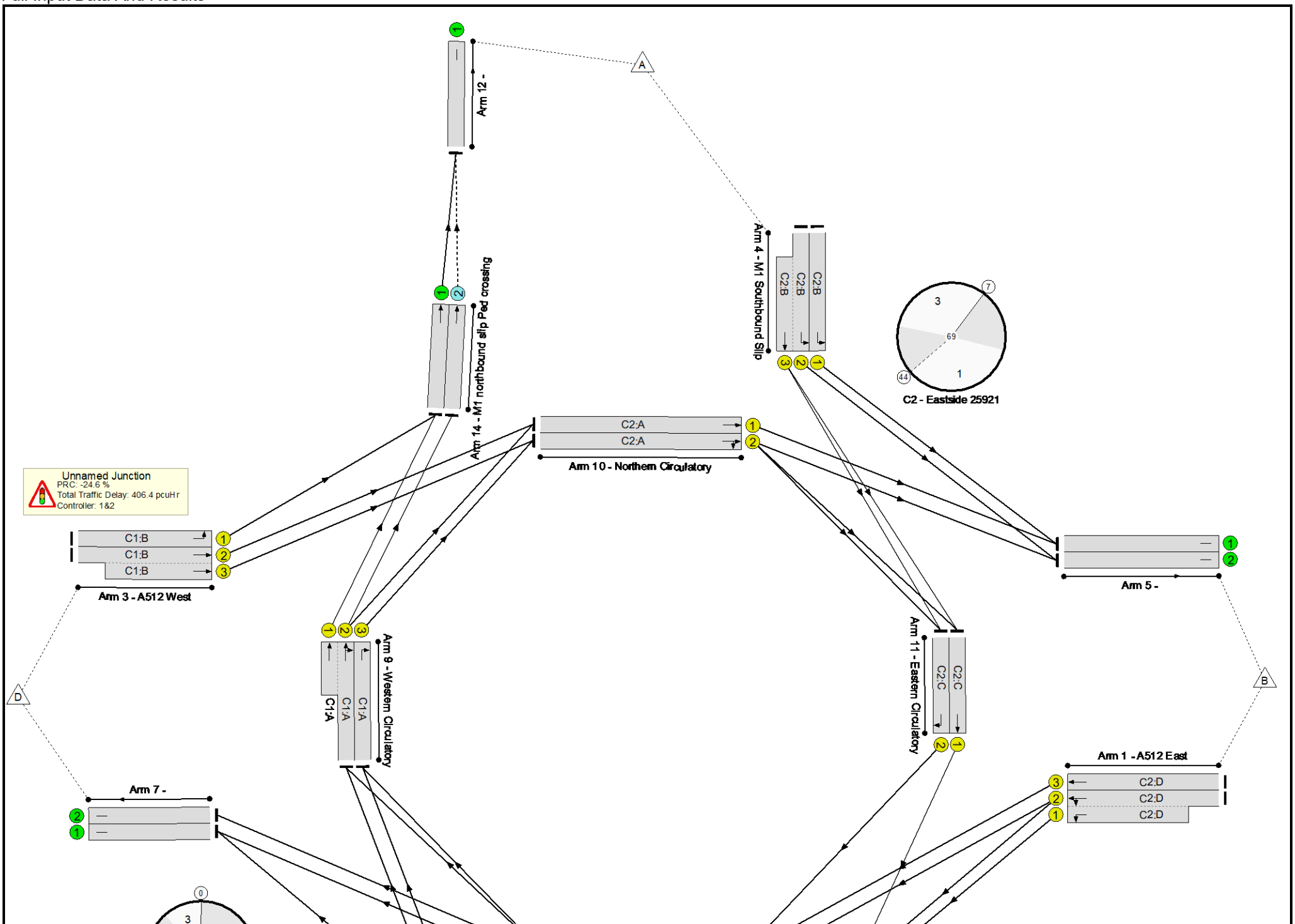
Stage	1	3
Duration	24	22
Change Point	7	44

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**112.1%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	24	-	1006	1949:1963	706+263	103.8 : 103.8%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	24	-	716	1955	708	101.1%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	8	-	346	1973:1963	257+52	111.9 : 111.9%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	8	-	287	1979	258	111.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	485	1926	837	57.9%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	1482	1937:1941	694+687	107.3 : 107.3%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	22	-	714	1937	646	110.6%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	22	-	931	1945:1948	181+649	112.1 : 112.1%
5/1		U	N/A	N/A	-		-	-	-	1747	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	944	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	556	1980	1980	25.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	917	0.0%
7/1		U	N/A	N/A	-		-	-	-	791	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	48	-	733	1961	1393	50.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	48	-	1444	1945	1381	98.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	936	1926:1941	391+619	84.6 : 91.7%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	287	1932	812	31.8%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	30	-	1033	1953	877	108.5%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	30	-	1024	1937	870	108.6%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	33	-	283	1997	984	23.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	33	-	728	1994	983	66.1%
12/1		U	N/A	N/A	-		-	-	-	1133	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1059	1940	1940	54.3%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	74	1940	483	15.1%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**73**	**0**	**0**	**66.1**	**340.2**	**0.0**	**406.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**73**	**0**	**0**	**66.1**	**340.2**	**0.0**	**406.4**	**-**	**-**	**-**	**-**
1/2+1/1	1006	979	-	-	-	6.5	27.5	-	34.0	121.8	14.6	27.5	42.1
1/3	716	708	-	-	-	4.6	15.4	-	20.0	100.7	13.9	15.4	29.3
2/2+2/1	346	315	-	-	-	3.4	22.3	-	25.7	267.7	5.9	22.3	28.2
2/3	287	258	-	-	-	3.5	18.3	-	21.9	274.2	6.4	18.3	24.7
3/1	485	485	-	-	-	2.0	0.7	-	2.7	19.8	7.0	0.7	7.7
3/2+3/3	1482	1381	-	-	-	10.3	57.1	-	67.4	163.6	23.8	57.1	80.9
4/1	714	646	-	-	-	7.2	38.8	-	46.0	231.9	15.0	38.8	53.8
4/2+4/3	931	852	-	-	-	8.3	54.6	-	62.9	243.2	17.4	54.6	72.0
5/1	1523	1523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	509	509	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	764	764	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	706	706	-	-	-	1.1	0.5	-	1.6	8.3	4.2	0.5	4.7
8/2	1358	1358	-	-	-	2.1	13.5	-	15.6	41.2	17.9	13.5	31.3
9/2+9/1	898	898	-	-	-	2.9	3.8	-	6.7	26.8	11.6	3.8	15.4
9/3	258	258	-	-	-	0.4	0.2	-	0.7	9.1	0.8	0.2	1.0
10/1	952	877	-	-	-	6.2	42.7	-	48.9	184.9	19.7	42.7	62.3
10/2	945	870	-	-	-	6.1	42.9	-	49.0	186.6	19.5	42.9	62.4
11/1	236	236	-	-	-	1.1	0.2	-	1.2	18.8	4.5	0.2	4.6
11/2	649	649	-	-	-	0.4	1.0	-	1.3	7.4	0.8	1.0	1.7
12/1	1126	1126	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1053	1053	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
14/2	73	73	73	0	0	0.0	0.1	-	0.1	4.4	0.3	0.1	0.4

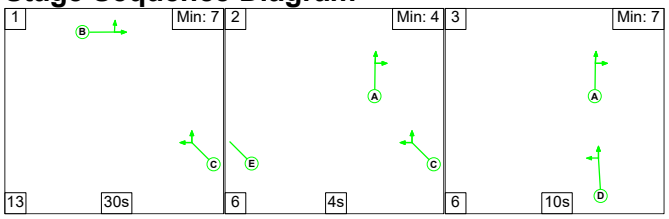
C1 - Westside 25911	PRC for Signalled Lanes (%):	-24.3	Total Delay for Signalled Lanes (pcuHr):	142.13	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-24.6	Total Delay for Signalled Lanes (pcuHr):	263.38	Cycle Time (s):	69
	PRC Over All Lanes (%):	-24.6	Total Delay Over All Lanes(pcuHr):	406.36		

Full Input Data And Results

Scenario 10: '2038 With Development Flows (PM)' (FG10: '2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

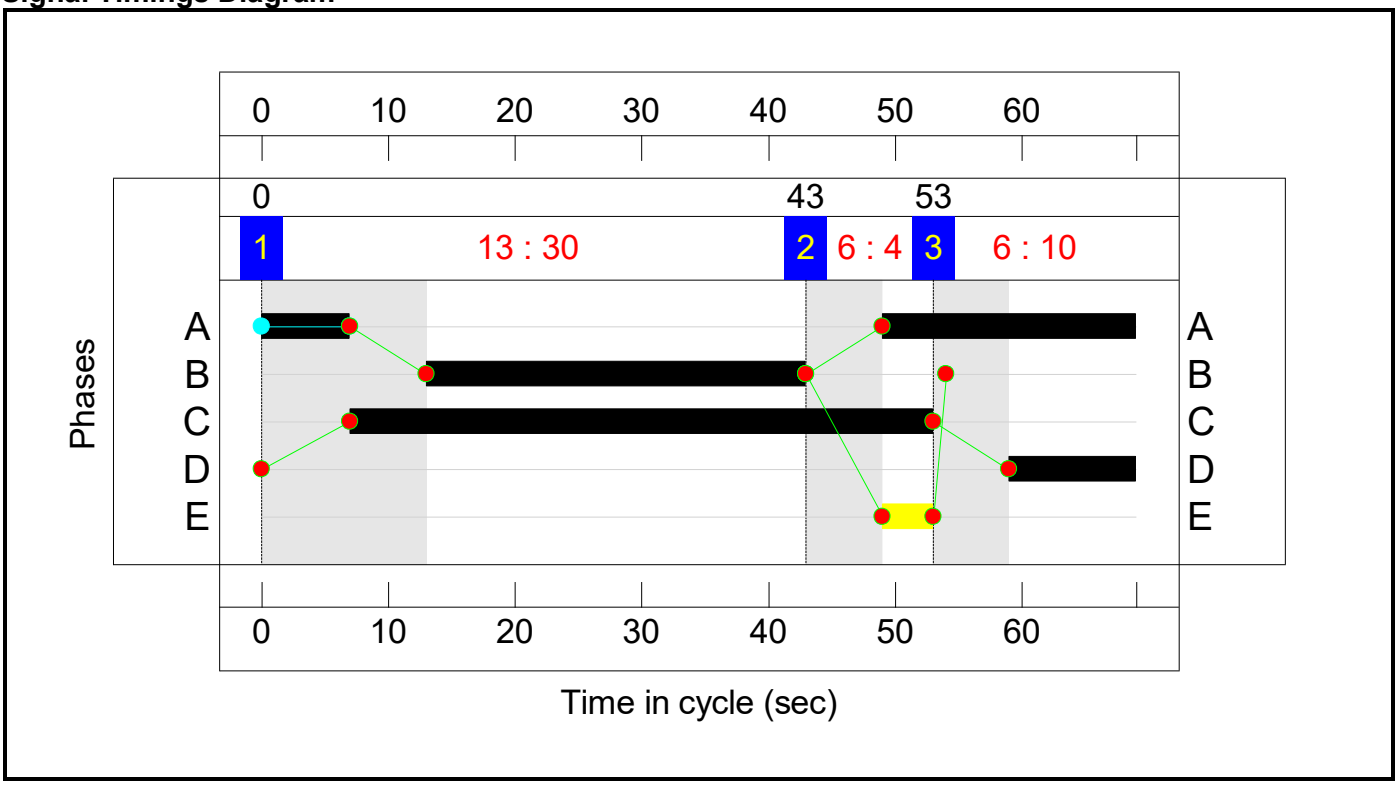
Stage Sequence Diagram



Stage Timings

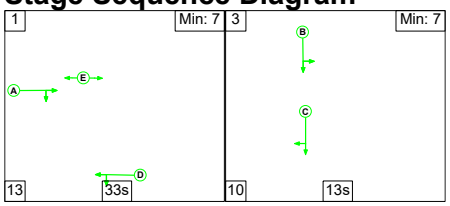
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

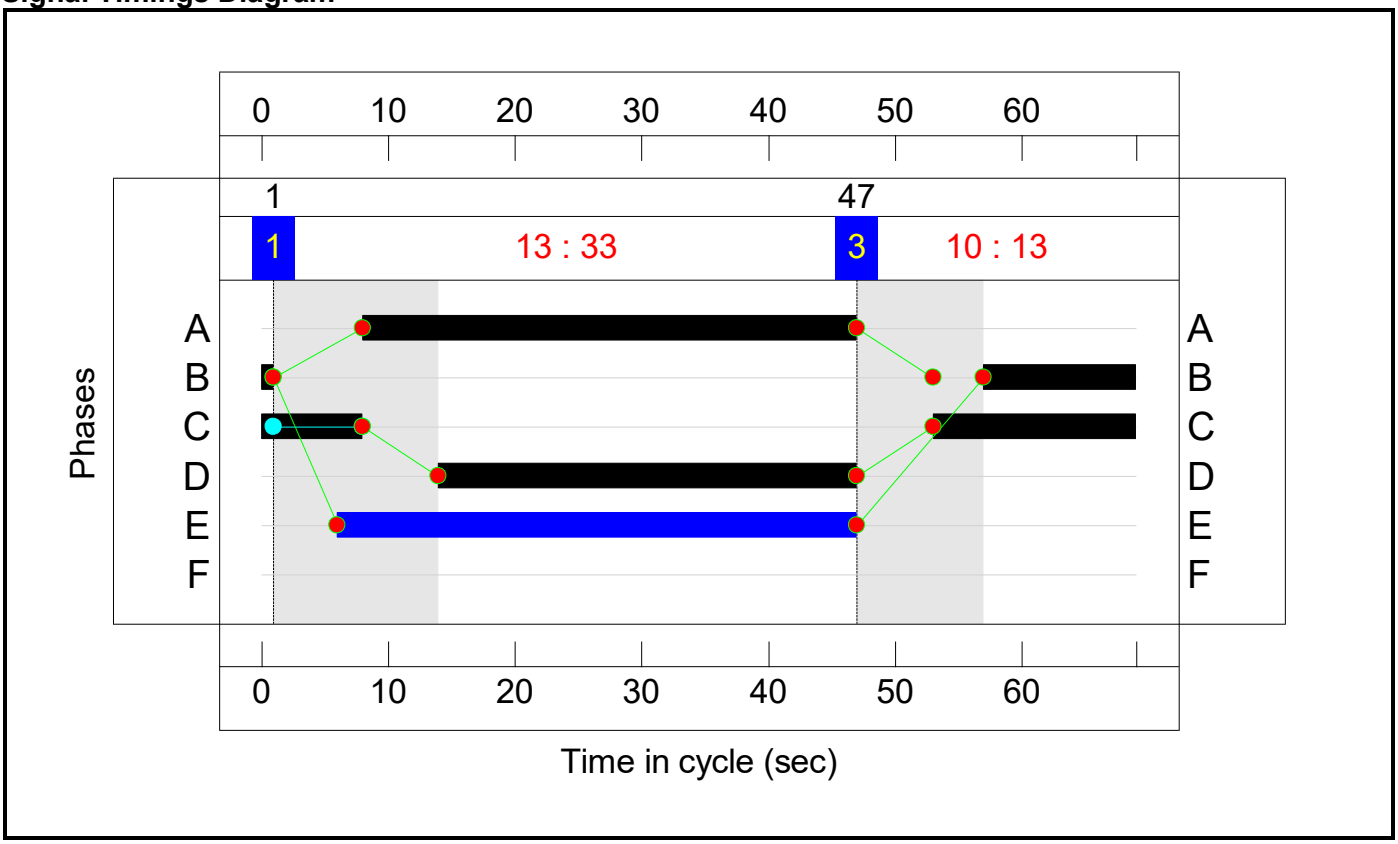


Stage Timings

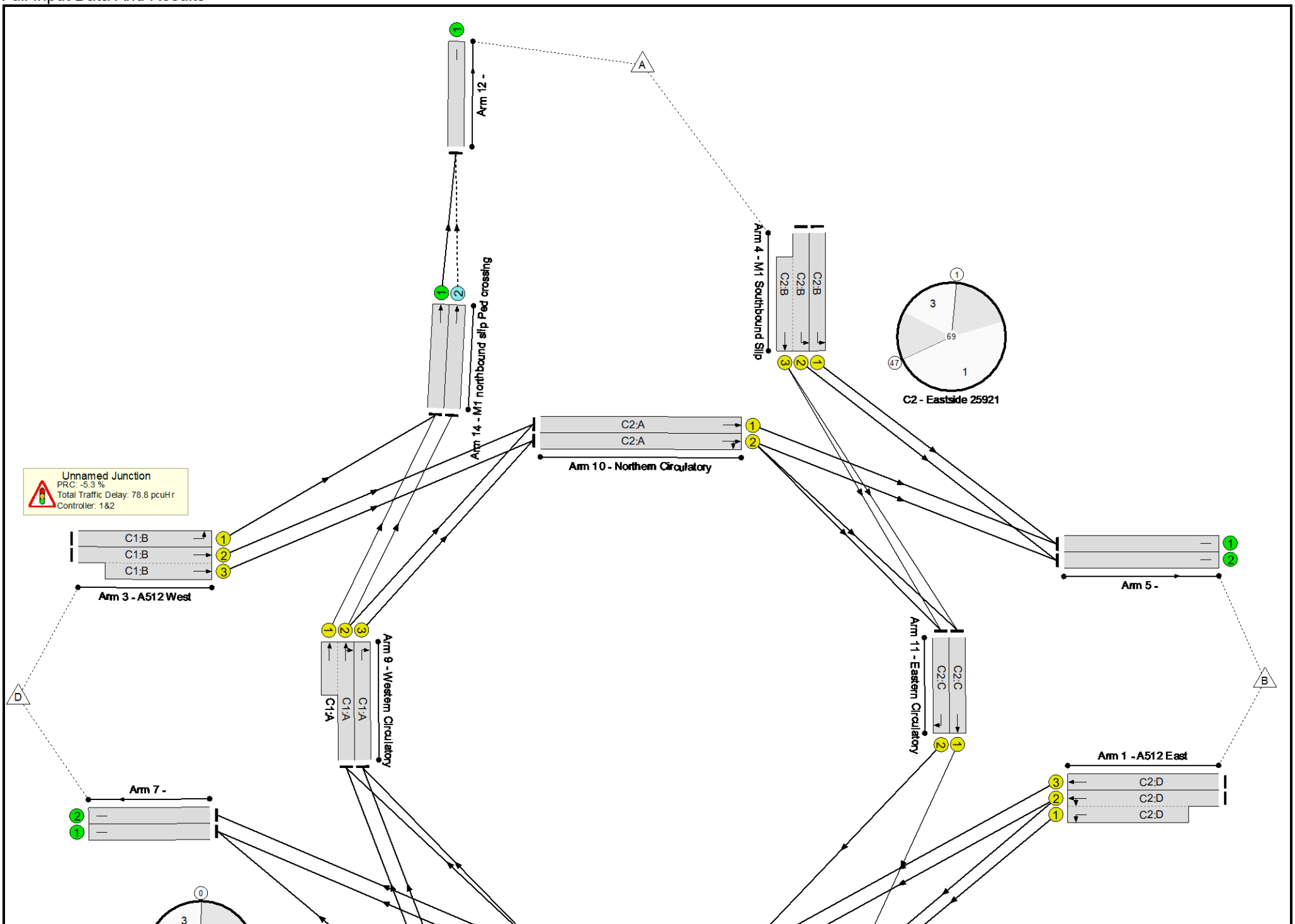
Stage	1	3
Duration	33	13
Change Point	1	47

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.8%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1308	1949:1963	906+536	90.7 : 90.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	772	1955	963	80.1%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	358	1973:1963	66+313	94.6 : 94.6%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	294	1979	315	93.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	470	1926	865	54.3%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1282	1937:1941	718+635	94.8 : 94.8%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	298	1937	393	75.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	694	1945:1948	395+395	90.0 : 85.8%
5/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	982	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	755	1980	1980	38.1%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	549	0.0%
7/1		U	N/A	N/A	-		-	-	-	1118	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	822	1961	1336	61.5%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1111	1940	1321	84.1%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	713	1926:1941	135+733	82.1 : 82.1%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	294	1932	784	37.5%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	742	1953	1132	65.5%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	896	1937	1123	79.8%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	269	1997	724	37.2%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	339	1994	722	46.9%
12/1		U	N/A	N/A	-		-	-	-	1121	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	755	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1072	1940	1940	55.3%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	49	1940	479	10.2%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**49**	**0**	**0**	**38.4**	**40.4**	**0.0**	**78.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**49**	**0**	**0**	**38.4**	**40.4**	**0.0**	**78.8**	**-**	**-**	**-**	**-**
1/2+1/1	1308	1308	-	-	-	5.1	4.6	-	9.7	26.6	13.7	4.6	18.3
1/3	772	772	-	-	-	3.1	2.0	-	5.1	23.9	12.2	2.0	14.2
2/2+2/1	358	358	-	-	-	2.8	5.6	-	8.4	84.8	5.6	5.6	11.2
2/3	294	294	-	-	-	2.3	4.7	-	7.1	86.7	5.6	4.7	10.3
3/1	470	470	-	-	-	1.8	0.6	-	2.4	18.4	6.5	0.6	7.1
3/2+3/3	1282	1282	-	-	-	5.6	7.5	-	13.1	36.7	12.9	7.5	20.4
4/1	298	298	-	-	-	2.1	1.5	-	3.7	44.3	5.4	1.5	6.9
4/2+4/3	694	694	-	-	-	5.1	3.4	-	8.5	44.2	6.6	3.4	10.0
5/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	982	982	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	755	755	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1118	1118	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	822	822	-	-	-	1.2	0.8	-	2.0	8.8	4.3	0.8	5.1
8/2	1111	1111	-	-	-	1.1	2.6	-	3.7	12.0	7.6	2.6	10.2
9/2+9/1	713	713	-	-	-	3.0	2.2	-	5.3	26.7	13.1	2.2	15.3
9/3	294	294	-	-	-	0.3	0.3	-	0.6	7.7	0.6	0.3	0.9
10/1	742	742	-	-	-	1.6	0.9	-	2.6	12.6	4.5	0.9	5.4
10/2	896	896	-	-	-	1.4	1.9	-	3.3	13.5	6.0	1.9	7.9
11/1	269	269	-	-	-	1.3	0.3	-	1.6	21.8	5.1	0.3	5.4
11/2	339	339	-	-	-	0.2	0.4	-	0.7	7.2	0.4	0.4	0.8
12/1	1121	1121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	755	755	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1072	1072	-	-	-	0.0	0.6	-	0.6	2.1	1.1	0.6	1.7
14/2	49	49	49	0	0	0.0	0.1	-	0.1	4.2	0.0	0.1	0.1

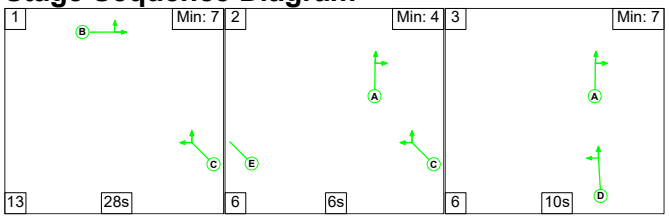
C1 - Westside 25911	PRC for Signalled Lanes (%):	-5.3	Total Delay for Signalled Lanes (pcuHr):	42.59	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	35.23	Cycle Time (s):	69
	PRC Over All Lanes (%):	-5.3	Total Delay Over All Lanes(pcuHr):	78.81		

Full Input Data And Results

Scenario 11: '2a 2028 With Development Flows (AM)' (FG11: '2a 2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

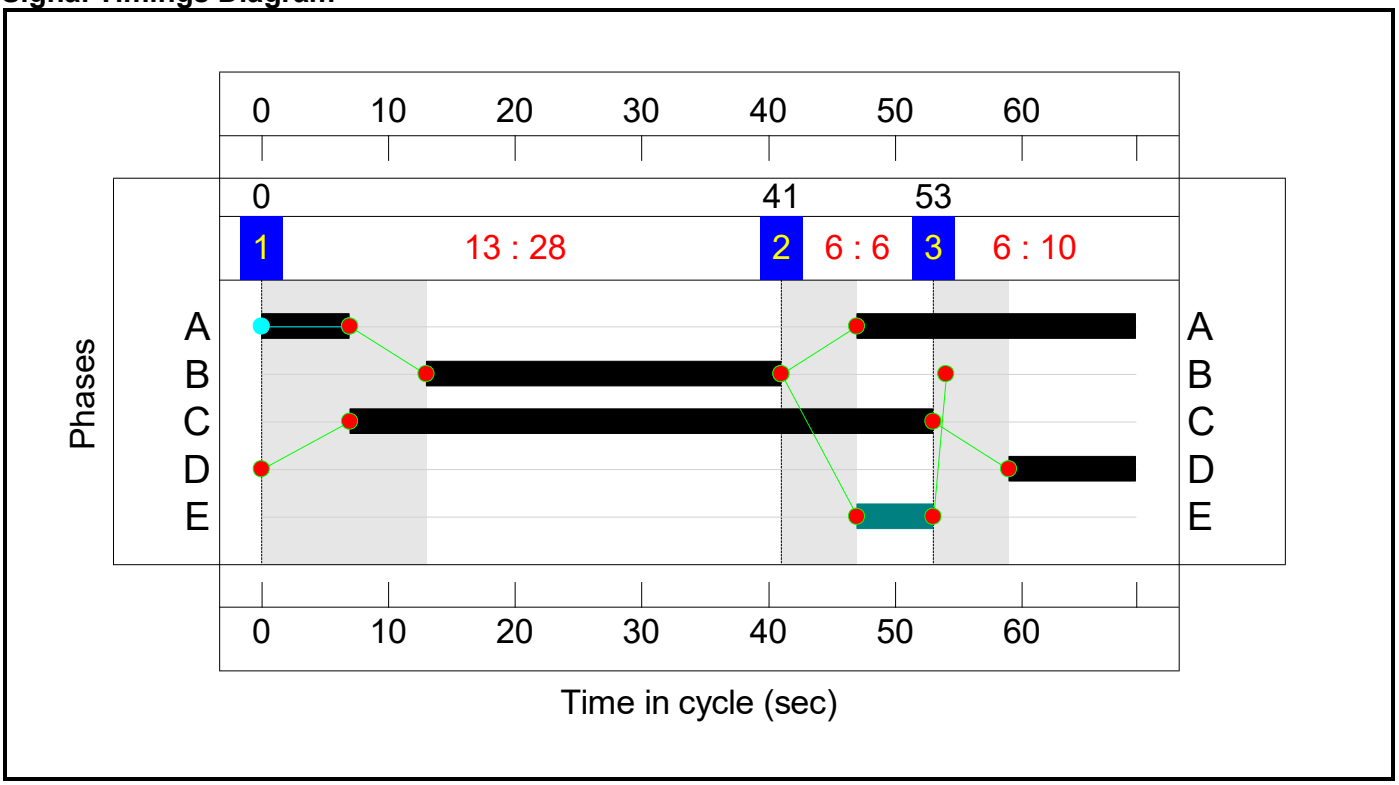
Stage Sequence Diagram



Stage Timings

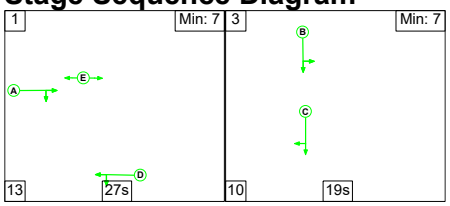
Stage	1	2	3
Duration	28	6	10
Change Point	0	41	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

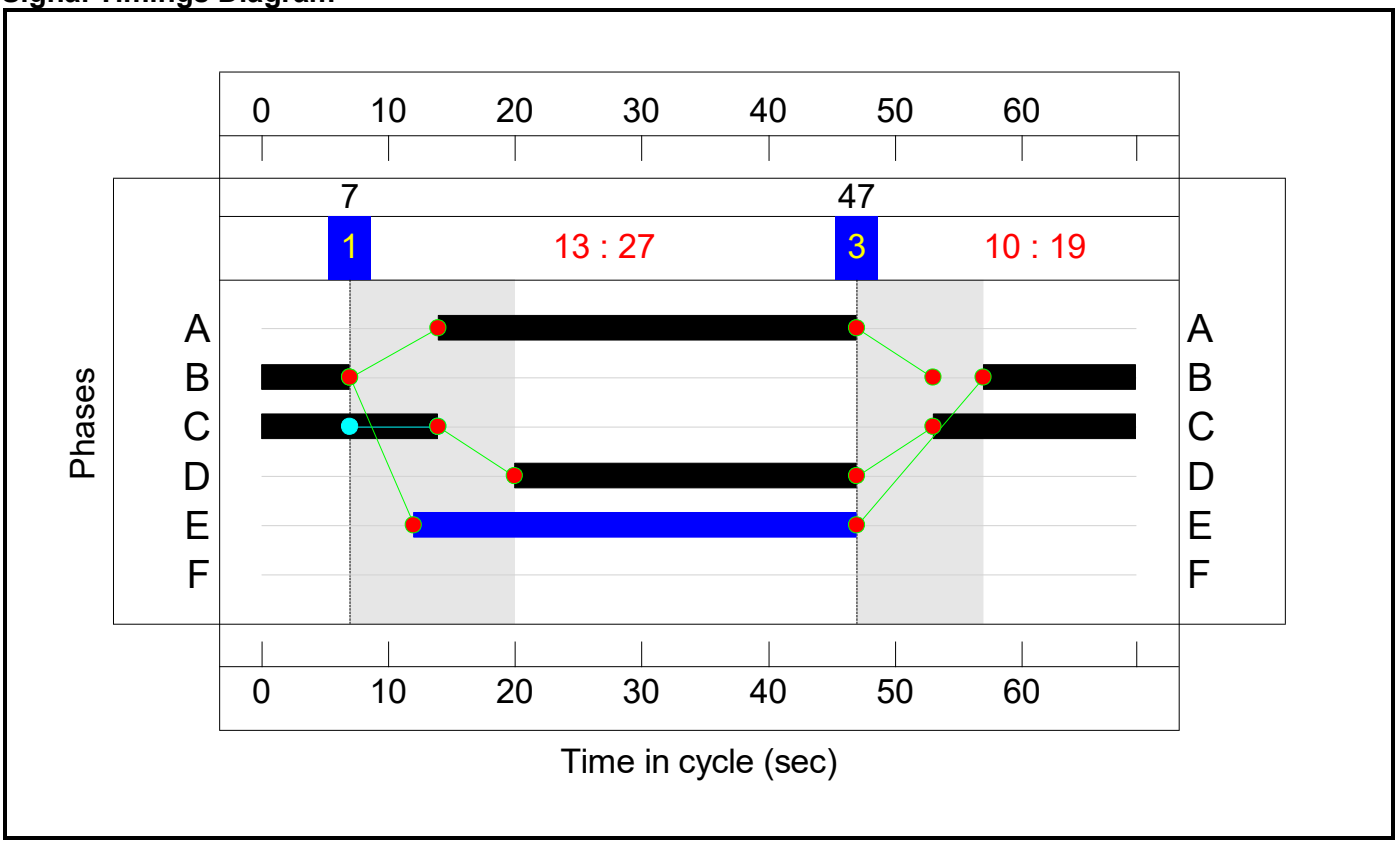


Stage Timings

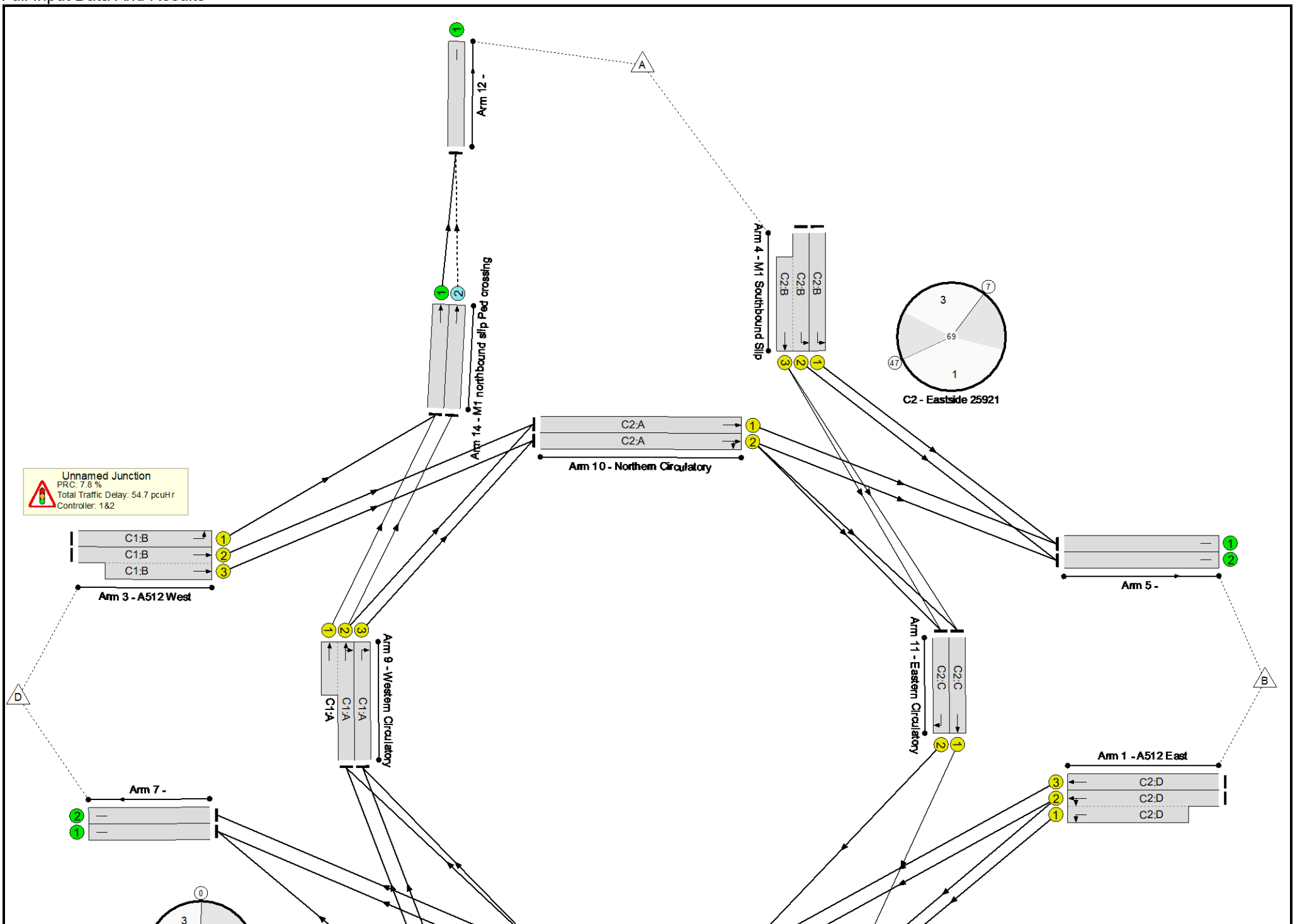
Stage	1	3
Duration	27	19
Change Point	7	47

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.5%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	27	-	743	1949:1963	791+291	68.7 : 68.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	27	-	592	1955	793	74.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	270	1973:1963	315+65	71.2 : 71.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	234	1979	315	74.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	371	1926	809	45.8%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1130	1937:1941	679+674	83.5 : 83.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	19	-	375	1937	561	66.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	19	-	934	1945:1948	564+565	82.5 : 83.1%
5/1		U	N/A	N/A	-		-	-	-	1166	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1085	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	377	1980	1980	19.0%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	632	0.0%
7/1		U	N/A	N/A	-		-	-	-	589	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	543	1961	1336	40.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1061	1941	1322	80.2%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	816	1926:1941	339+668	81.0 : 81.0%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	234	1932	840	27.9%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	33	-	791	1953	962	82.2%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	33	-	797	1937	954	83.5%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	30	-	177	1997	897	19.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	30	-	469	1994	896	52.4%
12/1		U	N/A	N/A	-		-	-	-	963	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	912	1940	1940	47.0%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	51	1940	514	9.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**51**	**0**	**0**	**32.7**	**22.0**	**0.0**	**54.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**51**	**0**	**0**	**32.7**	**22.0**	**0.0**	**54.7**	**-**	**-**	**-**	**-**
1/2+1/1	743	743	-	-	-	3.3	1.1	-	4.4	21.3	8.4	1.1	9.5
1/3	592	592	-	-	-	2.9	1.4	-	4.3	26.3	9.5	1.4	11.0
2/2+2/1	270	270	-	-	-	2.0	1.2	-	3.2	43.2	4.0	1.2	5.3
2/3	234	234	-	-	-	1.8	1.4	-	3.2	49.0	4.2	1.4	5.6
3/1	371	371	-	-	-	1.5	0.4	-	1.9	18.5	5.0	0.4	5.5
3/2+3/3	1130	1130	-	-	-	5.1	2.5	-	7.6	24.2	8.8	2.5	11.3
4/1	375	375	-	-	-	2.2	1.0	-	3.2	31.1	6.3	1.0	7.2
4/2+4/3	934	934	-	-	-	5.9	2.3	-	8.3	31.9	8.3	2.3	10.7
5/1	1166	1166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1085	1085	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	377	377	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	543	543	-	-	-	0.7	0.3	-	1.1	7.0	2.7	0.3	3.1
8/2	1061	1061	-	-	-	1.0	2.0	-	3.0	10.1	5.5	2.0	7.5
9/2+9/1	816	816	-	-	-	2.2	2.1	-	4.3	19.0	10.8	2.1	12.9
9/3	234	234	-	-	-	0.2	0.2	-	0.3	5.3	0.3	0.2	0.5
10/1	791	791	-	-	-	1.5	2.2	-	3.7	17.0	6.3	2.2	8.5
10/2	797	797	-	-	-	1.5	2.5	-	4.0	18.0	6.6	2.5	9.1
11/1	177	177	-	-	-	0.7	0.1	-	0.8	16.2	3.3	0.1	3.4
11/2	469	469	-	-	-	0.2	0.5	-	0.7	5.4	0.3	0.5	0.8
12/1	963	963	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	912	912	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	51	51	51	0	0	0.0	0.1	-	0.1	3.9	0.0	0.1	0.1

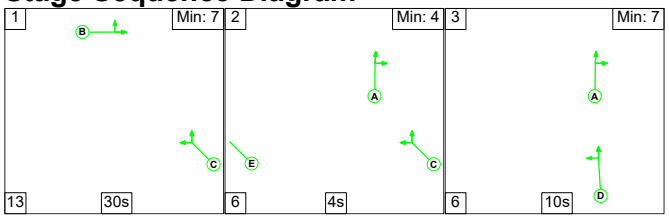
C1 - Westside 25911	PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	24.61	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	29.48	Cycle Time (s):	69
	PRC Over All Lanes (%):	7.8	Total Delay Over All Lanes(pcuHr):	54.70		

Full Input Data And Results

Scenario 12: '2a 2028 With Development Flows (PM)' (FG12: '2a 2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

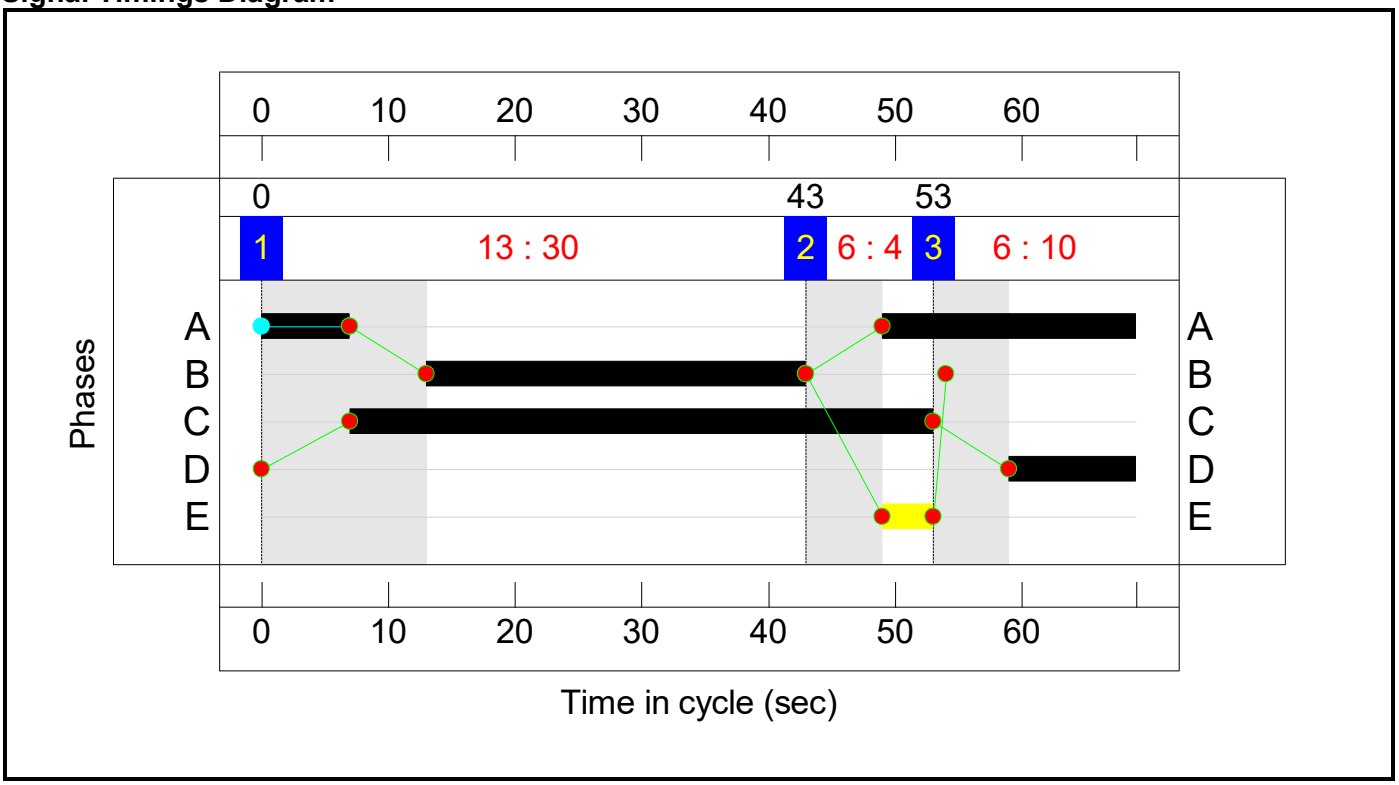
Stage Sequence Diagram



Stage Timings

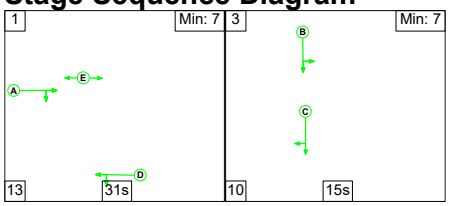
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

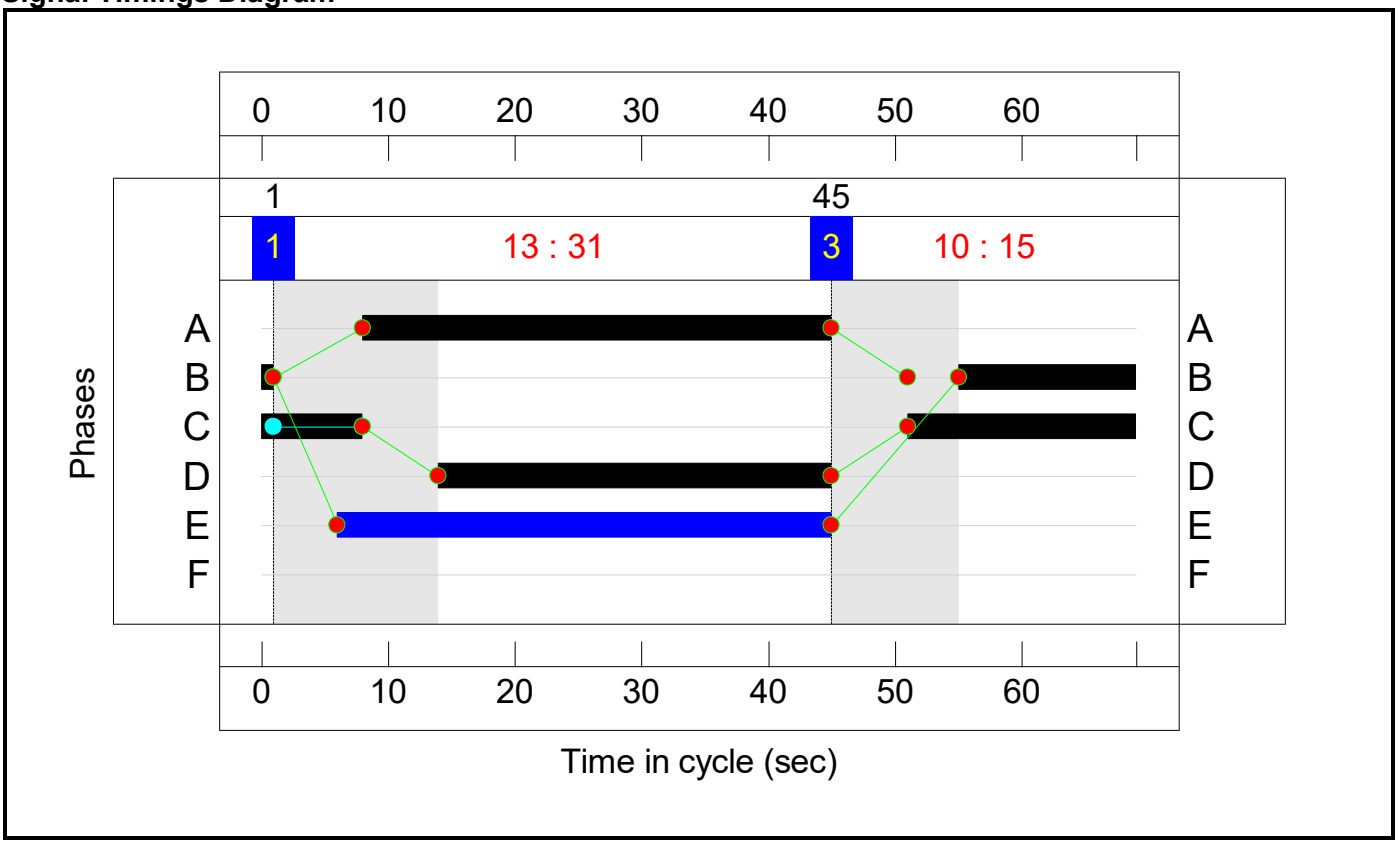


Stage Timings

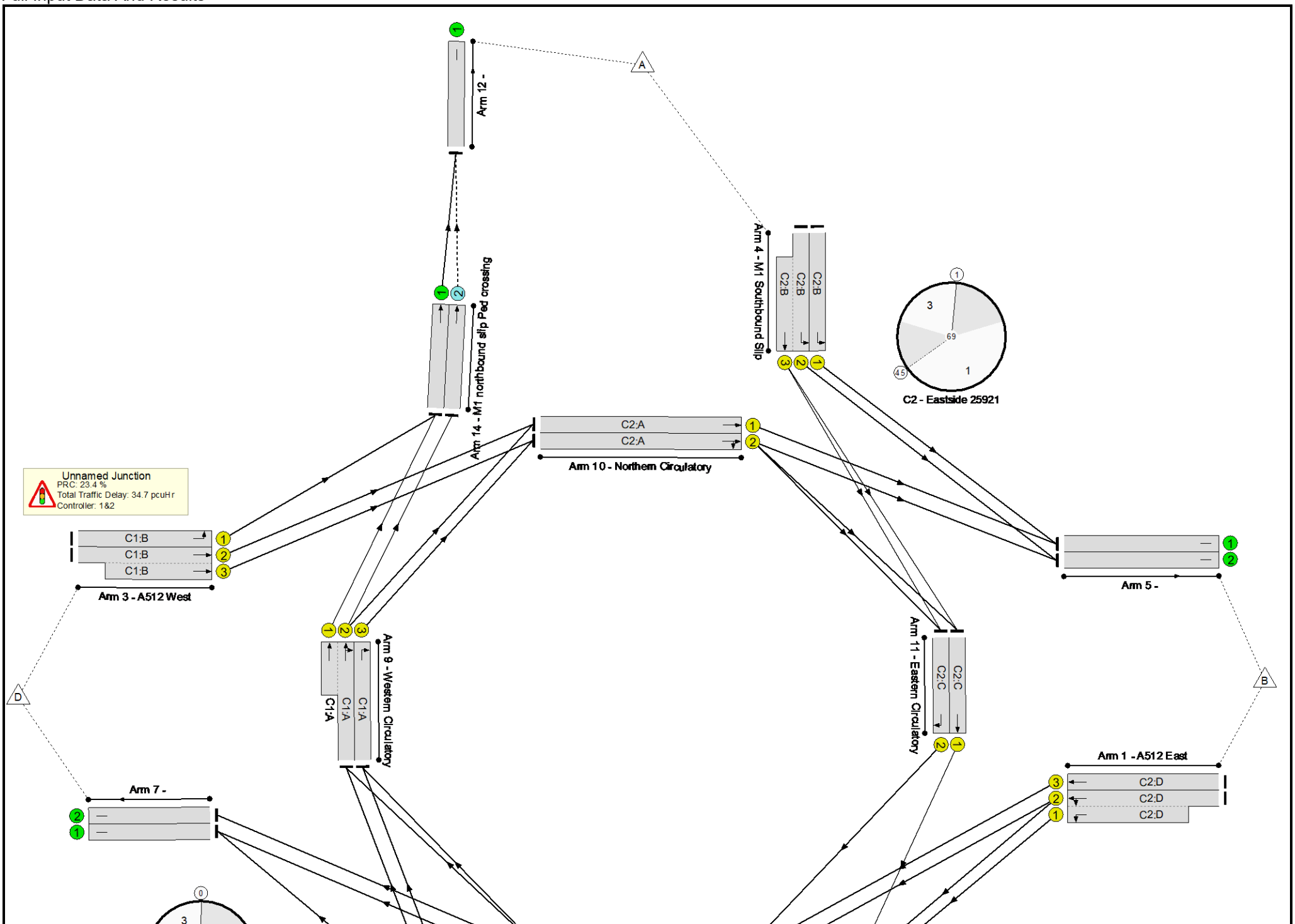
Stage	1	3
Duration	31	15
Change Point	1	45

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.9%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	31	-	997	1949:1963	871+496	72.9 : 72.9%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	31	-	549	1955	907	60.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	240	1973:1963	64+313	63.6 : 63.6%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	178	1979	315	56.4%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	329	1926	865	38.0%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	836	1937:1941	706+706	59.2 : 59.2%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	15	-	213	1937	449	47.4%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	15	-	618	1945:1948	451+452	72.5 : 64.4%
5/1		U	N/A	N/A	-		-	-	-	672	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	737	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	548	1980	1980	27.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	594	0.0%
7/1		U	N/A	N/A	-		-	-	-	834	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	346	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	635	1961	1336	47.5%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	840	1940	1321	63.6%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	535	1926:1941	204+692	59.7 : 59.7%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	178	1932	784	22.7%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	37	-	459	1953	1076	42.7%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	37	-	596	1937	1067	55.9%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	26	-	186	1997	781	23.8%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	26	-	291	1994	780	37.3%
12/1		U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	742	1940	1940	38.2%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	81	1940	552	14.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**81**	**0**	**0**	**24.3**	**10.4**	**0.0**	**34.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**81**	**0**	**0**	**24.3**	**10.4**	**0.0**	**34.7**	**-**	**-**	**-**	**-**
1/2+1/1	997	997	-	-	-	3.8	1.3	-	5.2	18.6	9.5	1.3	10.9
1/3	549	549	-	-	-	2.1	0.8	-	2.9	18.8	7.8	0.8	8.5
2/2+2/1	240	240	-	-	-	1.8	0.9	-	2.6	39.7	3.5	0.9	4.4
2/3	178	178	-	-	-	1.3	0.6	-	2.0	39.8	3.1	0.6	3.8
3/1	329	329	-	-	-	1.2	0.3	-	1.5	16.0	4.1	0.3	4.4
3/2+3/3	836	836	-	-	-	3.1	0.7	-	3.8	16.5	5.6	0.7	6.3
4/1	213	213	-	-	-	1.4	0.4	-	1.8	30.5	3.5	0.4	3.9
4/2+4/3	618	618	-	-	-	4.2	1.1	-	5.2	30.5	5.7	1.1	6.8
5/1	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	548	548	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	635	635	-	-	-	0.6	0.5	-	1.0	5.9	2.3	0.5	2.7
8/2	840	840	-	-	-	0.5	0.9	-	1.4	5.9	2.9	0.9	3.8
9/2+9/1	535	535	-	-	-	1.7	0.7	-	2.5	16.6	8.4	0.7	9.2
9/3	178	178	-	-	-	0.1	0.1	-	0.2	4.7	0.2	0.1	0.3
10/1	459	459	-	-	-	0.8	0.4	-	1.2	9.4	2.4	0.4	2.7
10/2	596	596	-	-	-	0.9	0.6	-	1.5	9.0	2.7	0.6	3.3
11/1	186	186	-	-	-	0.8	0.2	-	1.0	18.9	3.5	0.2	3.7
11/2	291	291	-	-	-	0.1	0.3	-	0.4	4.8	0.2	0.3	0.5
12/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	742	742	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	81	81	81	0	0	0.0	0.1	-	0.1	4.0	0.6	0.1	0.7

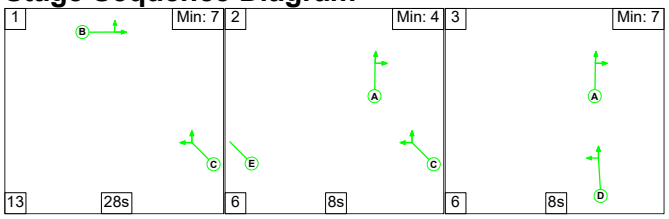
C1 - Westside 25911	PRC for Signalled Lanes (%):	41.5	Total Delay for Signalled Lanes (pcuHr):	15.02	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	23.4	Total Delay for Signalled Lanes (pcuHr):	19.11	Cycle Time (s):	69
	PRC Over All Lanes (%):	23.4	Total Delay Over All Lanes(pcuHr):	34.72		

Full Input Data And Results

Scenario 13: '2a 2038 With Development Flows (AM)' (FG13: '2a 2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

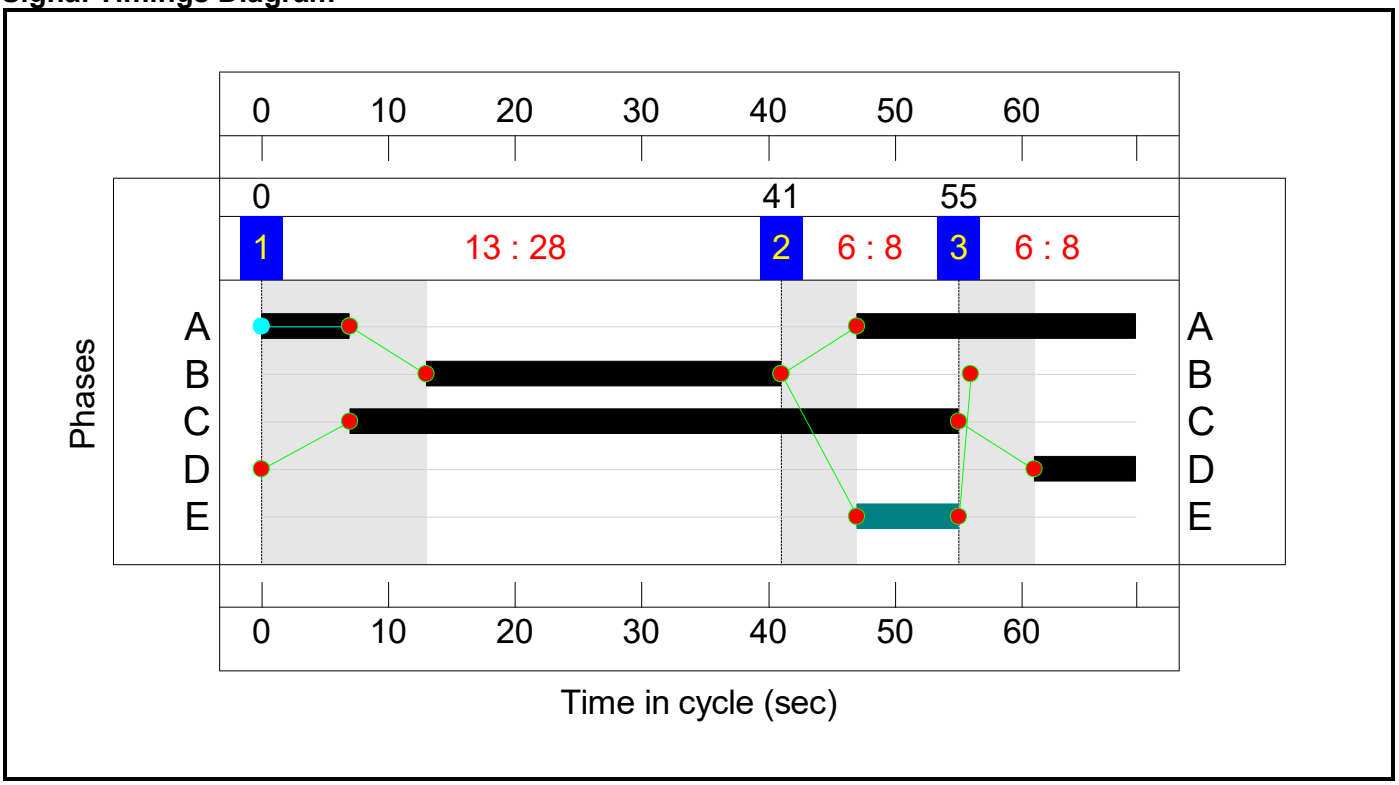
Stage Sequence Diagram



Stage Timings

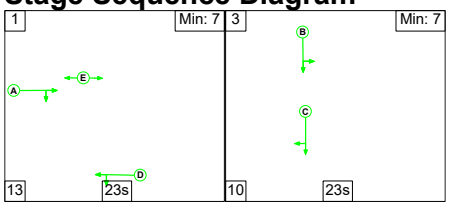
Stage	1	2	3
Duration	28	8	8
Change Point	0	41	55

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

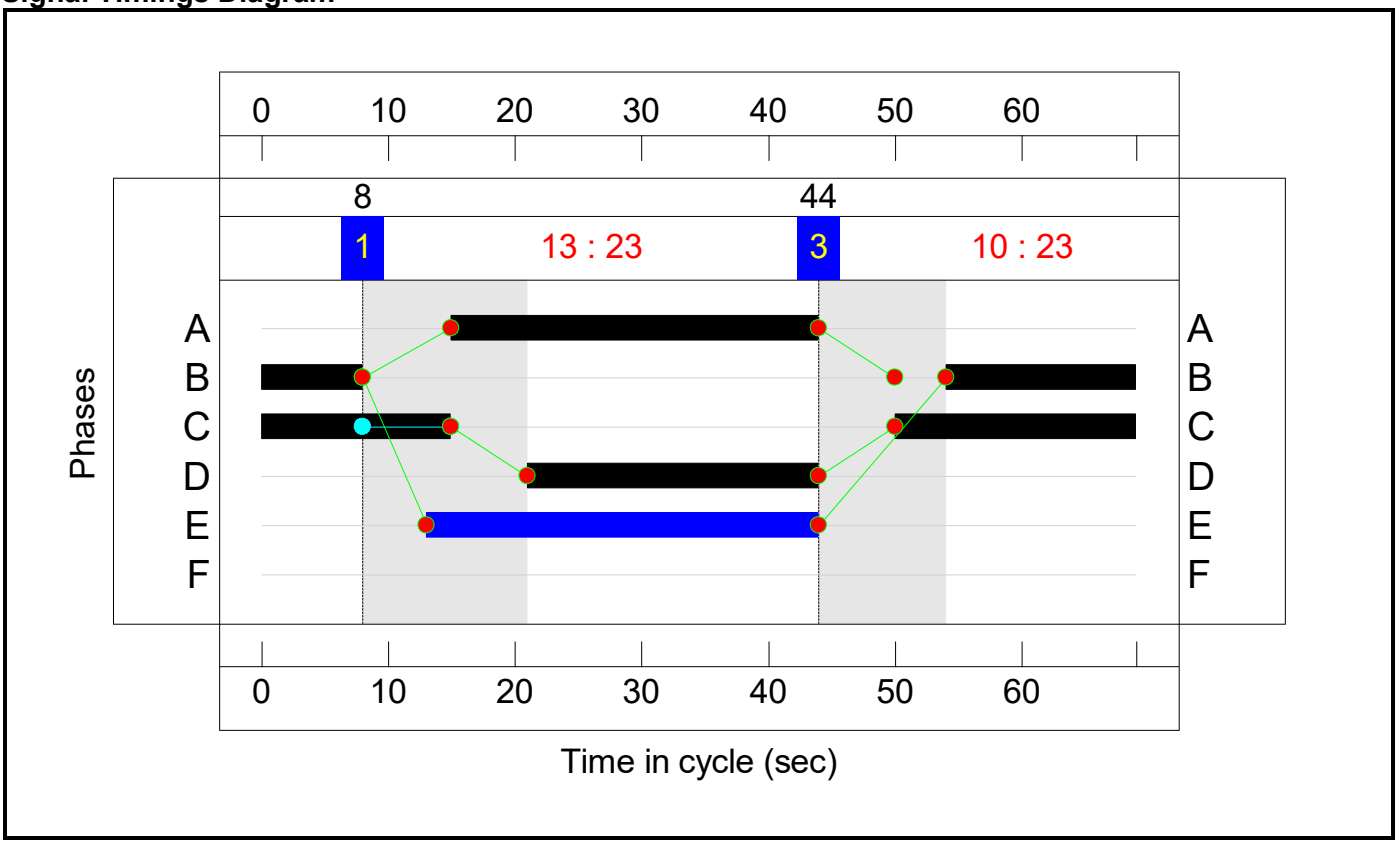


Stage Timings

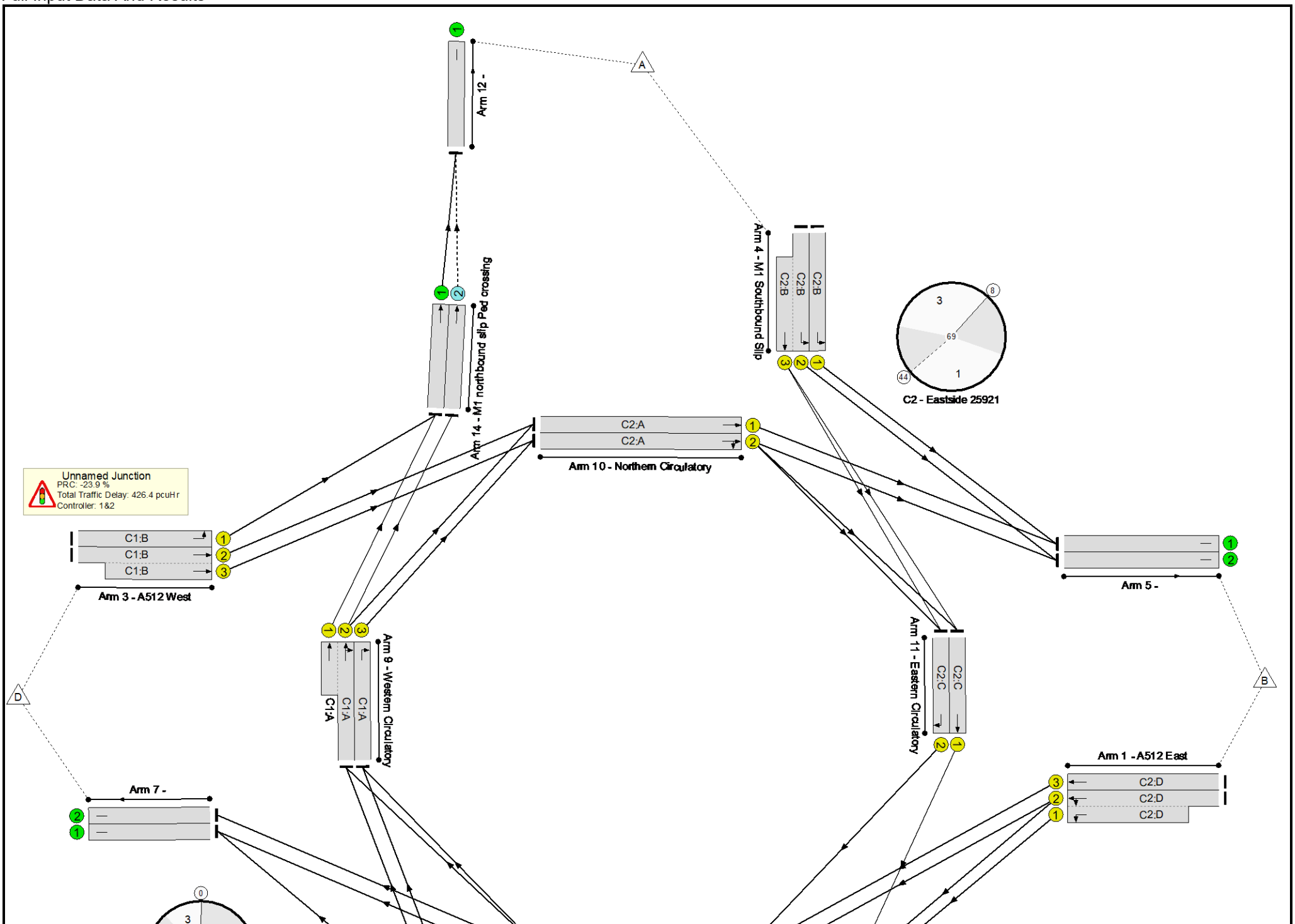
Stage	1	3
Duration	23	23
Change Point	8	44

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**111.5%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	23	-	987	1949:1963	678+251	106.2 : 106.2%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	23	-	693	1955	680	101.9%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	8	-	338	1973:1963	257+53	108.8 : 108.8%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	8	-	281	1979	258	108.9%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	480	1926	809	59.3%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1508	1937:1941	680+673	111.5 : 111.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	23	-	722	1937	674	107.2%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	23	-	929	1945:1948	177+678	108.8 : 108.8%
5/1		U	N/A	N/A	-		-	-	-	1760	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	934	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	556	1980	1980	24.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	921	0.0%
7/1		U	N/A	N/A	-		-	-	-	778	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	48	-	720	1961	1393	48.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	48	-	1430	1945	1381	98.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	897	1926:1941	396+639	80.6 : 85.0%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	281	1932	840	30.7%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	29	-	1038	1953	849	110.4%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	29	-	1031	1937	842	110.5%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	34	-	289	1997	1013	22.3%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	34	-	737	1994	1011	67.0%
12/1		U	N/A	N/A	-		-	-	-	1097	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1034	1940	1940	52.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	63	1940	490	12.6%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**62**	**0**	**0**	**67.2**	**359.2**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**62**	**0**	**0**	**67.2**	**359.2**	**0.0**	**426.4**	**-**	**-**	**-**	**-**
1/2+1/1	987	945	-	-	-	7.0	35.7	-	42.7	155.8	14.6	35.7	50.4
1/3	693	680	-	-	-	4.7	16.8	-	21.5	111.8	13.5	16.8	30.3
2/2+2/1	338	315	-	-	-	3.2	18.3	-	21.5	229.1	5.6	18.3	23.9
2/3	281	258	-	-	-	3.2	15.9	-	19.1	244.6	6.0	15.9	21.9
3/1	480	480	-	-	-	2.1	0.7	-	2.8	20.9	7.1	0.7	7.8
3/2+3/3	1508	1353	-	-	-	12.3	82.2	-	94.6	225.7	25.4	82.2	107.6
4/1	722	674	-	-	-	6.4	30.1	-	36.5	182.0	14.8	30.1	44.9
4/2+4/3	929	870	-	-	-	7.6	42.9	-	50.5	195.7	16.9	42.9	59.7
5/1	1523	1523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	493	493	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	678	678	-	-	-	1.1	0.5	-	1.6	8.4	4.2	0.5	4.7
8/2	1358	1358	-	-	-	2.1	13.4	-	15.6	41.3	18.4	13.4	31.8
9/2+9/1	863	863	-	-	-	2.5	2.4	-	5.0	20.8	11.1	2.4	13.5
9/3	258	258	-	-	-	0.4	0.2	-	0.6	8.8	0.8	0.2	1.0
10/1	937	849	-	-	-	6.6	48.9	-	55.5	213.2	19.7	48.9	68.6
10/2	931	842	-	-	-	6.5	49.1	-	55.7	215.2	19.5	49.1	68.7
11/1	226	226	-	-	-	1.0	0.1	-	1.1	18.3	4.2	0.1	4.4
11/2	678	678	-	-	-	0.4	1.0	-	1.4	7.3	0.8	1.0	1.8
12/1	1085	1085	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1024	1024	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
14/2	62	62	62	0	0	0.0	0.1	-	0.1	4.2	0.0	0.1	0.1

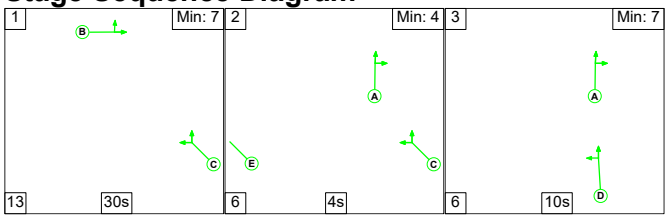
C1 - Westside 25911	PRC for Signalled Lanes (%):	-23.9	Total Delay for Signalled Lanes (pcuHr):	160.70	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-22.8	Total Delay for Signalled Lanes (pcuHr):	264.92	Cycle Time (s):	69
	PRC Over All Lanes (%):	-23.9	Total Delay Over All Lanes(pcuHr):	426.42		

Full Input Data And Results

Scenario 14: '2a 2038 With Development Flows (PM)' (FG14: '2a 2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

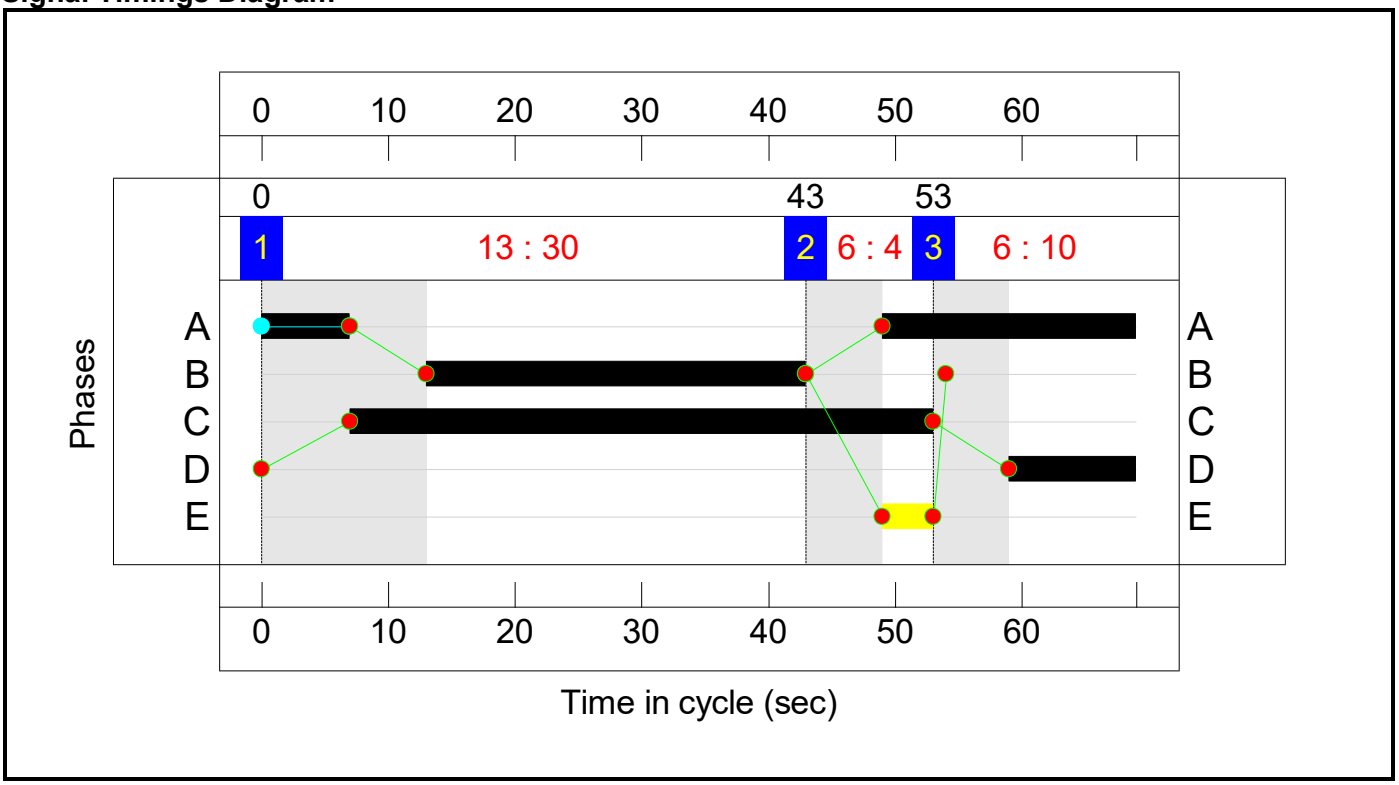
Stage Sequence Diagram



Stage Timings

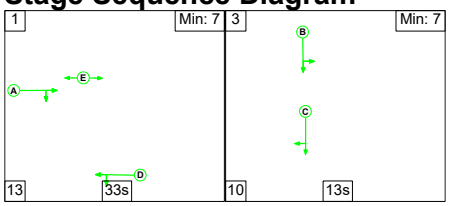
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

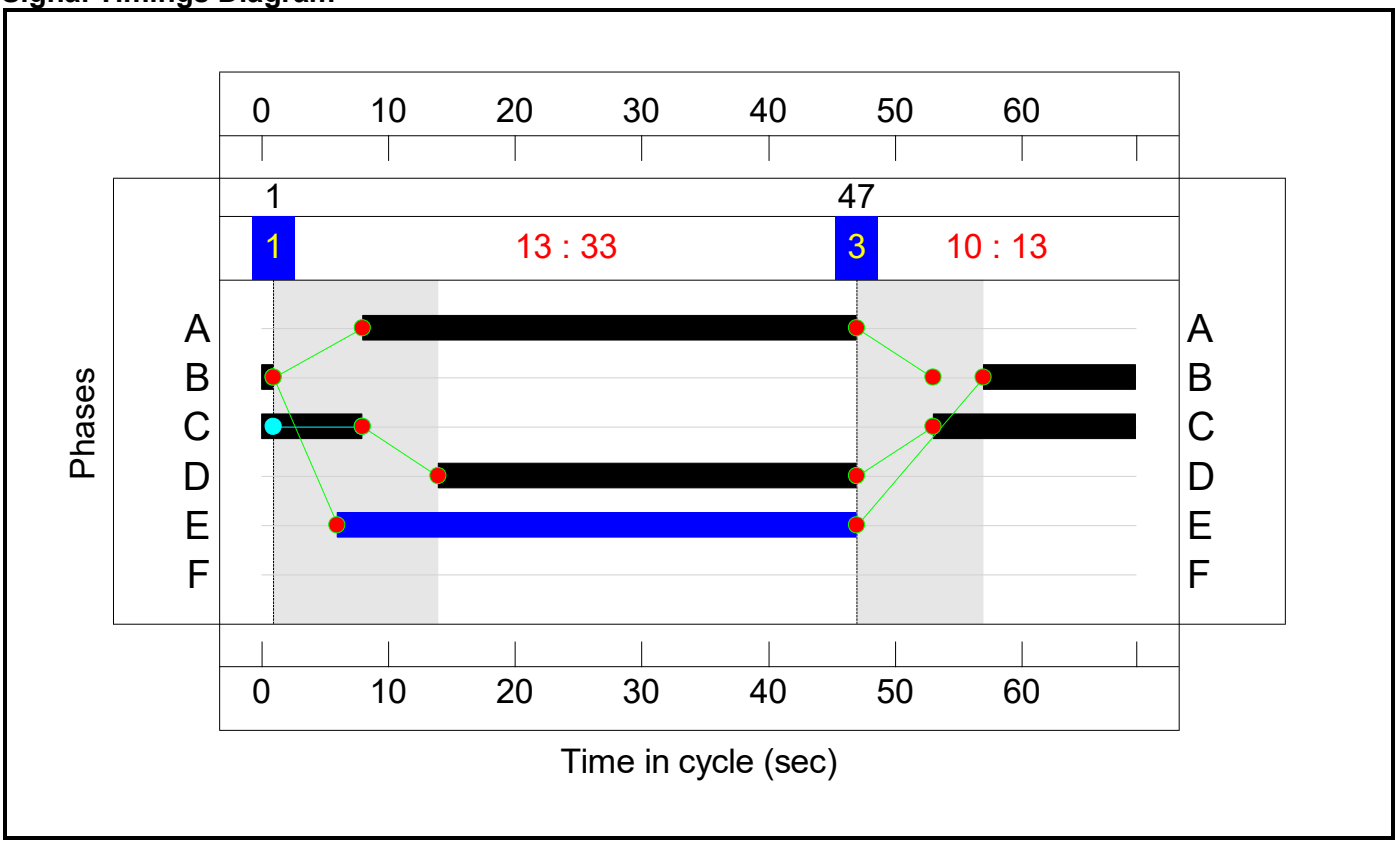


Stage Timings

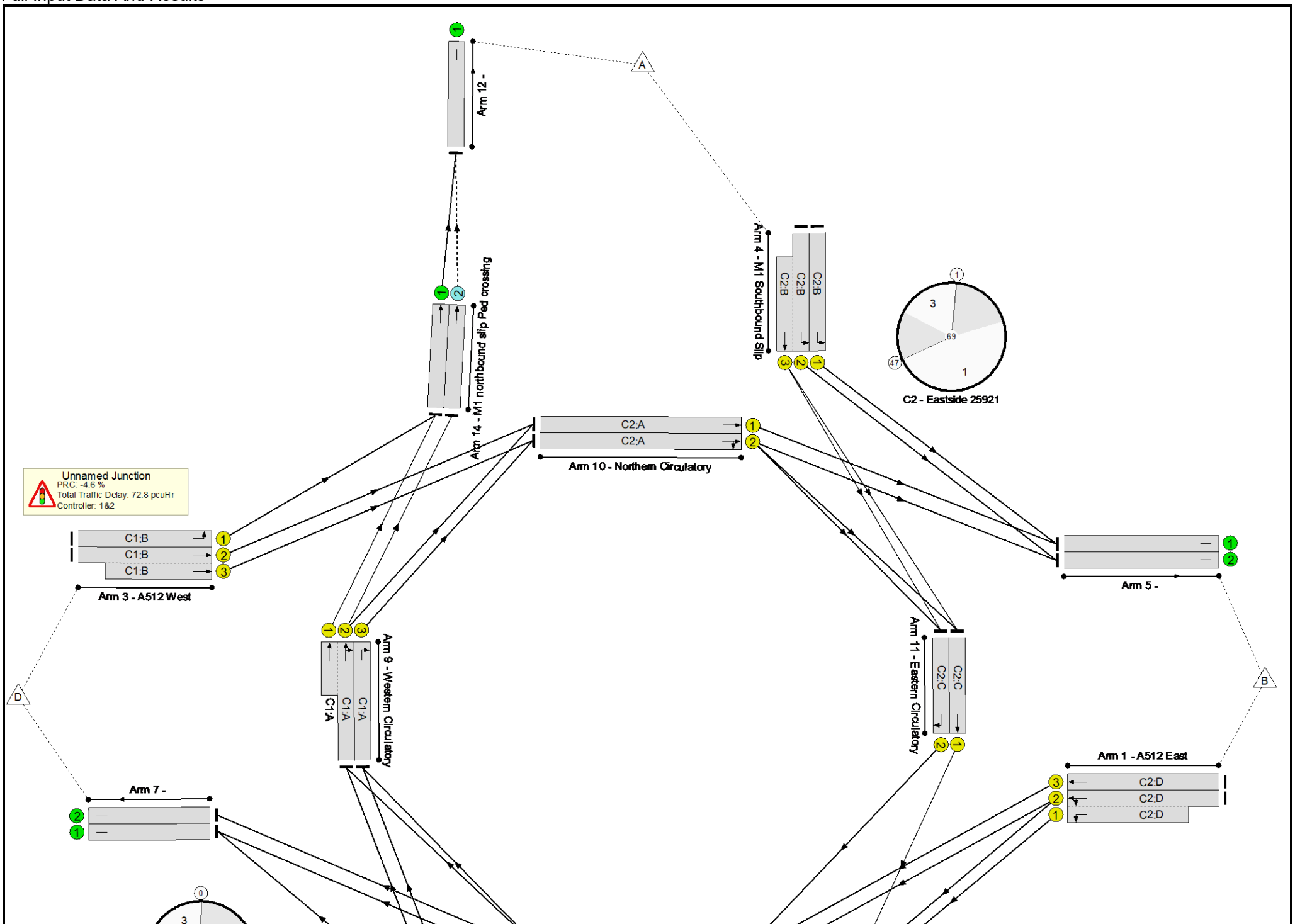
Stage	1	3
Duration	33	13
Change Point	1	47

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.1%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1302	1949:1963	906+541	90.0 : 90.0%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	773	1955	963	80.2%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	372	1973:1963	93+313	91.7 : 91.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	284	1979	315	90.0%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	450	1926	865	52.0%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1283	1937:1941	716+647	94.1 : 94.1%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	269	1937	393	68.4%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	656	1945:1948	395+395	90.0 : 76.2%
5/1		U	N/A	N/A	-		-	-	-	1028	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	992	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	743	1980	1980	37.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	551	0.0%
7/1		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	815	1961	1336	61.0%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1074	1939	1321	81.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	739	1926:1941	158+719	84.3 : 84.3%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	284	1932	784	36.2%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	759	1953	1132	67.0%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	893	1937	1123	79.5%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	256	1997	724	35.4%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	301	1994	722	41.7%
12/1		U	N/A	N/A	-		-	-	-	1104	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	743	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1056	1940	1940	54.4%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	48	1940	483	9.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**48**	**0**	**0**	**37.4**	**35.4**	**0.0**	**72.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**48**	**0**	**0**	**37.4**	**35.4**	**0.0**	**72.8**	**-**	**-**	**-**	**-**
1/2+1/1	1302	1302	-	-	-	5.1	4.2	-	9.3	25.7	13.6	4.2	17.8
1/3	773	773	-	-	-	3.2	2.0	-	5.1	23.9	12.2	2.0	14.2
2/2+2/1	372	372	-	-	-	2.9	4.4	-	7.3	70.3	5.3	4.4	9.7
2/3	284	284	-	-	-	2.2	3.7	-	5.9	74.8	5.3	3.7	8.9
3/1	450	450	-	-	-	1.7	0.5	-	2.2	18.0	6.1	0.5	6.7
3/2+3/3	1283	1283	-	-	-	5.6	6.9	-	12.5	35.0	12.2	6.9	19.0
4/1	269	269	-	-	-	1.9	1.1	-	3.0	39.7	4.7	1.1	5.8
4/2+4/3	656	656	-	-	-	4.8	2.4	-	7.2	39.4	6.6	2.4	9.0
5/1	1028	1028	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	992	992	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	743	743	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	815	815	-	-	-	1.2	0.8	-	1.9	8.6	4.2	0.8	5.0
8/2	1074	1074	-	-	-	1.1	2.1	-	3.2	10.8	7.0	2.1	9.2
9/2+9/1	739	739	-	-	-	3.1	2.6	-	5.7	27.7	13.6	2.6	16.2
9/3	284	284	-	-	-	0.3	0.3	-	0.6	7.3	0.5	0.3	0.8
10/1	759	759	-	-	-	1.6	1.0	-	2.6	12.4	4.4	1.0	5.4
10/2	893	893	-	-	-	1.4	1.9	-	3.3	13.4	6.0	1.9	7.9
11/1	256	256	-	-	-	1.2	0.3	-	1.5	21.4	4.9	0.3	5.1
11/2	301	301	-	-	-	0.2	0.4	-	0.5	6.1	0.3	0.4	0.6
12/1	1104	1104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	743	743	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1056	1056	-	-	-	0.0	0.6	-	0.6	2.0	1.1	0.6	1.7
14/2	48	48	48	0	0	0.0	0.1	-	0.1	4.1	0.0	0.1	0.1

C1 - Westside 25911	PRC for Signalled Lanes (%):	-4.6	Total Delay for Signalled Lanes (pcuHr):	39.30	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	32.55	Cycle Time (s):	69
	PRC Over All Lanes (%):	-4.6	Total Delay Over All Lanes(pcuHr):	72.81		

APPENDIX 58: Junction 13: A50 Junction 1 Stage 1A/2A Modelling Results

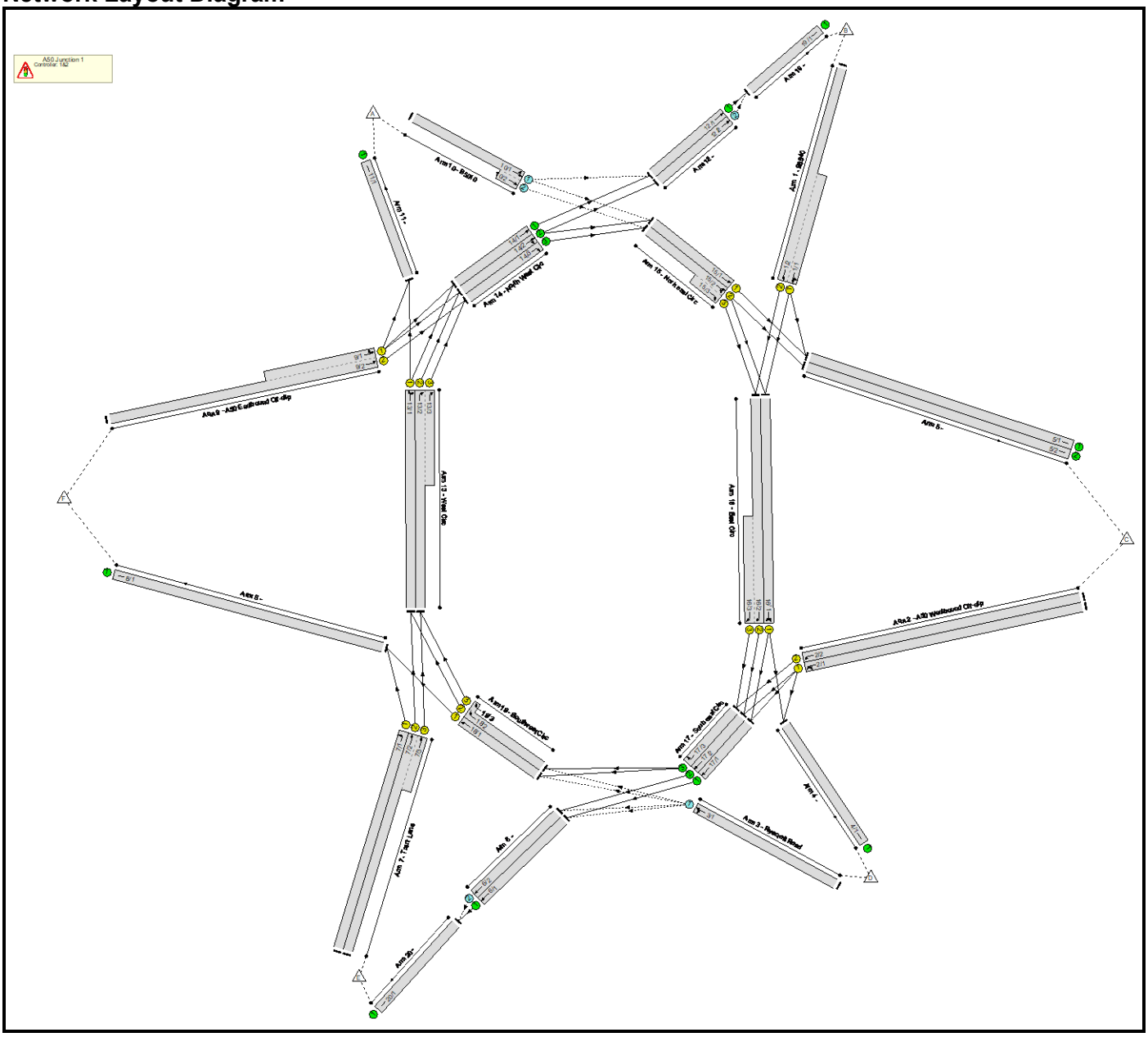
Full Input Data And Results

User and Project Details

Project:	**A50 Junction 1**
Title:	**A50 Junction 1**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 13
Date Completed:	27/03/2024
Checked By:	Vibeeshan Devaharan
Additional detail:	
File name:	250622 A50 Junction 1 (Consented Scheme)_Stage 1a+2a.lsg3x
Author:	Charlie Cresswell
Company:	
Address:	

Full Input Data And Results

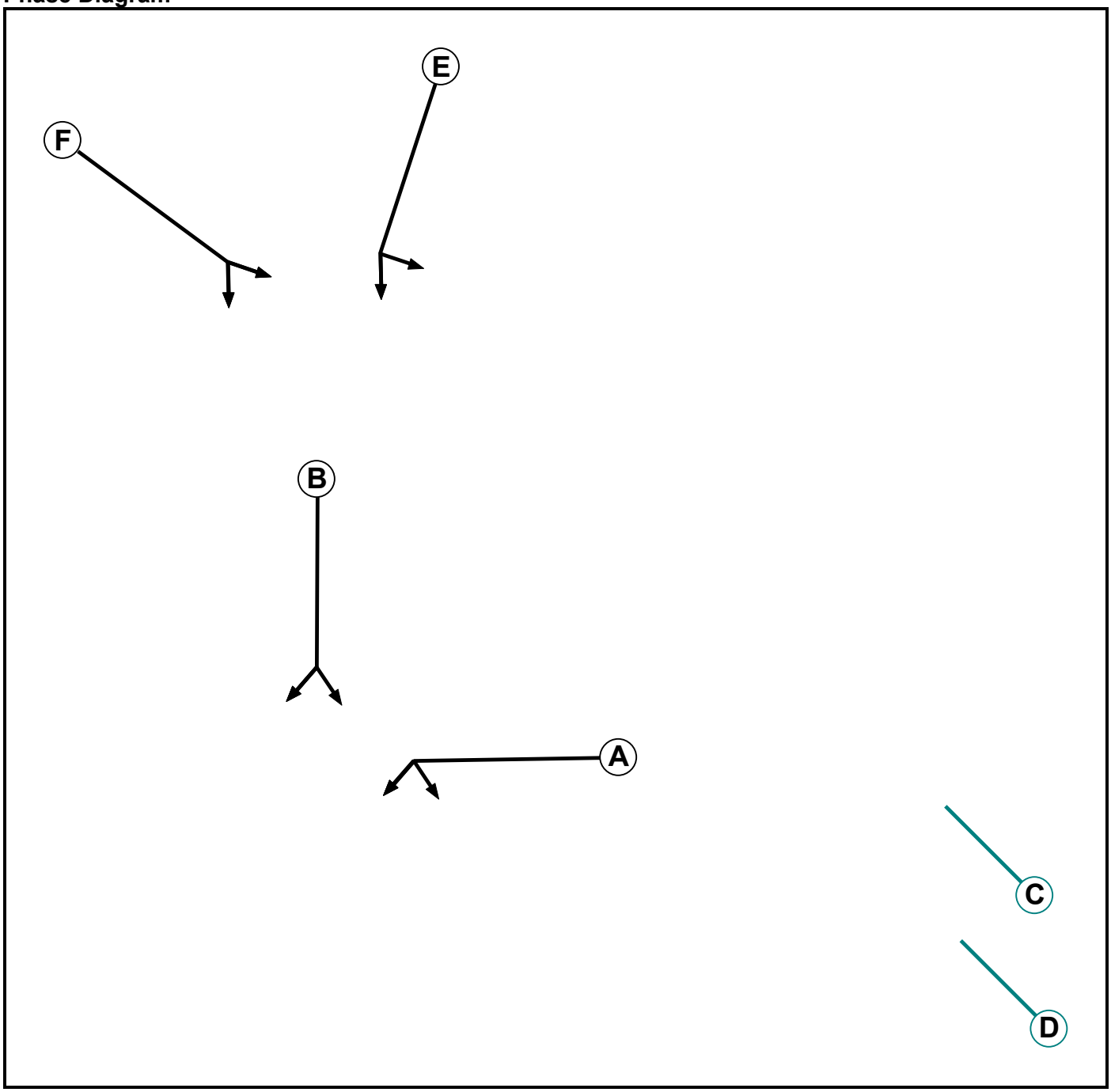
Network Layout Diagram



Full Input Data And Results

Controller :C1 - Eastsde E36308

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Dummy		7	7
D	Dummy		7	7
E	Traffic		7	7
F	Traffic		7	7

Full Input Data And Results

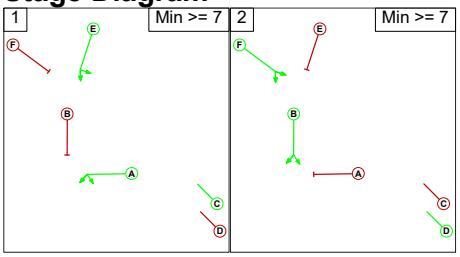
Phase Intergreens Matrix

Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		7	-	-	-	-
	B	5		-	-	-	-
	C	-	-		7	-	-
	D	-	-	5		-	-
	E	-	-	-	-		7
	F	-	-	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A C E
2	B D F

Stage Diagram



Phase Delays

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

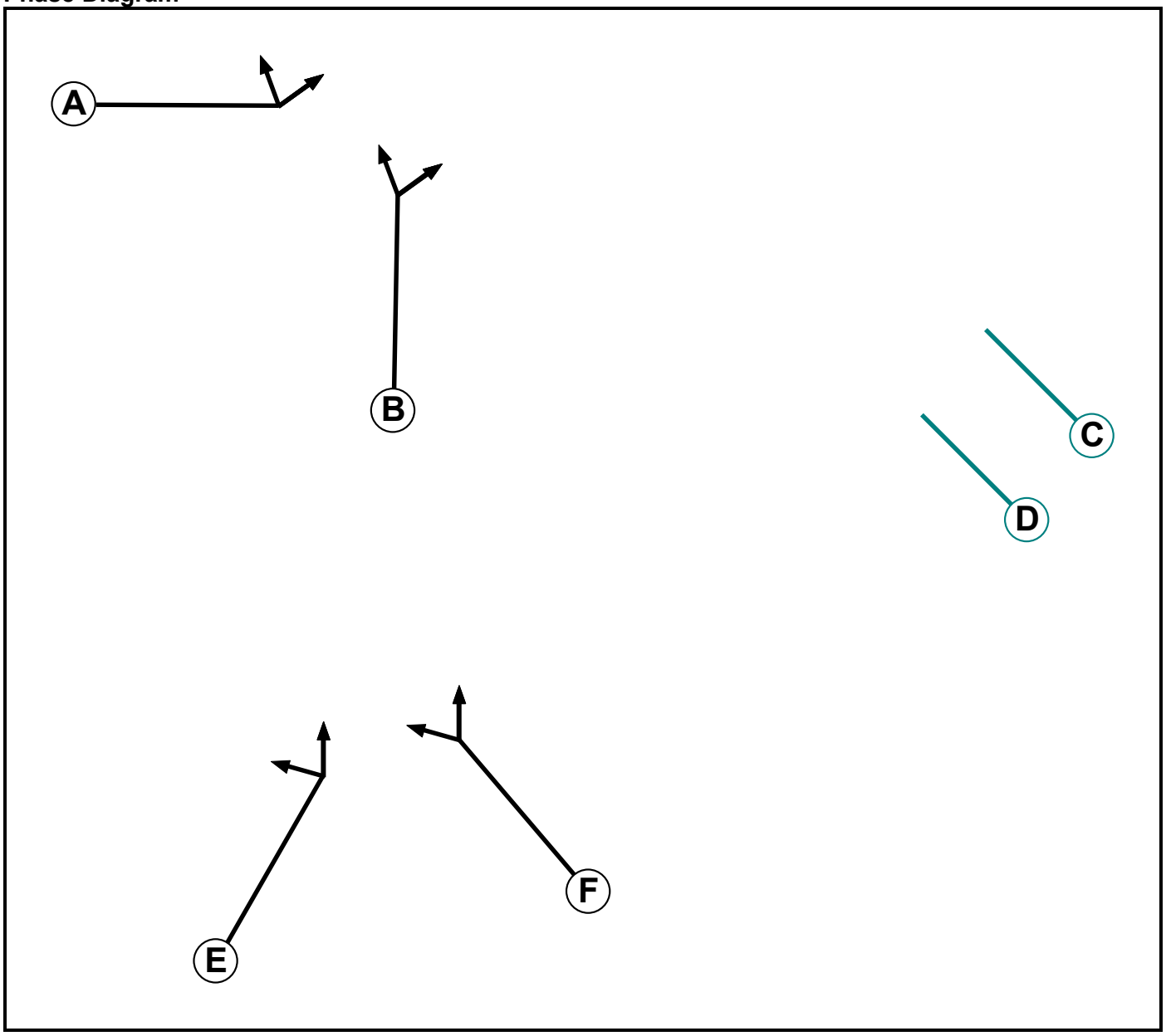
Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		7
	2	5	

Full Input Data And Results

Controller :C2 - Westside E36309

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Dummy		7	7
D	Dummy		7	7
E	Traffic		7	7
F	Traffic		7	7

Full Input Data And Results

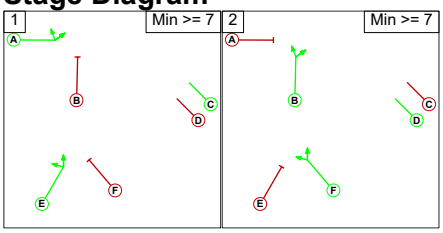
Phase Intergreens Matrix

Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		7	-	-	-	-
	B	5		-	-	-	-
	C	-	-		7	-	-
	D	-	-	5		-	-
	E	-	-	-	-		7
	F	-	-	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A C E
2	B D F

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		7
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A50 Junction 1

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Ryecroft Road)	6/1 (Left)	1000	0	17/1	0.33	All	-	-	-	-	-
				17/2	0.33	All					
	6/2 (Left)	1000	0	17/1	0.33	All					
				17/2	0.33	All					
	18/1 (Ahead)	1000	0	17/1	0.33	All					
				17/2	0.33	All					
				17/3	0.33	All					
	18/2 (Ahead)	1000	0	17/1	0.33	All					
				17/2	0.33	All					
				17/3	0.33	All					
6/2	20/1 (Ahead)	715	0	6/1	0.22	All	-	-	-	-	-
10/1 (B5010)	12/1 (Left)	1000	0	14/1	0.33	All	-	-	-	-	-
				14/2	0.33	All					
				14/3	0.33	All					
	15/1 (Ahead)	1000	0	14/1	0.33	All					
				14/2	0.33	All					
				14/3	0.33	All					
10/2 (B5010)	15/2 (Ahead)	1000	0	14/1	0.33	All	-	-	-	-	-
				14/2	0.33	All					
				14/3	0.33	All					
12/2	19/1 (Ahead)	715	0	12/1	0.22	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: A50 Junction 1

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (B6540)	U	E	2	3	17.4	Geom	-	4.00	0.00	Y	Arm 5 Left	45.00
											Arm 16 Ahead	45.00
1/2 (B6540)	U	E	2	3	60.0	Geom	-	4.00	0.00	N	Arm 16 Ahead	47.00
2/1 (A50 Westbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Left	39.00
											Arm 17 Ahead	39.00
2/2 (A50 Westbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 17 Ahead	43.00
3/1 (Ryecroft Road)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	36.00
											Arm 18 Ahead	36.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 20 Ahead	Inf
6/2	O		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 20 Ahead	Inf
7/1 (Trent Lane)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Left	51.00
7/2 (Trent Lane)	U	E	2	3	60.0	Geom	-	3.65	0.00	N	Arm 13 Ahead	54.00
7/3 (Trent Lane)	U	E	2	3	8.7	Geom	-	4.00	0.00	N	Arm 13 Ahead	58.00
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (A50 Eastbound Off-slip)	U	A	2	3	17.4	Geom	-	3.00	0.00	Y	Arm 11 Left	40.00
											Arm 14 Ahead	45.00
9/2 (A50 Eastbound Off-slip)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 14 Ahead	50.00
10/1 (B5010)	O		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 12 Left	33.00
											Arm 15 Ahead	33.00
10/2 (B5010)	O		2	3	3.5	Geom	-	3.50	0.00	N	Arm 15 Ahead	43.00
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

12/1	U		2	3	12.2	Geom	-	3.50	0.00	Y	Arm 19 Ahead	Inf
12/2	O		2	3	12.2	Geom	-	3.50	0.00	Y	Arm 19 Ahead	Inf
13/1 (West Circ)	U	B	2	3	23.5	Geom	-	3.65	0.00	Y	Arm 11 Ahead	80.00
											Arm 14 Right	80.00
13/2 (West Circ)	U	B	2	3	24.0	Geom	-	3.65	0.00	Y	Arm 14 Right	77.00
13/3 (West Circ)	U	B	2	3	14.8	Geom	-	3.65	0.00	Y	Arm 14 Right	73.00
14/1 (North West Circ)	U		2	3	7.0	Geom	-	3.65	0.00	Y	Arm 12 Ahead	58.00
14/2 (North West Circ)	U		2	3	7.0	Geom	-	3.65	0.00	Y	Arm 12 Ahead	54.00
											Arm 15 Right	54.00
14/3 (North West Circ)	U		2	3	7.0	Geom	-	3.65	0.00	Y	Arm 15 Right	51.00
15/1 (Northeast Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	61.00
15/2 (Northeast Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	57.00
											Arm 16 Right	57.00
15/3 (Northeast Circ)	U	F	2	3	5.2	Geom	-	3.65	0.00	Y	Arm 16 Right	54.00
16/1 (East Circ)	U	B	2	3	26.1	Geom	-	3.65	0.00	Y	Arm 4 Ahead	62.00
											Arm 17 Ahead	62.00
16/2 (East Circ)	U	B	2	3	25.2	Geom	-	3.65	0.00	Y	Arm 17 Ahead	58.00
16/3 (East Circ)	U	B	2	3	16.5	Geom	-	3.65	0.00	Y	Arm 17 Ahead	55.00
17/1 (Southeast Circ)	U		2	3	9.6	Geom	-	3.65	0.00	Y	Arm 6 Ahead	42.00
17/2 (Southeast Circ)	U		2	3	9.0	Geom	-	3.65	0.00	Y	Arm 6 Ahead	39.00
17/3 (Southeast Circ)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 18 Right	35.00
18/1 (Southwest Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 8 Ahead	68.00
18/2 (Southwest Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 13 Right	64.00

18/3 (Southwest Circ)	U	F	2	3	1.0	Geom	-	3.65	0.00	Y	Arm 13 Right	58.00
19/1	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Base Flows AM'	07:45	08:45	01:00	
2: '2023 Base Flows PM'	17:00	18:00	01:00	
3: '2028 WoD Flows AM'	07:45	08:45	01:00	
4: '2028 WoD Flows PM'	17:00	18:00	01:00	
5: '2028 WD Flows AM'	07:45	08:45	01:00	
6: '2028 WD Flows PM'	17:00	18:00	01:00	
7: '2038 WoD Flows AM'	07:45	08:45	01:00	
8: '2038 WoD Flows PM'	17:00	18:00	01:00	
9: '2038 WD Flows AM'	07:45	08:45	01:00	
10: '2038 WD Flows PM'	17:00	18:00	01:00	
11: '2a 2028 WD Flows AM'	07:45	08:45	01:00	
12: '2a 2028 WD Flows PM'	17:00	18:00	01:00	
13: '2a 2038 WD Flows AM'	07:45	08:45	01:00	
14: '2a 2038 WD Flows PM'	17:00	18:00	01:00	

Scenario 1: '2022 Base AM' (FG1: '2023 Base Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	65	88	5	95	72	325
	B	37	0	315	11	237	198	798
	C	64	269	0	13	419	0	765
	D	3	10	15	0	10	12	50
	E	49	145	292	12	0	347	845
	F	14	245	0	15	449	0	723
	Tot.	167	734	710	56	1210	629	3506

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2022 Base AM
Junction: A50 Junction 1	
1/1 (short)	416
1/2 (with short)	798(In) 382(Out)
2/1	432
2/2	333
3/1	50
4/1	56
5/1	579
5/2	131
6/1	923
6/2	287
7/1	347
7/2 (with short)	498(In) 80(Out)
7/3 (short)	418
8/1	629
9/1 (short)	259
9/2 (with short)	723(In) 464(Out)
10/1 (with short)	325(In) 153(Out)
10/2 (short)	172
11/1	167
12/1	567
12/2	167
13/1	410
13/2 (with short)	486(In) 343(Out)
13/3 (short)	143
14/1	502
14/2	343
14/3	607
15/1	264
15/2 (with short)	779(In) 567(Out)
15/3 (short)	212
16/1	537
16/2 (with short)	594(In) 287(Out)

Full Input Data And Results

16/3 (short)	307
17/1	913
17/2	287
17/3	640
18/1	282
18/2 (with short)	398(In) 330(Out)
18/3 (short)	68
19/1	734
20/1	1210

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	75.7 %	1950	1950
				Arm 16 Ahead	45.00	24.3 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	3.0 %	1907	1907
				Arm 17 Ahead	39.00	97.0 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	20.0 %	1886	1886
				Arm 18 Ahead	36.00	80.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.4 %	1853	1853
				Arm 14 Ahead	45.00	94.6 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	42.5 %	1894	1894
				Arm 15 Ahead	33.00	57.5 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	37.3 %	1944	1944
				Arm 14 Right	80.00	62.7 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	48.7 %	1926	1926
				Arm 15 Right	54.00	51.3 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	23.1 %	1929	1929
				Arm 16 Right	57.00	76.9 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	8.0 %	1933	1933
				Arm 17 Ahead	62.00	92.0 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2022 Base PM' (FG2: '2023 Base Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	51	61	3	65	79	259
	B	69	0	261	6	173	182	691
	C	121	279	0	16	330	0	746
	D	5	15	17	0	11	15	63
	E	107	235	415	17	0	501	1275
	F	20	199	0	14	383	0	616
	Tot.	322	779	754	56	962	777	3650

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 Base PM
Junction: A50 Junction 1	
1/1 (short)	349
1/2 (with short)	691(In) 342(Out)
2/1	346
2/2	400
3/1	63
4/1	56
5/1	612
5/2	142
6/1	710
6/2	252
7/1	501
7/2 (with short)	774(In) 212(Out)
7/3 (short)	562
8/1	777
9/1 (short)	219
9/2 (with short)	616(In) 397(Out)
10/1 (with short)	259(In) 112(Out)
10/2 (short)	147
11/1	322
12/1	554
12/2	225
13/1	606
13/2 (with short)	674(In) 515(Out)
13/3 (short)	159
14/1	503
14/2	515
14/3	556
15/1	351
15/2 (with short)	703(In) 463(Out)
15/3 (short)	240
16/1	409
16/2 (with short)	582(In) 252(Out)

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16/3 (short)	330
17/1	699
17/2	252
17/3	730
18/1	276
18/2 (with short)	506(In) 394(Out)
18/3 (short)	112
19/1	779
20/1	962

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	74.8 %	1950	1950
				Arm 16 Ahead	45.00	25.2 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	4.6 %	1907	1907
				Arm 17 Ahead	39.00	95.4 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	17.5 %	1886	1886
				Arm 18 Ahead	36.00	82.5 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	9.1 %	1853	1853
				Arm 14 Ahead	45.00	90.9 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	45.5 %	1894	1894
				Arm 15 Ahead	33.00	54.5 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	49.8 %	1944	1944
				Arm 14 Right	80.00	50.2 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	43.7 %	1926	1926
				Arm 15 Right	54.00	56.3 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	30.7 %	1929	1929
				Arm 16 Right	57.00	69.3 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	9.8 %	1933	1933
				Arm 17 Ahead	62.00	90.2 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	101	90	39	113	94	437
	B	36	0	380	91	277	282	1066
	C	65	441	0	109	521	0	1136
	D	3	15	14	0	11	15	58
	E	42	182	303	82	0	409	1018
	F	14	389	0	127	548	0	1078
	Tot.	160	1128	787	448	1470	800	4793

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2028 WoD AM
Junction: A50 Junction 1	
1/1 (short)	646
1/2 (with short)	1066(In) 420(Out)
2/1	630
2/2	506
3/1	58
4/1	448
5/1	683
5/2	155
6/1	955
6/2	515
7/1	409
7/2 (with short)	660(In) 106(Out)
7/3 (short)	554
8/1	800
9/1 (short)	403
9/2 (with short)	1078(In) 675(Out)
10/1 (with short)	437(In) 191(Out)
10/2 (short)	246
11/1	160
12/1	929
12/2	199
13/1	585
13/2 (with short)	649(In) 412(Out)
13/3 (short)	237
14/1	828
14/2	412
14/3	912
15/1	303
15/2 (with short)	1158(In) 651(Out)
15/3 (short)	507
16/1	762
16/2 (with short)	927(In) 515(Out)

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16/3 (short)	412
17/1	944
17/2	515
17/3	918
18/1	391
18/2 (with short)	574(In) 479(Out)
18/3 (short)	95
19/1	1128
20/1	1470

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	58.8 %	1950	1950
				Arm 16 Ahead	45.00	41.2 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	17.3 %	1907	1907
				Arm 17 Ahead	39.00	82.7 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	19.0 %	1886	1886
				Arm 18 Ahead	36.00	81.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.5 %	1853	1853
				Arm 14 Ahead	45.00	96.5 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	52.9 %	1894	1894
				Arm 15 Ahead	33.00	47.1 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	25.0 %	1944	1944
				Arm 14 Right	80.00	75.0 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

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14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	48.3 %	1926	1926
				Arm 15 Right	54.00	51.7 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	23.8 %	1929	1929
				Arm 16 Right	57.00	76.2 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	44.5 %	1933	1933
				Arm 17 Ahead	62.00	55.5 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	68	74	5	79	91	317
	B	83	0	516	14	195	304	1112
	C	136	479	0	59	355	0	1029
	D	4	17	16	0	8	15	60
	E	88	295	519	26	0	608	1536
	F	24	394	0	32	469	0	919
	Tot.	335	1253	1125	136	1106	1018	4973

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2028 WoD PM
Junction: A50 Junction 1	
1/1 (short)	621
1/2 (with short)	1112(In) 491(Out)
2/1	414
2/2	615
3/1	60
4/1	136
5/1	974
5/2	151
6/1	815
6/2	291
7/1	608
7/2 (with short)	928(In) 249(Out)
7/3 (short)	679
8/1	1018
9/1 (short)	418
9/2 (with short)	919(In) 501(Out)
10/1 (with short)	317(In) 142(Out)
10/2 (short)	175
11/1	335
12/1	904
12/2	349
13/1	753
13/2 (with short)	910(In) 733(Out)
13/3 (short)	177
14/1	836
14/2	733
14/3	678
15/1	458
15/2 (with short)	853(In) 575(Out)
15/3 (short)	278
16/1	529
16/2 (with short)	769(In) 291(Out)

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16/3 (short)	478
17/1	807
17/2	291
17/3	1093
18/1	410
18/2 (with short)	735(In) 504(Out)
18/3 (short)	231
19/1	1253
20/1	1106

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	83.1 %	1950	1950
				Arm 16 Ahead	45.00	16.9 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	14.3 %	1907	1907
				Arm 17 Ahead	39.00	85.7 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	13.3 %	1886	1886
				Arm 18 Ahead	36.00	86.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.7 %	1853	1853
				Arm 14 Ahead	45.00	94.3 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	47.9 %	1894	1894
				Arm 15 Ahead	33.00	52.1 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	41.3 %	1944	1944
				Arm 14 Right	80.00	58.7 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	47.6 %	1926	1926
				Arm 15 Right	54.00	52.4 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	26.3 %	1929	1929
				Arm 16 Right	57.00	73.7 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	14.6 %	1933	1933
				Arm 17 Ahead	62.00	85.4 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2028 WD AM' (FG5: '2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	97	95	39	115	89	435
	B	35	0	396	89	280	272	1072
	C	65	427	0	110	535	0	1137
	D	3	17	18	0	13	17	68
	E	43	180	335	87	0	426	1071
	F	14	394	0	136	593	0	1137
	Tot.	160	1115	844	461	1536	804	4920

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Traffic Lane Flows

Lane	Scenario 5: 2028 WD AM
Junction: A50 Junction 1	
1/1 (short)	625
1/2 (with short)	1072(In) 447(Out)
2/1	645
2/2	492
3/1	68
4/1	461
5/1	844
5/2	0
6/1	994
6/2	542
7/1	426
7/2 (with short)	645(In) 109(Out)
7/3 (short)	536
8/1	804
9/1 (short)	408
9/2 (with short)	1137(In) 729(Out)
10/1 (with short)	435(In) 192(Out)
10/2 (short)	243
11/1	160
12/1	945
12/2	170
13/1	600
13/2 (with short)	610(In) 523(Out)
13/3 (short)	87
14/1	848
14/2	523
14/3	816
15/1	448
15/2 (with short)	1059(In) 568(Out)
15/3 (short)	491
16/1	797
16/2 (with short)	938(In) 542(Out)
16/3 (short)	396

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17/1	981
17/2	542
17/3	888
18/1	378
18/2 (with short)	565(In) 491(Out)
18/3 (short)	74
19/1	1115
20/1	1536

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	63.4 %	1950	1950
				Arm 16 Ahead	45.00	36.6 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	17.1 %	1907	1907
				Arm 17 Ahead	39.00	82.9 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	19.1 %	1886	1886
				Arm 18 Ahead	36.00	80.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.4 %	1853	1853
				Arm 14 Ahead	45.00	96.6 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	50.5 %	1894	1894
				Arm 15 Ahead	33.00	49.5 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	24.3 %	1944	1944
				Arm 14 Right	80.00	75.7 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	32.5 %	1926	1926
				Arm 15 Right	54.00	67.5 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	0.0 %	1929	1929
				Arm 16 Right	57.00	100.0 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	44.0 %	1933	1933
				Arm 17 Ahead	62.00	56.0 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2028 WD PM' (FG6: '2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	71	70	7	66	90	304
	B	85	0	439	18	197	292	1031
	C	121	421	0	49	303	0	894
	D	4	17	16	0	8	14	59
	E	91	302	466	34	0	557	1450
	F	24	376	0	41	444	0	885
	Tot.	325	1187	991	149	1018	953	4623

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 WD PM
Junction: A50 Junction 1	
1/1 (short)	559
1/2 (with short)	1031(In) 472(Out)
2/1	352
2/2	542
3/1	59
4/1	149
5/1	653
5/2	338
6/1	667
6/2	351
7/1	557
7/2 (with short)	893(In) 270(Out)
7/3 (short)	623
8/1	953
9/1 (short)	400
9/2 (with short)	885(In) 485(Out)
10/1 (with short)	304(In) 141(Out)
10/2 (short)	163
11/1	325
12/1	829
12/2	358
13/1	683
13/2 (with short)	874(In) 502(Out)
13/3 (short)	372
14/1	758
14/2	502
14/3	857
15/1	214
15/2 (with short)	1020(In) 674(Out)
15/3 (short)	346
16/1	456
16/2 (with short)	818(In) 351(Out)
16/3 (short)	467

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17/1	659
17/2	351
17/3	1009
18/1	396
18/2 (with short)	664(In) 413(Out)
18/3 (short)	251
19/1	1187
20/1	1018

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	78.5 %	1950	1950
				Arm 16 Ahead	45.00	21.5 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	13.9 %	1907	1907
				Arm 17 Ahead	39.00	86.1 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	13.6 %	1886	1886
				Arm 18 Ahead	36.00	86.4 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	6.0 %	1853	1853
				Arm 14 Ahead	45.00	94.0 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	50.4 %	1894	1894
				Arm 15 Ahead	33.00	49.6 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	44.1 %	1944	1944
				Arm 14 Right	80.00	55.9 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	71.3 %	1926	1926
				Arm 15 Right	54.00	28.7 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	50.1 %	1929	1929
				Arm 16 Right	57.00	49.9 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	21.9 %	1933	1933
				Arm 17 Ahead	62.00	78.1 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	85	105	39	100	78	407
	B	41	0	474	105	301	266	1187
	C	68	415	0	116	522	0	1121
	D	3	17	23	0	13	17	73
	E	61	251	505	135	0	535	1487
	F	15	380	0	139	568	0	1102
	Tot.	188	1148	1107	534	1504	896	5377

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2038 WoD AM
Junction: A50 Junction 1	
1/1 (short)	622
1/2 (with short)	1187(In) 565(Out)
2/1	638
2/2	483
3/1	73
4/1	534
5/1	1107
5/2	0
6/1	921
6/2	583
7/1	535
7/2 (with short)	952(In) 198(Out)
7/3 (short)	754
8/1	896
9/1 (short)	395
9/2 (with short)	1102(In) 707(Out)
10/1 (with short)	407(In) 190(Out)
10/2 (short)	217
11/1	188
12/1	979
12/2	169
13/1	687
13/2 (with short)	832(In) 697(Out)
13/3 (short)	135
14/1	894
14/2	697
14/3	842
15/1	633
15/2 (with short)	1059(In) 656(Out)
15/3 (short)	403
16/1	804
16/2 (with short)	968(In) 583(Out)

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16/3 (short)	385
17/1	908
17/2	583
17/3	868
18/1	361
18/2 (with short)	567(In) 489(Out)
18/3 (short)	78
19/1	1148
20/1	1504

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	76.2 %	1950	1950
				Arm 16 Ahead	45.00	23.8 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	18.2 %	1907	1907
				Arm 17 Ahead	39.00	81.8 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	17.8 %	1886	1886
				Arm 18 Ahead	36.00	82.2 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.8 %	1853	1853
				Arm 14 Ahead	45.00	96.2 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	44.7 %	1894	1894
				Arm 15 Ahead	33.00	55.3 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	25.2 %	1944	1944
				Arm 14 Right	80.00	74.8 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	24.2 %	1926	1926
				Arm 15 Right	54.00	75.8 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	0.0 %	1929	1929
				Arm 16 Right	57.00	100.0 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	52.0 %	1933	1933
				Arm 17 Ahead	62.00	48.0 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	91	70	15	77	81	334
	B	128	0	513	49	340	316	1346
	C	117	405	0	71	329	0	922
	D	6	30	23	0	14	18	91
	E	124	436	518	85	0	560	1723
	F	21	328	0	61	439	0	849
	Tot.	396	1290	1124	281	1199	975	5265

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 WoD PM
Junction: A50 Junction 1	
1/1 (short)	651
1/2 (with short)	1346(In) 695(Out)
2/1	400
2/2	522
3/1	91
4/1	281
5/1	989
5/2	135
6/1	787
6/2	412
7/1	560
7/2 (with short)	1163(In) 361(Out)
7/3 (short)	802
8/1	975
9/1 (short)	349
9/2 (with short)	849(In) 500(Out)
10/1 (with short)	334(In) 161(Out)
10/2 (short)	173
11/1	396
12/1	867
12/2	423
13/1	823
13/2 (with short)	1049(In) 829(Out)
13/3 (short)	220
14/1	776
14/2	829
14/3	720
15/1	476
15/2 (with short)	893(In) 651(Out)
15/3 (short)	242
16/1	654
16/2 (with short)	937(In) 412(Out)

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16/3 (short)	525
17/1	773
17/2	412
17/3	1047
18/1	415
18/2 (with short)	709(In) 462(Out)
18/3 (short)	247
19/1	1290
20/1	1199

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	78.8 %	1950	1950
				Arm 16 Ahead	45.00	21.2 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	17.8 %	1907	1907
				Arm 17 Ahead	39.00	82.2 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	15.4 %	1886	1886
				Arm 18 Ahead	36.00	84.6 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	6.0 %	1853	1853
				Arm 14 Ahead	45.00	94.0 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	56.5 %	1894	1894
				Arm 15 Ahead	33.00	43.5 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	45.6 %	1944	1944
				Arm 14 Right	80.00	54.4 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	51.0 %	1926	1926
				Arm 15 Right	54.00	49.0 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	20.7 %	1929	1929
				Arm 16 Right	57.00	79.3 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	32.1 %	1933	1933
				Arm 17 Ahead	62.00	67.9 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2038 WD AM' (FG9: '2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	84	109	39	102	79	413
	B	38	0	479	103	303	265	1188
	C	65	412	0	115	522	0	1114
	D	3	17	25	0	14	18	77
	E	60	258	534	140	0	558	1550
	F	15	385	0	141	584	0	1125
	Tot.	181	1156	1147	538	1525	920	5467

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2038 WD AM
Junction: A50 Junction 1	
1/1 (short)	708
1/2 (with short)	1188(In) 480(Out)
2/1	637
2/2	477
3/1	77
4/1	538
5/1	1146
5/2	1
6/1	949
6/2	576
7/1	558
7/2 (with short)	992(In) 239(Out)
7/3 (short)	753
8/1	920
9/1 (short)	400
9/2 (with short)	1125(In) 725(Out)
10/1 (with short)	413(In) 193(Out)
10/2 (short)	220
11/1	181
12/1	1007
12/2	149
13/1	704
13/2 (with short)	848(In) 707(Out)
13/3 (short)	141
14/1	923
14/2	707
14/3	866
15/1	667
15/2 (with short)	1086(In) 608(Out)
15/3 (short)	478
16/1	836
16/2 (with short)	958(In) 576(Out)
16/3 (short)	382

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17/1	935
17/2	576
17/3	859
18/1	362
18/2 (with short)	560(In) 465(Out)
18/3 (short)	95
19/1	1156
20/1	1525

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	67.7 %	1950	1950
				Arm 16 Ahead	45.00	32.3 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	18.1 %	1907	1907
				Arm 17 Ahead	39.00	81.9 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	18.2 %	1886	1886
				Arm 18 Ahead	36.00	81.8 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.8 %	1853	1853
				Arm 14 Ahead	45.00	96.2 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	43.5 %	1894	1894
				Arm 15 Ahead	33.00	56.5 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	23.6 %	1944	1944
				Arm 14 Right	80.00	76.4 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	21.1 %	1926	1926
				Arm 15 Right	54.00	78.9 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	0.2 %	1929	1929
				Arm 16 Right	57.00	99.8 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	50.6 %	1933	1933
				Arm 17 Ahead	62.00	49.4 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2038 WD PM' (FG10: '2038 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	91	63	16	80	79	329
	B	131	0	489	53	359	315	1347
	C	115	394	0	74	329	0	912
	D	8	41	28	0	19	22	118
	E	129	457	497	98	0	570	1751
	F	20	320	0	65	442	0	847
	Tot.	403	1303	1077	306	1229	986	5304

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 WD PM
Junction: A50 Junction 1	
1/1 (short)	651
1/2 (with short)	1347(In) 696(Out)
2/1	403
2/2	509
3/1	118
4/1	306
5/1	959
5/2	118
6/1	807
6/2	422
7/1	570
7/2 (with short)	1181(In) 356(Out)
7/3 (short)	825
8/1	986
9/1 (short)	340
9/2 (with short)	847(In) 507(Out)
10/1 (with short)	329(In) 154(Out)
10/2 (short)	175
11/1	403
12/1	864
12/2	439
13/1	836
13/2 (with short)	1062(In) 846(Out)
13/3 (short)	216
14/1	773
14/2	846
14/3	723
15/1	470
15/2 (with short)	898(In) 647(Out)
15/3 (short)	251
16/1	691
16/2 (with short)	947(In) 422(Out)
16/3 (short)	525

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17/1	788
17/2	422
17/3	1034
18/1	416
18/2 (with short)	717(In) 480(Out)
18/3 (short)	237
19/1	1303
20/1	1229

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	75.1 %	1950	1950
				Arm 16 Ahead	45.00	24.9 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	18.4 %	1907	1907
				Arm 17 Ahead	39.00	81.6 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	16.1 %	1886	1886
				Arm 18 Ahead	36.00	83.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.9 %	1853	1853
				Arm 14 Ahead	45.00	94.1 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	59.1 %	1894	1894
				Arm 15 Ahead	33.00	40.9 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	45.8 %	1944	1944
				Arm 14 Right	80.00	54.2 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	51.9 %	1926	1926
				Arm 15 Right	54.00	48.1 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	18.2 %	1929	1929
				Arm 16 Right	57.00	81.8 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	33.6 %	1933	1933
				Arm 17 Ahead	62.00	66.4 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2a 2028 WD AM' (FG11: '2a 2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	105	90	34	120	93	442
	B	37	0	374	78	296	279	1064
	C	62	430	0	88	523	0	1103
	D	2	13	13	0	10	13	51
	E	45	196	313	73	0	417	1044
	F	13	368	0	98	524	0	1003
	Tot.	159	1112	790	371	1473	802	4707

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2a 2028 WD AM
Junction: A50 Junction 1	
1/1 (short)	596
1/2 (with short)	1064(In) 468(Out)
2/1	611
2/2	492
3/1	51
4/1	371
5/1	715
5/2	75
6/1	1038
6/2	435
7/1	417
7/2 (with short)	627(In) 103(Out)
7/3 (short)	524
8/1	802
9/1 (short)	381
9/2 (with short)	1003(In) 622(Out)
10/1 (with short)	442(In) 195(Out)
10/2 (short)	247
11/1	159
12/1	888
12/2	224
13/1	561
13/2 (with short)	623(In) 475(Out)
13/3 (short)	148
14/1	783
14/2	475
14/3	770
15/1	341
15/2 (with short)	1017(In) 641(Out)
15/3 (short)	376
16/1	788
16/2 (with short)	844(In) 435(Out)

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16/3 (short)	409
17/1	1028
17/2	435
17/3	901
18/1	385
18/2 (with short)	557(In) 458(Out)
18/3 (short)	99
19/1	1112
20/1	1473

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	62.8 %	1950	1950
				Arm 16 Ahead	45.00	37.2 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	14.4 %	1907	1907
				Arm 17 Ahead	39.00	85.6 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	19.6 %	1886	1886
				Arm 18 Ahead	36.00	80.4 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.4 %	1853	1853
				Arm 14 Ahead	45.00	96.6 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	53.8 %	1894	1894
				Arm 15 Ahead	33.00	46.2 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	26.0 %	1944	1944
				Arm 14 Right	80.00	74.0 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	47.2 %	1926	1926
				Arm 15 Right	54.00	52.8 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	11.7 %	1929	1929
				Arm 16 Right	57.00	88.3 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	35.9 %	1933	1933
				Arm 17 Ahead	62.00	64.1 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2a 2028 WD PM' (FG12: '2a 2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	65	75	5	64	88	297
	B	85	0	467	13	195	286	1046
	C	122	407	0	41	300	0	870
	D	5	20	21	0	10	17	73
	E	93	301	517	24	0	566	1501
	F	26	393	0	31	474	0	924
	Tot.	331	1186	1080	114	1043	957	4711

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2a 2028 WD PM
Junction: A50 Junction 1	
1/1 (short)	603
1/2 (with short)	1046(In) 443(Out)
2/1	341
2/2	529
3/1	73
4/1	114
5/1	761
5/2	319
6/1	733
6/2	310
7/1	566
7/2 (with short)	935(In) 260(Out)
7/3 (short)	675
8/1	957
9/1 (short)	419
9/2 (with short)	924(In) 505(Out)
10/1 (with short)	297(In) 140(Out)
10/2 (short)	157
11/1	331
12/1	845
12/2	341
13/1	692
13/2 (with short)	903(In) 560(Out)
13/3 (short)	343
14/1	780
14/2	560
14/3	848
15/1	294
15/2 (with short)	1005(In) 679(Out)
15/3 (short)	326
16/1	496
16/2 (with short)	769(In) 310(Out)

Full Input Data And Results

16/3 (short)	459
17/1	723
17/2	310
17/3	988
18/1	391
18/2 (with short)	660(In) 432(Out)
18/3 (short)	228
19/1	1186
20/1	1043

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	77.4 %	1950	1950
				Arm 16 Ahead	45.00	22.6 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	12.0 %	1907	1907
				Arm 17 Ahead	39.00	88.0 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	13.7 %	1886	1886
				Arm 18 Ahead	36.00	86.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	6.2 %	1853	1853
				Arm 14 Ahead	45.00	93.8 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	46.4 %	1894	1894
				Arm 15 Ahead	33.00	53.6 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	44.1 %	1944	1944
				Arm 14 Right	80.00	55.9 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	60.9 %	1926	1926
				Arm 15 Right	54.00	39.1 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	47.0 %	1929	1929
				Arm 16 Right	57.00	53.0 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	14.7 %	1933	1933
				Arm 17 Ahead	62.00	85.3 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 13: '2a 2038 WD AM' (FG13: '2a 2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	90	103	30	105	79	407
	B	43	0	474	81	318	266	1182
	C	64	399	0	79	492	0	1034
	D	3	16	20	0	12	15	66
	E	64	269	513	105	0	551	1502
	F	13	359	0	93	523	0	988
	Tot.	187	1133	1110	388	1450	911	5179

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2a 2038 WD AM
Junction: A50 Junction 1	
1/1 (short)	651
1/2 (with short)	1182(In) 531(Out)
2/1	571
2/2	463
3/1	66
4/1	388
5/1	1108
5/2	2
6/1	991
6/2	459
7/1	551
7/2 (with short)	951(In) 291(Out)
7/3 (short)	660
8/1	911
9/1 (short)	372
9/2 (with short)	988(In) 616(Out)
10/1 (with short)	407(In) 193(Out)
10/2 (short)	214
11/1	187
12/1	964
12/2	169
13/1	689
13/2 (with short)	807(In) 700(Out)
13/3 (short)	107
14/1	874
14/2	700
14/3	723
15/1	634
15/2 (with short)	937(In) 621(Out)
15/3 (short)	316
16/1	796
16/2 (with short)	847(In) 459(Out)

Full Input Data And Results

16/3 (short)	388
17/1	979
17/2	459
17/3	851
18/1	360
18/2 (with short)	545(In) 398(Out)
18/3 (short)	147
19/1	1133
20/1	1450

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	72.8 %	1950	1950
				Arm 16 Ahead	45.00	27.2 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	13.8 %	1907	1907
				Arm 17 Ahead	39.00	86.2 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	18.2 %	1886	1886
				Arm 18 Ahead	36.00	81.8 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.5 %	1853	1853
				Arm 14 Ahead	45.00	96.5 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	46.6 %	1894	1894
				Arm 15 Ahead	33.00	53.4 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	25.3 %	1944	1944
				Arm 14 Right	80.00	74.7 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	24.1 %	1926	1926
				Arm 15 Right	54.00	75.9 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	0.3 %	1929	1929
				Arm 16 Right	57.00	99.7 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	38.8 %	1933	1933
				Arm 17 Ahead	62.00	61.2 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2a 2038 WD PM' (FG14: '2a 2038 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	86	72	6	76	77	317
	B	131	0	545	22	343	307	1348
	C	113	372	0	45	314	0	844
	D	15	71	55	0	32	41	214
	E	129	440	563	38	0	558	1728
	F	21	326	0	28	449	0	824
	Tot.	409	1295	1235	139	1214	983	5275

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 2a 2038 WD PM
Junction: A50 Junction 1	
1/1 (short)	697
1/2 (with short)	1348(In) 651(Out)
2/1	359
2/2	485
3/1	214
4/1	139
5/1	1031
5/2	204
6/1	867
6/2	347
7/1	558
7/2 (with short)	1170(In) 340(Out)
7/3 (short)	830
8/1	983
9/1 (short)	347
9/2 (with short)	824(In) 477(Out)
10/1 (with short)	317(In) 158(Out)
10/2 (short)	159
11/1	409
12/1	859
12/2	436
13/1	835
13/2 (with short)	1092(In) 850(Out)
13/3 (short)	242
14/1	773
14/2	850
14/3	719
15/1	486
15/2 (with short)	878(In) 667(Out)
15/3 (short)	211
16/1	615
16/2 (with short)	862(In) 347(Out)

Full Input Data And Results

16/3 (short)	515
17/1	835
17/2	347
17/3	1000
18/1	425
18/2 (with short)	757(In) 495(Out)
18/3 (short)	262
19/1	1295
20/1	1214

Full Input Data And Results

Lane Saturation Flows

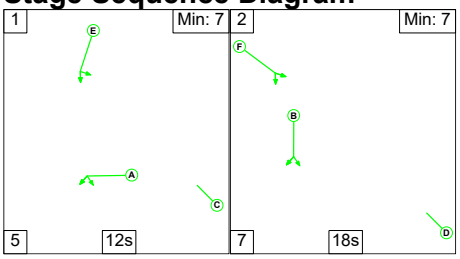
Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	78.2 %	1950	1950
				Arm 16 Ahead	45.00	21.8 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	12.5 %	1907	1907
				Arm 17 Ahead	39.00	87.5 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	15.0 %	1886	1886
				Arm 18 Ahead	36.00	85.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	6.1 %	1853	1853
				Arm 14 Ahead	45.00	93.9 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	54.4 %	1894	1894
				Arm 15 Ahead	33.00	45.6 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	46.5 %	1944	1944
				Arm 14 Right	80.00	53.5 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

Full Input Data And Results

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	51.3 %	1926	1926
				Arm 15 Right	54.00	48.7 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	30.6 %	1929	1929
				Arm 16 Right	57.00	69.4 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	15.3 %	1933	1933
				Arm 17 Ahead	62.00	84.7 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 Base AM' (FG1: '2023 Base Flows AM', Plan 1: 'Network Control Plan 1')
Controller :C1 - Eastsde E36308

Stage Sequence Diagram

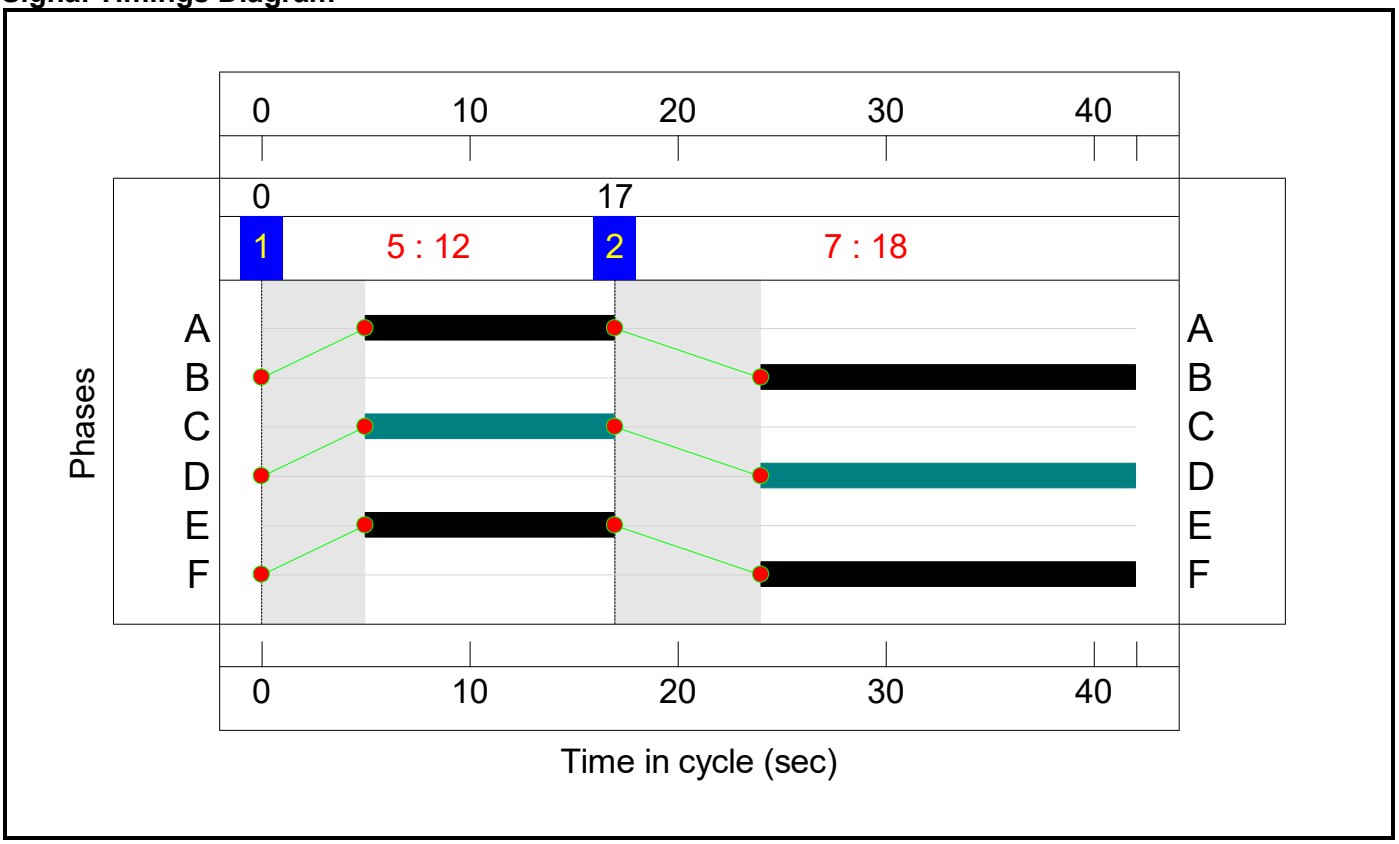


Stage Timings

Stage	1	2
Duration	12	18
Change Point	0	17

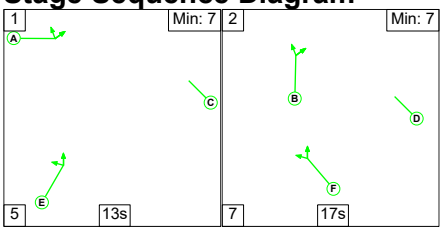
Full Input Data And Results

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

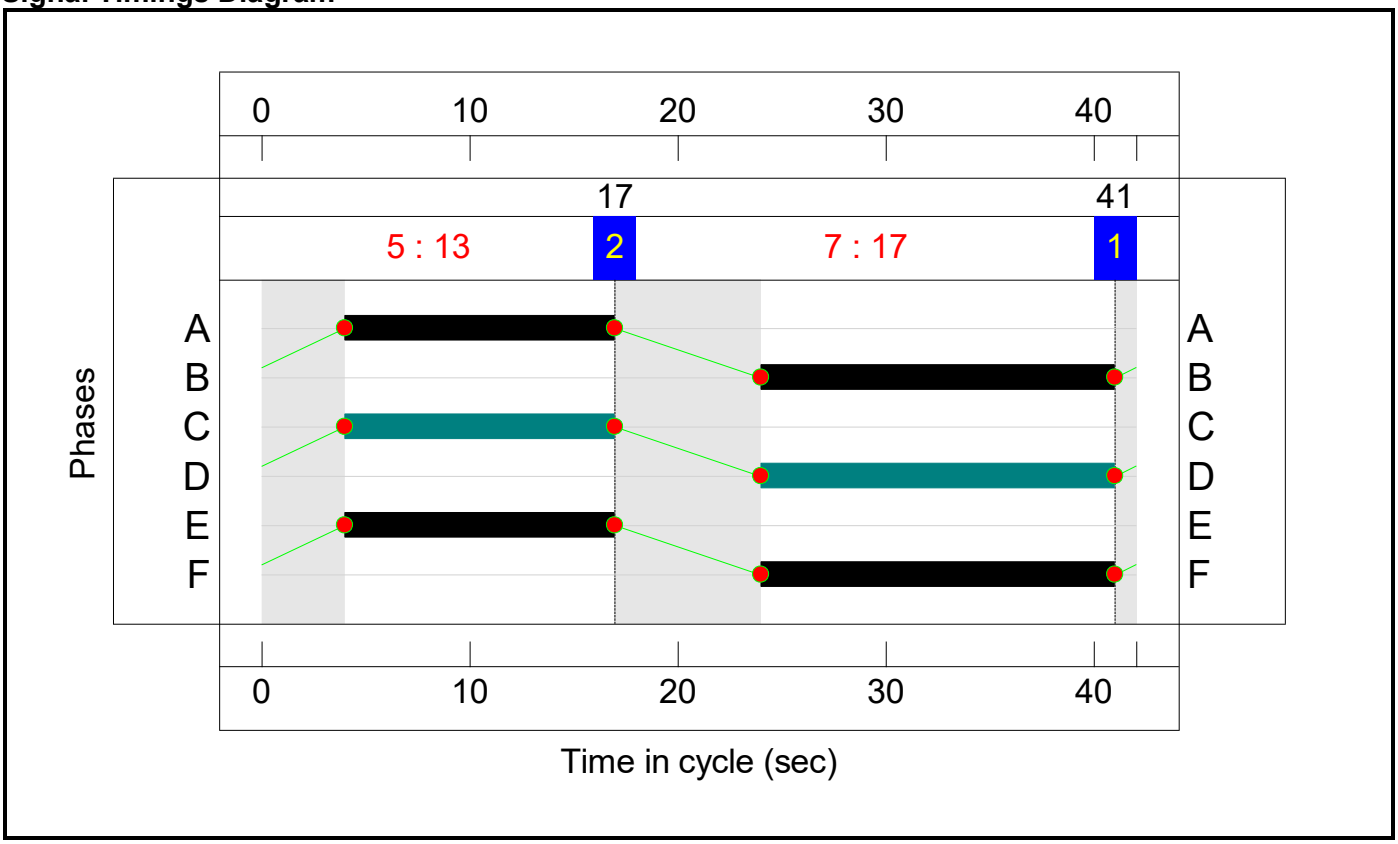


Stage Timings

Stage	1	2
Duration	13	17
Change Point	41	17

Full Input Data And Results

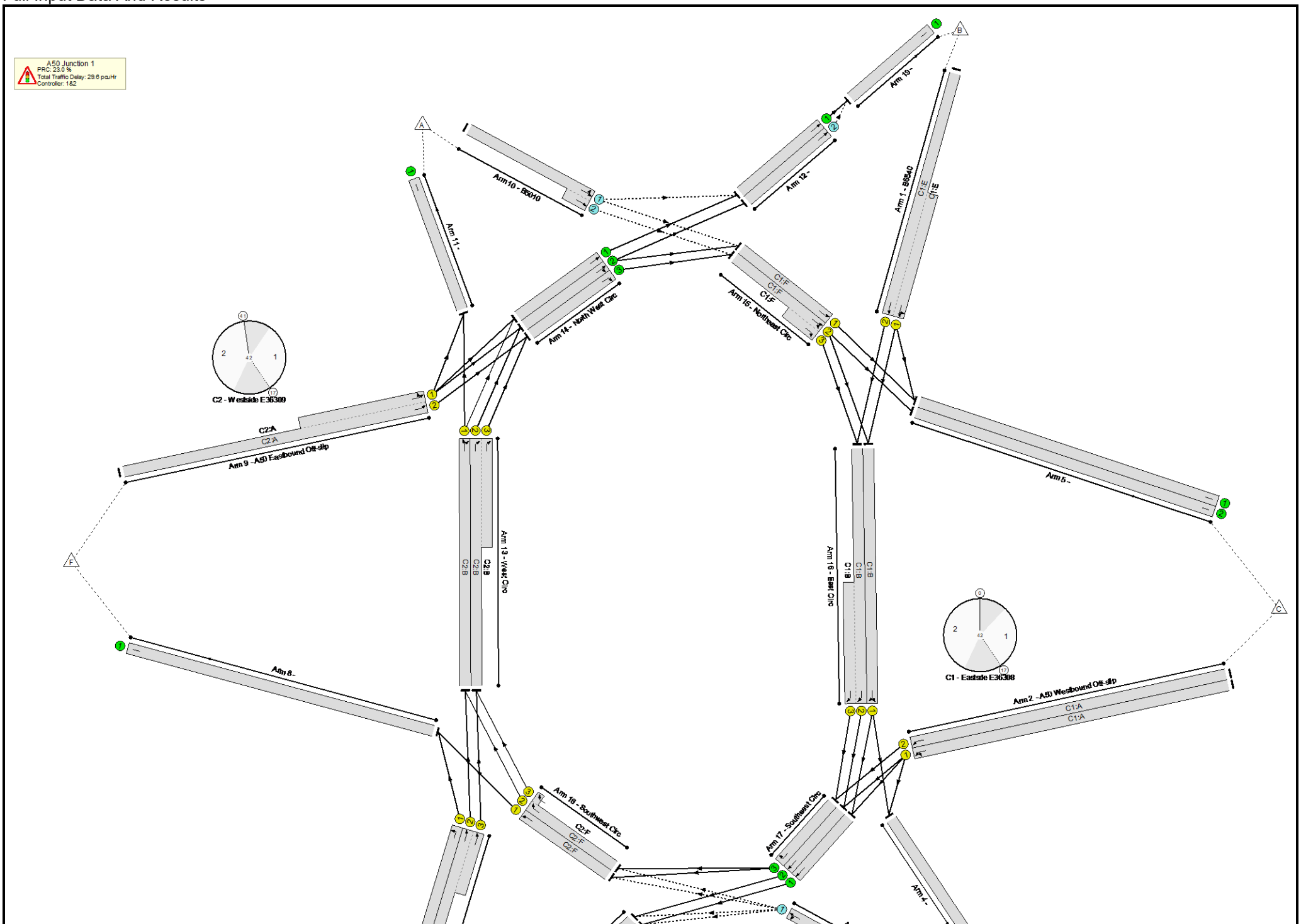
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.2%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.2%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	12	-	798	2088:1950	646+604	59.1 : 68.9%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	12	-	432	1907	590	73.2%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	12	-	333	2049	634	52.5%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	50	1886	444	11.3%
4/1		U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	923	1980	1980	46.6%
6/2	Ahead	O	N/A	N/A	-		-	-	-	287	1980	512	56.1%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	347	1923	641	54.1%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	498	2063:2101	134+700	59.7 : 59.7%
8/1		U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	723	1995:1853	665+618	69.8 : 41.9%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	325	1894:2034	550+550	27.8 : 31.3%
11/1		U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	567	1965	1965	28.9%
12/2	Ahead	O	N/A	N/A	-		-	-	-	167	1965	590	28.3%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	410	1944	833	49.2%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	486	1942:1940	832+347	41.2 : 41.2%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	502	1930	1930	26.0%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	343	1926	1926	17.8%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	607	1923	1923	31.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	18	-	264	1932	874	30.2%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	18	-	779	1929:1926	775+290	73.2 : 73.2%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	18	-	537	1933	874	61.4%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	18	-	594	1930:1927	873+872	32.9 : 35.2%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	913	1912	1912	47.8%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	287	1907	1907	15.0%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	640	1899	1899	33.7%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	282	1937	830	34.0%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	398	1935:1930	697+144	47.4 : 47.4%
19/1		U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1210	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1154**	**0**	**0**	**17.6**	**12.0**	**0.0**	**29.6**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1154**	**0**	**0**	**17.6**	**12.0**	**0.0**	**29.6**	**-**	**-**	**-**	**-**
1/2+1/1	798	798	-	-	-	2.8	0.9	-	3.7	16.5	4.2	0.9	5.0
2/1	432	432	-	-	-	1.6	1.3	-	2.9	24.1	4.4	1.3	5.8
2/2	333	333	-	-	-	1.1	0.6	-	1.7	17.9	3.1	0.6	3.7
3/1	50	50	50	0	0	0.0	0.1	-	0.1	5.3	0.1	0.1	0.2
4/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	923	923	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
6/2	287	287	287	0	0	0.1	0.6	-	0.7	8.7	1.7	0.6	2.3
7/1	347	347	-	-	-	1.1	0.6	-	1.7	17.5	3.3	0.6	3.9
7/2+7/3	498	498	-	-	-	1.6	0.7	-	2.3	16.7	3.9	0.7	4.7
8/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	723	723	-	-	-	2.4	0.6	-	3.0	14.9	4.6	0.6	5.3
10/1+10/2	325	325	650	0	0	0.1	0.2	-	0.3	3.3	0.4	0.2	0.6
11/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	567	567	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
12/2	167	167	167	0	0	0.0	0.2	-	0.2	4.5	1.1	0.2	1.3
13/1	410	410	-	-	-	1.1	0.5	-	1.6	14.1	2.8	0.5	3.3
13/2+13/3	486	486	-	-	-	0.7	0.4	-	1.0	7.5	14.9	0.4	15.3
14/1	502	502	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
14/2	343	343	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
14/3	607	607	-	-	-	0.0	0.2	-	0.2	1.4	2.2	0.2	2.4
15/1	264	264	-	-	-	0.4	0.2	-	0.6	8.2	1.0	0.2	1.2

Full Input Data And Results

15/2+15/3	779	779	-	-	-	1.4	1.4	-	2.7	12.7	5.2	1.4	6.6
16/1	537	537	-	-	-	1.7	0.8	-	2.5	16.8	4.2	0.8	5.0
16/2+16/3	594	594	-	-	-	0.5	0.3	-	0.8	4.7	16.7	0.3	16.9
17/1	913	913	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
17/2	287	287	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	640	640	-	-	-	0.0	0.3	-	0.3	1.4	0.5	0.3	0.8
18/1	282	282	-	-	-	0.6	0.3	-	0.9	11.0	1.4	0.3	1.7
18/2+18/3	398	398	-	-	-	0.6	0.4	-	1.0	9.3	3.8	0.4	4.3
19/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1210	1210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

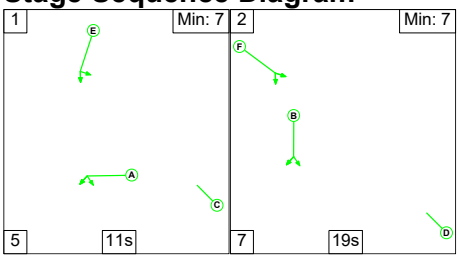
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	23.0	Total Delay for Signalled Lanes (pcuHr):	14.83	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	29.0	Total Delay for Signalled Lanes (pcuHr):	11.50	Cycle Time (s): 42
	PRC Over All Lanes (%):	23.0	Total Delay Over All Lanes(pcuHr):	29.56	

Full Input Data And Results

Scenario 2: '2022 Base PM' (FG2: '2023 Base Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

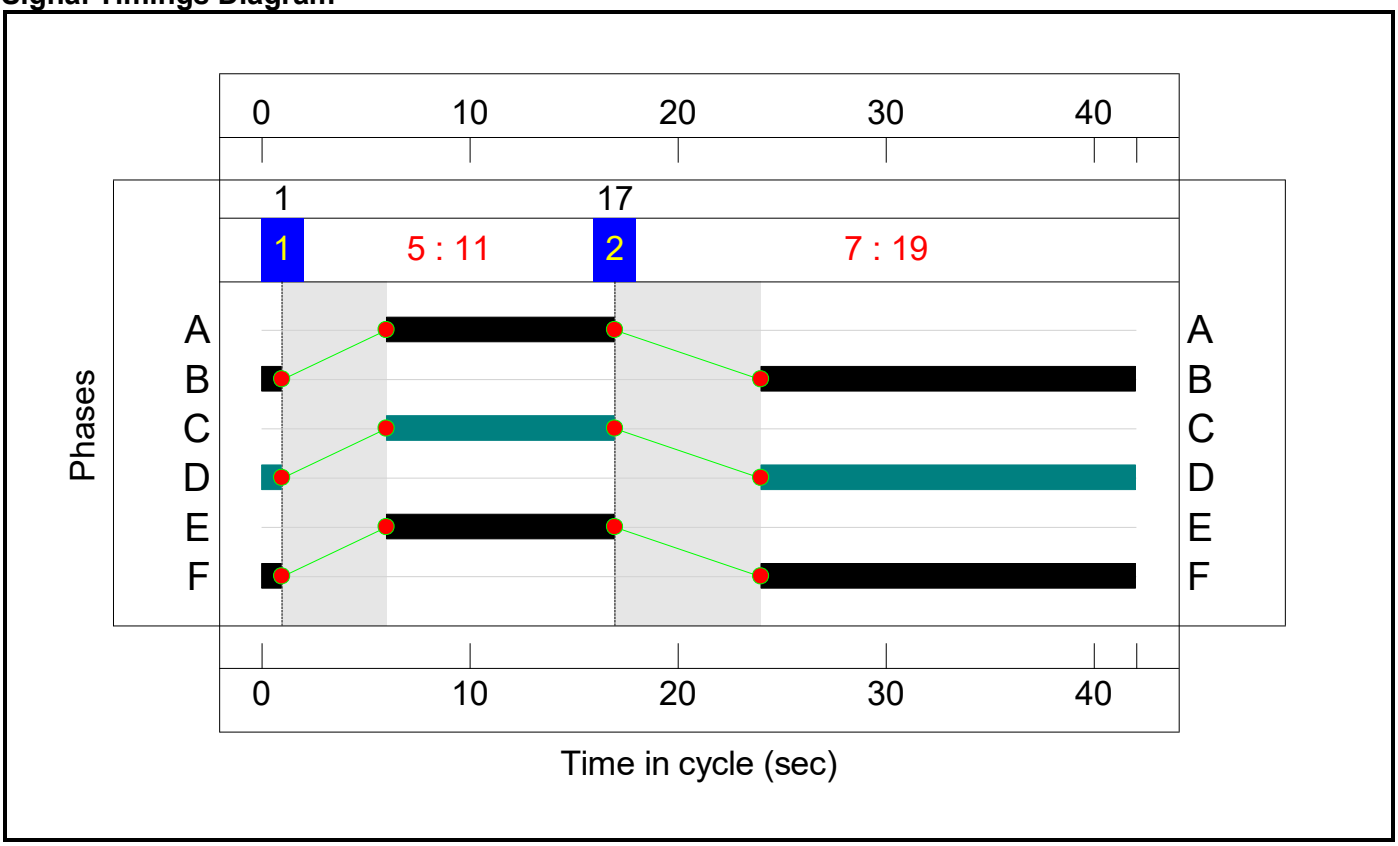
Stage Sequence Diagram



Stage Timings

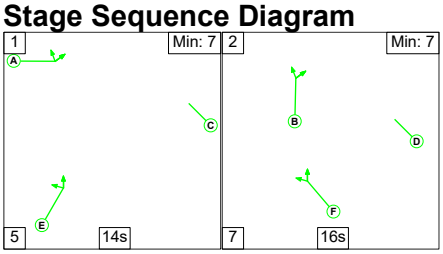
Stage	1	2
Duration	11	19
Change Point	1	17

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

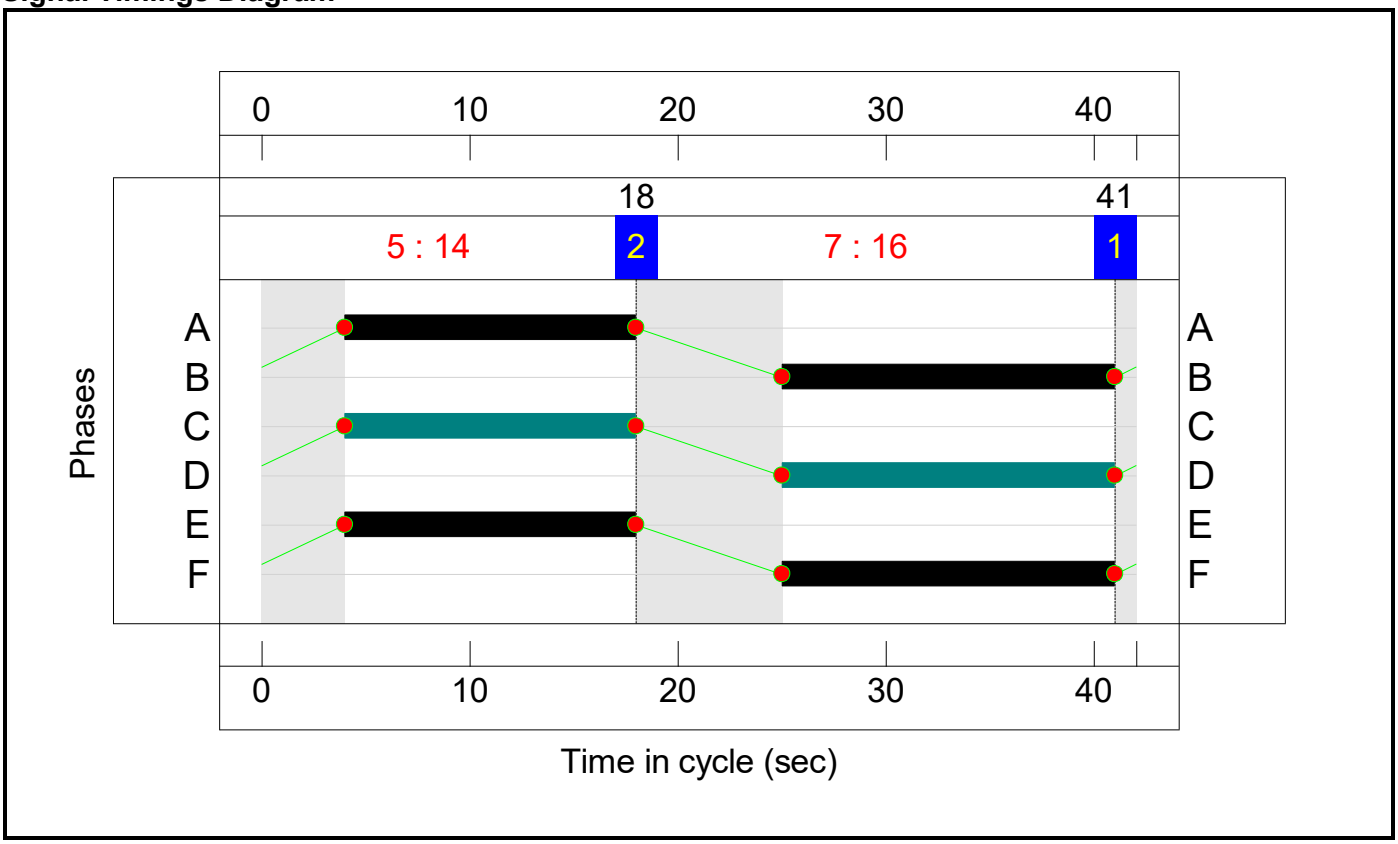


Full Input Data And Results

Stage Timings

Stage	1	2
Duration	14	16
Change Point	41	18

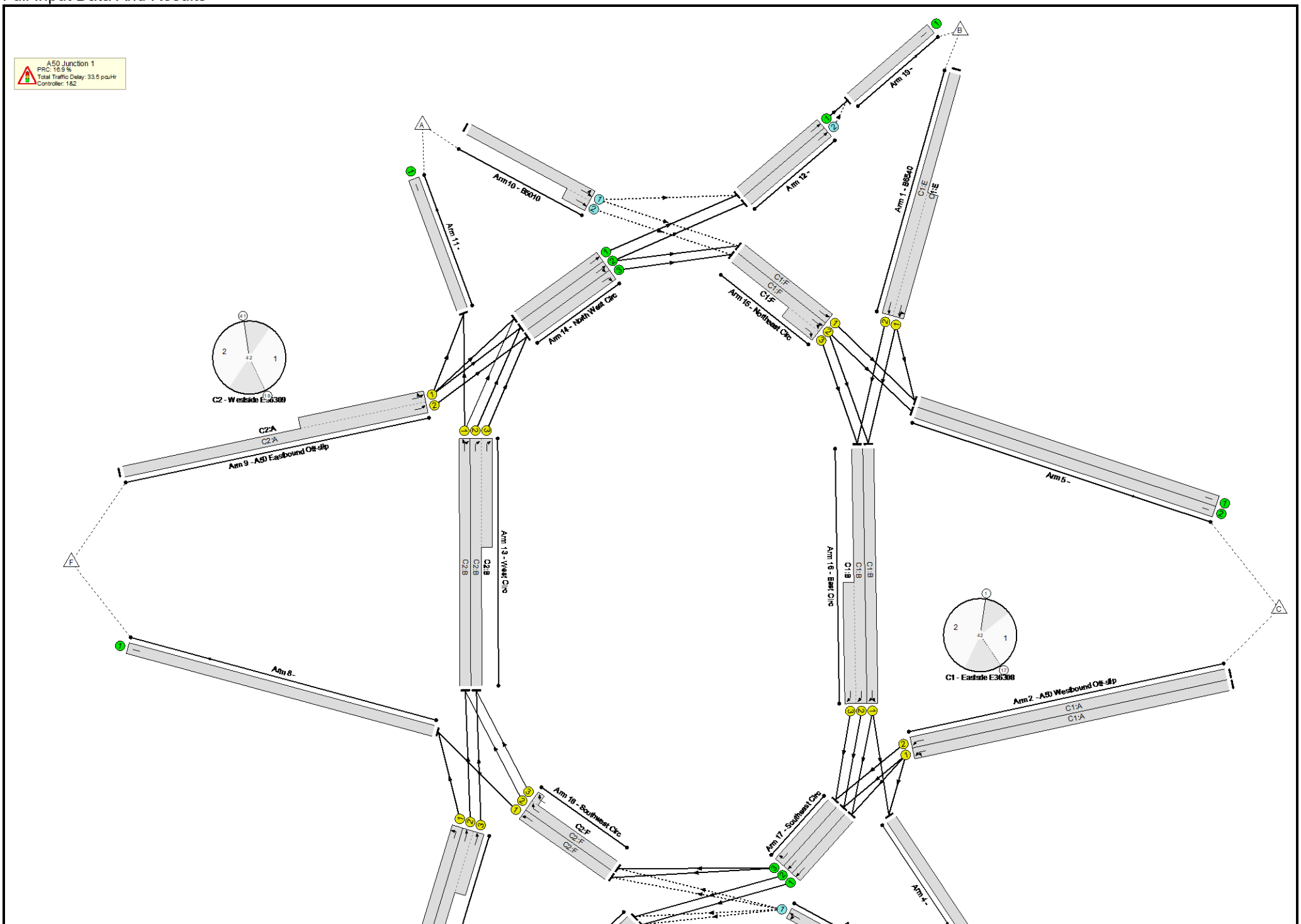
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**77.0%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	11	-	691	2088:1950	597+557	57.3 : 62.6%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	11	-	346	1907	545	63.5%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	11	-	400	2049	585	68.3%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	63	1886	484	13.0%
4/1		U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	612	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	142	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	710	1980	1980	35.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	252	1980	559	45.1%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	501	1923	687	72.9%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	774	2063:2101	283+750	74.9 : 74.9%
8/1		U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	616	1995:1853	713+587	55.7 : 37.3%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	259	1894:2034	386+507	29.0 : 29.0%
11/1		U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	554	1965	1965	28.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	225	1965	593	37.9%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	606	1944	787	77.0%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	674	1942:1940	786+243	65.5 : 65.5%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	503	1930	1930	26.1%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	515	1926	1926	26.7%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	556	1923	1923	28.9%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	19	-	351	1932	920	38.2%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	19	-	703	1929:1926	774+401	59.8 : 59.8%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	19	-	409	1933	920	44.4%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	19	-	582	1930:1927	835+918	30.2 : 36.0%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	699	1912	1912	36.6%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	252	1907	1907	13.2%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	730	1899	1899	38.4%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	276	1937	784	35.2%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	506	1935:1930	624+177	63.2 : 63.2%
19/1		U	N/A	N/A	-		-	-	-	779	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	962	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1058**	**0**	**0**	**19.4**	**14.0**	**0.0**	**33.5**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1058**	**0**	**0**	**19.4**	**14.0**	**0.0**	**33.5**	**-**	**-**	**-**	**-**
1/2+1/1	691	691	-	-	-	2.5	0.7	-	3.2	16.8	3.5	0.7	4.2
2/1	346	346	-	-	-	1.3	0.9	-	2.1	22.1	3.5	0.9	4.3
2/2	400	400	-	-	-	1.5	1.1	-	2.5	22.9	4.1	1.1	5.2
3/1	63	63	63	0	0	0.0	0.1	-	0.1	5.0	0.1	0.1	0.2
4/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	142	142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	710	710	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	252	252	252	0	0	0.0	0.4	-	0.4	6.1	1.2	0.4	1.6
7/1	501	501	-	-	-	1.6	1.3	-	3.0	21.3	5.0	1.3	6.3
7/2+7/3	774	774	-	-	-	2.4	1.5	-	3.9	18.1	5.6	1.5	7.1
8/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	616	616	-	-	-	1.8	0.5	-	2.2	13.1	3.6	0.5	4.1
10/1+10/2	259	259	518	0	0	0.1	0.2	-	0.3	4.4	0.5	0.2	0.7
11/1	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	554	554	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
12/2	225	225	225	0	0	0.0	0.3	-	0.3	5.5	1.8	0.3	2.1
13/1	606	606	-	-	-	2.3	1.6	-	3.9	23.4	5.6	1.6	7.2
13/2+13/3	674	674	-	-	-	1.3	0.9	-	2.3	12.1	15.1	0.9	16.0
14/1	503	503	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
14/2	515	515	-	-	-	0.0	0.2	-	0.2	1.3	1.6	0.2	1.8
14/3	556	556	-	-	-	0.0	0.2	-	0.2	1.3	1.1	0.2	1.3
15/1	351	351	-	-	-	0.8	0.3	-	1.1	11.4	1.9	0.3	2.2

Full Input Data And Results

15/2+15/3	703	703	-	-	-	1.1	0.7	-	1.9	9.5	3.5	0.7	4.2
16/1	409	409	-	-	-	0.7	0.4	-	1.1	10.1	2.3	0.4	2.7
16/2+16/3	582	582	-	-	-	0.4	0.2	-	0.6	4.0	16.6	0.2	16.9
17/1	699	699	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
17/2	252	252	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	730	730	-	-	-	0.0	0.3	-	0.3	1.5	1.6	0.3	1.9
18/1	276	276	-	-	-	0.7	0.3	-	0.9	12.1	1.5	0.3	1.8
18/2+18/3	506	506	-	-	-	0.9	0.9	-	1.7	12.2	4.9	0.9	5.8
19/1	779	779	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	962	962	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

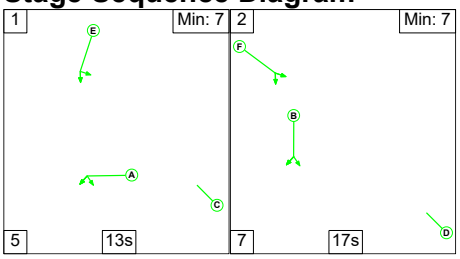
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	31.7	Total Delay for Signalled Lanes (pcuHr):	12.65	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	16.9	Total Delay for Signalled Lanes (pcuHr):	17.95	Cycle Time (s): 42
	PRC Over All Lanes (%):	16.9	Total Delay Over All Lanes(pcuHr):	33.49	

Full Input Data And Results

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

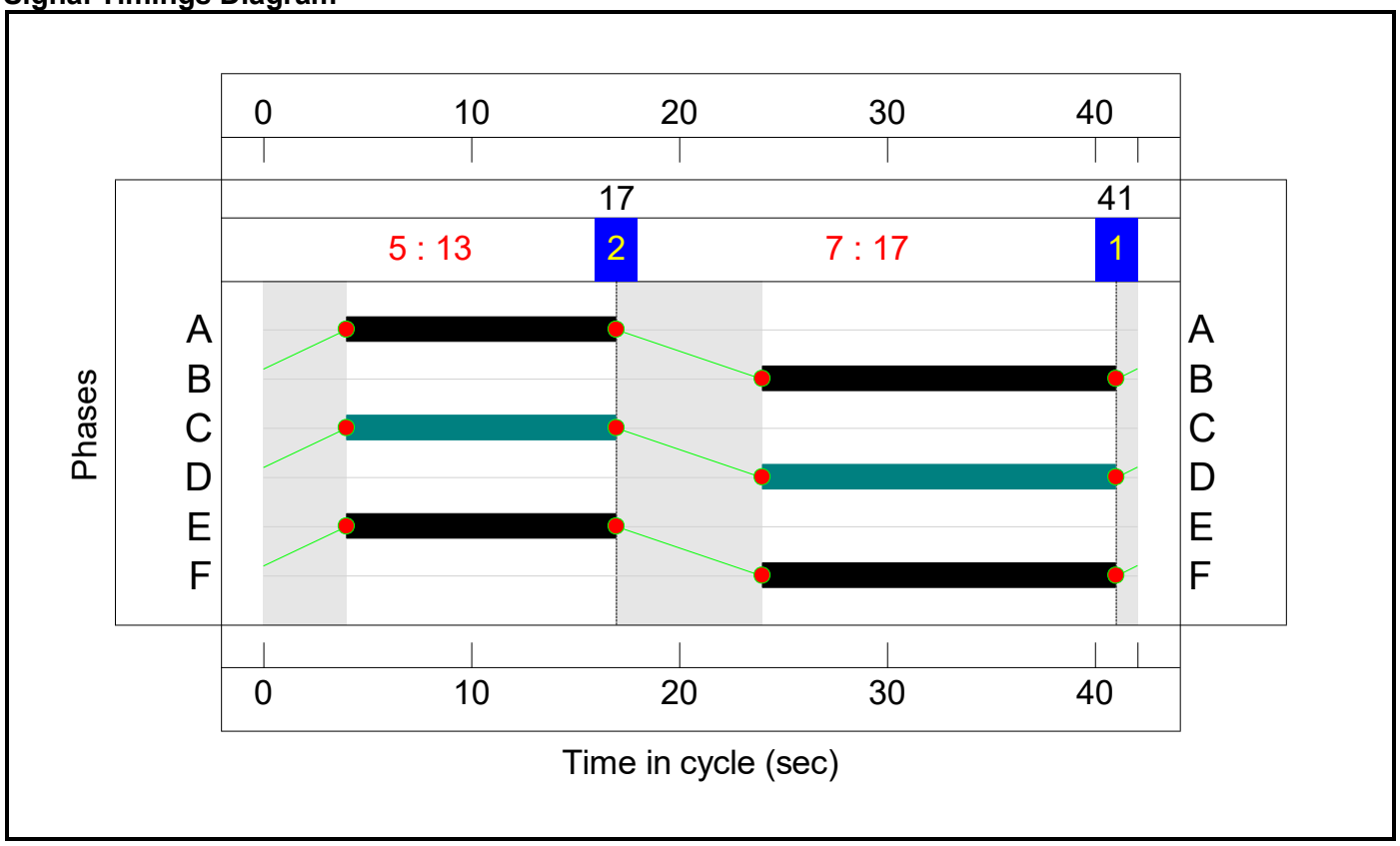
Stage Sequence Diagram



Stage Timings

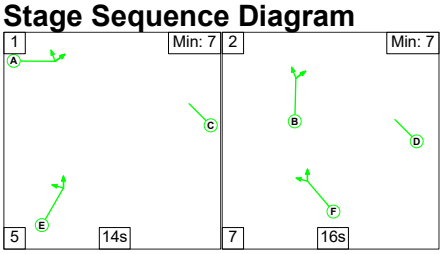
Stage	1	2
Duration	13	17
Change Point	41	17

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

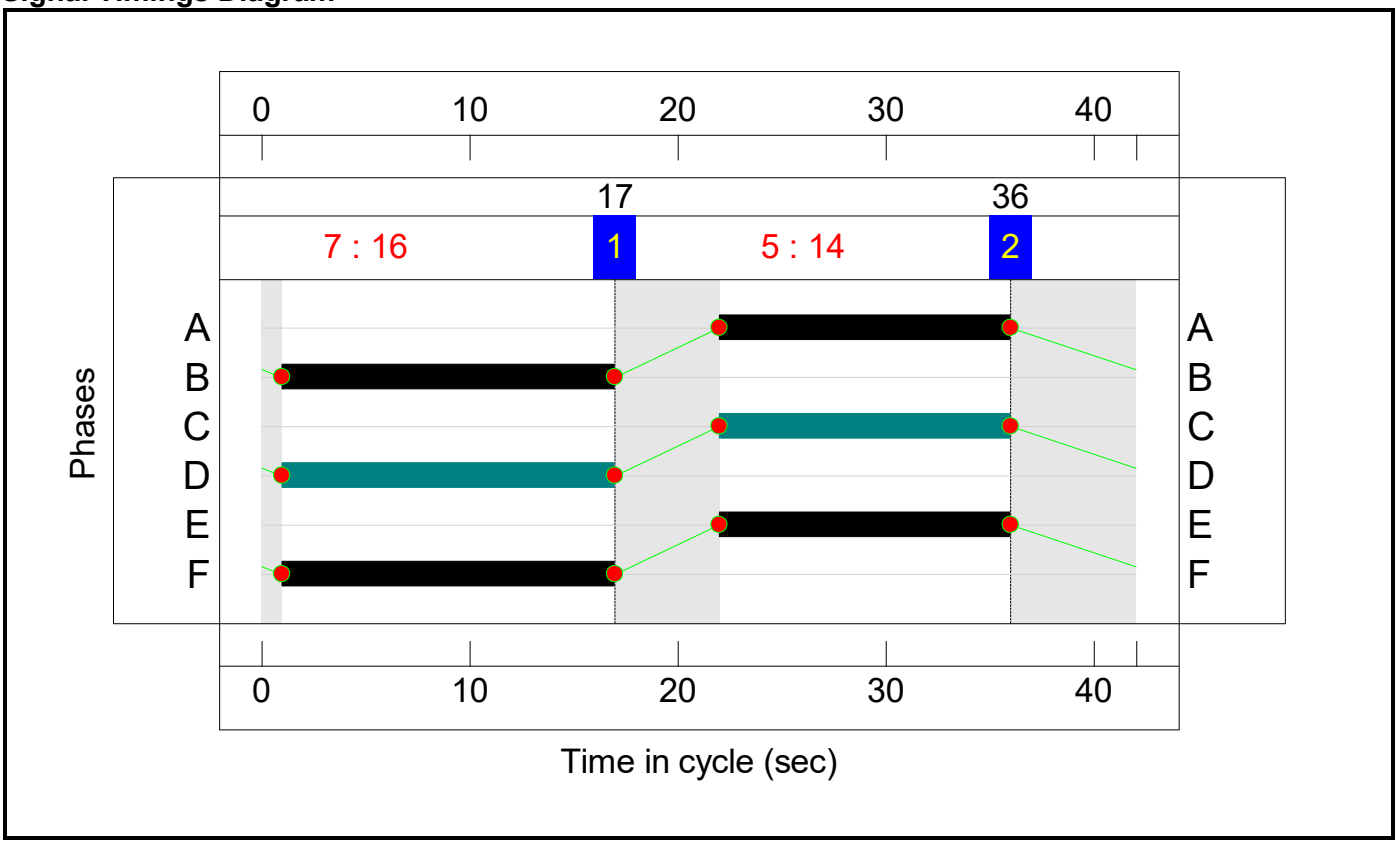


Full Input Data And Results

Stage Timings

Stage	1	2
Duration	14	16
Change Point	17	36

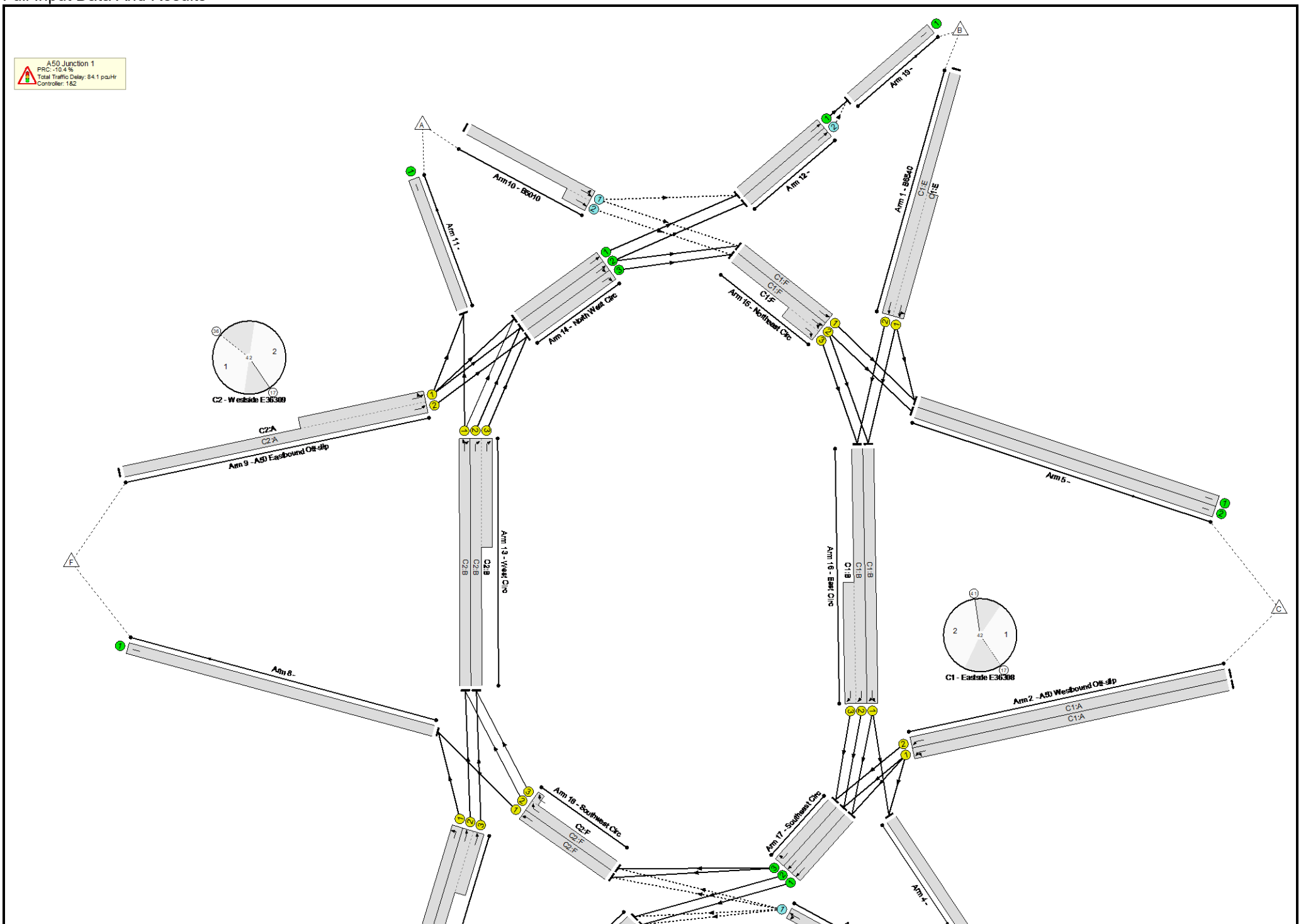
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.4%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.4%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	1066	2088:1950	659+650	63.8 : 99.4%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	630	1907	636	99.1%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	506	2049	683	74.1%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	58	1886	319	18.2%
4/1		U	N/A	N/A	-		-	-	-	448	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	155	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	955	1980	1980	47.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	515	1980	507	97.9%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	409	1923	687	59.6%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	660	2063:2101	144+750	73.8 : 73.8%
8/1		U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	1078	1995:1853	713+662	94.7 : 60.9%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	437	1894:2034	325+385	58.8 : 63.9%
11/1		U	N/A	N/A	-		-	-	-	160	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	929	1965	1965	47.3%
12/2	Ahead	O	N/A	N/A	-		-	-	-	199	1965	511	39.0%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	585	1944	787	74.3%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	649	1942:1940	786+473	52.4 : 50.1%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	828	1930	1930	42.9%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	412	1926	1926	21.4%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	912	1923	1923	47.4%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	303	1932	828	36.6%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	1158	1929:1926	675+526	96.5 : 96.5%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	762	1933	828	89.8%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	927	1930:1927	827+826	60.1 : 49.9%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	944	1912	1912	48.8%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	515	1907	1907	26.0%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	918	1899	1899	48.3%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	391	1937	784	49.9%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	574	1935:1930	662+131	72.3 : 72.3%
19/1		U	N/A	N/A	-		-	-	-	1128	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1470	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1628**	**0**	**0**	**34.2**	**49.8**	**0.0**	**84.1**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1628**	**0**	**0**	**34.2**	**49.8**	**0.0**	**84.1**	**-**	**-**	**-**	**-**
1/2+1/1	1066	1066	-	-	-	3.9	2.2	-	6.0	20.4	7.4	2.2	9.5
2/1	630	630	-	-	-	2.4	11.2	-	13.7	78.0	7.2	11.2	18.4
2/2	506	506	-	-	-	1.7	1.4	-	3.1	22.4	5.2	1.4	6.6
3/1	58	58	58	0	0	0.0	0.1	-	0.1	8.7	0.2	0.1	0.3
4/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	155	155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	944	944	-	-	-	0.0	0.5	-	0.5	1.7	0.0	0.5	0.5
6/2	497	497	497	0	0	1.2	8.8	-	10.0	72.6	5.6	8.8	14.4
7/1	409	409	-	-	-	1.3	0.7	-	2.0	17.5	3.9	0.7	4.6
7/2+7/3	660	660	-	-	-	2.1	1.4	-	3.5	19.0	5.5	1.4	6.9
8/1	800	800	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	1078	1078	-	-	-	3.7	1.8	-	5.5	18.4	7.5	1.8	9.3
10/1+10/2	437	437	874	0	0	0.4	0.8	-	1.2	10.1	1.2	0.8	2.0
11/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	929	929	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
12/2	199	199	199	0	0	0.1	0.3	-	0.4	7.1	1.9	0.3	2.2
13/1	585	585	-	-	-	2.5	1.4	-	4.0	24.3	5.3	1.4	6.7
13/2+13/3	649	649	-	-	-	1.1	0.5	-	1.7	9.3	15.0	0.5	15.6
14/1	828	828	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	412	412	-	-	-	0.0	0.1	-	0.1	1.2	0.5	0.1	0.7
14/3	912	912	-	-	-	0.0	0.5	-	0.5	1.8	5.5	0.5	5.9
15/1	303	303	-	-	-	0.8	0.3	-	1.1	12.6	3.3	0.3	3.6

Full Input Data And Results

15/2+15/3	1158	1121	-	-	-	4.0	9.5	-	13.5	41.8	12.5	9.5	22.0
16/1	744	744	-	-	-	2.5	4.0	-	6.5	31.5	7.2	4.0	11.2
16/2+16/3	909	909	-	-	-	2.7	0.6	-	3.3	12.9	16.7	0.6	17.3
17/1	933	933	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
17/2	497	497	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
17/3	918	918	-	-	-	0.0	0.5	-	0.5	1.9	3.2	0.5	3.6
18/1	391	391	-	-	-	0.6	0.5	-	1.1	10.0	4.4	0.5	4.9
18/2+18/3	574	574	-	-	-	3.2	1.3	-	4.5	28.1	5.9	1.3	7.2
19/1	1128	1128	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1440	1440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

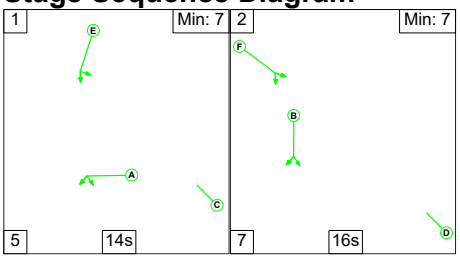
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-10.4	Total Delay for Signalled Lanes (pcuHr):	47.12	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-5.3	Total Delay for Signalled Lanes (pcuHr):	22.16	Cycle Time (s):	42
	PRC Over All Lanes (%):	-10.4	Total Delay Over All Lanes(pcuHr):	84.06		

Full Input Data And Results

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

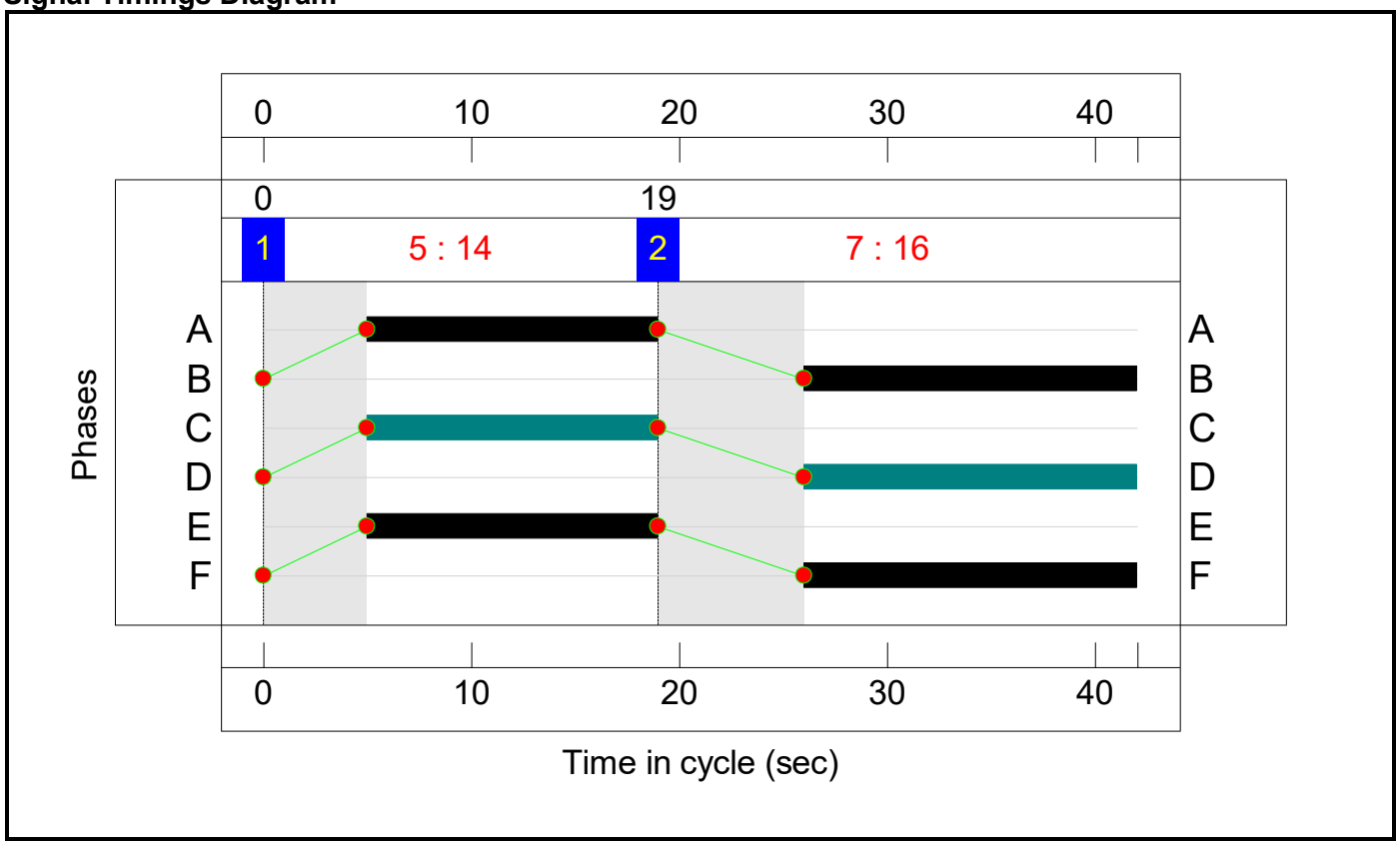
Stage Sequence Diagram



Stage Timings

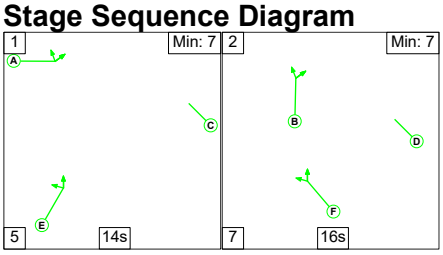
Stage	1	2
Duration	14	16
Change Point	0	19

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

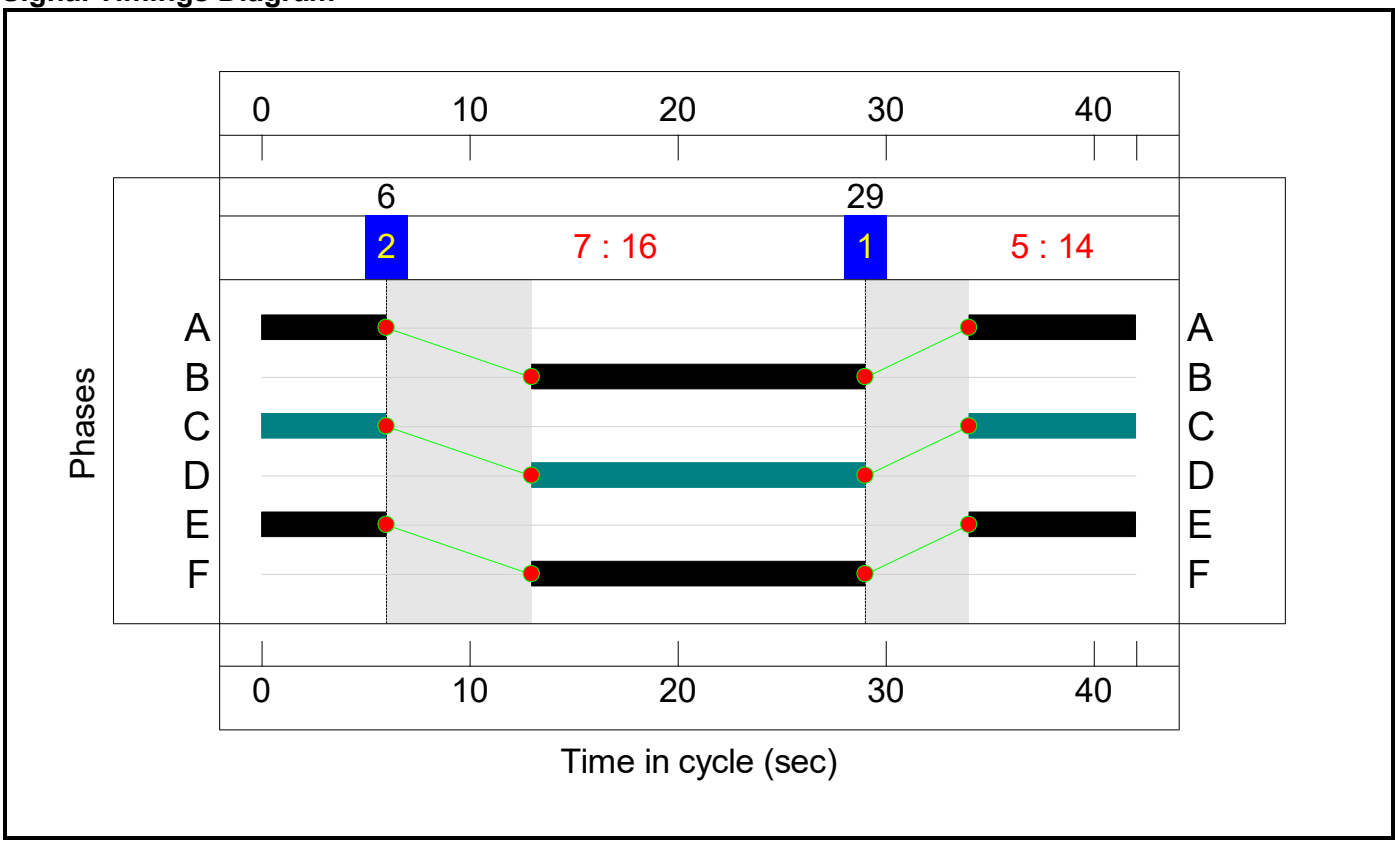


Full Input Data And Results

Stage Timings

Stage	1	2
Duration	14	16
Change Point	29	6

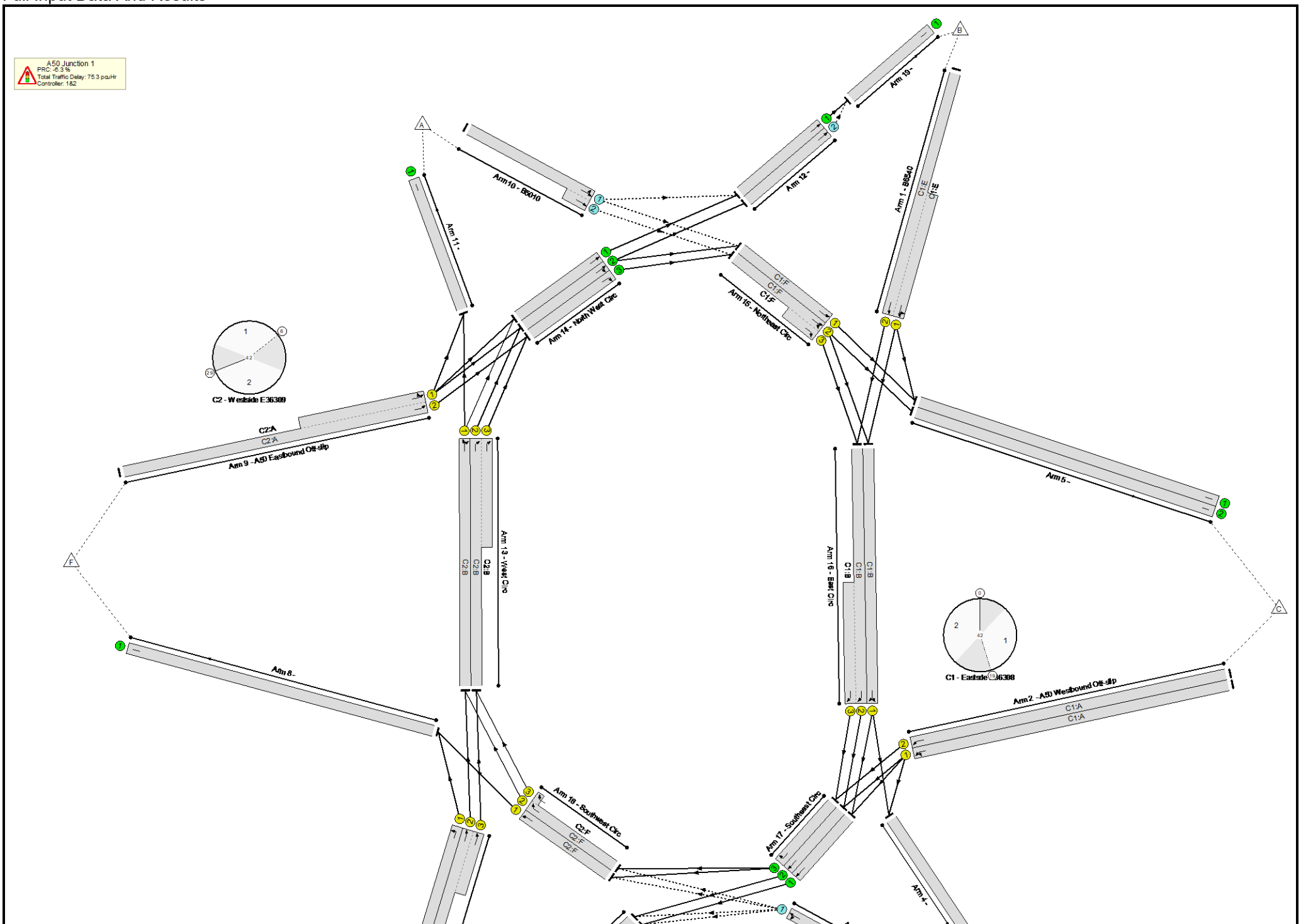
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.7%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.7%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1112	2088:1950	746+696	65.8 : 89.2%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	414	1907	681	60.8%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	615	2049	732	84.0%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	60	1886	373	16.1%
4/1		U	N/A	N/A	-		-	-	-	136	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	974	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	151	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	815	1980	1980	41.2%
6/2	Ahead	O	N/A	N/A	-		-	-	-	291	1980	536	54.3%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	608	1923	687	88.5%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	928	2063:2101	275+750	90.5 : 90.5%
8/1		U	N/A	N/A	-		-	-	-	1018	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	919	1995:1853	713+662	70.3 : 63.2%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	317	1894:2034	320+332	44.4 : 52.8%
11/1		U	N/A	N/A	-		-	-	-	335	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	904	1965	1965	46.0%
12/2	Ahead	O	N/A	N/A	-		-	-	-	349	1965	516	67.6%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	753	1944	787	95.7%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	910	1942:1940	786+190	93.3 : 93.3%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	836	1930	1930	43.3%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	733	1926	1926	38.1%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	678	1923	1923	35.3%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	458	1932	782	58.6%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	853	1929:1926	689+333	83.5 : 83.5%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	529	1933	782	67.6%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	769	1930:1927	599+780	48.6 : 61.3%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	807	1912	1912	42.2%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	291	1907	1907	15.3%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1093	1899	1899	57.6%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	410	1937	784	52.3%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	735	1935:1930	559+256	90.1 : 90.1%
19/1		U	N/A	N/A	-		-	-	-	1253	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1106	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1334**	**0**	**0**	**33.4**	**42.0**	**0.0**	**75.3**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1334**	**0**	**0**	**33.4**	**42.0**	**0.0**	**75.3**	**-**	**-**	**-**	**-**
1/2+1/1	1112	1112	-	-	-	3.7	1.7	-	5.4	17.5	6.7	1.7	8.4
2/1	414	414	-	-	-	1.3	0.8	-	2.0	17.8	3.9	0.8	4.7
2/2	615	615	-	-	-	2.1	2.5	-	4.6	27.2	6.5	2.5	9.0
3/1	60	60	60	0	0	0.0	0.1	-	0.1	7.8	0.2	0.1	0.3
4/1	136	136	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	974	974	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	151	151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	815	815	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	291	291	291	0	0	0.3	0.6	-	0.8	10.5	3.1	0.6	3.7
7/1	608	608	-	-	-	2.1	3.5	-	5.7	33.7	6.6	3.5	10.1
7/2+7/3	928	928	-	-	-	3.1	4.4	-	7.5	29.0	7.4	4.4	11.7
8/1	1018	1018	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	919	919	-	-	-	2.9	1.0	-	3.9	15.4	5.0	1.0	6.0
10/1+10/2	317	317	634	0	0	0.4	0.5	-	0.9	9.8	0.9	0.5	1.4
11/1	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	904	904	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
12/2	349	349	349	0	0	0.5	1.0	-	1.5	15.5	3.8	1.0	4.9
13/1	753	753	-	-	-	3.2	7.7	-	10.8	51.8	8.2	7.7	15.9
13/2+13/3	910	910	-	-	-	2.3	5.9	-	8.2	32.4	15.2	5.9	21.1
14/1	836	836	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	733	733	-	-	-	0.0	0.3	-	0.3	1.5	4.3	0.3	4.6
14/3	678	678	-	-	-	0.0	0.3	-	0.3	1.5	2.7	0.3	3.0
15/1	458	458	-	-	-	0.3	0.7	-	1.0	8.1	1.1	0.7	1.8

Full Input Data And Results

15/2+15/3	853	853	-	-	-	4.0	2.5	-	6.4	27.1	6.7	2.5	9.2
16/1	529	529	-	-	-	2.2	1.0	-	3.3	22.2	4.9	1.0	5.9
16/2+16/3	769	769	-	-	-	2.1	0.6	-	2.7	12.5	16.8	0.6	17.4
17/1	807	807	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
17/2	291	291	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	1093	1093	-	-	-	0.0	0.7	-	0.7	2.3	4.8	0.7	5.4
18/1	410	410	-	-	-	1.6	0.5	-	2.2	19.0	4.7	0.5	5.3
18/2+18/3	735	735	-	-	-	1.2	4.1	-	5.3	26.2	2.3	4.1	6.5
19/1	1253	1253	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1106	1106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

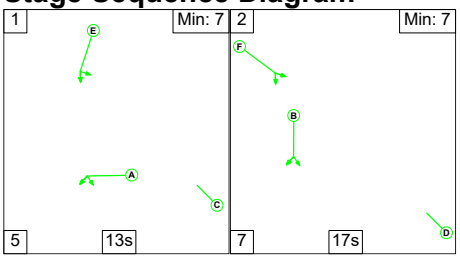
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	0.9	Total Delay for Signalled Lanes (pcuHr):	25.51	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-6.3	Total Delay for Signalled Lanes (pcuHr):	43.60	Cycle Time (s): 42
	PRC Over All Lanes (%):	-6.3	Total Delay Over All Lanes(pcuHr):	75.35	

Full Input Data And Results

Scenario 5: '2028 WD AM' (FG5: '2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

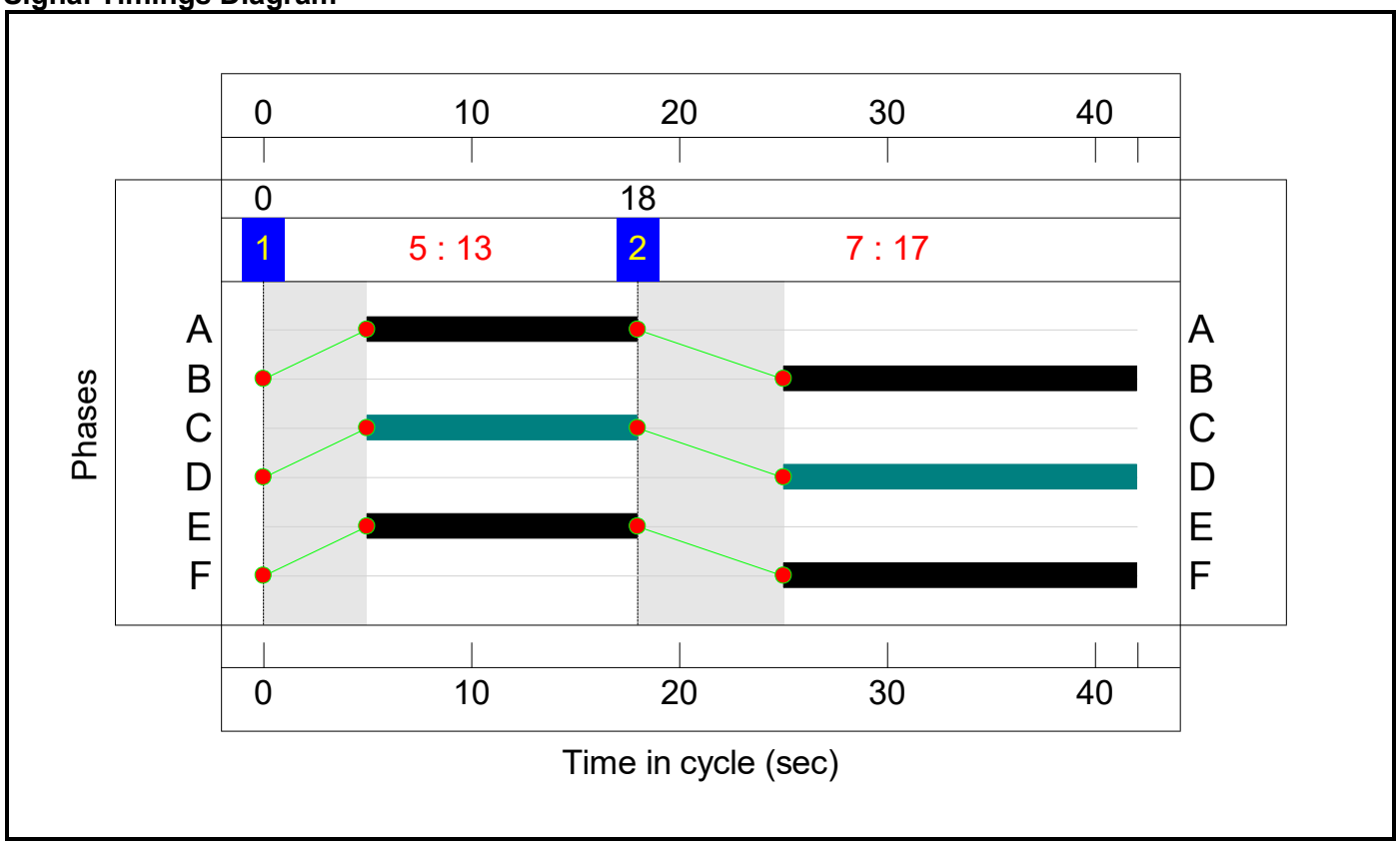
Stage Sequence Diagram



Stage Timings

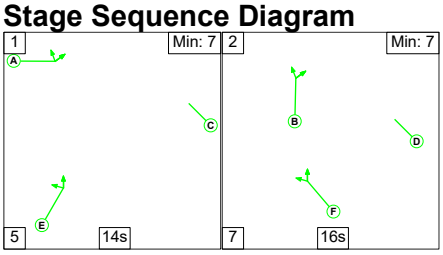
Stage	1	2
Duration	13	17
Change Point	0	18

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

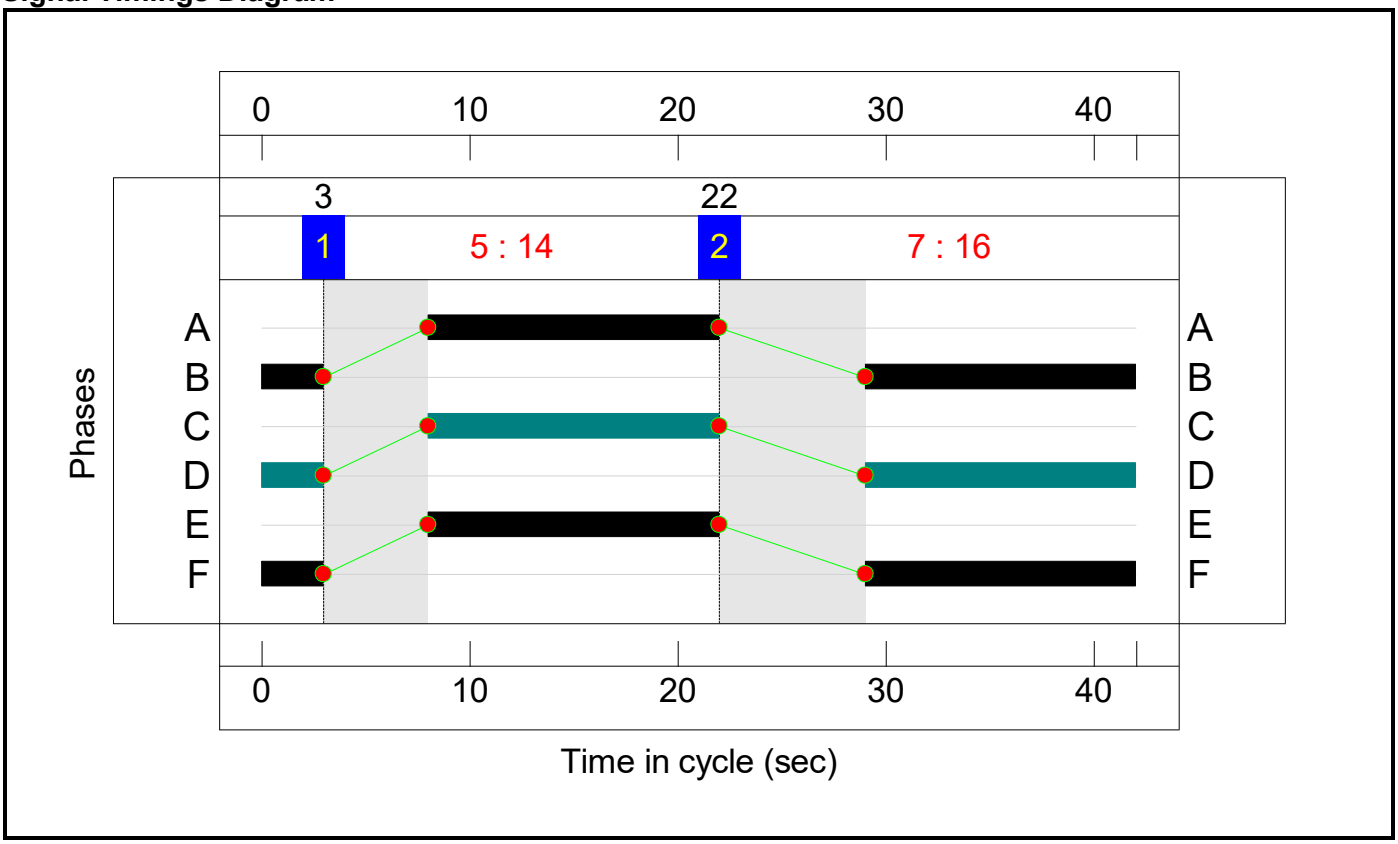


Full Input Data And Results

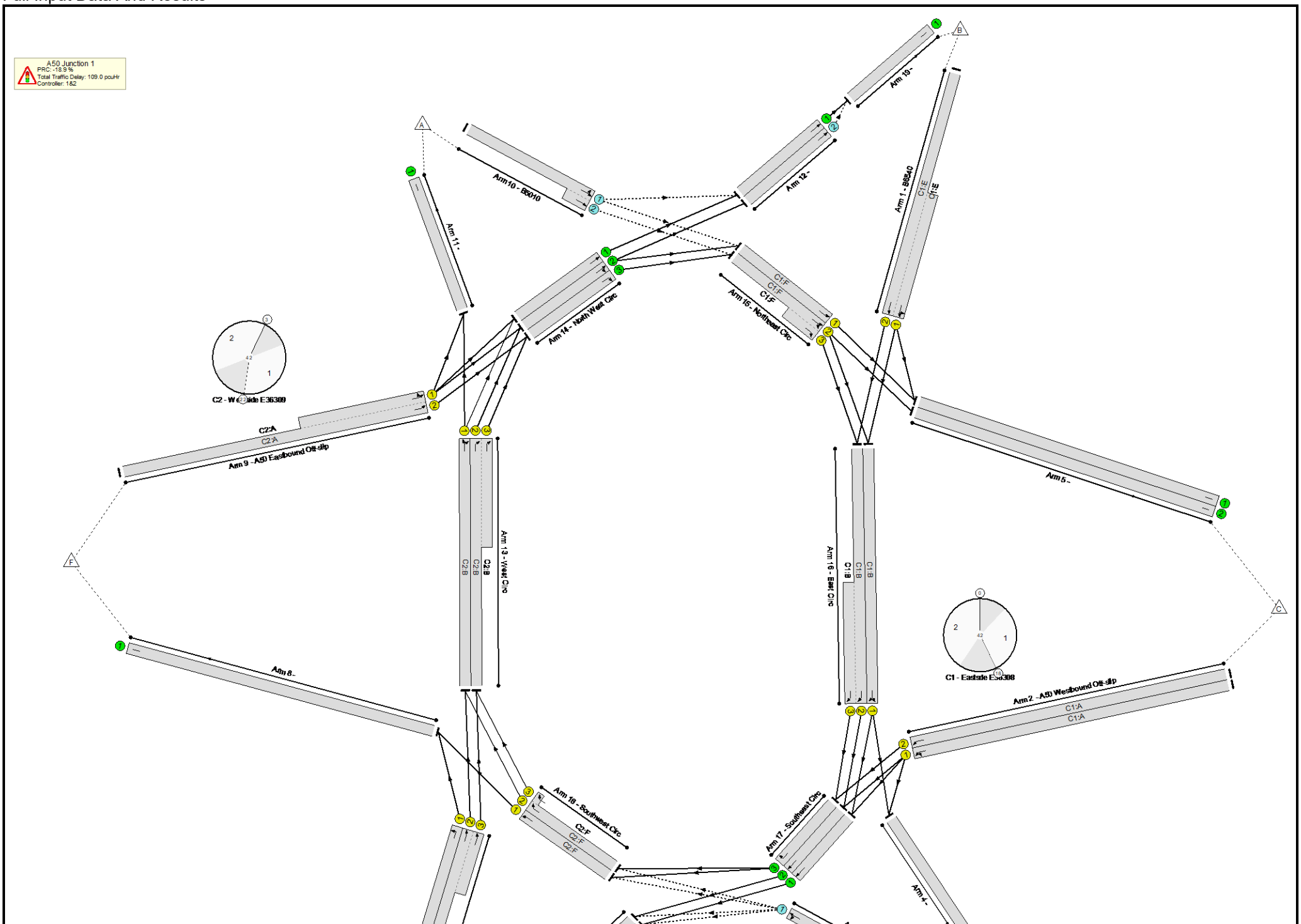
Stage Timings

Stage	1	2
Duration	14	16
Change Point	3	22

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**107.0%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**107.0%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	1072	2088:1950	696+650	64.2 : 96.2%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	645	1907	636	101.5%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	492	2049	683	72.0%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	68	1886	314	21.7%
4/1		U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	844	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	994	1980	1980	49.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	542	1980	499	107.0%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	426	1923	687	62.0%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	645	2063:2101	153+750	71.4 : 71.4%
8/1		U	N/A	N/A	-		-	-	-	804	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	1137	1995:1853	713+605	102.3 : 67.5%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	435	1894:2034	303+341	63.5 : 71.3%
11/1		U	N/A	N/A	-		-	-	-	160	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	945	1965	1965	48.1%
12/2	Ahead	O	N/A	N/A	-		-	-	-	170	1965	507	33.5%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	600	1944	787	76.3%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	610	1942:1940	786+131	66.5 : 66.5%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	848	1930	1930	43.9%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	523	1926	1926	27.2%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	816	1923	1923	41.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	448	1932	828	54.1%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	1059	1929:1926	664+574	84.2 : 84.2%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	797	1933	828	95.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	938	1930:1927	827+814	64.6 : 48.6%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	981	1912	1912	50.6%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	542	1907	1907	28.0%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	888	1899	1899	46.8%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	378	1937	784	48.2%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	565	1935:1930	686+103	71.6 : 71.6%
19/1		U	N/A	N/A	-		-	-	-	1115	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1536	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1607**	**0**	**0**	**34.1**	**74.8**	**0.0**	**109.0**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1607**	**0**	**0**	**34.1**	**74.8**	**0.0**	**109.0**	**-**	**-**	**-**	**-**
1/2+1/1	1072	1072	-	-	-	3.9	1.9	-	5.8	19.4	7.1	1.9	9.0
2/1	645	636	-	-	-	2.7	15.2	-	17.9	100.1	7.6	15.2	22.9
2/2	492	492	-	-	-	1.7	1.3	-	3.0	21.6	4.9	1.3	6.2
3/1	68	68	68	0	0	0.0	0.1	-	0.2	9.5	0.2	0.1	0.3
4/1	456	456	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	980	980	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
6/2	534	499	499	0	0	2.5	23.3	-	25.8	173.5	18.7	23.3	42.0
7/1	426	426	-	-	-	1.3	0.8	-	2.1	18.0	4.0	0.8	4.8
7/2+7/3	645	645	-	-	-	2.0	1.2	-	3.3	18.2	5.4	1.2	6.6
8/1	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	1137	1120	-	-	-	4.3	11.3	-	15.6	49.4	8.7	11.3	20.0
10/1+10/2	435	435	870	0	0	0.5	1.0	-	1.5	12.7	1.2	1.0	2.2
11/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	945	945	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	170	170	170	0	0	0.0	0.3	-	0.3	5.6	1.0	0.3	1.3
13/1	600	600	-	-	-	2.6	1.6	-	4.2	25.3	5.4	1.6	7.0
13/2+13/3	610	610	-	-	-	1.2	1.0	-	2.1	12.6	15.0	1.0	16.0
14/1	848	848	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	523	523	-	-	-	0.0	0.2	-	0.2	1.3	1.6	0.2	1.8
14/3	800	800	-	-	-	0.0	0.4	-	0.4	1.7	6.1	0.4	6.4
15/1	448	448	-	-	-	2.0	0.6	-	2.6	20.9	4.1	0.6	4.6

Full Input Data And Results

15/2+15/3	1043	1043	-	-	-	1.2	2.6	-	3.8	13.2	8.4	2.6	11.0
16/1	788	788	-	-	-	3.1	7.2	-	10.3	47.2	8.1	7.2	15.3
16/2+16/3	930	930	-	-	-	2.9	0.7	-	3.6	13.8	16.7	0.7	17.4
17/1	967	967	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
17/2	534	534	-	-	-	0.0	0.2	-	0.2	1.3	0.5	0.2	0.7
17/3	888	888	-	-	-	0.0	0.4	-	0.4	1.8	2.7	0.4	3.2
18/1	378	378	-	-	-	0.6	0.5	-	1.1	10.0	1.2	0.5	1.7
18/2+18/3	565	565	-	-	-	1.5	1.2	-	2.8	17.6	6.0	1.2	7.3
19/1	1115	1115	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1480	1480	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

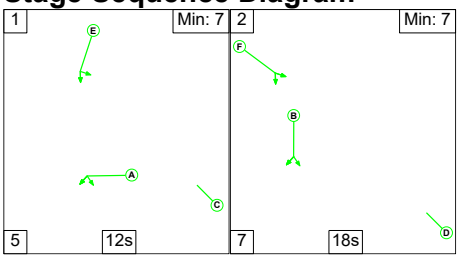
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-12.7	Total Delay for Signalled Lanes (pcuHr):	47.00	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-13.7	Total Delay for Signalled Lanes (pcuHr):	31.18	Cycle Time (s): 42
	PRC Over All Lanes (%):	-18.9	Total Delay Over All Lanes(pcuHr):	108.97	

Full Input Data And Results

Scenario 6: '2028 WD PM' (FG6: '2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

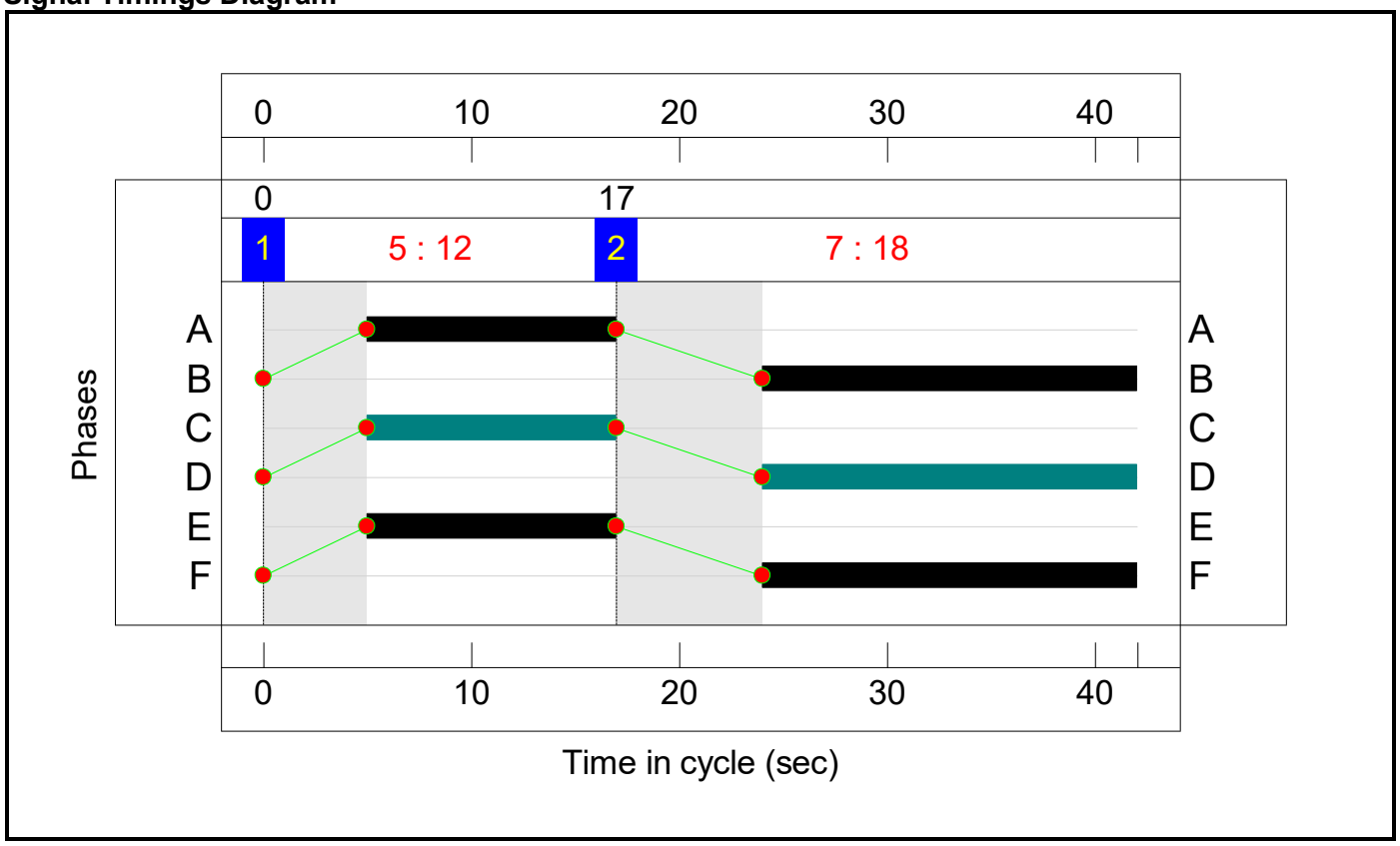
Stage Sequence Diagram



Stage Timings

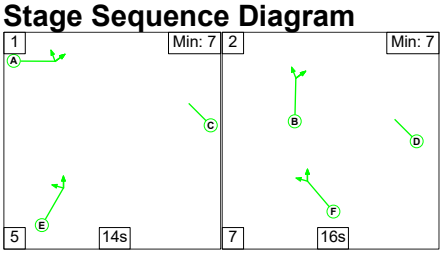
Stage	1	2
Duration	12	18
Change Point	0	17

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

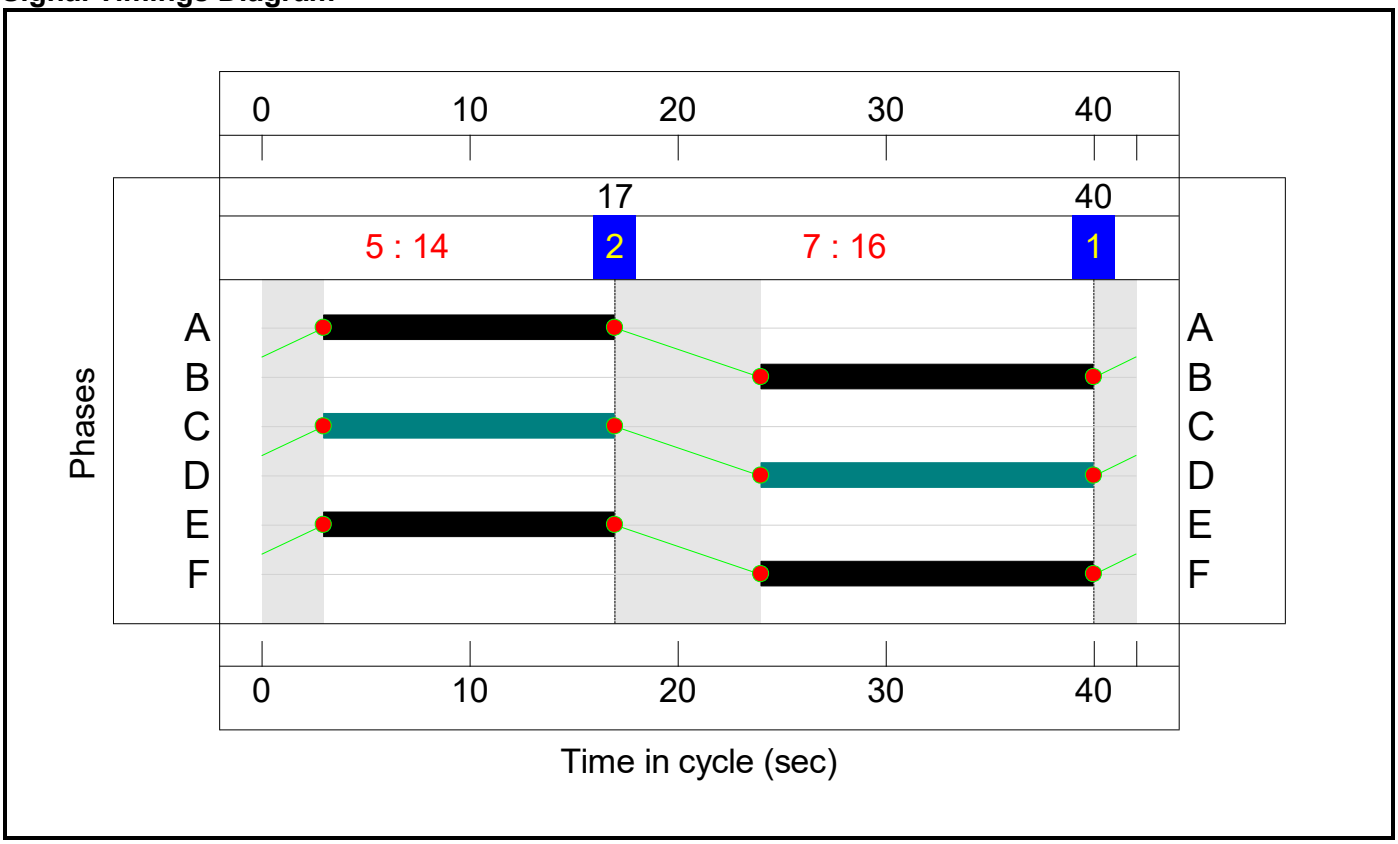


Full Input Data And Results

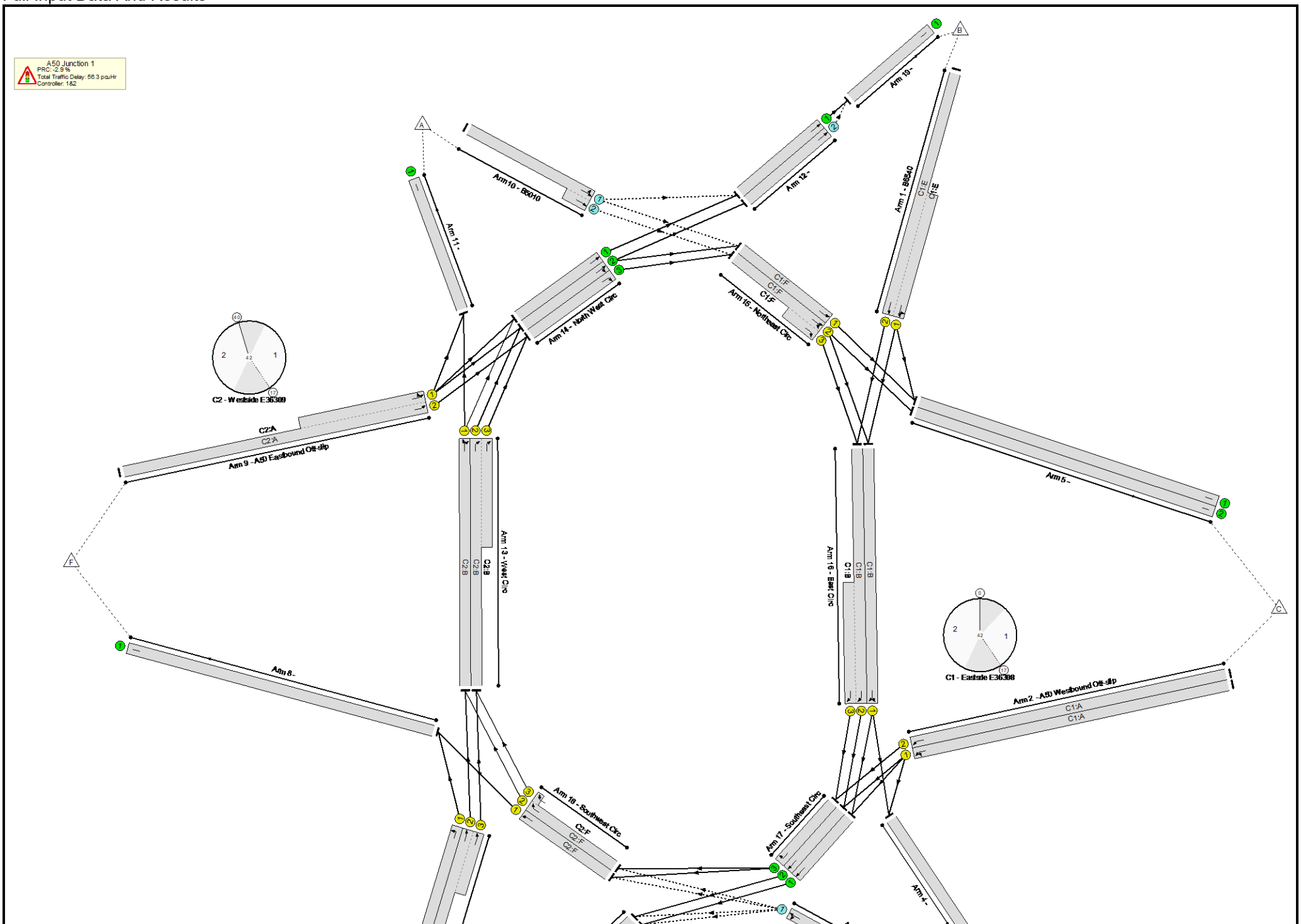
Stage Timings

Stage	1	2
Duration	14	16
Change Point	40	17

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	12	-	1031	2088:1950	646+604	73.0 : 92.6%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	12	-	352	1907	590	59.6%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	12	-	542	2049	634	85.5%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	59	1886	405	14.6%
4/1		U	N/A	N/A	-		-	-	-	149	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	338	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	667	1980	1980	33.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	351	1980	568	61.8%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	557	1923	687	81.1%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	893	2063:2101	325+750	83.0 : 83.0%
8/1		U	N/A	N/A	-		-	-	-	953	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	885	1995:1853	713+662	68.1 : 60.4%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	304	1894:2034	422+422	33.4 : 38.6%
11/1		U	N/A	N/A	-		-	-	-	325	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	829	1965	1965	42.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	358	1965	533	67.2%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	683	1944	787	86.8%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	874	1942:1940	786+756	63.9 : 49.2%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	758	1930	1930	39.3%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	502	1926	1926	26.1%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	857	1923	1923	44.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	18	-	214	1932	874	24.5%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	18	-	1020	1929:1926	745+382	90.5 : 90.5%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	18	-	456	1933	874	52.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	18	-	818	1930:1927	827+872	42.4 : 53.6%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	659	1912	1912	34.5%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	351	1907	1907	18.4%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1009	1899	1899	53.1%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	396	1937	784	50.5%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	664	1935:1930	515+313	80.2 : 80.2%
19/1		U	N/A	N/A	-		-	-	-	1187	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1018	Inf	Inf	0.0%

Full Input Data And Results

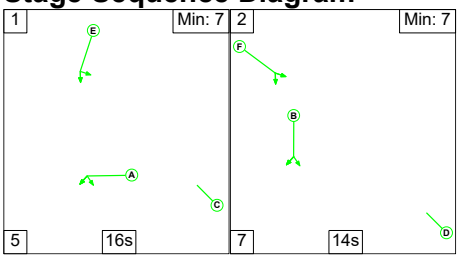
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1376**	**0**	**0**	**28.7**	**27.6**	**0.0**	**56.3**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1376**	**0**	**0**	**28.7**	**27.6**	**0.0**	**56.3**	**-**	**-**	**-**	**-**
1/2+1/1	1031	1031	-	-	-	3.9	2.3	-	6.2	21.6	6.2	2.3	8.5
2/1	352	352	-	-	-	1.2	0.7	-	1.9	19.8	3.4	0.7	4.2
2/2	542	542	-	-	-	2.1	2.8	-	4.8	32.0	5.9	2.8	8.6
3/1	59	59	59	0	0	0.0	0.1	-	0.1	6.7	0.1	0.1	0.2
4/1	149	149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	653	653	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	338	338	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	667	667	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	351	351	351	0	0	0.2	0.8	-	1.0	10.0	3.6	0.8	4.4
7/1	557	557	-	-	-	1.9	2.1	-	4.0	25.7	5.9	2.1	8.0
7/2+7/3	893	893	-	-	-	2.9	2.4	-	5.3	21.2	6.6	2.4	9.0
8/1	953	953	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	885	885	-	-	-	2.8	0.9	-	3.7	15.0	4.7	0.9	5.6
10/1+10/2	304	304	608	0	0	0.2	0.3	-	0.5	5.8	0.6	0.3	0.9
11/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	829	829	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
12/2	358	358	358	0	0	0.6	1.0	-	1.6	16.2	3.9	1.0	4.9
13/1	683	683	-	-	-	2.7	3.1	-	5.8	30.7	6.8	3.1	9.9
13/2+13/3	874	874	-	-	-	2.2	0.7	-	2.8	11.6	15.1	0.7	15.8
14/1	758	758	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	502	502	-	-	-	0.0	0.2	-	0.2	1.3	1.1	0.2	1.3
14/3	857	857	-	-	-	0.0	0.4	-	0.4	1.7	2.2	0.4	2.6
15/1	214	214	-	-	-	0.6	0.2	-	0.7	12.3	1.4	0.2	1.5

Full Input Data And Results

15/2+15/3	1020	1020	-	-	-	1.8	4.4	-	6.2	22.0	4.1	4.4	8.5
16/1	456	456	-	-	-	1.3	0.5	-	1.8	14.2	3.5	0.5	4.0
16/2+16/3	818	818	-	-	-	1.6	0.5	-	2.0	8.9	16.8	0.5	17.2
17/1	659	659	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
17/2	351	351	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	1009	1009	-	-	-	0.0	0.6	-	0.6	2.1	3.8	0.6	4.4
18/1	396	396	-	-	-	1.5	0.5	-	2.0	18.2	2.9	0.5	3.4
18/2+18/3	664	664	-	-	-	1.4	2.0	-	3.4	18.2	7.0	2.0	9.0
19/1	1187	1187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1018	1018	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-2.9	Total Delay for Signalled Lanes (pcuHr):	23.74	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	3.7	Total Delay for Signalled Lanes (pcuHr):	26.93	Cycle Time (s): 42
	PRC Over All Lanes (%):	-2.9	Total Delay Over All Lanes(pcuHr):	56.33	

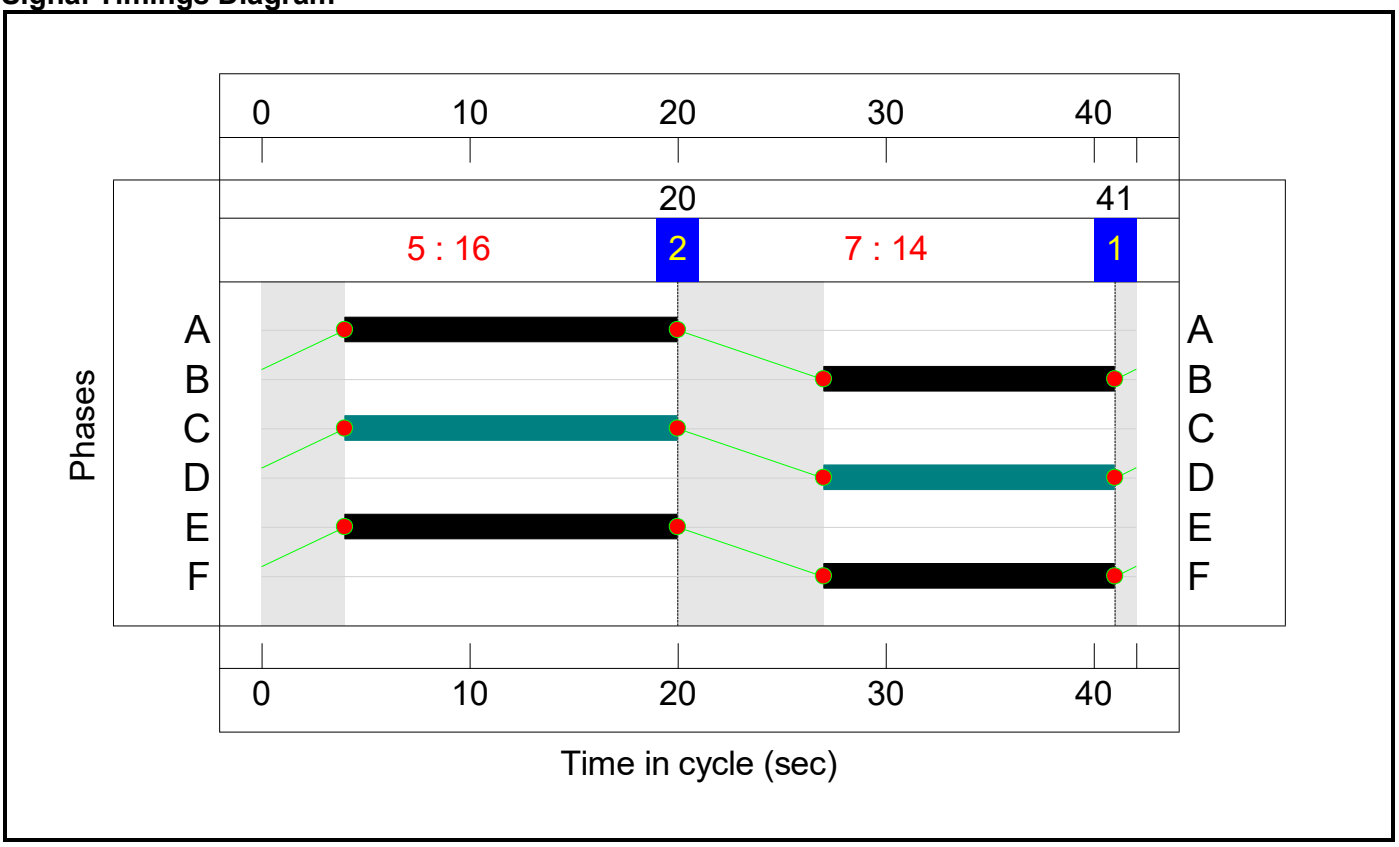
Full Input Data And Results
Scenario 7: '2038 WoD AM' (FG7: '2038 WoD Flows AM', Plan 1: 'Network Control Plan 1')
Controller :C1 - Eastsde E36308
Stage Sequence Diagram



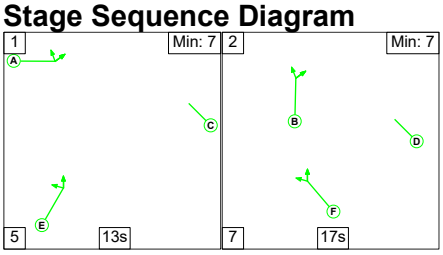
Stage Timings

Stage	1	2
Duration	16	14
Change Point	41	20

Signal Timings Diagram



Controller :C2 - Westside E36309
Stage Sequence Diagram

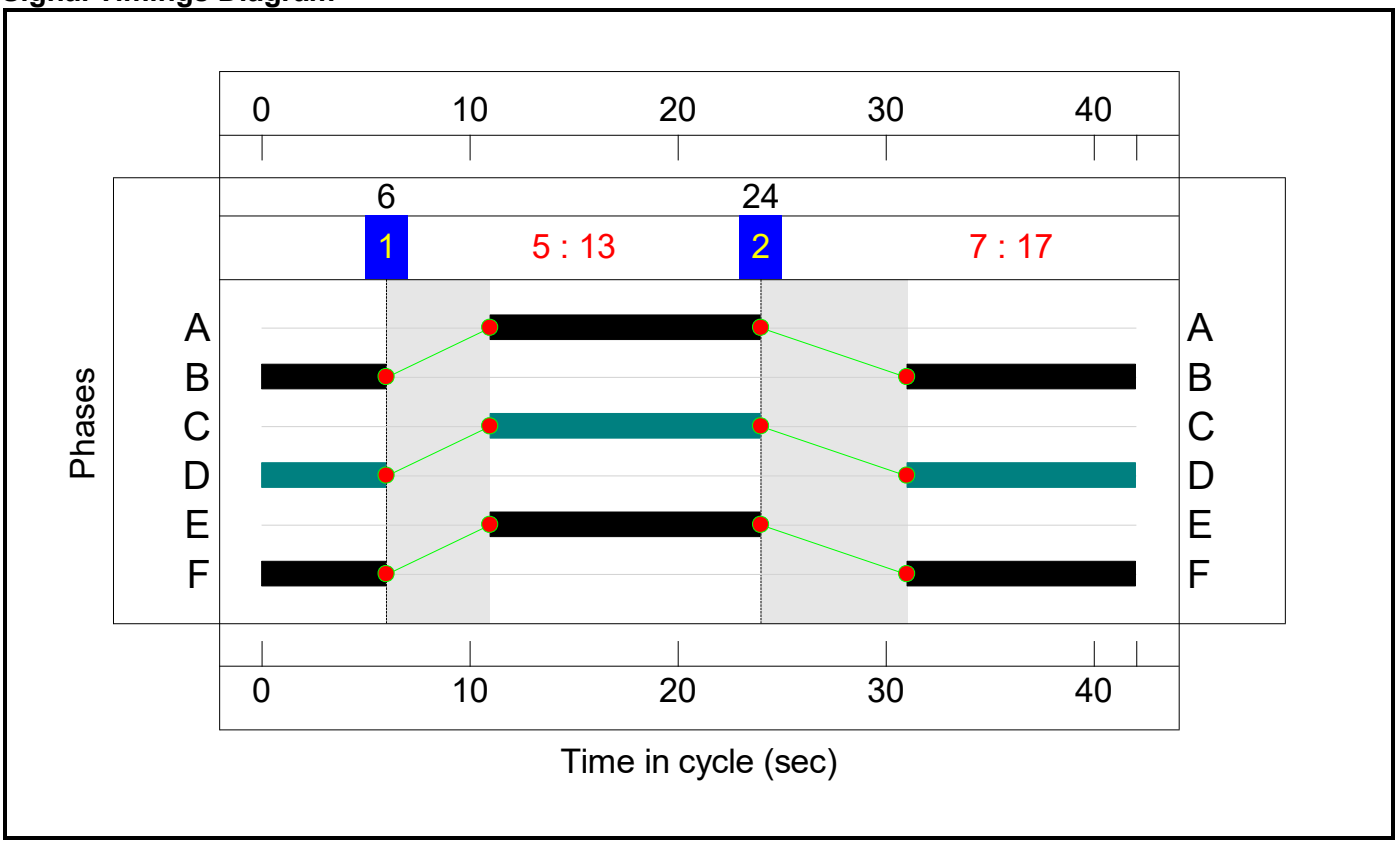


Full Input Data And Results

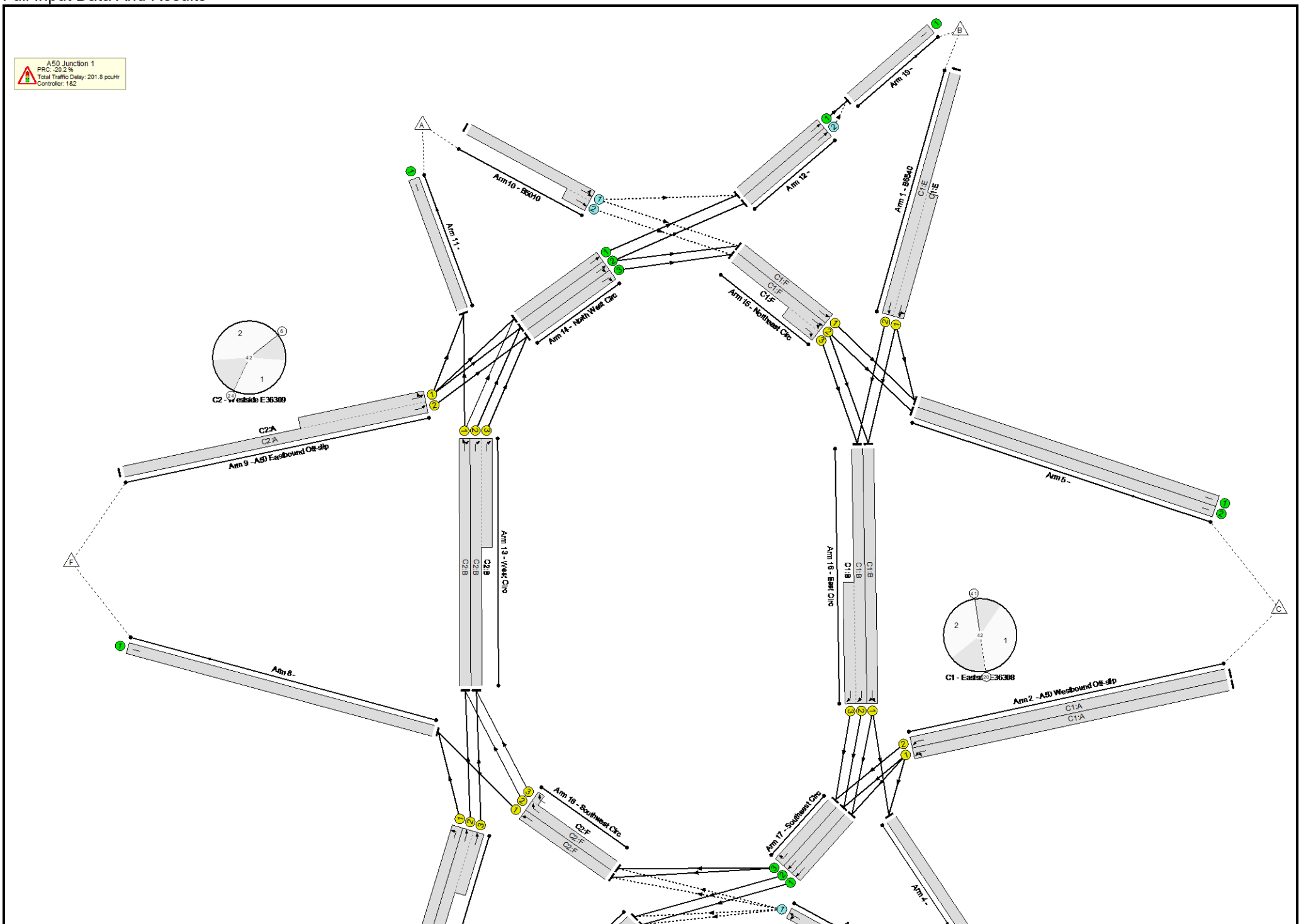
Stage Timings

Stage	1	2
Duration	13	17
Change Point	6	24

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.2%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.2%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	16	-	1187	2088:1950	845+789	66.9 : 78.8%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	16	-	638	1907	772	82.7%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	16	-	483	2049	829	58.2%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	73	1886	344	21.2%
4/1		U	N/A	N/A	-		-	-	-	534	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1107	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	921	1980	1980	43.3%
6/2	Ahead	O	N/A	N/A	-		-	-	-	583	1980	526	105.0%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	535	1923	641	83.5%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	952	2063:2101	184+700	107.7 : 107.7%
8/1		U	N/A	N/A	-		-	-	-	896	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	1102	1995:1853	665+618	106.3 : 64.0%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	407	1894:2034	300+300	63.4 : 72.4%
11/1		U	N/A	N/A	-		-	-	-	188	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	979	1965	1965	49.3%
12/2	Ahead	O	N/A	N/A	-		-	-	-	169	1965	502	32.1%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	687	1944	833	80.8%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	832	1942:1940	832+161	78.5 : 77.8%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	894	1930	1930	45.8%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	697	1926	1926	33.9%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	842	1923	1923	41.1%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	14	-	633	1932	690	86.5%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	14	-	1059	1929:1926	613+376	101.4 : 102.7%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	14	-	804	1933	690	108.2%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	14	-	968	1930:1927	689+688	80.2 : 55.7%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	908	1912	1912	44.2%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	583	1907	1907	29.0%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	868	1899	1899	45.6%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	361	1937	830	43.3%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	567	1935:1930	721+115	67.8 : 67.8%
19/1		U	N/A	N/A	-		-	-	-	1148	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1504	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1574**	**0**	**0**	**42.5**	**159.3**	**0.0**	**201.8**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1574**	**0**	**0**	**42.5**	**159.3**	**0.0**	**201.8**	**-**	**-**	**-**	**-**
1/2+1/1	1187	1187	-	-	-	3.5	1.3	-	4.8	14.6	6.2	1.3	7.5
2/1	638	638	-	-	-	2.0	2.3	-	4.3	24.2	6.6	2.3	8.9
2/2	483	483	-	-	-	1.3	0.7	-	2.0	14.9	4.3	0.7	5.0
3/1	73	73	73	0	0	0.0	0.1	-	0.2	8.8	0.2	0.1	0.4
4/1	483	483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1071	1071	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	858	858	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
6/2	553	526	526	0	0	2.4	20.1	-	22.5	146.5	19.2	20.1	39.3
7/1	535	535	-	-	-	1.9	2.4	-	4.3	29.2	5.6	2.4	8.1
7/2+7/3	952	884	-	-	-	4.5	39.9	-	44.4	167.9	10.8	39.9	50.7
8/1	894	894	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	1102	1060	-	-	-	4.8	24.0	-	28.8	93.9	8.7	24.0	32.7
10/1+10/2	407	407	814	0	0	0.6	1.0	-	1.6	14.3	1.2	1.0	2.3
11/1	184	184	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	969	969	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	161	161	161	0	0	0.0	0.2	-	0.2	5.3	0.0	0.2	0.2
13/1	673	673	-	-	-	2.6	2.0	-	4.6	24.7	5.9	2.0	8.0
13/2+13/3	778	778	-	-	-	1.2	1.8	-	3.0	14.0	15.3	1.8	17.0
14/1	884	884	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	653	653	-	-	-	0.0	0.3	-	0.3	1.4	3.2	0.3	3.5
14/3	790	790	-	-	-	0.0	0.3	-	0.4	1.7	5.5	0.3	5.9
15/1	597	597	-	-	-	3.6	3.0	-	6.6	39.7	6.7	3.0	9.7

Full Input Data And Results

15/2+15/3	1007	970	-	-	-	2.5	21.2	-	23.7	84.5	10.0	21.2	31.1
16/1	747	690	-	-	-	5.6	33.9	-	39.5	190.4	9.6	33.9	43.4
16/2+16/3	936	936	-	-	-	3.8	1.1	-	4.8	18.5	16.8	1.1	17.9
17/1	845	845	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
17/2	553	553	-	-	-	0.0	0.2	-	0.2	1.3	2.1	0.2	2.3
17/3	866	866	-	-	-	0.0	0.4	-	0.4	1.8	2.1	0.4	2.6
18/1	359	359	-	-	-	0.3	0.4	-	0.7	6.9	0.7	0.4	1.0
18/2+18/3	567	567	-	-	-	1.9	1.0	-	2.9	18.4	6.0	1.0	7.1
19/1	1130	1130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1384	1384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

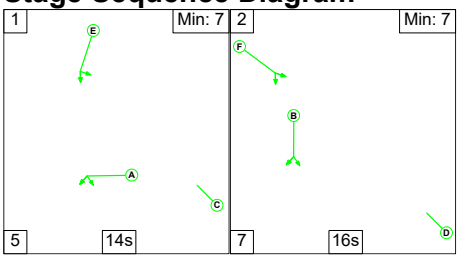
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-20.2	Total Delay for Signalled Lanes (pcuHr):	85.66	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-19.6	Total Delay for Signalled Lanes (pcuHr):	88.73	Cycle Time (s): 42
	PRC Over All Lanes (%):	-20.2	Total Delay Over All Lanes(pcuHr):	201.84	

Full Input Data And Results

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

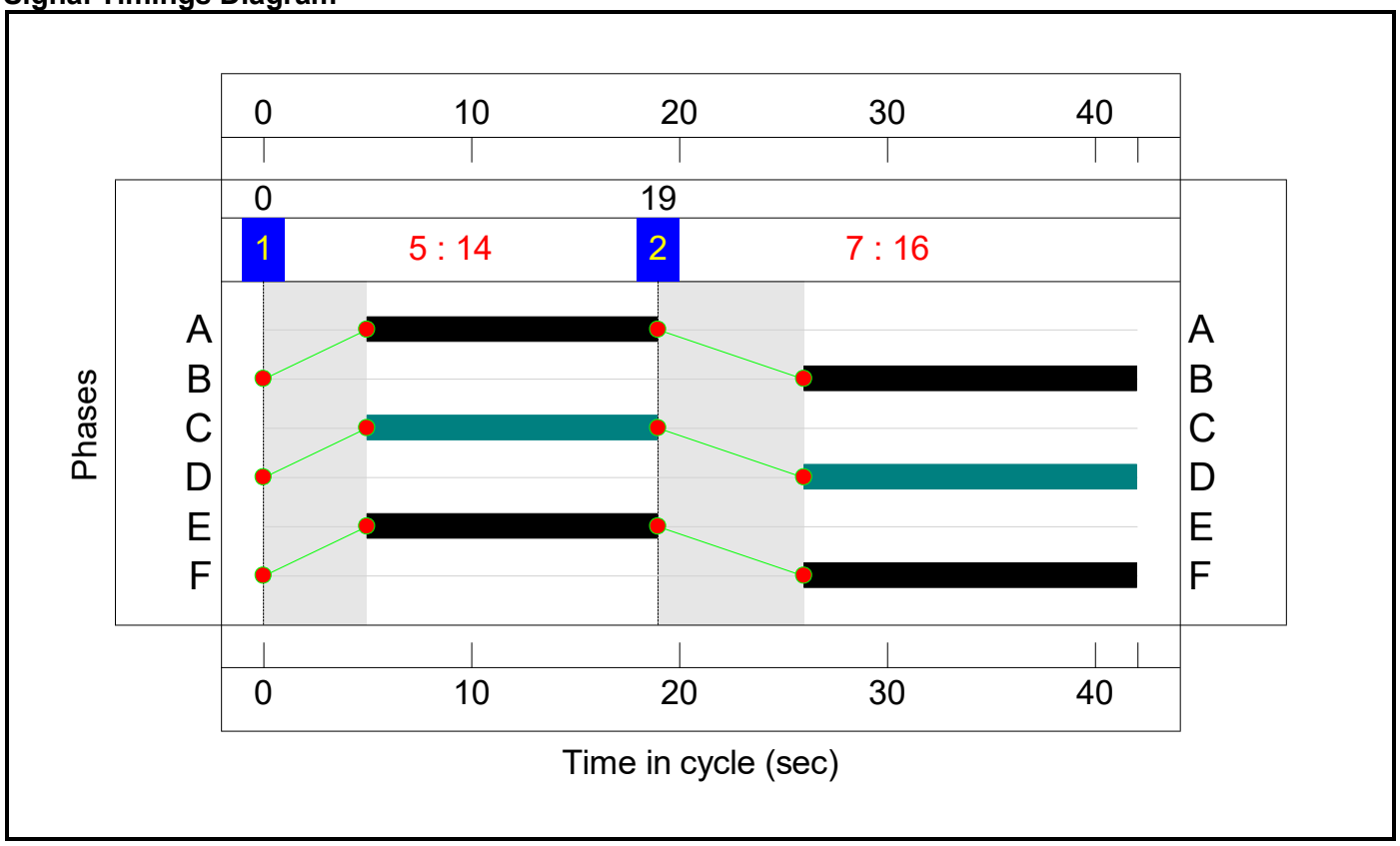
Stage Sequence Diagram



Stage Timings

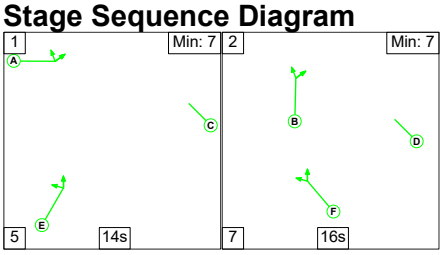
Stage	1	2
Duration	14	16
Change Point	0	19

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

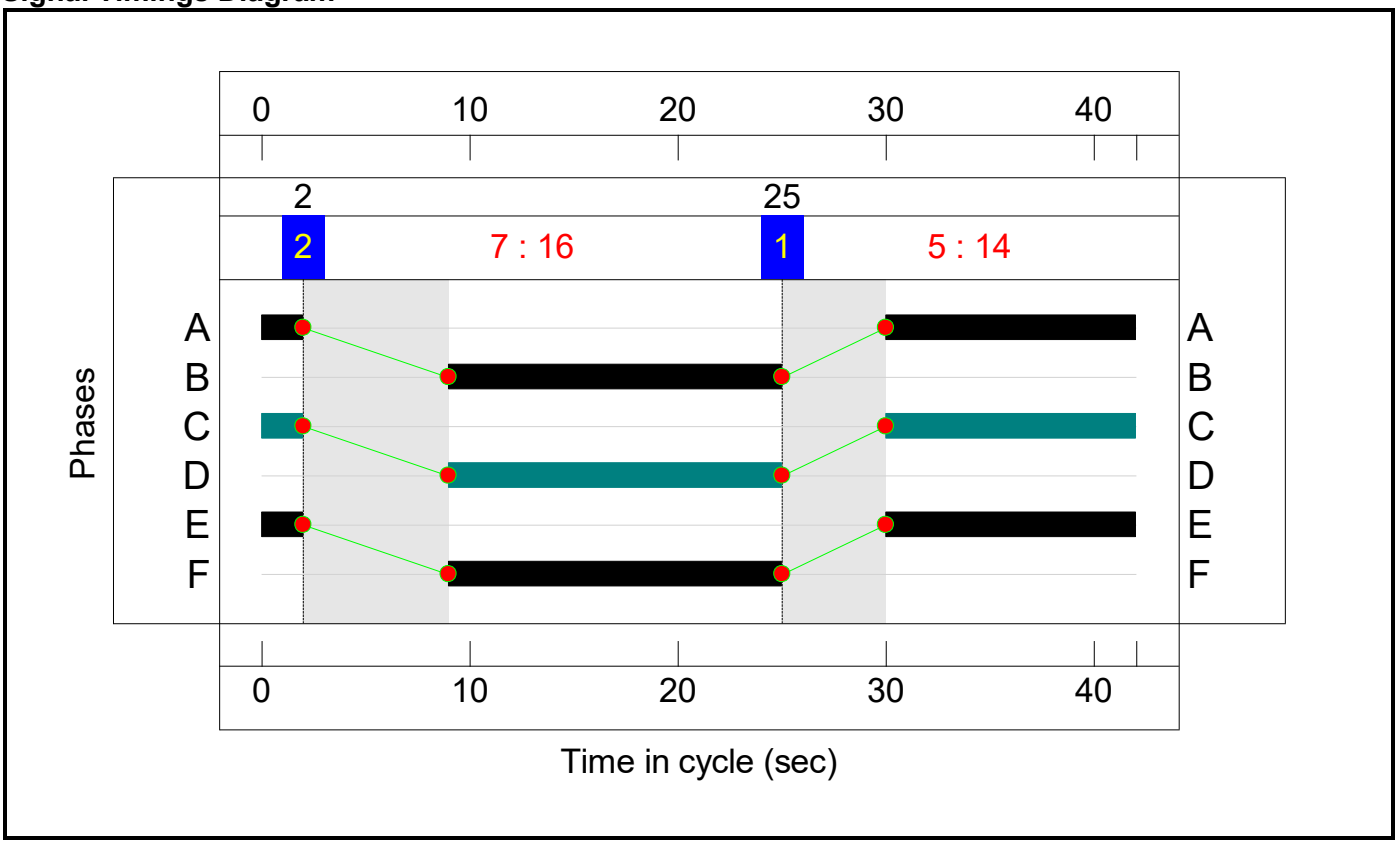


Full Input Data And Results

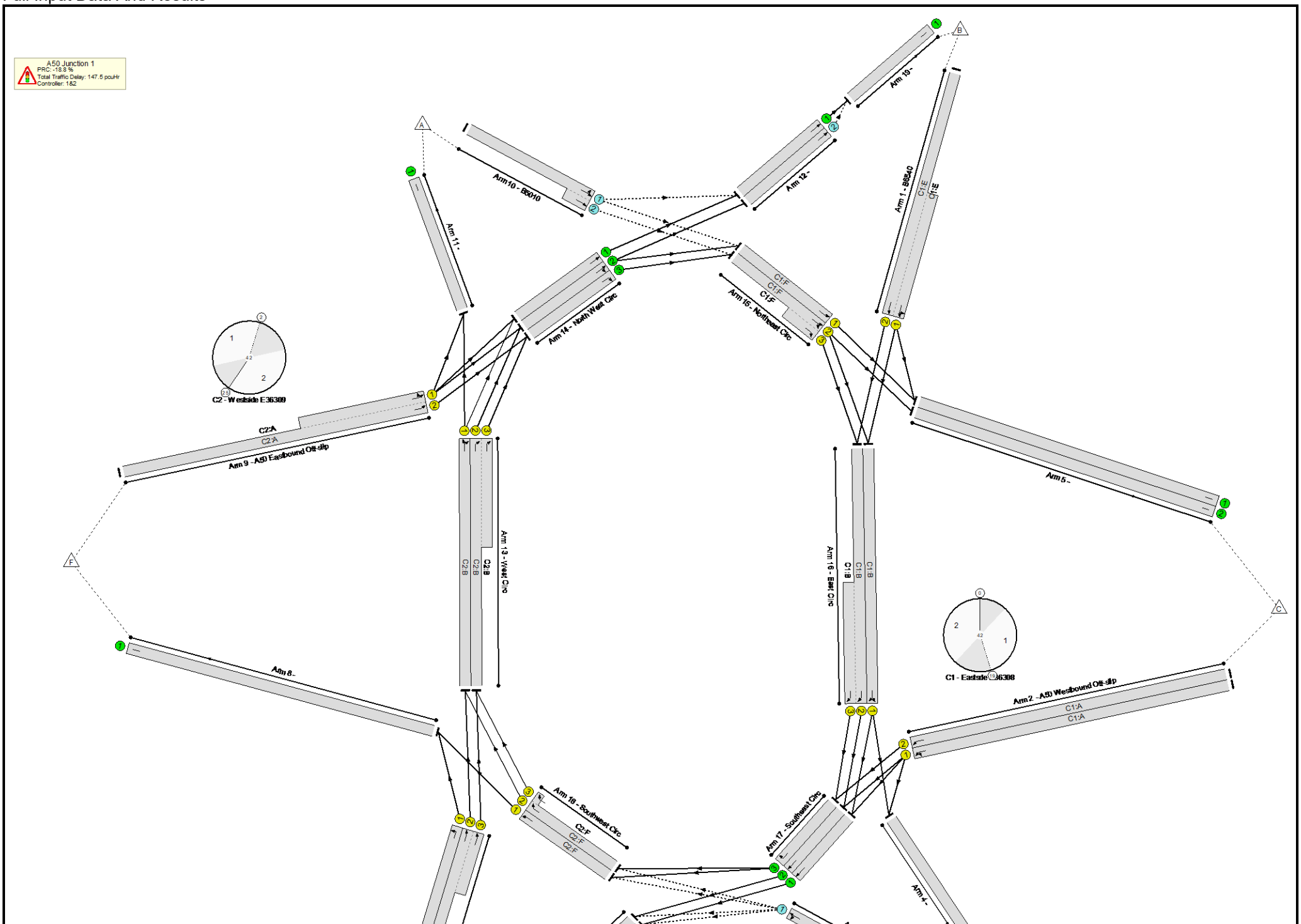
Stage Timings

Stage	1	2
Duration	14	16
Change Point	25	2

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.9%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.9%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1346	2088:1950	746+696	93.2 : 93.5%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	400	1907	681	58.7%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	522	2049	732	71.3%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	91	1886	369	24.7%
4/1		U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	989	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	135	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	787	1980	1980	39.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	412	1980	542	76.0%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	560	1923	687	81.5%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	1163	2063:2101	338+750	106.9 : 106.9%
8/1		U	N/A	N/A	-		-	-	-	975	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	849	1995:1853	713+662	70.2 : 52.7%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	334	1894:2034	318+318	50.6 : 54.3%
11/1		U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	867	1965	1965	43.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	423	1965	528	76.8%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	823	1944	787	102.0%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	1049	1942:1940	786+209	100.7 : 98.8%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	776	1930	1930	39.3%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	829	1926	1926	40.8%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	720	1923	1923	36.7%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	476	1932	782	57.6%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	893	1929:1926	708+263	89.9 : 91.9%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	654	1933	782	82.9%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	937	1930:1927	781+780	52.7 : 67.3%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	773	1912	1912	40.4%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	412	1907	1907	21.6%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1047	1899	1899	55.1%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	415	1937	784	52.9%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	709	1935:1930	536+286	86.3 : 86.3%
19/1		U	N/A	N/A	-		-	-	-	1290	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1199	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1576**	**0**	**0**	**37.7**	**109.8**	**0.0**	**147.5**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1576**	**0**	**0**	**37.7**	**109.8**	**0.0**	**147.5**	**-**	**-**	**-**	**-**
1/2+1/1	1346	1346	-	-	-	4.9	6.2	-	11.1	29.6	7.7	6.2	13.9
2/1	400	400	-	-	-	1.2	0.7	-	1.9	17.4	3.8	0.7	4.5
2/2	522	522	-	-	-	1.7	1.2	-	2.9	20.1	5.2	1.2	6.4
3/1	91	91	91	0	0	0.1	0.2	-	0.2	8.9	0.3	0.2	0.5
4/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	964	964	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	787	787	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	412	412	412	0	0	0.8	1.5	-	2.3	20.1	4.6	1.5	6.2
7/1	560	560	-	-	-	1.9	2.1	-	4.0	26.0	5.9	2.1	8.0
7/2+7/3	1163	1091	-	-	-	5.4	44.0	-	49.5	153.2	11.6	44.0	55.7
8/1	975	975	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	849	849	-	-	-	2.6	0.8	-	3.5	14.6	5.0	0.8	5.8
10/1+10/2	334	334	668	0	0	0.5	0.5	-	1.0	11.2	1.5	0.5	2.1
11/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	849	849	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
12/2	405	405	405	0	0	0.7	1.6	-	2.3	20.3	4.5	1.6	6.1
13/1	803	787	-	-	-	3.6	18.7	-	22.3	99.9	9.6	18.7	28.2
13/2+13/3	997	992	-	-	-	2.5	17.7	-	20.2	72.9	15.3	17.7	33.0
14/1	758	758	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	786	786	-	-	-	0.0	0.3	-	0.3	1.6	5.4	0.3	5.7
14/3	706	706	-	-	-	0.0	0.3	-	0.3	1.5	2.7	0.3	3.0
15/1	451	451	-	-	-	0.3	0.7	-	1.0	7.9	2.9	0.7	3.5

Full Input Data And Results

15/2+15/3	879	879	-	-	-	3.9	4.3	-	8.2	33.7	6.5	4.3	10.9
16/1	649	649	-	-	-	2.8	2.3	-	5.2	28.6	6.3	2.3	8.6
16/2+16/3	937	937	-	-	-	1.8	0.7	-	2.6	9.9	17.0	0.7	17.7
17/1	773	773	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
17/2	412	412	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	1047	1047	-	-	-	0.0	0.6	-	0.6	2.1	3.2	0.6	3.8
18/1	415	415	-	-	-	1.2	0.6	-	1.8	15.3	4.8	0.6	5.3
18/2+18/3	709	709	-	-	-	1.8	3.0	-	4.8	24.3	3.8	3.0	6.7
19/1	1255	1255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1199	1199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

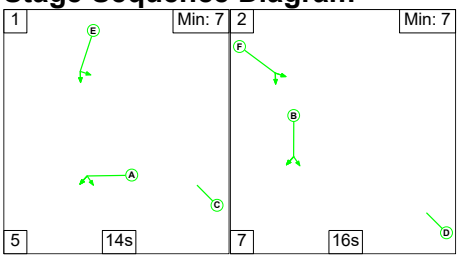
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-3.9	Total Delay for Signalled Lanes (pcuHr):	32.86	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-18.8	Total Delay for Signalled Lanes (pcuHr):	106.00	Cycle Time (s): 42
	PRC Over All Lanes (%):	-18.8	Total Delay Over All Lanes(pcuHr):	147.48	

Full Input Data And Results

Scenario 9: '2038 WD AM' (FG9: '2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

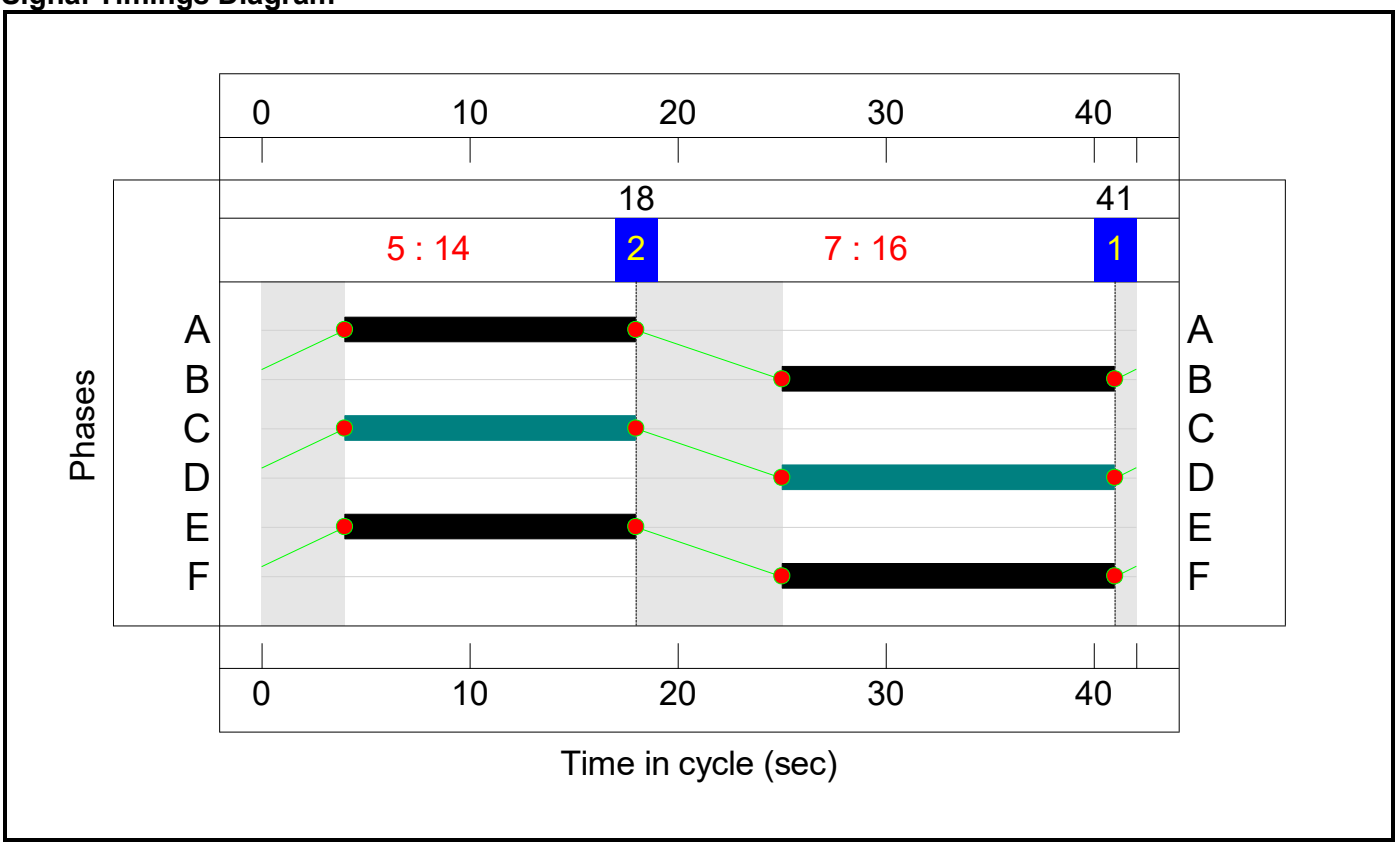
Stage Sequence Diagram



Stage Timings

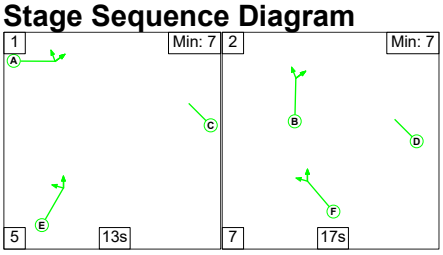
Stage	1	2
Duration	14	16
Change Point	41	18

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

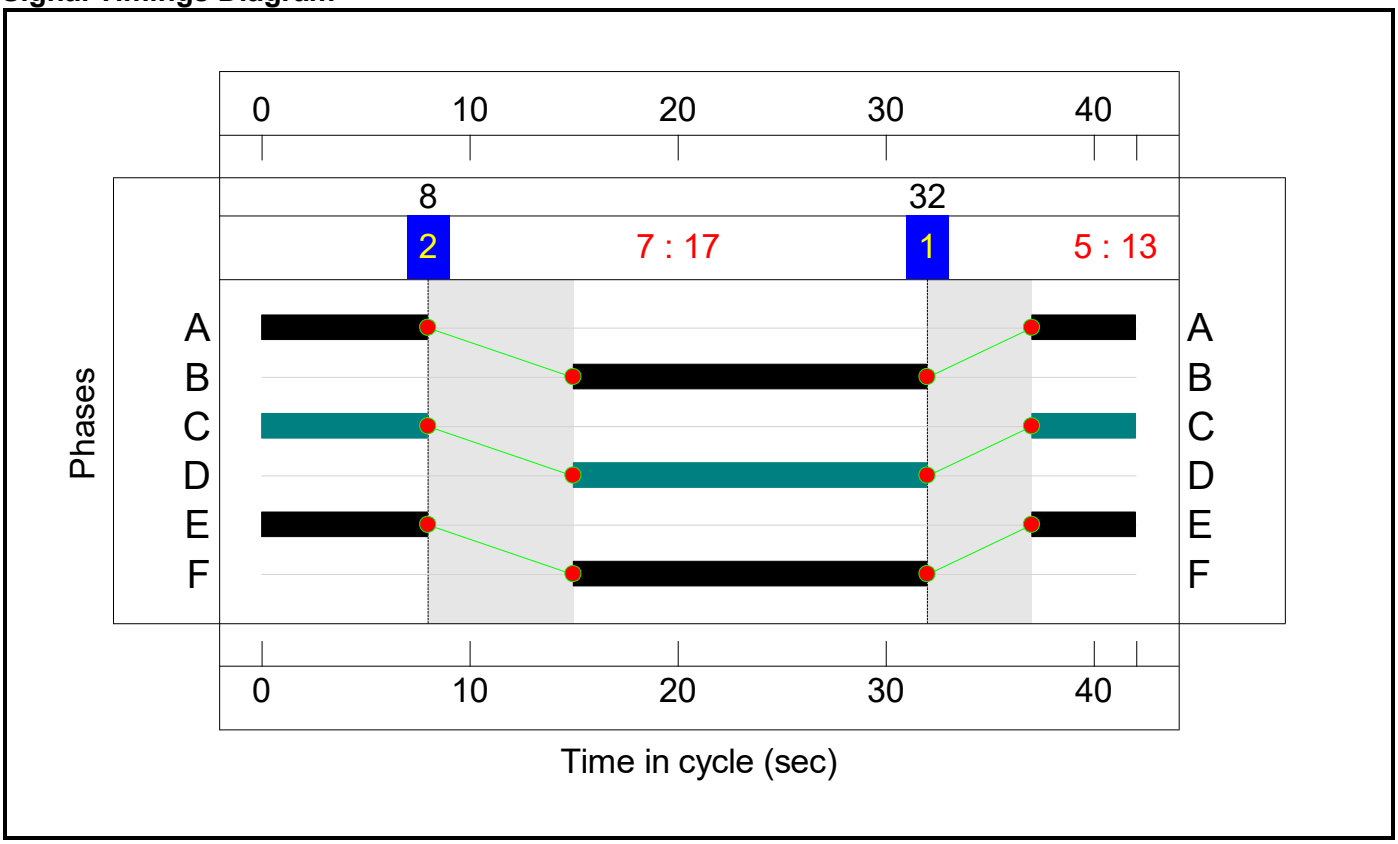


Full Input Data And Results

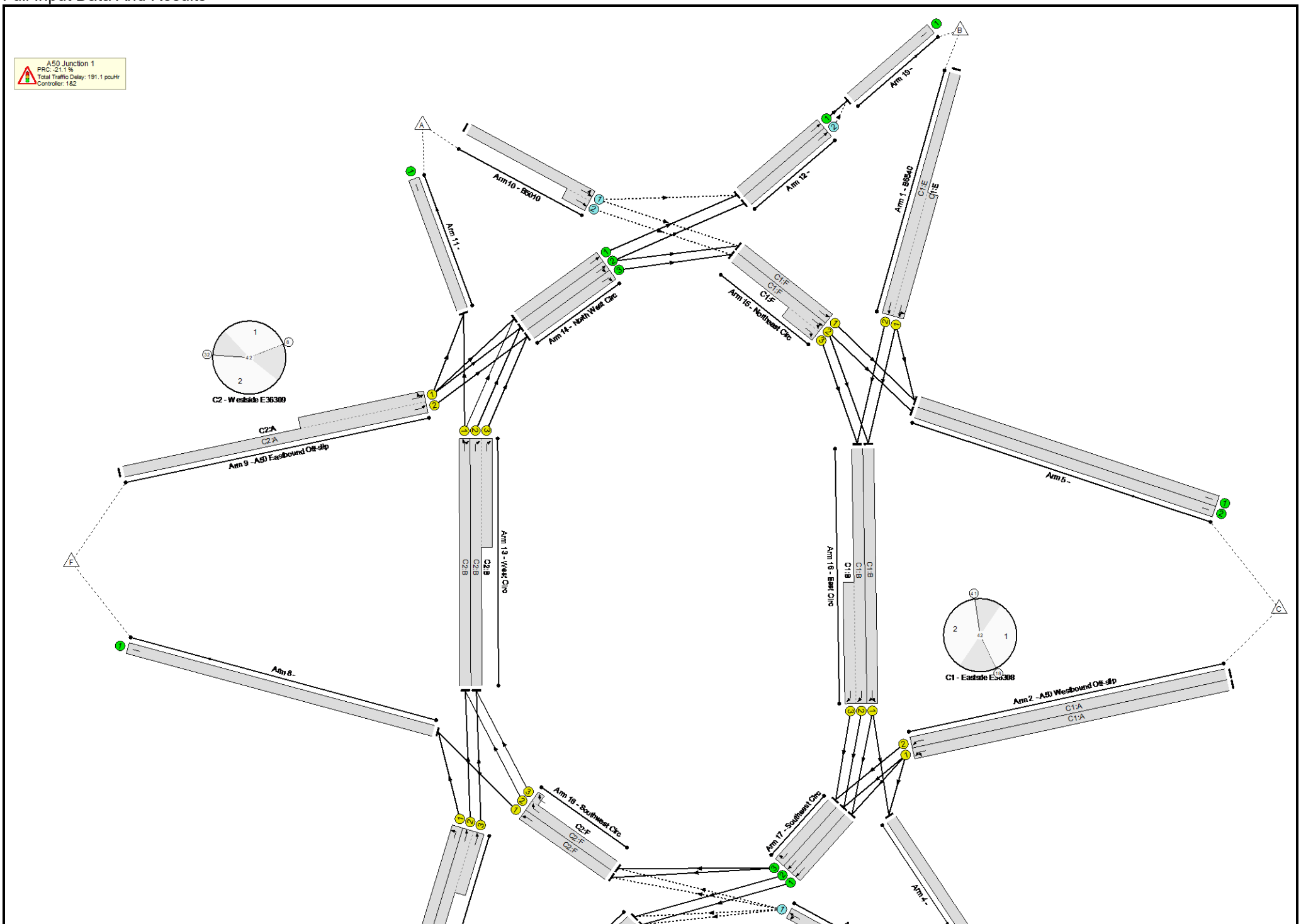
Stage Timings

Stage	1	2
Duration	13	17
Change Point	32	8

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.0%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.0%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1188	2088:1950	699+696	68.7 : 101.7%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	637	1907	681	93.5%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	477	2049	732	65.2%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	77	1886	326	23.6%
4/1		U	N/A	N/A	-		-	-	-	538	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1146	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	949	1980	1980	46.6%
6/2	Ahead	O	N/A	N/A	-		-	-	-	576	1980	512	107.0%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	558	1923	641	87.1%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	992	2063:2101	222+700	107.5 : 107.5%
8/1		U	N/A	N/A	-		-	-	-	920	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	1125	1995:1853	665+581	109.0 : 68.8%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	413	1894:2034	302+302	64.0 : 72.9%
11/1		U	N/A	N/A	-		-	-	-	181	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1007	1965	1965	50.6%
12/2	Ahead	O	N/A	N/A	-		-	-	-	149	1965	496	28.9%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	704	1944	833	82.5%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	848	1942:1940	832+166	79.8 : 79.0%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	923	1930	1930	47.2%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	707	1926	1926	34.5%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	866	1923	1923	41.4%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	667	1932	782	80.5%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	1086	1929:1926	648+510	87.3 : 88.3%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	836	1933	782	101.0%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	958	1930:1927	781+706	70.2 : 54.1%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	935	1912	1912	47.5%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	576	1907	1907	28.7%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	859	1899	1899	45.2%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	362	1937	830	43.6%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	560	1935:1930	698+143	66.7 : 66.7%
19/1		U	N/A	N/A	-		-	-	-	1156	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1525	Inf	Inf	0.0%

Full Input Data And Results

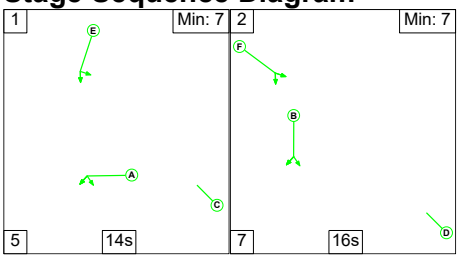
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1559**	**0**	**0**	**41.3**	**149.8**	**0.0**	**191.1**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1559**	**0**	**0**	**41.3**	**149.8**	**0.0**	**191.1**	**-**	**-**	**-**	**-**
1/2+1/1	1188	1176	-	-	-	4.4	8.6	-	13.0	39.3	8.4	8.6	17.0
2/1	637	637	-	-	-	2.3	5.7	-	8.0	45.4	7.1	5.7	12.8
2/2	477	477	-	-	-	1.5	0.9	-	2.4	18.3	4.6	0.9	5.6
3/1	77	77	77	0	0	0.0	0.2	-	0.2	9.4	0.3	0.2	0.4
4/1	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1101	1101	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1	1	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	922	922	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
6/2	548	512	512	0	0	2.6	23.7	-	26.3	173.0	19.2	23.7	42.9
7/1	558	558	-	-	-	2.0	3.1	-	5.2	33.3	6.0	3.1	9.2
7/2+7/3	992	923	-	-	-	5.0	40.8	-	45.8	166.1	10.9	40.8	51.7
8/1	920	920	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	1125	1065	-	-	-	4.9	34.3	-	39.2	125.5	8.6	34.3	42.9
10/1+10/2	413	413	826	0	0	0.6	1.1	-	1.7	14.5	1.2	1.1	2.3
11/1	177	177	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	995	995	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
12/2	143	143	143	0	0	0.0	0.2	-	0.2	5.1	0.0	0.2	0.2
13/1	688	688	-	-	-	2.7	2.3	-	5.0	26.1	6.6	2.3	8.9
13/2+13/3	795	795	-	-	-	1.3	1.9	-	3.3	14.7	15.3	1.9	17.2
14/1	911	911	-	-	-	0.0	0.4	-	0.4	1.8	0.0	0.4	0.4
14/2	664	664	-	-	-	0.0	0.3	-	0.3	1.4	3.2	0.3	3.5
14/3	796	796	-	-	-	0.0	0.4	-	0.4	1.7	5.5	0.4	5.9
15/1	630	630	-	-	-	0.6	2.0	-	2.6	15.1	2.3	2.0	4.3

Full Input Data And Results

15/2+15/3	1016	1016	-	-	-	4.0	3.4	-	7.5	26.5	6.6	3.4	10.0
16/1	790	782	-	-	-	3.8	16.2	-	20.1	91.3	9.3	16.2	25.5
16/2+16/3	930	930	-	-	-	3.3	0.8	-	4.2	16.2	16.8	0.8	17.6
17/1	908	908	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
17/2	548	548	-	-	-	0.0	0.2	-	0.2	1.3	1.1	0.2	1.3
17/3	859	859	-	-	-	0.0	0.4	-	0.4	1.7	2.2	0.4	2.6
18/1	362	362	-	-	-	1.7	0.4	-	2.1	20.8	4.2	0.4	4.5
18/2+18/3	560	560	-	-	-	0.4	1.0	-	1.3	8.7	0.8	1.0	1.8
19/1	1138	1138	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1434	1434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-13.0	Total Delay for Signalled Lanes (pcuHr):	57.78	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-21.1	Total Delay for Signalled Lanes (pcuHr):	101.80	Cycle Time (s):	42
	PRC Over All Lanes (%):	-21.1	Total Delay Over All Lanes(pcuHr):	191.08		

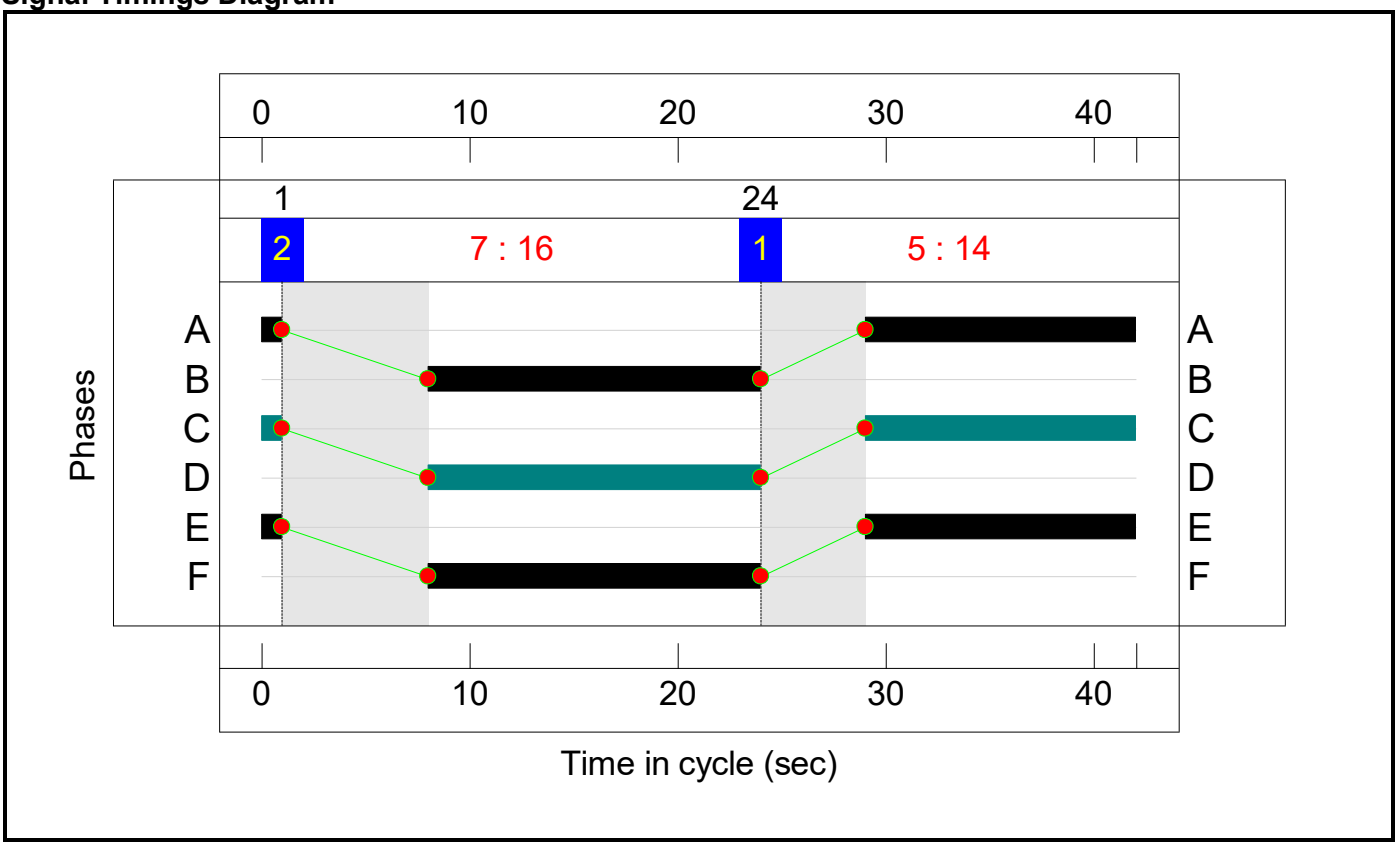
Full Input Data And Results
Scenario 10: '2038 WD PM' (FG10: '2038 WD Flows PM', Plan 1: 'Network Control Plan 1')
Controller :C1 - Eastsde E36308
Stage Sequence Diagram



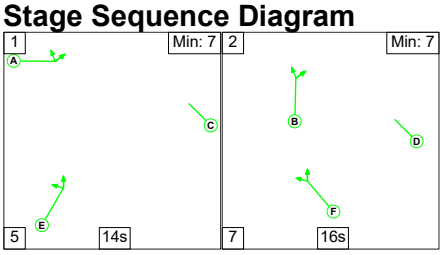
Stage Timings

Stage	1	2
Duration	14	16
Change Point	24	1

Signal Timings Diagram



Controller :C2 - Westside E36309
Stage Sequence Diagram

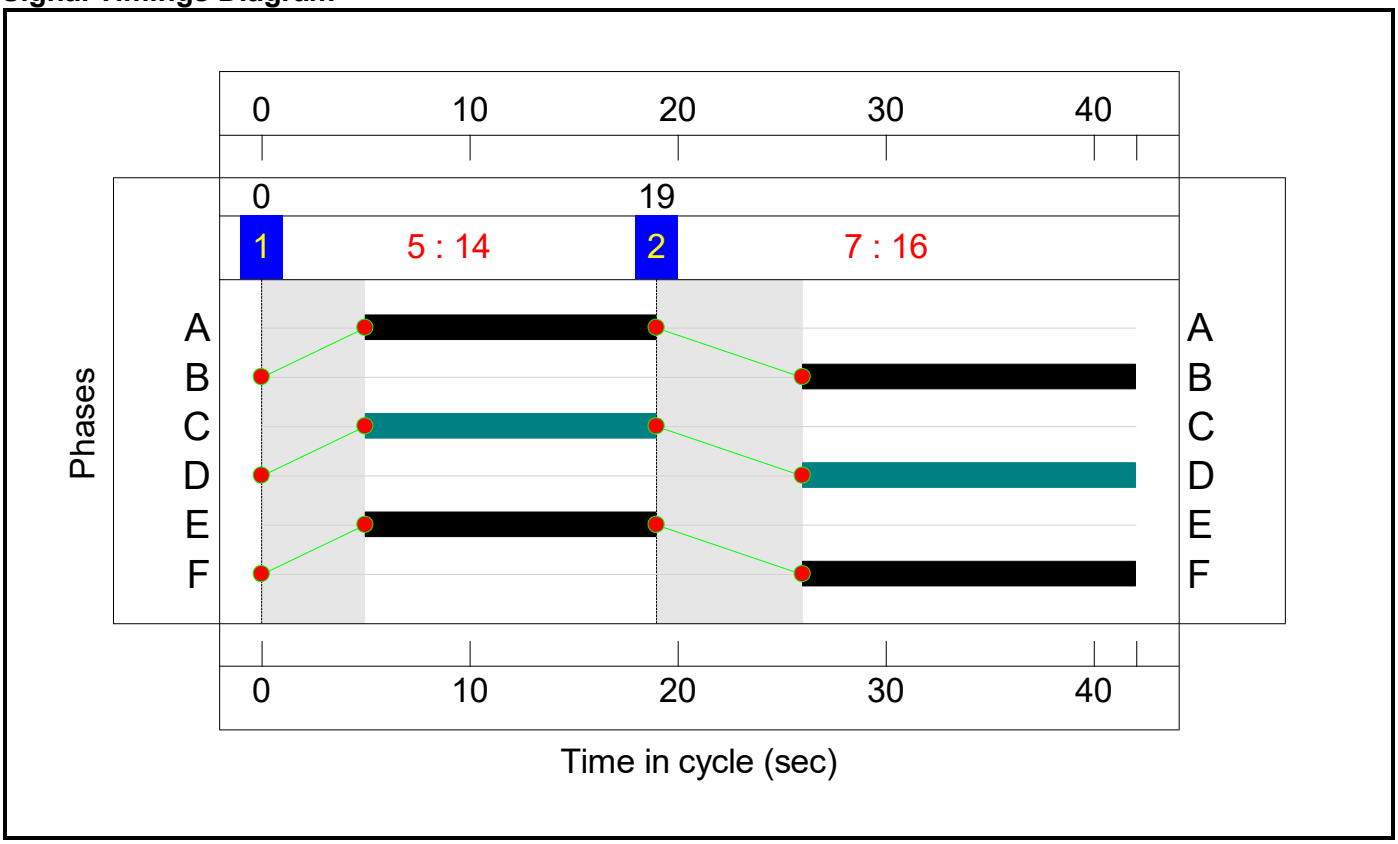


Full Input Data And Results

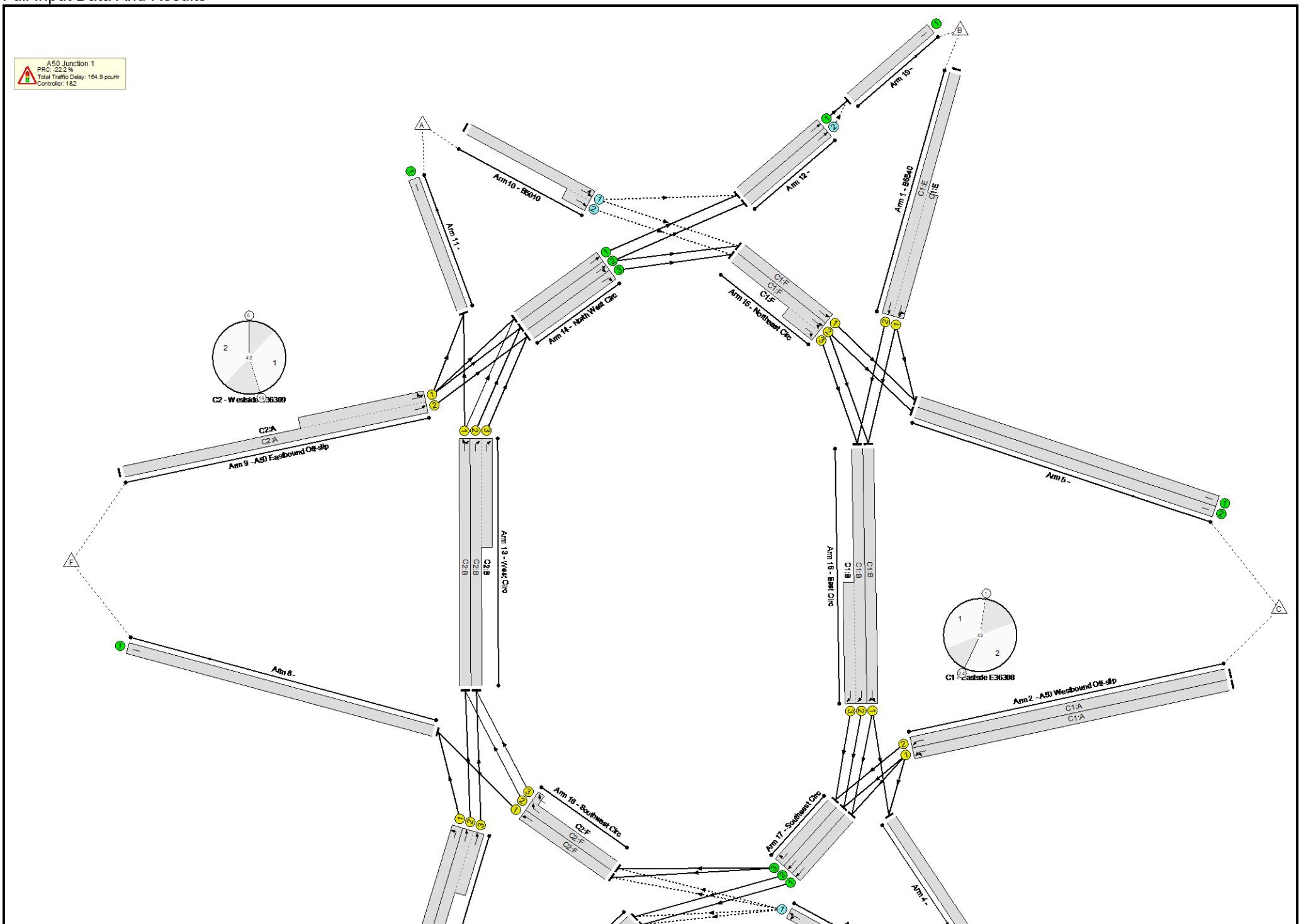
Stage Timings

Stage	1	2
Duration	14	16
Change Point	0	19

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.9%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.9%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1347	2088:1950	746+696	93.3 : 93.5%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	403	1907	681	59.2%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	509	2049	732	69.6%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	118	1886	375	31.5%
4/1		U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	959	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	118	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	807	1980	1980	40.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	422	1980	537	78.5%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	570	1923	687	83.0%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	1181	2063:2101	324+750	109.9 : 109.9%
8/1		U	N/A	N/A	-		-	-	-	986	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	847	1995:1853	713+662	71.2 : 51.4%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	329	1894:2034	314+314	49.1 : 55.7%
11/1		U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	864	1965	1965	42.4%
12/2	Ahead	O	N/A	N/A	-		-	-	-	439	1965	532	78.3%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	836	1944	787	102.2%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	1062	1942:1940	786+201	100.6 : 98.0%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	773	1930	1930	38.4%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	846	1926	1926	40.8%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	723	1923	1923	36.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	470	1932	782	55.3%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	898	1929:1926	705+274	89.0 : 91.7%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	691	1933	782	87.2%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	947	1930:1927	781+780	54.0 : 67.3%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	788	1912	1912	41.2%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	422	1907	1907	22.1%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1034	1899	1899	54.4%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	416	1937	784	53.1%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	717	1935:1930	548+271	87.6 : 87.6%
19/1		U	N/A	N/A	-		-	-	-	1303	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1229	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1614**	**0**	**0**	**38.7**	**126.2**	**0.0**	**164.9**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1614**	**0**	**0**	**38.7**	**126.2**	**0.0**	**164.9**	**-**	**-**	**-**	**-**
1/2+1/1	1347	1347	-	-	-	4.9	6.3	-	11.1	29.7	7.7	6.3	14.0
2/1	403	403	-	-	-	1.2	0.7	-	2.0	17.5	3.8	0.7	4.5
2/2	509	509	-	-	-	1.6	1.1	-	2.8	19.5	4.9	1.1	6.1
3/1	118	118	118	0	0	0.1	0.2	-	0.3	9.4	0.5	0.2	0.7
4/1	297	297	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	922	922	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	108	108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	807	807	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	422	422	422	0	0	0.9	1.8	-	2.7	22.7	4.7	1.8	6.5
7/1	570	570	-	-	-	2.0	2.3	-	4.3	27.2	6.0	2.3	8.4
7/2+7/3	1181	1074	-	-	-	6.1	58.5	-	64.6	196.8	13.6	58.5	72.1
8/1	986	986	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	847	847	-	-	-	2.6	0.8	-	3.4	14.6	5.1	0.8	5.9
10/1+10/2	329	329	658	0	0	0.5	0.5	-	1.0	11.3	1.6	0.5	2.2
11/1	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	833	833	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
12/2	416	416	416	0	0	0.7	1.8	-	2.5	21.2	4.6	1.8	6.3
13/1	804	787	-	-	-	3.9	19.1	-	23.0	103.0	9.6	19.1	28.6
13/2+13/3	987	983	-	-	-	2.6	17.8	-	20.4	74.4	15.3	17.8	33.2
14/1	742	742	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	786	786	-	-	-	0.0	0.3	-	0.3	1.6	5.4	0.3	5.7
14/3	704	704	-	-	-	0.0	0.3	-	0.3	1.5	2.7	0.3	3.0
15/1	433	433	-	-	-	0.9	0.6	-	1.5	12.6	4.8	0.6	5.5

Full Input Data And Results

15/2+15/3	879	879	-	-	-	2.2	4.1	-	6.2	25.5	4.0	4.1	8.0
16/1	682	682	-	-	-	2.9	3.2	-	6.1	32.1	6.8	3.2	10.0
16/2+16/3	947	947	-	-	-	1.7	0.8	-	2.5	9.4	17.0	0.8	17.7
17/1	788	788	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
17/2	422	422	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	1034	1034	-	-	-	0.0	0.6	-	0.6	2.1	2.7	0.6	3.3
18/1	416	416	-	-	-	0.4	0.6	-	1.0	8.6	4.1	0.6	4.6
18/2+18/3	717	717	-	-	-	3.5	3.3	-	6.8	34.2	7.1	3.3	10.4
19/1	1249	1249	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1229	1229	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

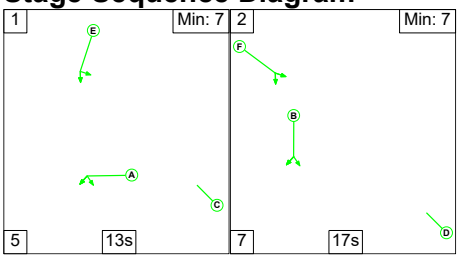
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-3.9	Total Delay for Signalled Lanes (pcuHr):	32.12	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-22.2	Total Delay for Signalled Lanes (pcuHr):	123.55	Cycle Time (s):	42
	PRC Over All Lanes (%):	-22.2	Total Delay Over All Lanes(pcuHr):	164.89		

Full Input Data And Results

Scenario 11: '2a 2028 WD AM' (FG11: '2a 2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

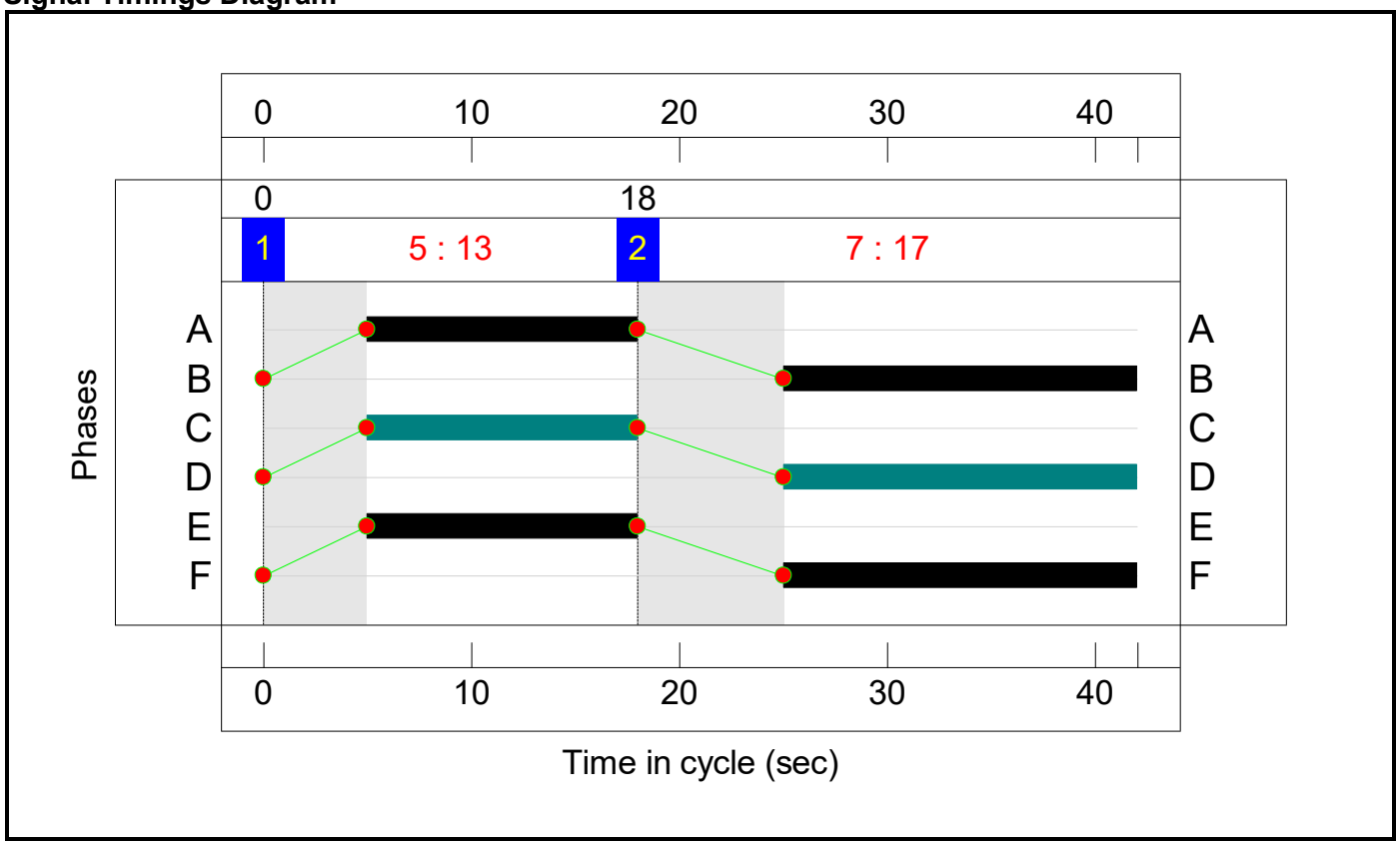
Stage Sequence Diagram



Stage Timings

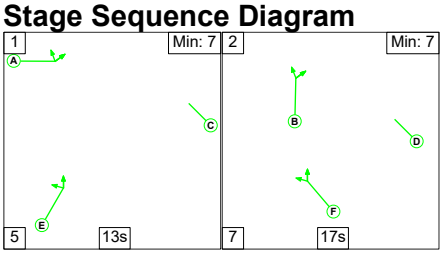
Stage	1	2
Duration	13	17
Change Point	0	18

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

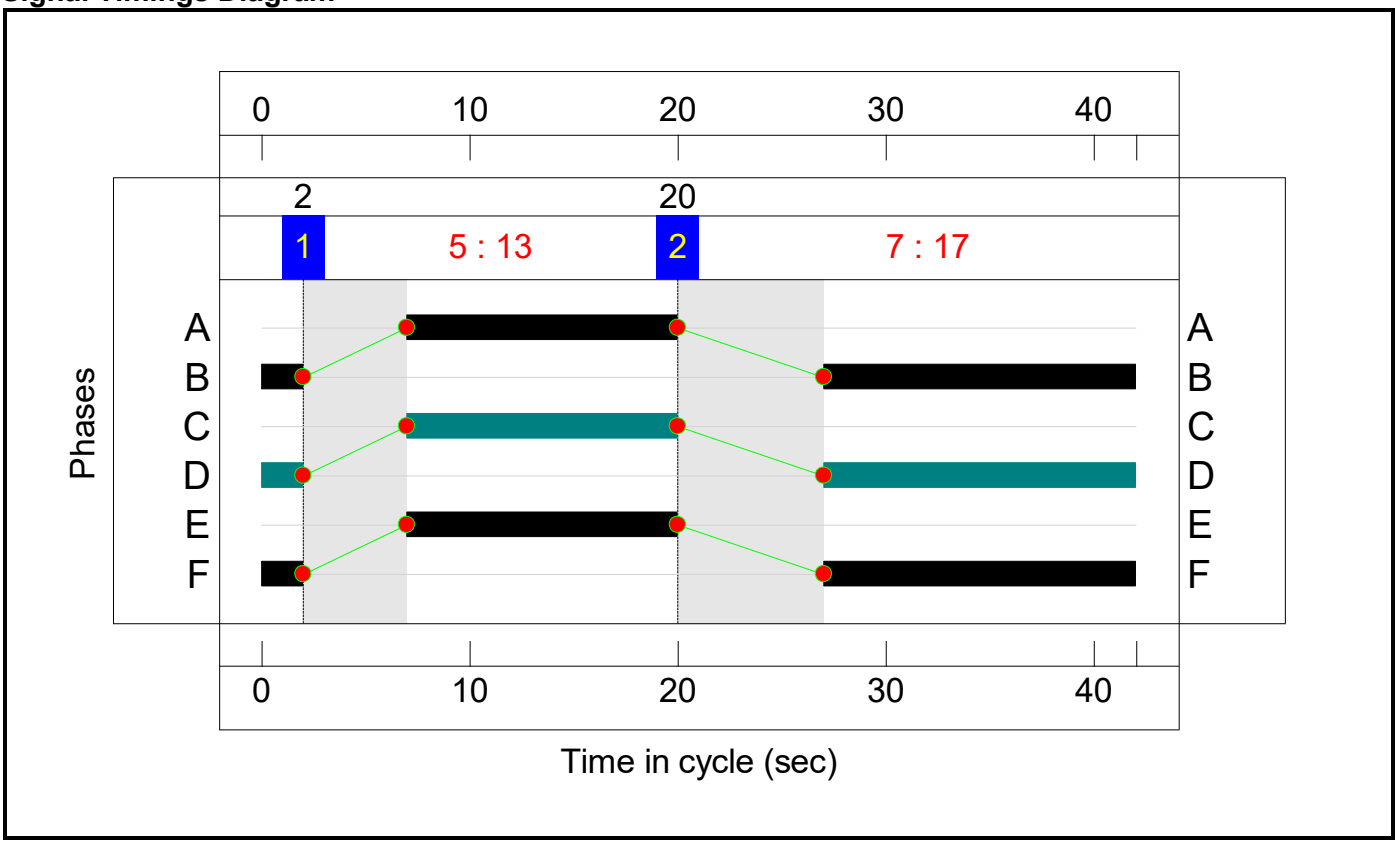


Full Input Data And Results

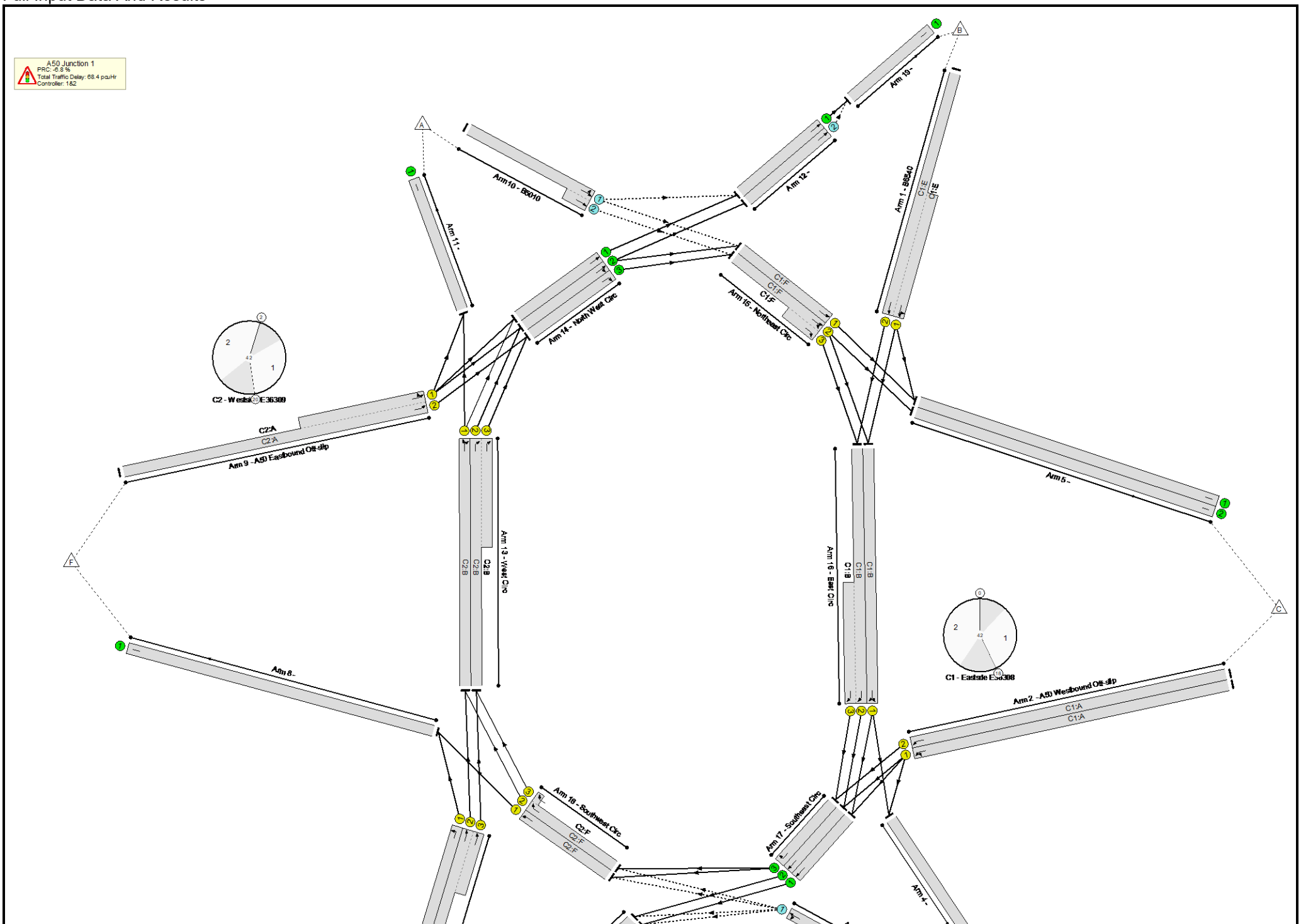
Stage Timings

Stage	1	2
Duration	13	17
Change Point	2	20

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.1%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.1%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	1064	2088:1950	696+650	67.2 : 91.7%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	611	1907	636	96.1%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	492	2049	683	72.0%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	51	1886	326	15.6%
4/1		U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	75	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	1038	1980	1980	52.4%
6/2	Ahead	O	N/A	N/A	-		-	-	-	435	1980	487	89.4%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	417	1923	641	65.1%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	627	2063:2101	138+700	74.8 : 74.8%
8/1		U	N/A	N/A	-		-	-	-	802	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	1003	1995:1853	665+618	93.5 : 61.7%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	442	1894:2034	325+397	59.9 : 62.2%
11/1		U	N/A	N/A	-		-	-	-	159	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	888	1965	1965	45.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	224	1965	520	43.1%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	561	1944	833	67.3%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	623	1942:1940	832+259	57.1 : 57.1%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	783	1930	1930	40.6%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	475	1926	1926	24.7%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	770	1923	1923	40.0%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	341	1932	828	41.2%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	1017	1929:1926	702+412	91.3 : 91.3%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	788	1933	828	95.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	844	1930:1927	827+826	52.6 : 49.5%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	1028	1912	1912	53.8%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	435	1907	1907	22.8%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	901	1899	1899	47.4%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	385	1937	830	46.4%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	557	1935:1930	692+149	66.2 : 66.2%
19/1		U	N/A	N/A	-		-	-	-	1112	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1473	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1594**	**0**	**0**	**29.6**	**38.8**	**0.0**	**68.4**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1594**	**0**	**0**	**29.6**	**38.8**	**0.0**	**68.4**	**-**	**-**	**-**	**-**
1/2+1/1	1064	1064	-	-	-	3.8	1.9	-	5.7	19.1	6.6	1.9	8.5
2/1	611	611	-	-	-	2.3	7.6	-	10.0	58.8	7.0	7.6	14.6
2/2	492	492	-	-	-	1.7	1.3	-	3.0	21.6	4.9	1.3	6.2
3/1	51	51	51	0	0	0.0	0.1	-	0.1	8.3	0.1	0.1	0.2
4/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	75	75	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1038	1038	-	-	-	0.0	0.6	-	0.6	1.9	0.0	0.6	0.6
6/2	435	435	435	0	0	1.0	3.7	-	4.7	38.7	4.9	3.7	8.6
7/1	417	417	-	-	-	1.4	0.9	-	2.3	19.9	4.1	0.9	5.0
7/2+7/3	627	627	-	-	-	2.1	1.5	-	3.6	20.4	5.4	1.5	6.9
8/1	802	802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	1003	1003	-	-	-	3.6	1.8	-	5.4	19.2	6.9	1.8	8.7
10/1+10/2	442	442	884	0	0	0.4	0.8	-	1.2	9.6	1.1	0.8	1.9
11/1	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	888	888	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
12/2	224	224	224	0	0	0.1	0.4	-	0.5	7.4	2.0	0.4	2.4
13/1	561	561	-	-	-	2.1	1.0	-	3.1	19.9	4.6	1.0	5.7
13/2+13/3	623	623	-	-	-	1.0	0.7	-	1.7	9.6	15.0	0.7	15.7
14/1	783	783	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
14/2	475	475	-	-	-	0.0	0.2	-	0.2	1.2	1.1	0.2	1.2
14/3	770	770	-	-	-	0.0	0.3	-	0.3	1.6	4.9	0.3	5.2
15/1	341	341	-	-	-	1.2	0.3	-	1.6	16.4	2.5	0.3	2.8

Full Input Data And Results

15/2+15/3	1017	1017	-	-	-	1.6	4.8	-	6.4	22.6	8.0	4.8	12.8
16/1	788	788	-	-	-	3.3	7.2	-	10.5	47.9	8.2	7.2	15.3
16/2+16/3	844	844	-	-	-	2.1	0.5	-	2.7	11.4	16.8	0.5	17.3
17/1	1028	1028	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
17/2	435	435	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	901	901	-	-	-	0.0	0.5	-	0.5	1.8	2.7	0.5	3.2
18/1	385	385	-	-	-	0.7	0.4	-	1.1	10.6	1.5	0.4	1.9
18/2+18/3	557	557	-	-	-	1.2	1.0	-	2.2	14.1	5.9	1.0	6.8
19/1	1112	1112	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1473	1473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

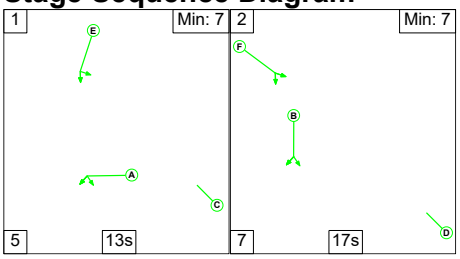
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-6.8	Total Delay for Signalled Lanes (pcuHr):	39.68	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-3.9	Total Delay for Signalled Lanes (pcuHr):	19.31	Cycle Time (s): 42
	PRC Over All Lanes (%):	-6.8	Total Delay Over All Lanes(pcuHr):	68.42	

Full Input Data And Results

Scenario 12: '2a 2028 WD PM' (FG12: '2a 2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

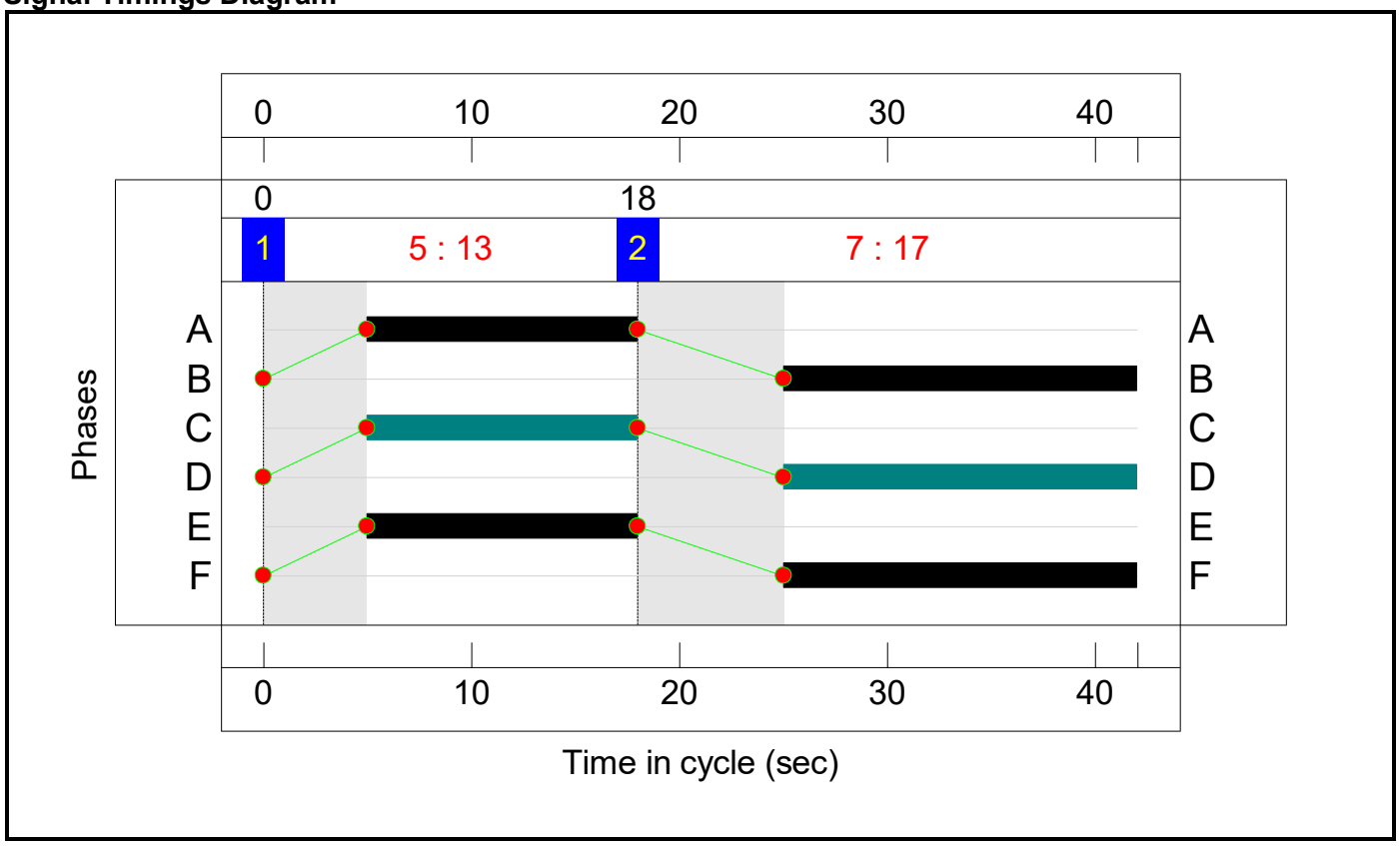
Stage Sequence Diagram



Stage Timings

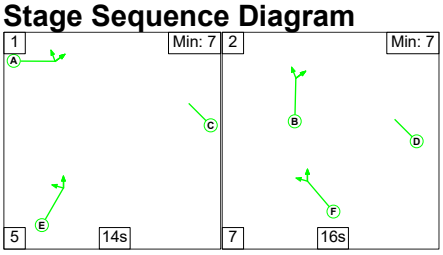
Stage	1	2
Duration	13	17
Change Point	0	18

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

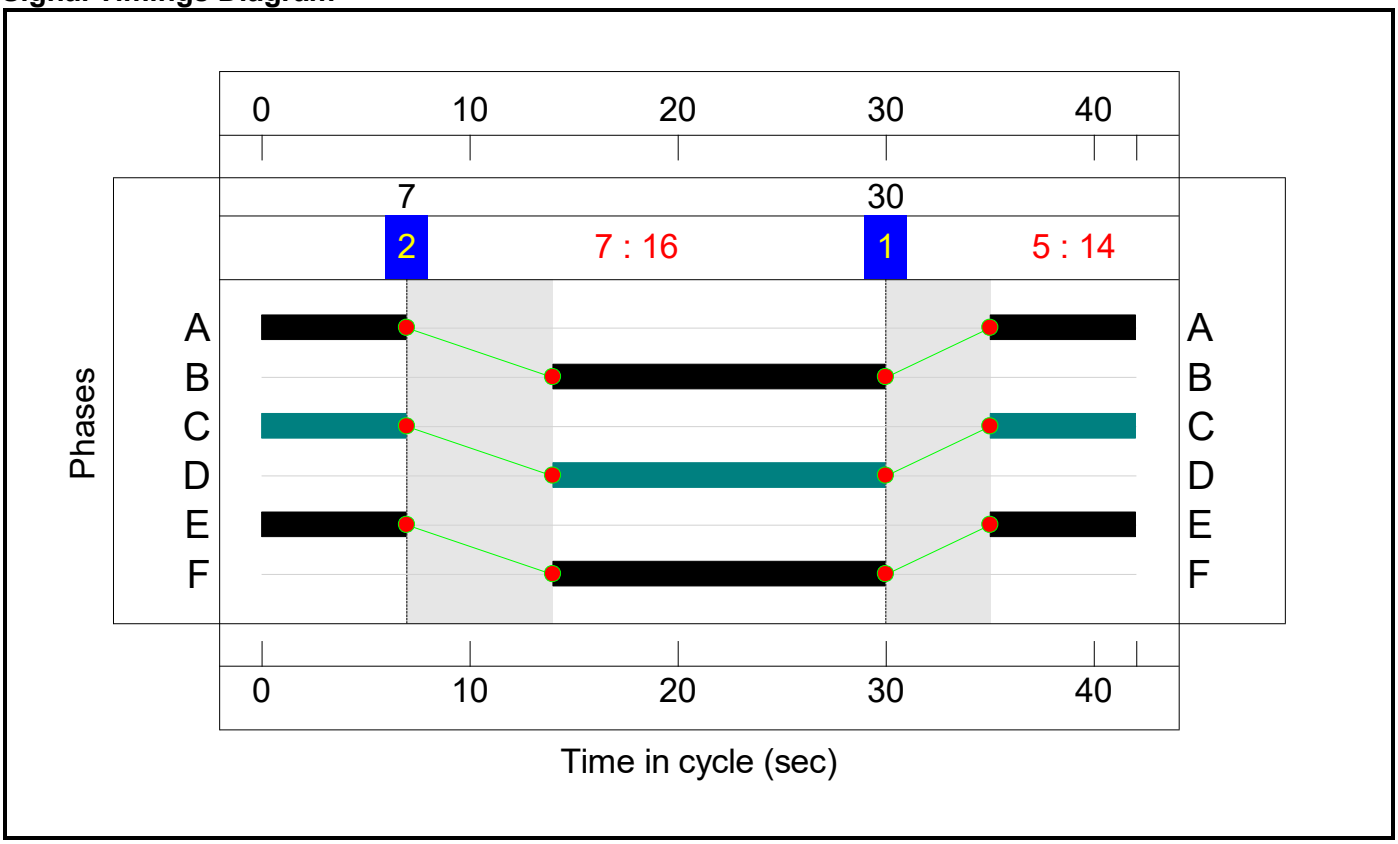


Full Input Data And Results

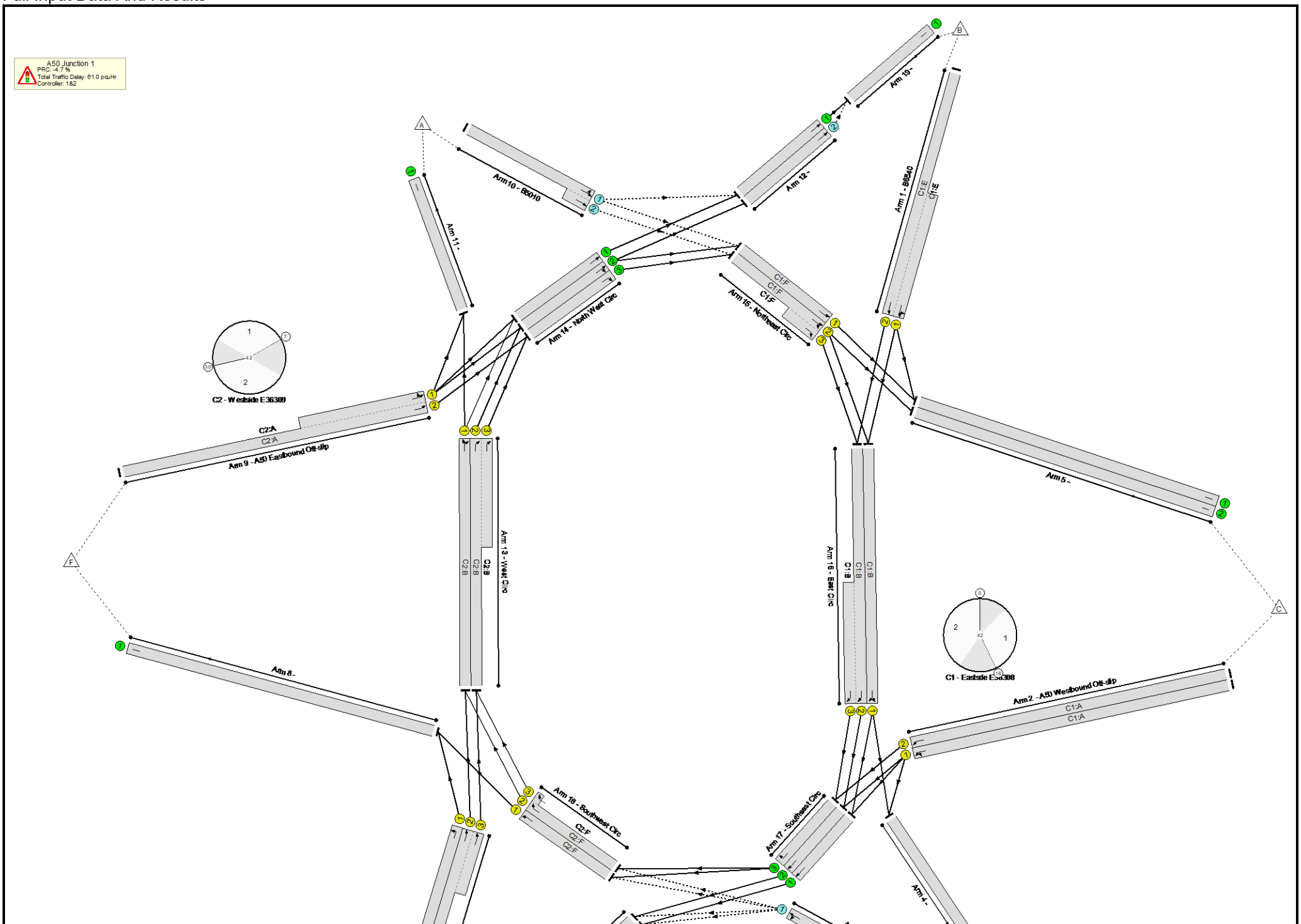
Stage Timings

Stage	1	2
Duration	14	16
Change Point	30	7

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.3%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.3%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	1046	2088:1950	696+650	63.6 : 92.8%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	341	1907	636	53.6%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	529	2049	683	77.5%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	73	1886	406	18.0%
4/1		U	N/A	N/A	-		-	-	-	114	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	761	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	319	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	733	1980	1980	37.0%
6/2	Ahead	O	N/A	N/A	-		-	-	-	310	1980	554	56.0%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	566	1923	687	82.4%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	935	2063:2101	289+750	90.0 : 90.0%
8/1		U	N/A	N/A	-		-	-	-	957	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	924	1995:1853	713+662	70.9 : 63.3%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	297	1894:2034	398+398	35.2 : 39.4%
11/1		U	N/A	N/A	-		-	-	-	331	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	845	1965	1965	43.0%
12/2	Ahead	O	N/A	N/A	-		-	-	-	341	1965	529	64.5%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	692	1944	787	87.9%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	903	1942:1940	786+521	71.2 : 65.8%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	780	1930	1930	40.4%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	560	1926	1926	29.1%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	848	1923	1923	44.1%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	294	1932	828	35.5%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	1005	1929:1926	720+346	94.3 : 94.3%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	496	1933	828	59.9%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	769	1930:1927	743+826	41.7 : 55.6%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	723	1912	1912	37.8%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	310	1907	1907	16.3%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	988	1899	1899	52.0%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	391	1937	784	49.9%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	660	1935:1930	538+284	80.4 : 80.4%
19/1		U	N/A	N/A	-		-	-	-	1186	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1043	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1318**	**0**	**0**	**29.9**	**31.1**	**0.0**	**61.0**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1318**	**0**	**0**	**29.9**	**31.1**	**0.0**	**61.0**	**-**	**-**	**-**	**-**
1/2+1/1	1046	1046	-	-	-	3.7	1.7	-	5.4	18.7	6.7	1.7	8.4
2/1	341	341	-	-	-	1.1	0.6	-	1.7	17.5	3.2	0.6	3.8
2/2	529	529	-	-	-	1.8	1.7	-	3.5	24.0	5.4	1.7	7.1
3/1	73	73	73	0	0	0.0	0.1	-	0.1	7.0	0.2	0.1	0.3
4/1	114	114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	761	761	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	733	733	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	310	310	310	0	0	0.1	0.6	-	0.7	8.7	2.1	0.6	2.8
7/1	566	566	-	-	-	1.9	2.3	-	4.2	26.7	6.0	2.3	8.2
7/2+7/3	935	935	-	-	-	3.1	4.1	-	7.3	28.0	7.3	4.1	11.5
8/1	957	957	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	924	924	-	-	-	2.9	1.0	-	4.0	15.4	5.1	1.0	6.1
10/1+10/2	297	297	594	0	0	0.2	0.3	-	0.5	6.6	0.6	0.3	0.9
11/1	331	331	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	845	845	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
12/2	341	341	341	0	0	0.5	0.9	-	1.4	14.9	3.7	0.9	4.6
13/1	692	692	-	-	-	2.8	3.4	-	6.2	32.2	7.1	3.4	10.5
13/2+13/3	903	903	-	-	-	2.1	1.1	-	3.2	12.6	15.2	1.1	16.3
14/1	780	780	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
14/2	560	560	-	-	-	0.0	0.2	-	0.2	1.3	2.2	0.2	2.4
14/3	848	848	-	-	-	0.0	0.4	-	0.4	1.7	2.7	0.4	3.1
15/1	294	294	-	-	-	0.2	0.3	-	0.5	5.7	0.7	0.3	1.0

Full Input Data And Results

15/2+15/3	1005	1005	-	-	-	3.4	6.7	-	10.2	36.4	7.9	6.7	14.6
16/1	496	496	-	-	-	1.5	0.7	-	2.2	16.2	3.9	0.7	4.6
16/2+16/3	769	769	-	-	-	1.8	0.5	-	2.3	10.8	16.7	0.5	17.2
17/1	723	723	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
17/2	310	310	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	988	988	-	-	-	0.0	0.5	-	0.6	2.0	3.3	0.5	3.8
18/1	391	391	-	-	-	1.8	0.5	-	2.3	20.8	4.5	0.5	5.0
18/2+18/3	660	660	-	-	-	0.8	2.0	-	2.8	15.1	1.8	2.0	3.7
19/1	1186	1186	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1043	1043	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

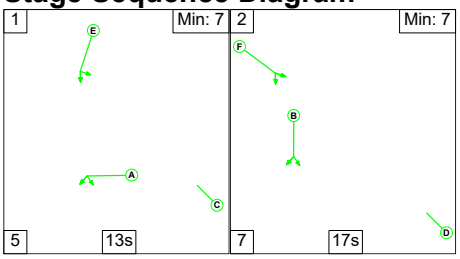
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-4.7	Total Delay for Signalled Lanes (pcuHr):	25.79	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	29.80	Cycle Time (s):	42
	PRC Over All Lanes (%):	-4.7	Total Delay Over All Lanes(pcuHr):	61.00		

Full Input Data And Results

Scenario 13: '2a 2038 WD AM' (FG13: '2a 2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

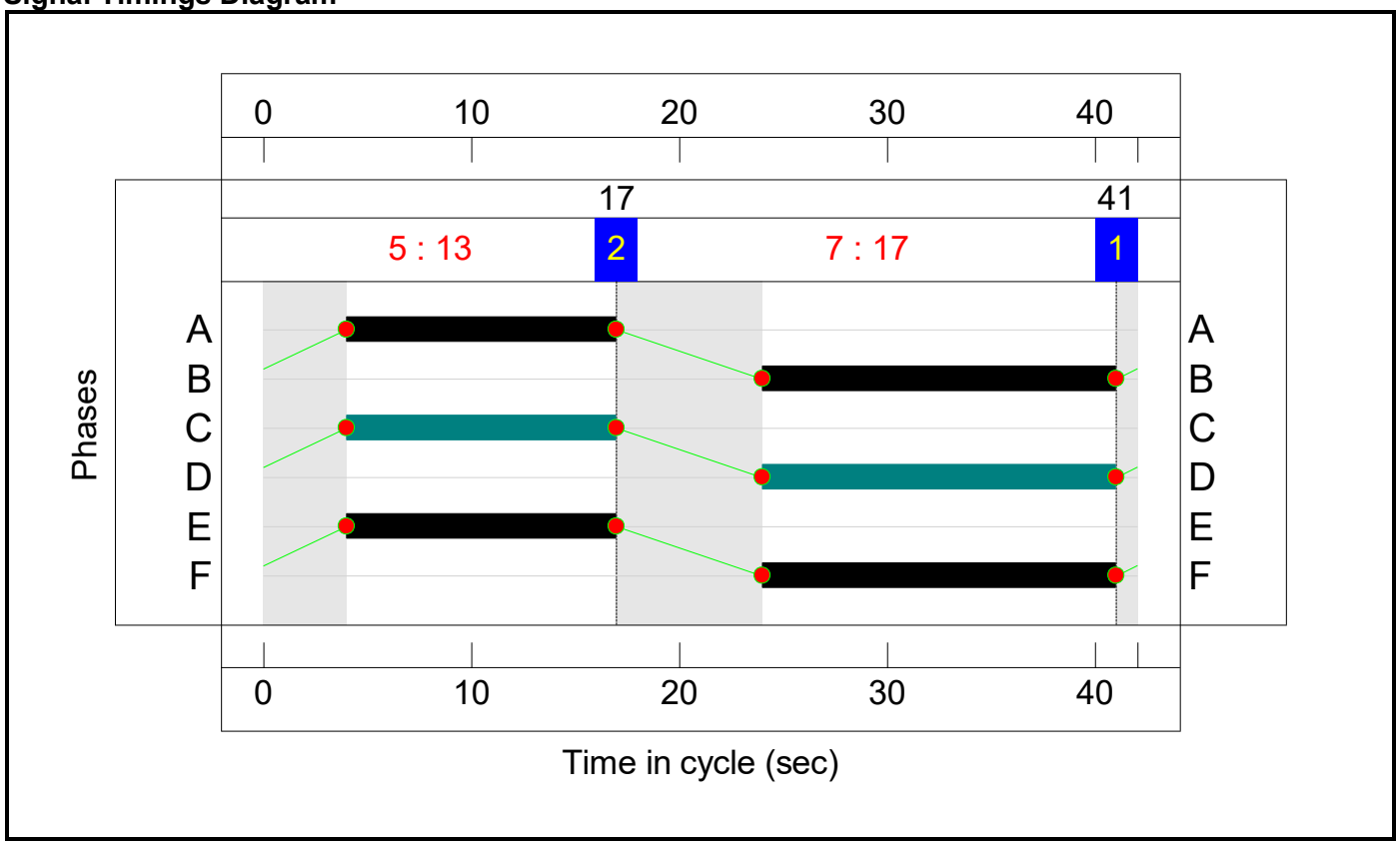
Stage Sequence Diagram



Stage Timings

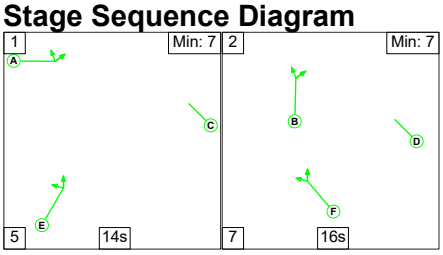
Stage	1	2
Duration	13	17
Change Point	41	17

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

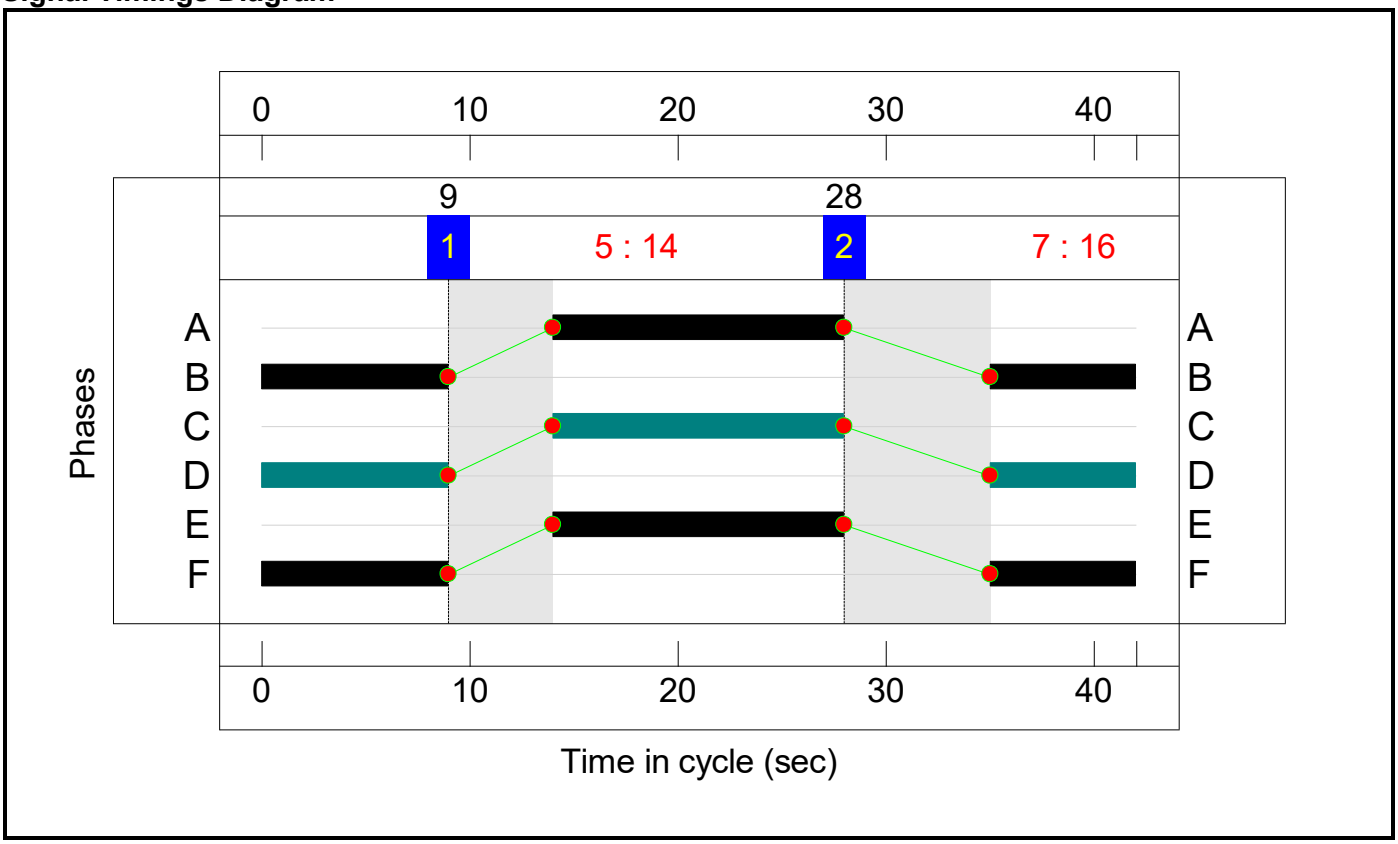


Full Input Data And Results

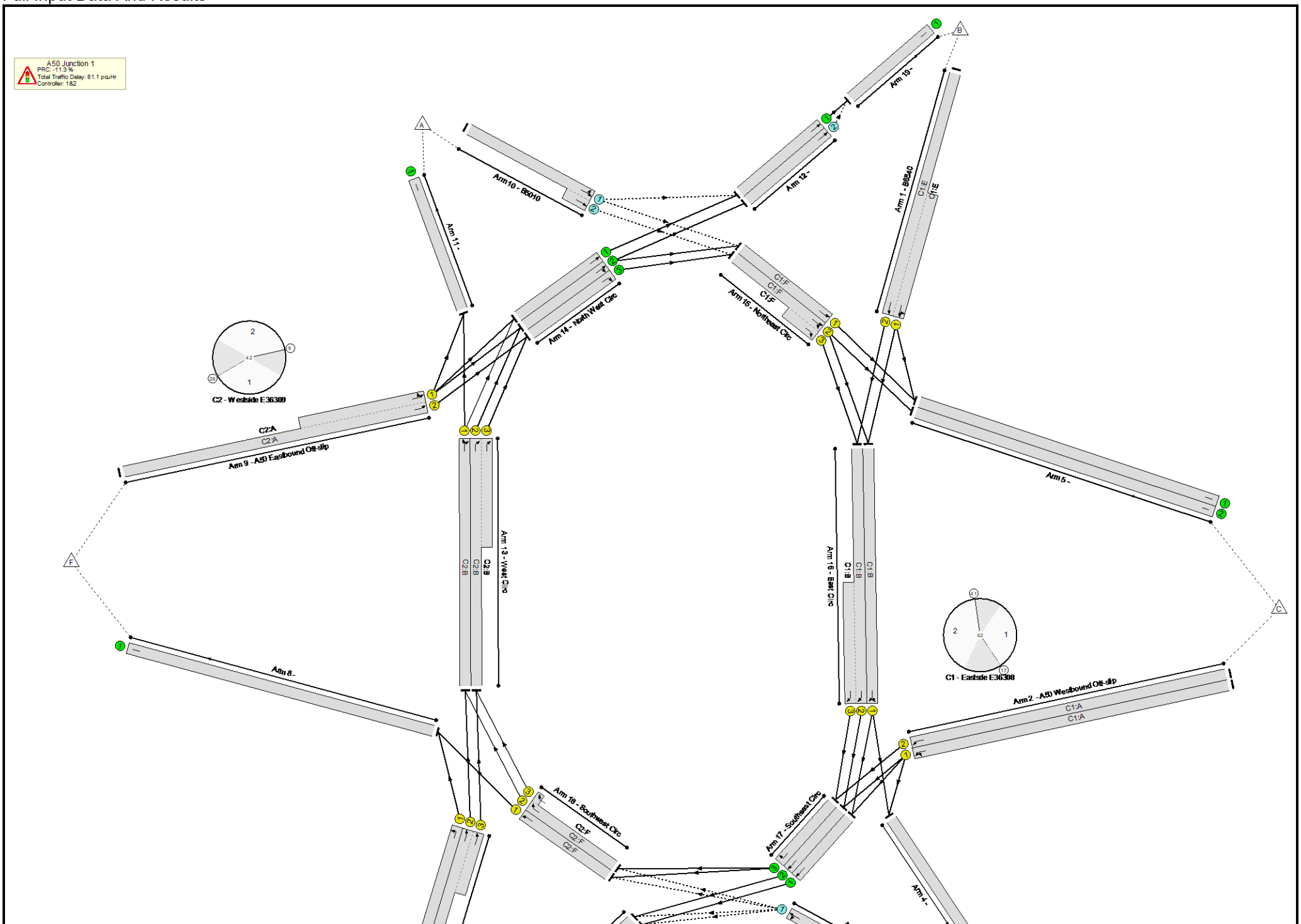
Stage Timings

Stage	1	2
Duration	14	16
Change Point	9	28

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.2%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.2%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	1182	2088:1950	696+650	76.3 : 100.2%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	571	1907	636	89.8%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	463	2049	683	67.8%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	66	1886	349	18.9%
4/1		U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1108	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	2	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	991	1980	1980	50.0%
6/2	Ahead	O	N/A	N/A	-		-	-	-	459	1980	497	92.4%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	551	1923	687	80.2%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	951	2063:2101	331+750	88.0 : 88.0%
8/1		U	N/A	N/A	-		-	-	-	911	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	988	1995:1853	713+662	86.5 : 56.2%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	407	1894:2034	305+305	63.2 : 70.1%
11/1		U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	964	1965	1965	49.1%
12/2	Ahead	O	N/A	N/A	-		-	-	-	169	1965	503	33.6%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	689	1944	787	87.6%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	807	1942:1940	786+120	89.1 : 89.1%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	874	1930	1930	45.3%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	700	1926	1926	36.3%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	723	1923	1923	37.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	634	1932	828	76.6%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	937	1929:1926	715+364	86.8 : 86.8%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	796	1933	828	96.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	847	1930:1927	827+826	55.5 : 47.0%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	979	1912	1912	51.2%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	459	1907	1907	24.1%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	851	1899	1899	44.8%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	360	1937	784	45.9%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	545	1935:1930	590+218	67.5 : 67.5%
19/1		U	N/A	N/A	-		-	-	-	1133	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1450	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1508**	**0**	**0**	**34.3**	**46.8**	**0.0**	**81.1**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1508**	**0**	**0**	**34.3**	**46.8**	**0.0**	**81.1**	**-**	**-**	**-**	**-**
1/2+1/1	1182	1181	-	-	-	4.4	4.0	-	8.4	25.5	7.6	4.0	11.6
2/1	571	571	-	-	-	2.1	3.9	-	6.0	38.1	6.2	3.9	10.1
2/2	463	463	-	-	-	1.6	1.0	-	2.6	20.2	4.6	1.0	5.7
3/1	66	66	66	0	0	0.0	0.1	-	0.2	8.3	0.2	0.1	0.3
4/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1107	1107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	2	2	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	991	991	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
6/2	459	459	459	0	0	1.2	4.8	-	6.0	47.2	5.2	4.8	10.0
7/1	551	551	-	-	-	1.9	2.0	-	3.8	25.0	5.7	2.0	7.6
7/2+7/3	951	951	-	-	-	3.1	3.5	-	6.6	25.0	7.1	3.5	10.6
8/1	911	911	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	988	988	-	-	-	3.3	1.3	-	4.5	16.5	6.7	1.3	7.9
10/1+10/2	407	407	814	0	0	0.6	1.0	-	1.6	14.0	1.2	1.0	2.2
11/1	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	964	964	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	169	169	169	0	0	0.0	0.3	-	0.3	5.4	0.6	0.3	0.9
13/1	689	689	-	-	-	2.7	3.3	-	6.0	31.2	6.7	3.3	10.0
13/2+13/3	807	807	-	-	-	1.9	3.8	-	5.7	25.4	15.2	3.8	19.0
14/1	874	874	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	700	700	-	-	-	0.0	0.3	-	0.3	1.5	3.8	0.3	4.1
14/3	723	723	-	-	-	0.0	0.3	-	0.3	1.6	4.4	0.3	4.7
15/1	634	634	-	-	-	2.8	1.6	-	4.4	25.0	7.1	1.6	8.7

Full Input Data And Results

15/2+15/3	937	937	-	-	-	1.0	3.2	-	4.2	16.0	7.9	3.2	11.0
16/1	796	796	-	-	-	3.4	8.1	-	11.5	52.2	8.2	8.1	16.3
16/2+16/3	847	847	-	-	-	1.8	0.5	-	2.3	9.7	16.8	0.5	17.3
17/1	979	979	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
17/2	459	459	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
17/3	851	851	-	-	-	0.0	0.4	-	0.4	1.7	2.2	0.4	2.6
18/1	360	360	-	-	-	0.3	0.4	-	0.7	6.9	0.8	0.4	1.2
18/2+18/3	545	545	-	-	-	2.2	1.0	-	3.3	21.6	5.7	1.0	6.8
19/1	1133	1133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1450	1450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

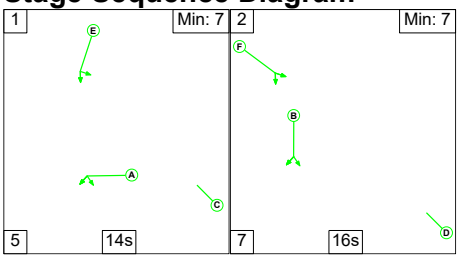
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-11.3	Total Delay for Signalled Lanes (pcuHr):	39.41	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	1.1	Total Delay for Signalled Lanes (pcuHr):	30.61	Cycle Time (s):	42
	PRC Over All Lanes (%):	-11.3	Total Delay Over All Lanes(pcuHr):	81.12		

Full Input Data And Results

Scenario 14: '2a 2038 WD PM' (FG14: '2a 2038 WD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

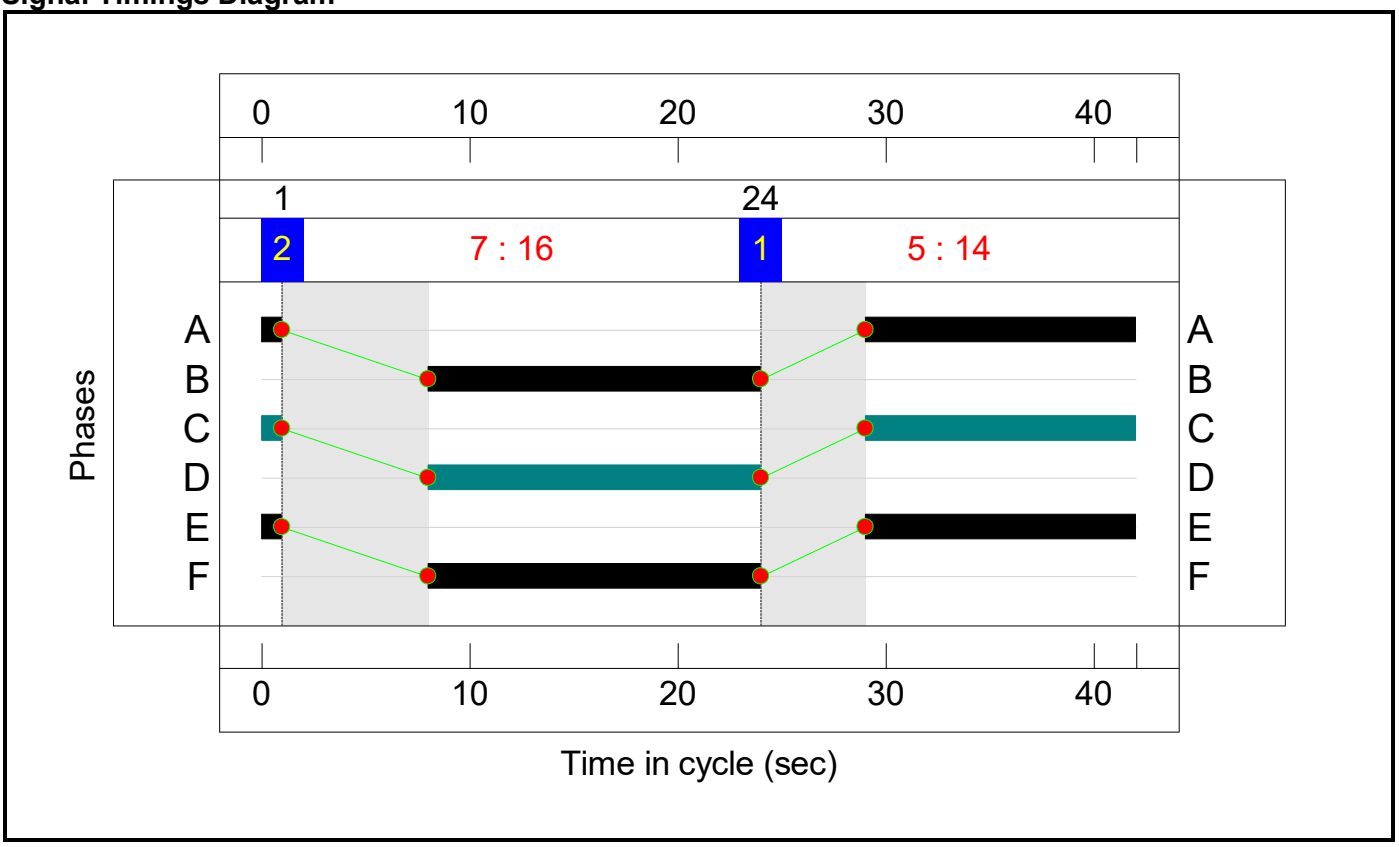
Stage Sequence Diagram



Stage Timings

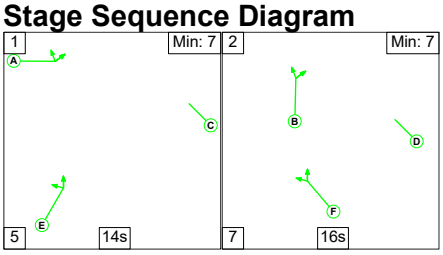
Stage	1	2
Duration	14	16
Change Point	24	1

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

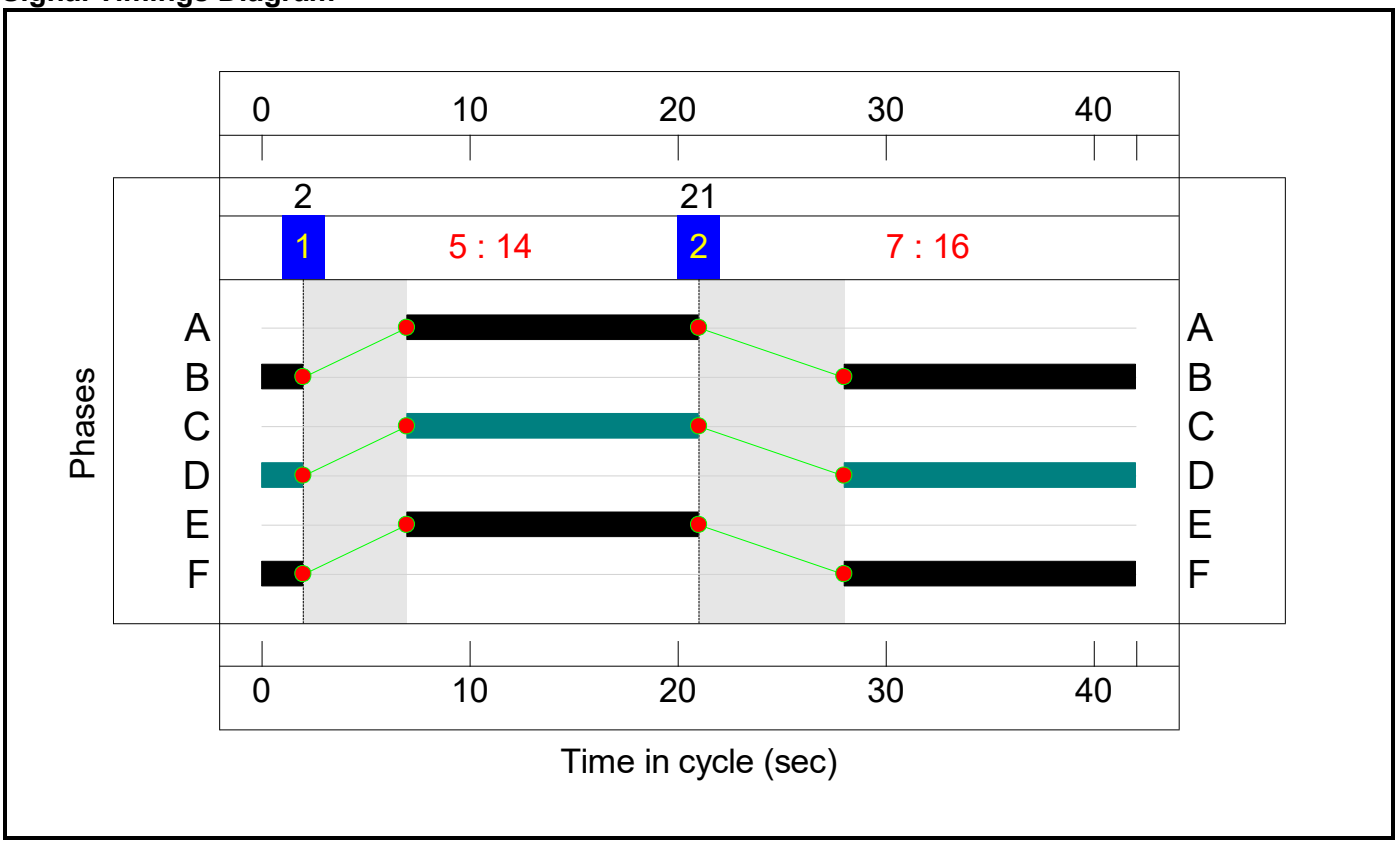


Full Input Data And Results

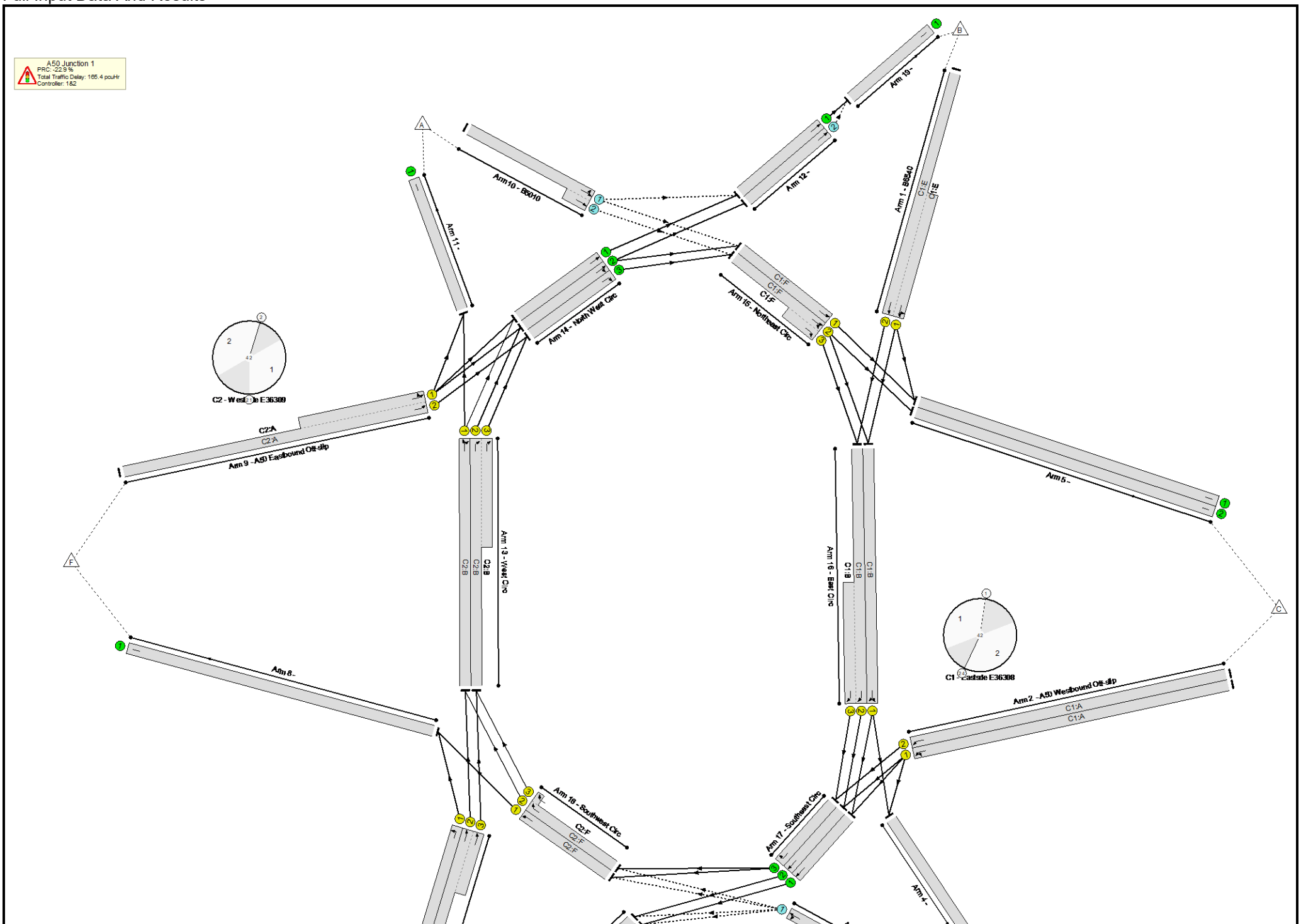
Stage Timings

Stage	1	2
Duration	14	16
Change Point	2	21

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.6%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.6%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1348	2088:1950	746+696	87.3 : 100.1%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	359	1907	681	52.7%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	485	2049	732	66.3%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	214	1886	393	54.5%
4/1		U	N/A	N/A	-		-	-	-	139	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1031	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	867	1980	1980	43.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	347	1980	524	66.2%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	558	1923	687	81.2%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	1170	2063:2101	307+750	110.6 : 110.6%
8/1		U	N/A	N/A	-		-	-	-	983	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	824	1995:1853	713+662	66.9 : 52.4%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	317	1894:2034	322+322	49.0 : 49.3%
11/1		U	N/A	N/A	-		-	-	-	409	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	859	1965	1965	42.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	436	1965	533	77.4%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	835	1944	787	102.0%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	1092	1942:1940	786+224	100.7 : 98.6%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	773	1930	1930	38.5%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	850	1926	1926	40.8%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	719	1923	1923	36.3%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	486	1932	782	57.1%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	878	1929:1926	719+228	89.8 : 92.7%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	615	1933	782	78.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	862	1930:1927	699+780	49.7 : 66.0%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	835	1912	1912	43.7%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	347	1907	1907	18.2%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1000	1899	1899	52.7%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	425	1937	784	54.2%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	757	1935:1930	537+284	92.1 : 92.1%
19/1		U	N/A	N/A	-		-	-	-	1295	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1214	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1607**	**0**	**0**	**37.3**	**128.1**	**0.0**	**165.4**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1607**	**0**	**0**	**37.3**	**128.1**	**0.0**	**165.4**	**-**	**-**	**-**	**-**
1/2+1/1	1348	1347	-	-	-	4.9	6.6	-	11.5	30.7	8.1	6.6	14.7
2/1	359	359	-	-	-	1.1	0.6	-	1.6	16.3	3.3	0.6	3.8
2/2	485	485	-	-	-	1.5	1.0	-	2.5	18.6	4.7	1.0	5.7
3/1	214	214	214	0	0	0.2	0.6	-	0.8	13.1	1.0	0.6	1.6
4/1	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	186	186	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	867	867	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
6/2	347	347	347	0	0	0.5	1.0	-	1.5	15.6	3.8	1.0	4.8
7/1	558	558	-	-	-	1.9	2.1	-	4.0	25.8	5.9	2.1	8.0
7/2+7/3	1170	1058	-	-	-	6.1	60.9	-	67.0	206.3	13.6	60.9	74.5
8/1	983	983	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	824	824	-	-	-	2.5	0.7	-	3.3	14.4	4.6	0.7	5.4
10/1+10/2	317	317	634	0	0	0.4	0.5	-	0.9	10.4	1.4	0.5	1.9
11/1	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	829	829	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
12/2	412	412	412	0	0	0.7	1.7	-	2.3	20.3	4.6	1.7	6.2
13/1	802	787	-	-	-	3.9	18.6	-	22.5	100.9	9.5	18.6	28.1
13/2+13/3	1012	1007	-	-	-	2.7	18.1	-	20.8	74.0	15.3	18.1	33.4
14/1	743	743	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	786	786	-	-	-	0.0	0.3	-	0.3	1.6	5.4	0.3	5.7
14/3	698	698	-	-	-	0.0	0.3	-	0.3	1.5	2.2	0.3	2.5
15/1	446	446	-	-	-	0.7	0.7	-	1.4	11.3	4.7	0.7	5.3

Full Input Data And Results

15/2+15/3	857	857	-	-	-	2.5	4.3	-	6.8	28.6	4.7	4.3	9.0
16/1	611	611	-	-	-	2.3	1.7	-	4.0	23.6	5.9	1.7	7.7
16/2+16/3	862	862	-	-	-	1.4	0.7	-	2.1	8.9	16.9	0.7	17.6
17/1	835	835	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
17/2	347	347	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	1000	1000	-	-	-	0.0	0.6	-	0.6	2.0	2.6	0.6	3.2
18/1	425	425	-	-	-	0.7	0.6	-	1.3	10.6	4.5	0.6	5.1
18/2+18/3	757	757	-	-	-	3.2	5.1	-	8.3	39.3	6.7	5.1	11.8
19/1	1241	1241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1214	1214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-11.2	Total Delay for Signalled Lanes (pcuHr):	29.98	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-22.9	Total Delay for Signalled Lanes (pcuHr):	127.15	Cycle Time (s): 42
	PRC Over All Lanes (%):	-22.9	Total Delay Over All Lanes(pcuHr):	165.41	

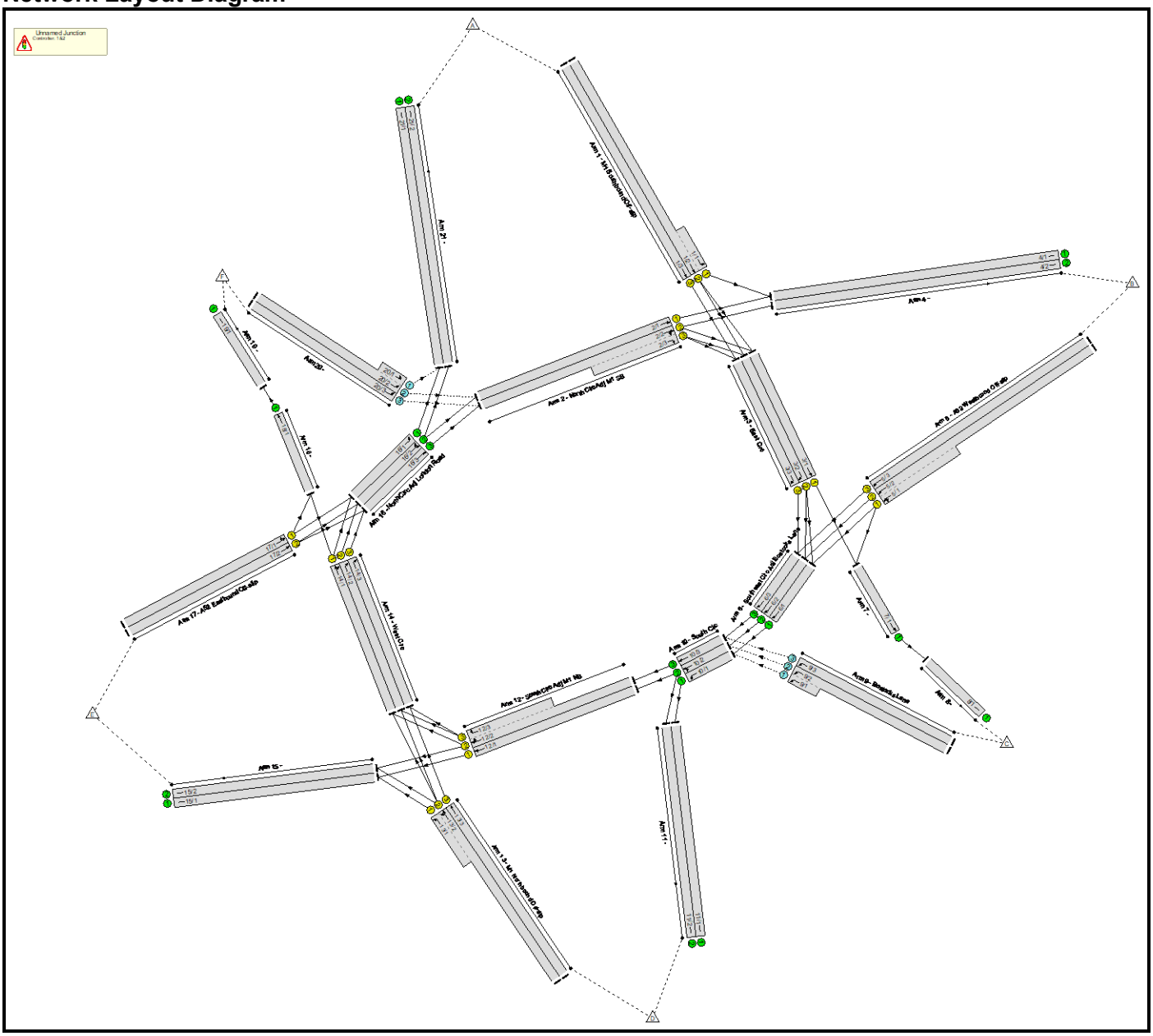
APPENDIX 59: Junction 14: M1 Junction 25 Stage 1A/2A Modelling Results

Detailed Input Data And Results

User and Project Details

Project:	**M1 Junction 25**
Title:	**EMG2**
Location:	
Client:	SERGO
Date Completed:	27/03/24
Checked By:	Vibeeshan Devaharan
Additional detail:	
File name:	250512 M1 Junction 25 Stage 1a+2a.lsg3x
Author:	Charlie Cresswell
Company:	BWB
Address:	
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



Scenarios

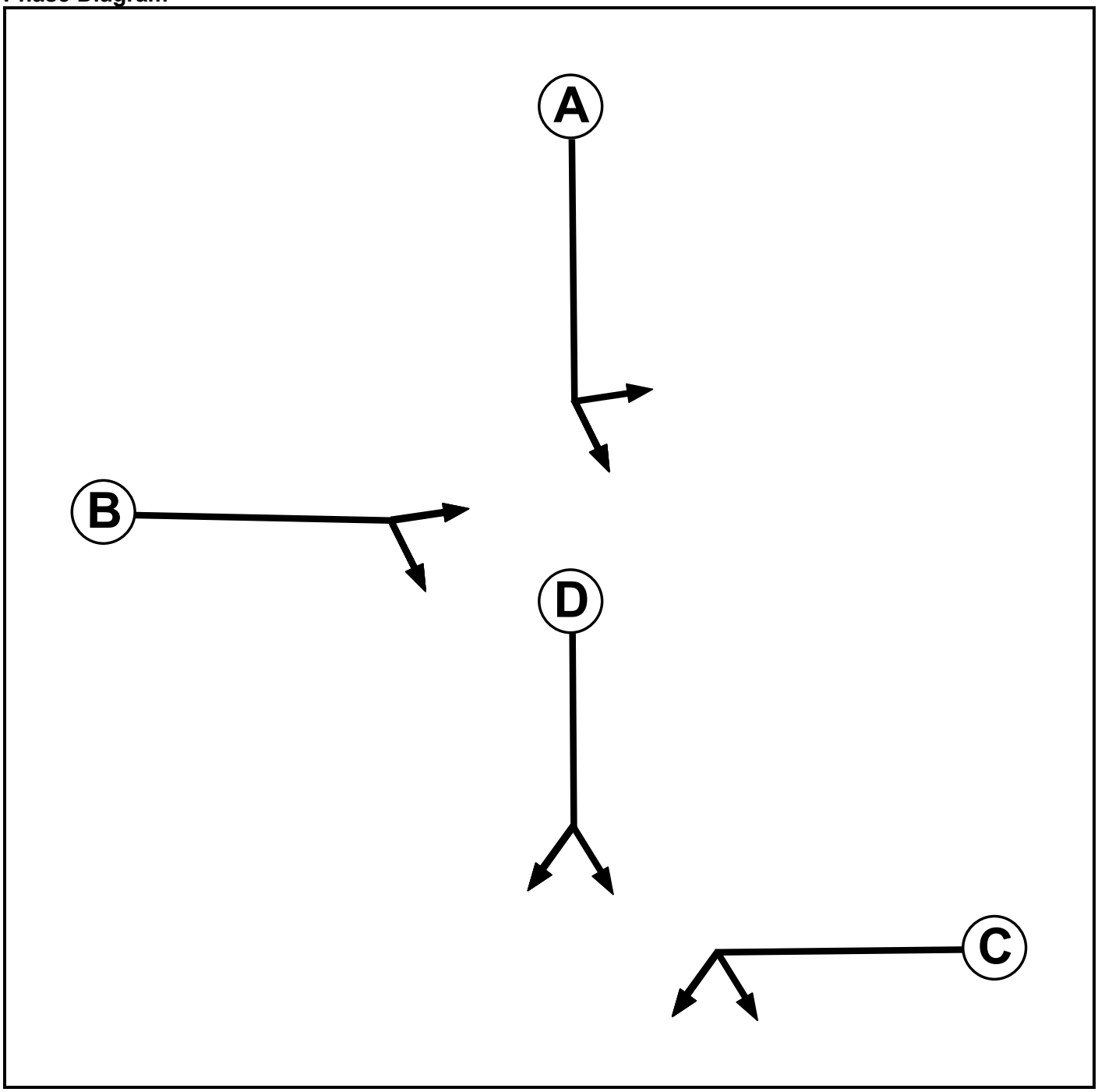
Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2022 AM	2022 AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-57.2	369.79
2	2022 PM	2022 PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-10.4	90.78
3	2028 WoD AM	2028 WoD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-61.0	782.29
4	2028 WoD PM	2028 WoD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-35.6	361.35
5	2028 WD AM	2028 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-64.5	790.86
6	2028 WD PM	2028 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-25.5	170.47
7	2038 WoD AM	2038 WoD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-64.7	838.55
8	2038 WoD PM	2038 WoD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-39.8	441.52
9	2038 WD AM	2038 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-98.8	799.79
10	2038 WD PM	2038 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-37.9	446.49
11	2a 2028 WD AM	2a 2028 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-66.2	716.26
12	2a 2028 WD PM	2a 2028 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-29.6	244.61
13	2a 2038 WD AM	2a 2038 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-73.7	904.84
14	2a 2038 WD PM	2a 2038 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-39.0	456.39

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1 - East Side T7772E06	Gen		Stage Stream 1	4	4	Unnamed Junction	
C2 - West Side T7771W07	Gen		Stage Stream 1	4	4	Unnamed Junction	

Controller :C1 - East Side T7772E06

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

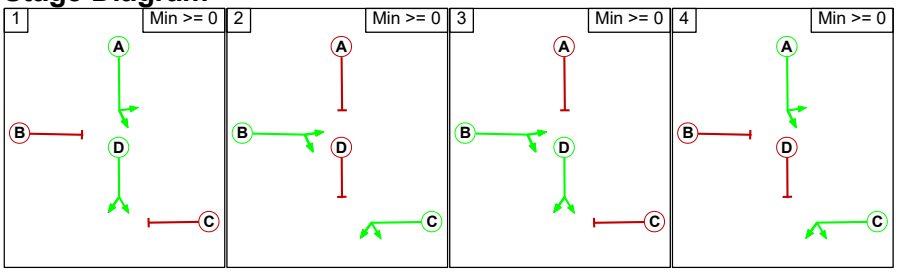
Phase Intergreens Matrix

Terminating Phase	Starting Phase			
	A	B	C	D
A		6	-	-
B	6		-	-
C	-	-		6
D	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A D
2	B C
3	B D
4	A C

Stage Diagram



Phase Delays

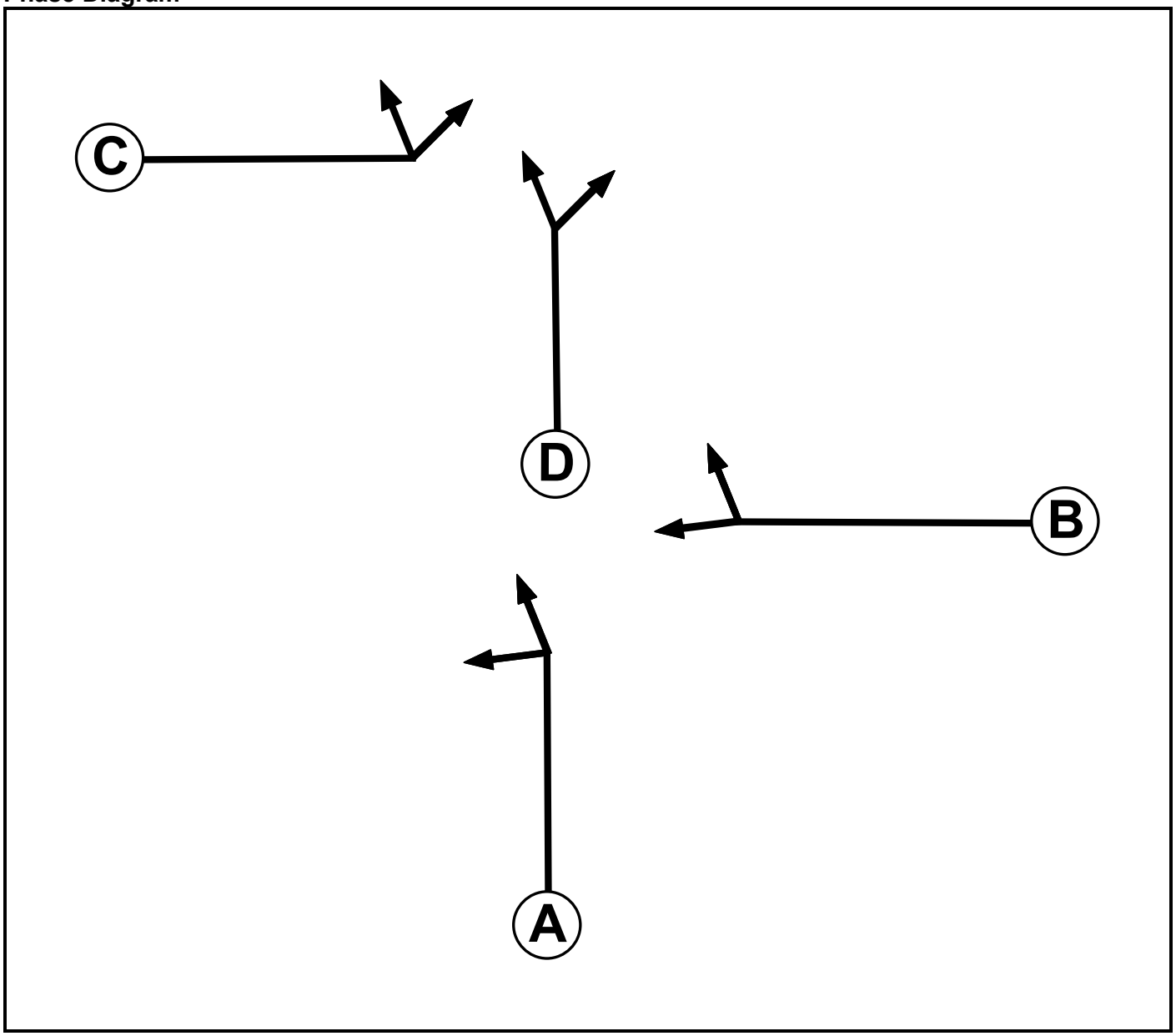
Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	D	Losing	11	11
3	4	D	Losing	11	11

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		16	6	5
	2	6		6	6
	3	6	5		16
	4	6	6	6	

Controller :C2 - West Side T7771W07

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

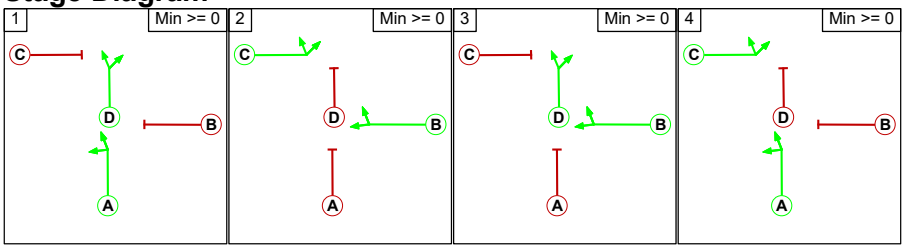
Phase Intergreens Matrix

Terminating Phase	Starting Phase				
		A	B	C	D
	A		6	-	-
	B	6		-	-
	C	-	-		6
	D	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A D
2	B C
3	B D
4	A C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	D	Losing	11	11
3	4	D	Losing	11	11

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		16	6	5
	2	6		6	6
	3	6	5		16
	4	6	6	6	

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (M1 Southbound Off-slip)	U	A	2	3	7.5	Geom	-	3.65	0.00	Y	Arm 4 Left	44.00
1/2 (M1 Southbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 3 Ahead	48.00
1/3 (M1 Southbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 3 Ahead	51.00
2/1 (North Circ Adj M1 SB)	U	B	2	3	23.5	Geom	-	3.30	0.00	Y	Arm 4 Ahead	77.00
2/2 (North Circ Adj M1 SB)	U	B	2	3	23.5	Geom	-	3.30	0.00	Y	Arm 3 Right	74.00
											Arm 4 Ahead	74.00
2/3 (North Circ Adj M1 SB)	U	B	2	3	14.8	Geom	-	3.30	0.00	Y	Arm 3 Right	70.00
3/1 (East Circ)	U	D	2	3	17.4	Geom	-	3.65	0.00	Y	Arm 7 Ahead	86.00
3/2 (East Circ)	U	D	2	3	17.4	Geom	-	3.65	0.00	Y	Arm 6 Right	83.00
3/3 (East Circ)	U	D	2	3	17.4	Geom	-	3.65	0.00	Y	Arm 6 Right	79.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A52 Westbound Off-slip)	U	C	2	3	14.8	Geom	-	3.50	0.00	Y	Arm 6 Ahead	68.00
											Arm 7 Left	68.00
5/2 (A52 Westbound Off-slip)	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 6 Ahead	71.00
5/3 (A52 Westbound Off-slip)	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 6 Ahead	75.00
6/1 (Southeast Circ Adj Bostocks Lane)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 10 Ahead	107.00

6/2 (Southeast Circ Adj Bostocks Lane)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 10 Ahead	104.00
6/3 (Southeast Circ Adj Bostocks Lane)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 10 Ahead	100.00
7/1	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 8 Ahead	Inf
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Bostocks Lane)	O		2	3	5.2	Geom	-	3.65	0.00	Y	Arm 10 Left	47.00
9/2 (Bostocks Lane)	O		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 10 Left	51.00
9/3 (Bostocks Lane)	O		2	3	29.6	Geom	-	3.65	0.00	Y	Arm 10 Left	54.00
10/1 (South Circ)	U		2	3	4.3	Geom	-	3.65	0.00	Y	Arm 11 Left	Inf
10/2 (South Circ)	U		2	3	4.3	Geom	-	3.65	0.00	Y	Arm 11 Left	Inf
											Arm 12 Ahead	Inf
10/3 (South Circ)	U		2	3	4.3	Geom	-	3.65	0.00	Y	Arm 12 Ahead	Inf
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/2	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1 (South Circ Adj M1 NB)	U	B	2	3	20.9	Geom	-	3.65	0.00	Y	Arm 15 Ahead	66.00
12/2 (South Circ Adj M1 NB)	U	B	2	3	20.9	Geom	-	3.65	0.00	Y	Arm 14 Right	58.00
											Arm 15 Ahead	62.00
12/3 (South Circ Adj M1 NB)	U	B	2	3	14.8	Geom	-	3.65	0.00	Y	Arm 14 Right	59.00
13/1 (M1 Northbound Off-slip)	U	A	2	3	9.6	Geom	-	3.65	0.00	Y	Arm 15 Left	42.00
13/2 (M1 Northbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 14 Ahead	46.00
											Arm 15 Left	46.00
13/3 (M1 Northbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 14 Ahead	49.00

14/1 (West Circ)	U	D	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 16 Right	68.00
											Arm 18 Ahead	68.00
14/2 (West Circ)	U	D	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 16 Right	65.00
14/3 (West Circ)	U	D	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 16 Right	61.00
15/1	U		2	3	60.0	Inf	-	-	-	-	-	-
15/2	U		2	3	60.0	Inf	-	-	-	-	-	-
16/1 (North Circ Adj London Road)	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 21 Left	103.00
16/2 (North Circ Adj London Road)	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 2 Ahead	99.00
											Arm 21 Left	99.00
16/3 (North Circ Adj London Road)	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 2 Ahead	96.00
17/1 (A52 Eastbound Off-slip)	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	56.00
											Arm 18 Left	56.00
17/2 (A52 Eastbound Off-slip)	U	C	2	3	60.0	Geom	-	3.65	0.00	N	Arm 16 Ahead	59.00
18/1	U		2	3	9.6	Geom	-	3.65	0.00	Y	Arm 19 Ahead	Inf
19/1	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	O		2	3	4.7	Geom	-	3.65	0.00	Y	Arm 21 Left	49.00
20/2	O		2	3	60.0	Geom	-	3.65	0.00	N	Arm 2 Left	52.00
20/3	O		2	3	9.6	Geom	-	3.65	0.00	Y	Arm 2 Left	56.00
21/1	U		2	3	60.0	Inf	-	-	-	-	-	-
21/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
9/1 (Bostocks Lane)	10/1 (Left)	1000	0	6/1	0.33	All	-	-	-	-	-
				6/2	0.33	All					
				6/3	0.33	All					
9/2 (Bostocks Lane)	10/2 (Left)	1000	0	6/1	0.33	All	-	-	-	-	-
				6/2	0.33	All					
				6/3	0.33	All					
9/3 (Bostocks Lane)	10/3 (Left)	1000	0	6/1	0.33	All	-	-	-	-	-
				6/2	0.33	All					
				6/3	0.33	All					
20/1	21/1 (Left)	1000	0	16/1	0.33	All	-	-	-	-	-
				16/2	0.33	All					
				16/3	0.33	All					
20/2	2/1 (Left)	1000	0	16/1	0.33	All	-	-	-	-	-
				16/2	0.33	All					
				16/3	0.33	All					
20/3	2/2 (Left)	1000	0	16/1	0.33	All	-	-	-	-	-
				16/2	0.33	All					
				16/3	0.33	All					

Lane Connector Input Data

Junction: Unnamed Junction				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	4/1	Internal	5	35
1/2	3/1	Internal	10	35
1/2	3/2	Internal	10	35
1/3	3/3	Internal	10	35
2/1	4/1	Internal	5	35
2/2	3/1	Internal	10	35
2/2	4/2	Internal	5	35
2/3	3/2	Internal	10	35
2/3	3/3	Internal	10	35
3/1	7/1	Internal	5	35
3/2	6/1	Internal	5	35
3/2	6/2	Internal	5	35
3/3	6/3	Internal	5	35
5/1	6/1	Internal	5	35
5/1	7/1	Internal	5	35
5/2	6/2	Internal	5	35
5/3	6/3	Internal	5	35
6/1	10/1	Internal	3	35
6/2	10/2	Internal	3	35
6/3	10/3	Internal	3	35
7/1	8/1	Internal	5	35
9/1	10/1	Internal	3	35
9/2	10/2	Internal	3	35
9/3	10/3	Internal	3	35
10/1	11/1	Internal	5	35
10/2	11/2	Internal	5	35
10/2	12/1	Internal	12	35
10/3	12/2	Internal	12	35
12/1	15/1	Internal	5	35
12/2	14/1	Internal	8	35
12/2	15/2	Internal	5	35
12/3	14/2	Internal	8	35
12/3	14/3	Internal	8	35
13/1	15/1	Internal	5	35
13/2	14/1	Internal	8	35
13/2	14/2	Internal	8	35
13/2	15/2	Internal	5	35

13/3	14/3	Internal	8	35
14/1	16/1	Internal	5	35
14/1	18/1	Internal	6	35
14/2	16/2	Internal	5	35
14/3	16/3	Internal	5	35
16/1	21/1	Internal	5	35
16/2	2/1	Internal	14	35
16/2	21/2	Internal	5	35
16/3	2/2	Internal	14	35
17/1	16/1	Internal	5	35
17/1	18/1	Internal	6	35
17/2	16/2	Internal	5	35
17/2	16/3	Internal	5	35
18/1	19/1	Internal	5	35
20/1	21/1	Internal	5	35
20/2	2/1	Internal	14	35
20/3	2/2	Internal	14	35

Scenario 1: '2022 AM' (FG1: '2022 AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	68.9 %	1906	1906
				Arm 4 Ahead	74.00	31.1 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	42.4 %	1923	1923
				Arm 7 Left	68.00	57.6 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923
9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926

10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	39.4 %	1980	1980
				Arm 12 Ahead	Inf	60.6 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	55.8 %	1931	1931
				Arm 15 Ahead	62.00	44.2 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	78.5 %	2053	2053
				Arm 15 Left	46.00	21.5 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	30.2 %	1937	1937
				Arm 18 Ahead	68.00	69.8 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	55.1 %	1950	1950
				Arm 21 Left	99.00	44.9 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	70.5 %	1928	1928
				Arm 18 Left	56.00	29.5 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf
20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921

20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2022 PM' (FG2: '2022 PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	57.8 %	1906	1906
				Arm 4 Ahead	74.00	42.2 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	12.9 %	1923	1923
				Arm 7 Left	68.00	87.1 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	52.5 %	1980	1980
				Arm 12 Ahead	Inf	47.5 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	67.1 %	1931	1931
				Arm 15 Ahead	62.00	32.9 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	13.8 %	1937	1937
				Arm 18 Ahead	68.00	86.2 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	34.1 %	1950	1950
				Arm 21 Left	99.00	65.9 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	78.5 %	1928	1928
				Arm 18 Left	56.00	21.5 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	56.3 %	1906	1906
				Arm 4 Ahead	74.00	43.7 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	58.4 %	1923	1923
				Arm 7 Left	68.00	41.6 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	46.8 %	1980	1980
				Arm 12 Ahead	Inf	53.2 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	59.3 %	1931	1931
				Arm 15 Ahead	62.00	40.7 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	39.0 %	1937	1937
				Arm 18 Ahead	68.00	61.0 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	51.7 %	1950	1950
				Arm 21 Left	99.00	48.3 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	77.5 %	1928	1928
				Arm 18 Left	56.00	22.5 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	38.9 %	1906	1906
				Arm 4 Ahead	74.00	61.1 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	51.3 %	1923	1923
				Arm 7 Left	68.00	48.7 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	54.6 %	1980	1980
				Arm 12 Ahead	Inf	45.4 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	56.5 %	1931	1931
				Arm 15 Ahead	62.00	43.5 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	26.6 %	1937	1937
				Arm 18 Ahead	68.00	73.4 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	29.1 %	1950	1950
				Arm 21 Left	99.00	70.9 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	89.6 %	1928	1928
				Arm 18 Left	56.00	10.4 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2028 WD AM' (FG5: '2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	57.2 %	1906	1906
				Arm 4 Ahead	74.00	42.8 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	58.0 %	1923	1923
				Arm 7 Left	68.00	42.0 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	51.6 %	1980	1980
				Arm 12 Ahead	Inf	48.4 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	58.4 %	1931	1931
				Arm 15 Ahead	62.00	41.6 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	39.1 %	1937	1937
				Arm 18 Ahead	68.00	60.9 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	51.6 %	1950	1950
				Arm 21 Left	99.00	48.4 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	78.1 %	1928	1928
				Arm 18 Left	56.00	21.9 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2028 WD PM' (FG6: '2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	43.8 %	1906	1906
				Arm 4 Ahead	74.00	56.2 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	50.9 %	1923	1923
				Arm 7 Left	68.00	49.1 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	52.6 %	1980	1980
				Arm 12 Ahead	Inf	47.4 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	55.7 %	1931	1931
				Arm 15 Ahead	62.00	44.3 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	98.6 %	2053	2053
				Arm 15 Left	46.00	1.4 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	24.2 %	1937	1937
				Arm 18 Ahead	68.00	75.8 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	34.0 %	1950	1950
				Arm 21 Left	99.00	66.0 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	88.5 %	1928	1928
				Arm 18 Left	56.00	11.5 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	48.9 %	1906	1906
				Arm 4 Ahead	74.00	51.1 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	67.1 %	1923	1923
				Arm 7 Left	68.00	32.9 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	49.4 %	1980	1980
				Arm 12 Ahead	Inf	50.6 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	58.4 %	1931	1931
				Arm 15 Ahead	62.00	41.6 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	93.4 %	2053	2053
				Arm 15 Left	46.00	6.6 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	37.9 %	1937	1937
				Arm 18 Ahead	68.00	62.1 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	55.2 %	1950	1950
				Arm 21 Left	99.00	44.8 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	82.3 %	1928	1928
				Arm 18 Left	56.00	17.7 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	41.5 %	1906	1906
				Arm 4 Ahead	74.00	58.5 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	52.0 %	1923	1923
				Arm 7 Left	68.00	48.0 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	51.6 %	1980	1980
				Arm 12 Ahead	Inf	48.4 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	54.0 %	1932	1932
				Arm 15 Ahead	62.00	46.0 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	25.4 %	1937	1937
				Arm 18 Ahead	68.00	74.6 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	38.4 %	1950	1950
				Arm 21 Left	99.00	61.6 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	89.1 %	1928	1928
				Arm 18 Left	56.00	10.9 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Scenario 9: '2038 WD AM' (FG9: '2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	45.4 %	1906	1906
				Arm 4 Ahead	74.00	54.6 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	66.8 %	1923	1923
				Arm 7 Left	68.00	33.2 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	47.4 %	1980	1980
				Arm 12 Ahead	Inf	52.6 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	53.4 %	1932	1932
				Arm 15 Ahead	62.00	46.6 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	76.1 %	2053	2053
				Arm 15 Left	46.00	23.9 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	30.9 %	1937	1937
				Arm 18 Ahead	68.00	69.1 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	48.8 %	1950	1950
				Arm 21 Left	99.00	51.2 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	81.9 %	1928	1928
				Arm 18 Left	56.00	18.1 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 9

Scenario 10: '2038 WD PM' (FG10: '2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	41.1 %	1906	1906
				Arm 4 Ahead	74.00	58.9 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	53.4 %	1923	1923
				Arm 7 Left	68.00	46.6 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	51.1 %	1980	1980
				Arm 12 Ahead	Inf	48.9 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	53.0 %	1932	1932
				Arm 15 Ahead	62.00	47.0 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	99.3 %	2053	2053
				Arm 15 Left	46.00	0.7 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	24.9 %	1937	1937
				Arm 18 Ahead	68.00	75.1 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	38.4 %	1950	1950
				Arm 21 Left	99.00	61.6 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	89.1 %	1928	1928
				Arm 18 Left	56.00	10.9 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 10

Scenario 11: '2a 2028 WD AM' (FG11: '2a 2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right Arm 4 Ahead	74.00 74.00	56.0 % 44.0 %	1906	1906
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead Arm 7 Left	68.00 68.00	59.2 % 40.8 %	1923	1923
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	54.9 %	1980	1980
				Arm 12 Ahead	Inf	45.1 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	51.4 %	1932	1932
				Arm 15 Ahead	62.00	48.6 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	35.8 %	1937	1937
				Arm 18 Ahead	68.00	64.2 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	49.6 %	1950	1950
				Arm 21 Left	99.00	50.4 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	77.9 %	1928	1928
				Arm 18 Left	56.00	22.1 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 11

Scenario 12: '2a 2028 WD PM' (FG12: '2a 2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	43.8 %	1906	1906
				Arm 4 Ahead	74.00	56.2 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	49.7 %	1923	1923
				Arm 7 Left	68.00	50.3 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	51.9 %	1980	1980
				Arm 12 Ahead	Inf	48.1 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	54.0 %	1932	1932
				Arm 15 Ahead	62.00	46.0 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	96.6 %	2053	2053
				Arm 15 Left	46.00	3.4 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	22.7 %	1937	1937
				Arm 18 Ahead	68.00	77.3 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	32.1 %	1950	1950
				Arm 21 Left	99.00	67.9 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	88.6 %	1928	1928
				Arm 18 Left	56.00	11.4 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 12

Scenario 13: '2a 2038 WD AM' (FG13: '2a 2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	45.2 %	1906	1906
				Arm 4 Ahead	74.00	54.8 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	70.2 %	1923	1923
				Arm 7 Left	68.00	29.8 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	49.9 %	1980	1980
				Arm 12 Ahead	Inf	50.1 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	51.2 %	1932	1932
				Arm 15 Ahead	62.00	48.8 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	74.8 %	2053	2053
				Arm 15 Left	46.00	25.2 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	29.4 %	1937	1937
				Arm 18 Ahead	68.00	70.6 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	46.3 %	1950	1950
				Arm 21 Left	99.00	53.7 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	83.3 %	1928	1928
				Arm 18 Left	56.00	16.7 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 13

Scenario 14: '2a 2038 WD PM' (FG14: '2a 2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	39.5 %	1906	1906
				Arm 4 Ahead	74.00	60.5 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	52.8 %	1923	1923
				Arm 7 Left	68.00	47.2 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	50.4 %	1980	1980
				Arm 12 Ahead	Inf	49.6 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	51.4 %	1932	1932
				Arm 15 Ahead	62.00	48.6 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	92.8 %	2053	2053
				Arm 15 Left	46.00	7.2 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	24.8 %	1937	1937
				Arm 18 Ahead	68.00	75.2 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	36.7 %	1950	1950
				Arm 21 Left	99.00	63.3 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	89.6 %	1928	1928
				Arm 18 Left	56.00	10.4 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 14

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 AM Base'	07:45	08:45	01:00	
2: '2022 PM Base'	17:00	18:00	01:00	
3: '2028 WoD AM Base'	07:45	08:45	01:00	
4: '2028 WoD PM Base'	17:00	18:00	01:00	
5: '2028 WD AM Base'	07:45	08:45	01:00	
6: '2028 WD PM Base'	17:00	18:00	01:00	
7: '2038 WoD AM Base'	07:45	08:45	01:00	
8: '2038 WoD PM Base'	17:00	18:00	01:00	
9: '2038 WD AM Base'	07:45	08:45	01:00	
10: '2038 WD PM Base'	17:00	18:00	01:00	
11: '2a 2028 WD AM Base'	07:45	08:45	01:00	
12: '2a 2028 WD PM Base'	17:00	18:00	01:00	
13: '2a 2038 WD AM Base'	07:45	08:45	01:00	
14: '2a 2038 WD PM Base'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2022 AM Base'

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	357	308	0	642	160	1467
	B	342	0	197	480	0	100	1119
	C	208	167	0	239	223	57	894
	D	0	457	220	0	313	200	1190
	E	373	0	142	377	0	148	1040
	F	215	163	83	280	195	0	936
	Tot.	1138	1144	950	1376	1373	665	6646

FG2: '2022 PM Base'

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	262	242	0	338	158	1000
	B	368	0	373	387	0	133	1261
	C	219	132	0	101	177	76	705
	D	0	494	203	0	177	313	1187
	E	563	0	131	244	0	108	1046
	F	170	136	66	126	88	0	586
	Tot.	1320	1024	1015	858	780	788	5785

FG3: '2028 WoD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	358	246	0	687	131	1422
	B	570	0	213	793	0	115	1691
	C	186	122	0	210	181	35	734
	D	0	692	257	0	490	239	1678
	E	426	0	109	428	0	117	1080
	F	257	166	67	334	209	0	1033
	Tot.	1439	1338	892	1765	1567	637	7638

FG4: '2028 WoD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	326	241	0	680	153	1400
	B	631	0	288	863	0	108	1890
	C	199	78	0	132	151	33	593
	D	0	689	223	0	397	341	1650
	E	390	0	44	218	0	35	687
	F	229	100	42	226	111	0	708
	Tot.	1449	1193	838	1439	1339	670	6928

FG5: '2028 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	350	253	0	685	135	1423
	B	573	0	205	805	0	110	1693
	C	189	111	0	214	171	35	720
	D	0	688	272	0	500	252	1712
	E	413	0	104	422	0	111	1050
	F	263	158	67	343	200	0	1031
	Tot.	1438	1307	901	1784	1556	643	7629

FG6: '2028 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	305	231	0	660	147	1343
	B	585	0	280	821	0	105	1791
	C	183	65	0	110	147	32	537
	D	0	668	225	0	411	347	1651
	E	378	0	41	212	0	37	668
	F	212	95	41	210	109	0	667
	Tot.	1358	1133	818	1353	1327	668	6657

FG7: '2038 WoD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	337	226	0	684	133	1380
	B	513	0	134	708	0	80	1435
	C	195	89	0	221	147	30	682
	D	0	848	302	0	643	315	2108
	E	444	0	78	443	0	90	1055
	F	290	127	53	386	172	0	1028
	Tot.	1442	1401	793	1758	1646	648	7688

FG8: '2038 WoD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	423	288	0	768	190	1669
	B	568	0	253	838	0	90	1749
	C	230	80	0	149	174	37	670
	D	0	788	254	0	421	372	1835
	E	354	0	41	214	0	34	643
	F	206	94	39	212	101	0	652
	Tot.	1358	1385	875	1413	1464	723	7218

FG9: '2038 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	341	225	0	681	134	1381
	B	470	0	127	659	0	77	1333
	C	210	97	0	243	165	34	749
	D	0	868	309	0	644	322	2143
	E	464	0	85	472	0	98	1119
	F	282	126	54	386	171	0	1019
	Tot.	1426	1432	800	1760	1661	665	7744

FG10: '2038 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	417	283	0	781	186	1667
	B	562	0	247	850	0	87	1746
	C	226	78	0	150	176	36	666
	D	0	804	259	0	444	377	1884
	E	353	0	41	216	0	34	644
	F	205	92	39	212	105	0	653
	Tot.	1346	1391	869	1428	1506	720	7260

FG11: '2a 2028 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	349	253	0	680	142	1424
	B	569	0	199	803	0	115	1686
	C	187	107	0	218	162	36	710
	D	0	691	270	0	495	265	1721
	E	413	0	100	424	0	112	1049
	F	268	153	66	349	196	0	1032
	Tot.	1437	1300	888	1794	1533	670	7622

FG12: '2a 2028 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	269	214	0	652	137	1272
	B	599	0	288	821	0	107	1815
	C	191	67	0	114	168	34	574
	D	0	676	238	0	455	364	1733
	E	391	0	44	215	0	38	688
	F	211	95	40	199	118	0	663
	Tot.	1392	1107	824	1349	1393	680	6745

FG13: '2a 2038 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	331	227	0	691	132	1381
	B	487	0	123	714	0	72	1396
	C	195	83	0	234	140	28	680
	D	0	851	314	0	668	323	2156
	E	447	0	76	471	0	87	1081
	F	288	122	50	401	166	0	1027
	Tot.	1417	1387	790	1820	1665	642	7721

FG14: '2a 2038 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	405	278	0	800	177	1660
	B	571	0	249	847	0	83	1750
	C	226	79	0	145	181	35	666
	D	0	818	262	0	465	377	1922
	E	350	0	40	213	0	32	635
	F	206	94	38	209	108	0	655
	Tot.	1353	1396	867	1414	1554	704	7288

Scenario 1: '2022 AM' (FG1: '2022 AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	357	308	0	642	160	1467
	B	342	0	197	480	0	100	1119
	C	208	167	0	239	223	57	894
	D	0	457	220	0	313	200	1190
	E	373	0	142	377	0	148	1040
	F	215	163	83	280	195	0	936
	Tot.	1138	1144	950	1376	1373	665	6646

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 2: '2022 PM' (FG2: '2022 PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	262	242	0	338	158	1000
	B	368	0	373	387	0	133	1261
	C	219	132	0	101	177	76	705
	D	0	494	203	0	177	313	1187
	E	563	0	131	244	0	108	1046
	F	170	136	66	126	88	0	586
	Tot.	1320	1024	1015	858	780	788	5785

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	358	246	0	687	131	1422
	B	570	0	213	793	0	115	1691
	C	186	122	0	210	181	35	734
	D	0	692	257	0	490	239	1678
	E	426	0	109	428	0	117	1080
	F	257	166	67	334	209	0	1033
	Tot.	1439	1338	892	1765	1567	637	7638

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	326	241	0	680	153	1400
	B	631	0	288	863	0	108	1890
	C	199	78	0	132	151	33	593
	D	0	689	223	0	397	341	1650
	E	390	0	44	218	0	35	687
	F	229	100	42	226	111	0	708
	Tot.	1449	1193	838	1439	1339	670	6928

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 5: '2028 WD AM' (FG5: '2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	350	253	0	685	135	1423
	B	573	0	205	805	0	110	1693
	C	189	111	0	214	171	35	720
	D	0	688	272	0	500	252	1712
	E	413	0	104	422	0	111	1050
	F	263	158	67	343	200	0	1031
	Tot.	1438	1307	901	1784	1556	643	7629

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 6: '2028 WD PM' (FG6: '2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	305	231	0	660	147	1343
	B	585	0	280	821	0	105	1791
	C	183	65	0	110	147	32	537
	D	0	668	225	0	411	347	1651
	E	378	0	41	212	0	37	668
	F	212	95	41	210	109	0	667
	Tot.	1358	1133	818	1353	1327	668	6657

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	337	226	0	684	133	1380
	B	513	0	134	708	0	80	1435
	C	195	89	0	221	147	30	682
	D	0	848	302	0	643	315	2108
	E	444	0	78	443	0	90	1055
	F	290	127	53	386	172	0	1028
	Tot.	1442	1401	793	1758	1646	648	7688

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	423	288	0	768	190	1669
	B	568	0	253	838	0	90	1749
	C	230	80	0	149	174	37	670
	D	0	788	254	0	421	372	1835
	E	354	0	41	214	0	34	643
	F	206	94	39	212	101	0	652
	Tot.	1358	1385	875	1413	1464	723	7218

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 9: '2038 WD AM' (FG9: '2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	341	225	0	681	134	1381
	B	470	0	127	659	0	77	1333
	C	210	97	0	243	165	34	749
	D	0	868	309	0	644	322	2143
	E	464	0	85	472	0	98	1119
	F	282	126	54	386	171	0	1019
	Tot.	1426	1432	800	1760	1661	665	7744

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 10: '2038 WD PM' (FG10: '2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	417	283	0	781	186	1667
	B	562	0	247	850	0	87	1746
	C	226	78	0	150	176	36	666
	D	0	804	259	0	444	377	1884
	E	353	0	41	216	0	34	644
	F	205	92	39	212	105	0	653
	Tot.	1346	1391	869	1428	1506	720	7260

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 11: '2a 2028 WD AM' (FG11: '2a 2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	349	253	0	680	142	1424
	B	569	0	199	803	0	115	1686
	C	187	107	0	218	162	36	710
	D	0	691	270	0	495	265	1721
	E	413	0	100	424	0	112	1049
	F	268	153	66	349	196	0	1032
	Tot.	1437	1300	888	1794	1533	670	7622

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 12: '2a 2028 WD PM' (FG12: '2a 2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	269	214	0	652	137	1272
	B	599	0	288	821	0	107	1815
	C	191	67	0	114	168	34	574
	D	0	676	238	0	455	364	1733
	E	391	0	44	215	0	38	688
	F	211	95	40	199	118	0	663
	Tot.	1392	1107	824	1349	1393	680	6745

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 13: '2a 2038 WD AM' (FG13: '2a 2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	F	Tot.
A	0	331	227	0	691	132	1381
B	487	0	123	714	0	72	1396
C	195	83	0	234	140	28	680
D	0	851	314	0	668	323	2156
E	447	0	76	471	0	87	1081
F	288	122	50	401	166	0	1027
Tot.	1417	1387	790	1820	1665	642	7721

Traffic Flows, Difference

Difference :

Origin \ Destination	A	B	C	D	E	F	Tot.
A	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0
Tot.	0	0	0	0	0	0	0

Scenario 14: '2a 2038 WD PM' (FG14: '2a 2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	F	Tot.
A	0	405	278	0	800	177	1660
B	571	0	249	847	0	83	1750
C	226	79	0	145	181	35	666
D	0	818	262	0	465	377	1922
E	350	0	40	213	0	32	635
F	206	94	38	209	108	0	655
Tot.	1353	1396	867	1414	1554	704	7288

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2022 AM	Scenario 2: 2022 PM	Scenario 3: 2028 WoD AM	Scenario 4: 2028 WoD PM	Scenario 5: 2028 WD AM	Scenario 6: 2028 WD PM
Junction: Unnamed Junction						
1/1 (short)	357	262	358	326	350	305
1/2 (with short)	890(In) 533(Out)	649(In) 387(Out)	883(In) 525(Out)	848(In) 522(Out)	852(In) 502(Out)	831(In) 526(Out)
1/3	577	351	539	552	571	512
2/1	586	470	644	382	625	434
2/2 (with short)	1498(In) 646(Out)	1150(In) 692(Out)	1740(In) 769(Out)	1349(In) 794(Out)	1740(In) 775(Out)	1232(In) 701(Out)
2/3 (short)	852	458	971	555	965	531
3/1	753	642	679	550	696	538
3/2	1066	563	1238	832	1208	804
3/3	588	391	551	556	577	534
4/1	943	732	1002	708	975	739
4/2	201	292	336	485	332	394
5/1 (short)	342	428	512	591	488	570
5/2 (with short)	677(In) 335(Out)	760(In) 332(Out)	1006(In) 494(Out)	1151(In) 560(Out)	1010(In) 522(Out)	1101(In) 531(Out)
5/3	442	501	685	739	683	690
6/1	772	348	989	658	934	659
6/2	774	602	1042	1037	1079	966
6/3	1030	892	1236	1295	1260	1224
7/1	950	1015	892	838	901	818
8/1	950	1015	892	838	901	818
9/1 (short)	193	101	198	132	196	108
9/2 (with short)	462(In) 269(Out)	278(In) 177(Out)	391(In) 193(Out)	283(In) 151(Out)	385(In) 189(Out)	257(In) 149(Out)
9/3	432	427	343	310	335	280
10/1	965	449	1187	790	1130	767
10/2	1043	779	1235	1188	1268	1115
10/3	1462	1319	1579	1605	1595	1504
11/1	965	449	1187	790	1130	767
11/2	411	409	578	649	654	586
12/1	632	370	657	539	614	529
12/2 (with short)	1462(In) 969(Out)	1319(In) 709(Out)	1579(In) 1033(Out)	1605(In) 927(Out)	1595(In) 1063(Out)	1504(In) 873(Out)
12/3 (short)	493	610	546	678	532	631
13/1 (short)	188	177	490	397	500	402
13/2 (with short)	769(In) 581(Out)	696(In) 519(Out)	1085(In) 595(Out)	990(In) 593(Out)	1108(In) 608(Out)	1034(In) 632(Out)

13/3	421	491	593	660	604	617
14/1	741	789	852	865	873	833
14/2	749	812	902	882	888	905
14/3	421	495	593	708	604	619
15/1	820	547	1147	936	1114	931
15/2	553	233	420	403	442	396
16/1	578	504	736	532	737	488
16/2	768	980	924	970	905	997
16/3	940	870	1130	970	1130	872
17/1	502	503	521	337	507	323
17/2	538	543	559	350	543	345
18/1	665	788	637	670	643	668
19/1	665	788	637	670	643	668
20/1 (short)	215	170	257	229	263	212
20/2 (with short)	378(In) 163(Out)	306(In) 136(Out)	423(In) 166(Out)	329(In) 100(Out)	421(In) 158(Out)	307(In) 95(Out)
20/3	558	280	610	379	610	360
21/1	793	674	993	761	1000	700
21/2	345	646	446	688	438	658

Lane	Scenario 7: 2038 WoD AM	Scenario 8: 2038 WoD PM	Scenario 9: 2038 WD AM	Scenario 10: 2038 WD PM	Scenario 11: 2a 2028 WD AM	Scenario 12: 2a 2028 WD PM
Junction: Unnamed Junction						
1/1 (short)	337	423	341	417	349	269
1/2 (with short)	860(In) 523(Out)	1008(In) 585(Out)	836(In) 495(Out)	1004(In) 587(Out)	858(In) 509(Out)	786(In) 517(Out)
1/3	520	661	545	663	566	486
2/1	612	492	553	488	609	424
2/2 (with short)	1886(In) 885(Out)	1331(In) 804(Out)	2015(In) 986(Out)	1358(In) 825(Out)	1747(In) 778(Out)	1268(In) 736(Out)
2/3 (short)	1001	527	1029	533	969	532
3/1	659	622	673	622	689	536
3/2	1269	824	1274	837	1078	786
3/3	549	661	570	663	713	535
4/1	949	915	894	905	958	693
4/2	452	470	538	486	342	414
5/1 (short)	407	527	382	530	488	572
5/2 (with short)	842(In) 435(Out)	1091(In) 564(Out)	786(In) 404(Out)	1097(In) 567(Out)	1002(In) 514(Out)	1109(In) 537(Out)
5/3	593	658	547	649	684	706
6/1	1000	653	1032	667	1037	653
6/2	977	1009	901	1020	844	954
6/3	1142	1319	1117	1312	1397	1241
7/1	793	875	800	869	888	824
8/1	793	875	800	869	888	824
9/1 (short)	184	149	204	150	189	113
9/2 (with short)	368(In) 184(Out)	323(In) 174(Out)	408(In) 204(Out)	326(In) 176(Out)	380(In) 191(Out)	282(In) 169(Out)
9/3	314	347	341	340	330	292
10/1	1184	802	1236	817	1226	766
10/2	1161	1183	1105	1196	1035	1123
10/3	1456	1666	1458	1652	1727	1533
11/1	1184	802	1236	817	1226	766
11/2	574	611	524	611	568	583
12/1	587	572	581	585	467	540
12/2 (with short)	1456(In) 999(Out)	1666(In) 1023(Out)	1458(In) 935(Out)	1652(In) 1014(Out)	1727(In) 1175(Out)	1533(In) 865(Out)
12/3 (short)	457	643	523	638	552	668
13/1 (short)	593	421	439	439	495	433
13/2 (with short)	1354(In) 761(Out)	1111(In) 690(Out)	1296(In) 857(Out)	1139(In) 700(Out)	1109(In) 614(Out)	1082(In) 649(Out)

13/3	754	724	847	745	612	651
14/1	898	924	821	914	869	831
14/2	853	961	853	956	901	930
14/3	754	724	847	745	612	652
15/1	1180	993	1020	1024	962	973
15/2	466	471	641	482	571	420
16/1	759	513	696	507	705	484
16/2	878	1037	875	1030	920	1026
16/3	1275	979	1404	1002	1136	911
17/1	509	312	540	313	506	333
17/2	546	331	579	331	543	355
18/1	648	723	665	720	670	680
19/1	648	723	665	720	670	680
20/1 (short)	290	206	282	205	268	211
20/2 (with short)	417(In) 127(Out)	300(In) 94(Out)	408(In) 126(Out)	297(In) 92(Out)	421(In) 153(Out)	306(In) 95(Out)
20/3	611	352	611	356	611	357
21/1	1049	719	978	712	973	695
21/2	393	639	448	634	464	697

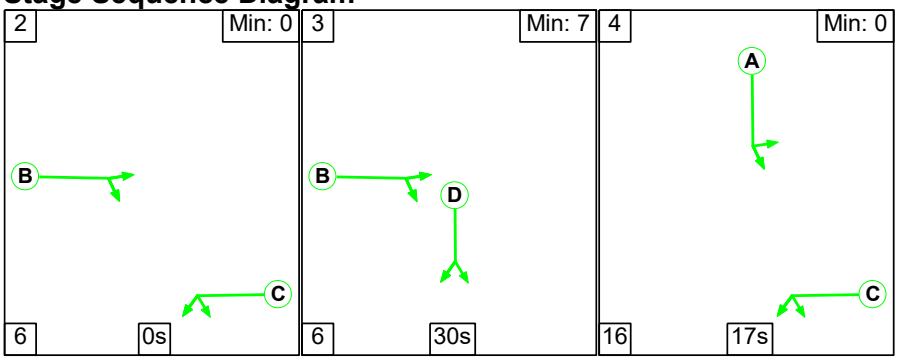
Detailed Input Data And Results

Lane	Scenario 13: 2a 2038 WD AM	Scenario 14: 2a 2038 WD PM
Junction: Unnamed Junction		
1/1 (short)	331	405
1/2 (with short)	838(In) 507(Out)	995(In) 590(Out)
1/3	543	665
2/1	522	471
2/2 (with short)	2012(In) 974(Out)	1390(In) 860(Out)
2/3 (short)	1038	530
3/1	667	618
3/2	1287	842
3/3	574	665
4/1	853	876
4/2	534	520
5/1 (short)	413	528
5/2 (with short)	837(In) 424(Out)	1096(In) 568(Out)
5/3	559	654
6/1	1086	659
6/2	915	1030
6/3	1133	1319
7/1	790	867
8/1	790	867
9/1 (short)	182	145
9/2 (with short)	374(In) 192(Out)	326(In) 181(Out)
9/3	306	340
10/1	1268	804
10/2	1107	1211
10/3	1439	1659
11/1	1268	804
11/2	552	610
12/1	555	601
12/2 (with short)	1439(In) 905(Out)	1659(In) 1005(Out)
12/3 (short)	534	654
13/1 (short)	452	413
13/2 (with short)	1308(In) 856(Out)	1140(In) 727(Out)

13/3	848	782
14/1	786	894
14/2	851	952
14/3	848	782
15/1	1007	1014
15/2	658	540
16/1	666	498
16/2	863	1026
16/3	1395	1035
17/1	522	308
17/2	559	327
18/1	642	704
19/1	642	704
20/1 (short)	288	206
20/2 (with short)	410(In) 122(Out)	300(In) 94(Out)
20/3	617	355
21/1	954	704
21/2	463	649

Scenario 1: '2022 AM' (FG1: '2022 AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



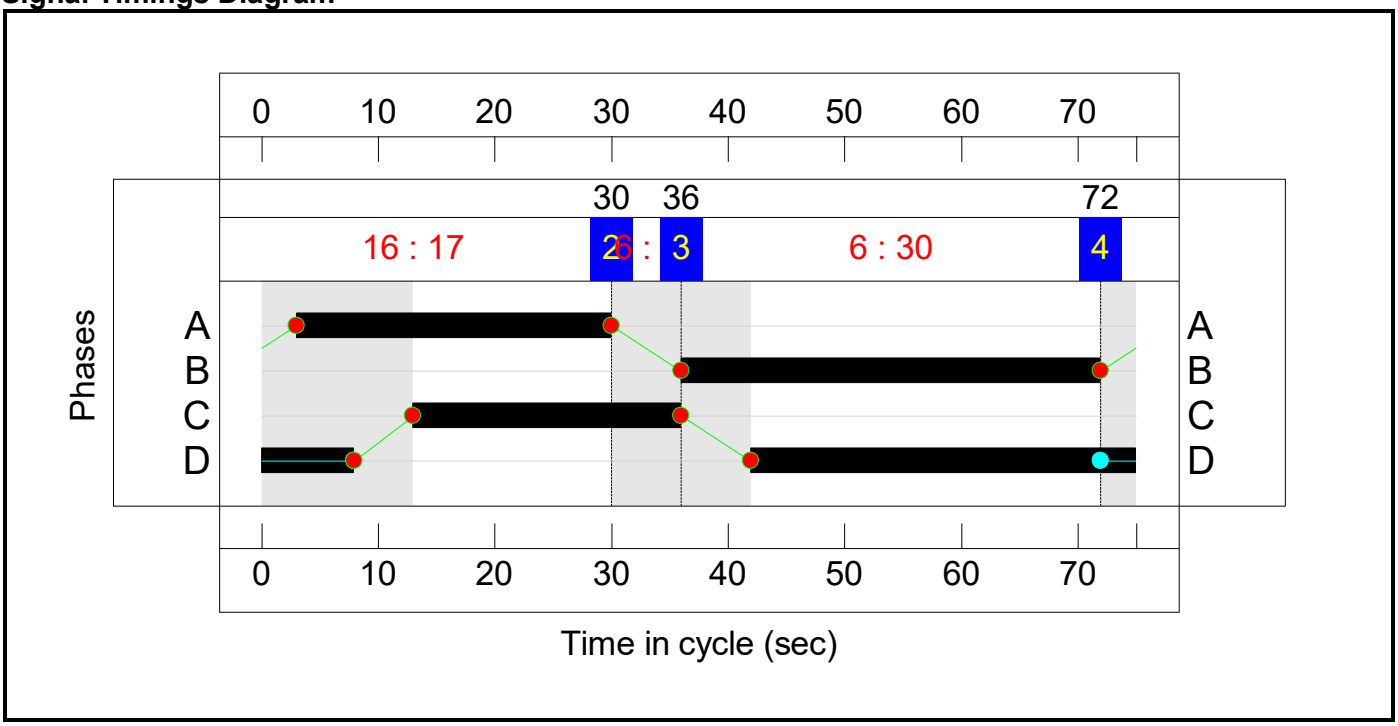
Stage Timings

Stage	2	3	4
Duration	0	30	17
Change Point	30	36	72

Phase Timings

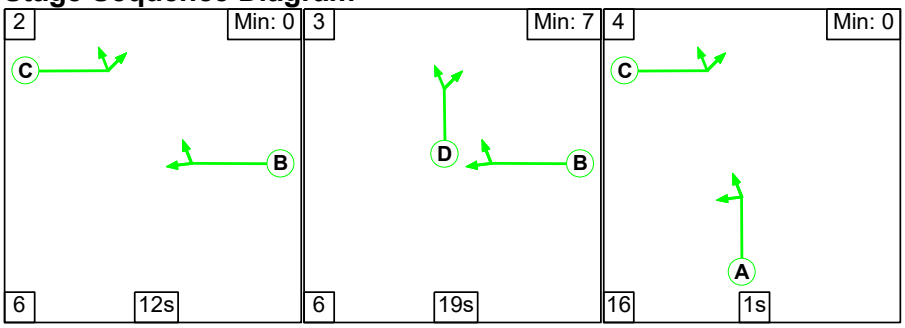
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	27	3	30
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	36	36	72
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	23	13	36
D	East Circ Right Ahead East Circ	Traffic	41	42	8

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



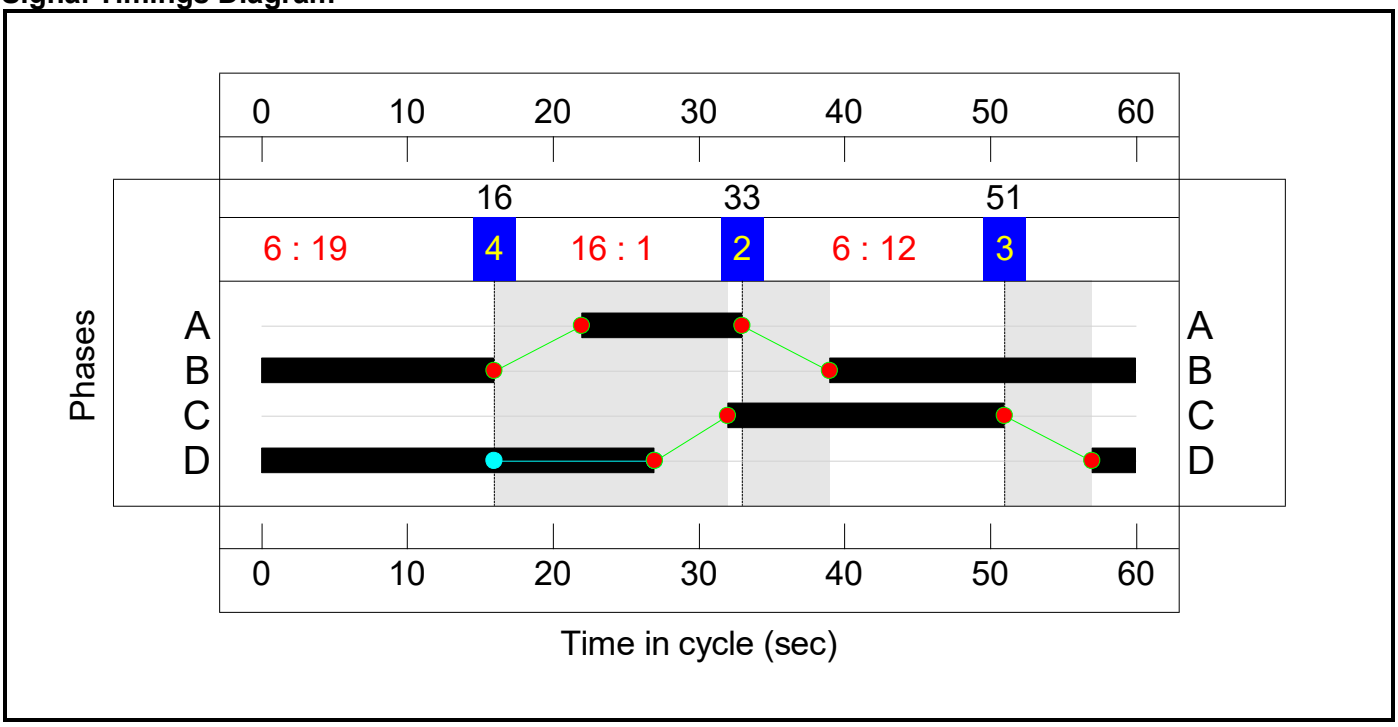
Stage Timings

Stage	2	3	4
Duration	12	19	1
Change Point	33	51	16

Phase Timings

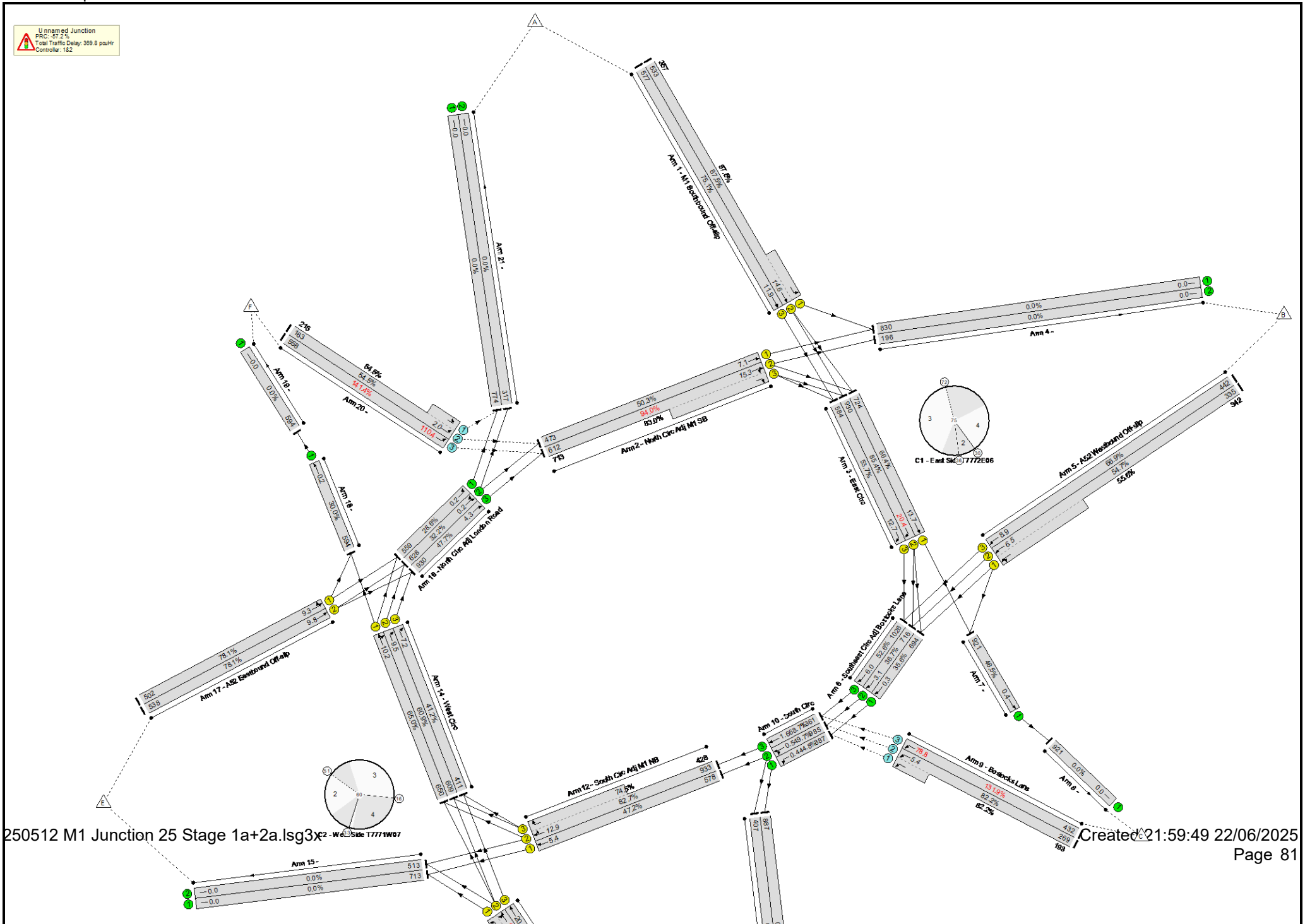
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	11	22	33
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	37	39	16
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	19	32	51
D	West Circ Right Ahead West Circ	Traffic	30	57	27

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	3	30
1/2	M1 Southbound Off-slip Ahead	U	A	3	30
1/3	M1 Southbound Off-slip Ahead	U	A	3	30
2/1	North Circ Adj M1 SB Ahead	U	B	36	72
2/2	North Circ Adj M1 SB Right Ahead	U	B	36	72
2/3	North Circ Adj M1 SB Right	U	B	36	72
3/1	East Circ Ahead	U	D	42	8
3/2	East Circ Right	U	D	42	8
3/3	East Circ Right	U	D	42	8
5/1	A52 Westbound Off-slip Ahead Left	U	C	13	36
5/2	A52 Westbound Off-slip Ahead	U	C	13	36
5/3	A52 Westbound Off-slip Ahead	U	C	13	36
12/1	South Circ Adj M1 NB Ahead	U	B	39	16
12/2	South Circ Adj M1 NB Right Ahead	U	B	39	16
12/3	South Circ Adj M1 NB Right	U	B	39	16
13/1	M1 Northbound Off-slip Left	U	A	22	33
13/2	M1 Northbound Off-slip Ahead Left	U	A	22	33
13/3	M1 Northbound Off-slip Ahead	U	A	22	33
14/1	West Circ Right Ahead	U	D	57	27
14/2	West Circ Right	U	D	57	27
14/3	West Circ Right	U	D	57	27
17/1	A52 Eastbound Off-slip Ahead Left	U	C	32	51
17/2	A52 Eastbound Off-slip Ahead	U	C	32	51


Unnamed Junction
PRC: -57.2 %
Total Traffic Delay: 369.8 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T7772E06
C2 - West Side T7771W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**141.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**141.5%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	27	-	-	890	2056:1915	609+408	87.5 : 87.5%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	27	-	-	577	2059	769	75.1%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	36	-	-	586	1908	941	50.3%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	36	-	-	1498	1906:1904	652+859	94.0 : 83.0%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	41	-	-	753	1946	1090	66.4%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	1066	1945	1089	85.4%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	588	1943	1088	53.7%
4/1		U	N/A	N/A	-		-	-	-	-	943	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	201	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	23	-	-	677	2061:1923	613+615	54.7 : 55.6%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	23	-	-	442	2064	660	66.9%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	772	1953	1953	35.6%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	774	1952	1952	36.7%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1030	1951	1951	52.6%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	950	1980	1980	46.5%
8/1		U	N/A	N/A	-		-	-	-	-	950	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	462	1923:1919	327+235	82.2 : 82.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	432	1926	327	131.9%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	965	1980	1980	44.8%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1043	1980	1980	49.7%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1462	1980	1980	68.7%
11/1		U	N/A	N/A	-		-	-	-	-	965	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	411	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	37	-	-	632	1936	1226	47.2%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	37	-	-	1462	1931:1931	1128+574	82.7 : 74.5%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	11	-	-	769	2053:1912	411+133	141.5 : 141.5%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	11	-	-	421	2057	411	102.3%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	30	-	-	741	1937	1001	65.0%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	30	-	-	749	1935	1000	60.9%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	30	-	-	421	1932	998	41.2%
15/1		U	N/A	N/A	-		-	-	-	-	820	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	553	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	578	1952	1952	28.6%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	768	1950	1950	32.2%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	940	1950	1950	47.7%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	19	-	-	502	1928	643	78.1%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	19	-	-	538	2067	689	78.1%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	665	1980	1980	30.0%
19/1		U	N/A	N/A	-		-	-	-	-	665	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	378	2061:1921	299+395	54.5 : 54.5%
20/3	Left	O	N/A	N/A	-		-	-	-	-	558	1928	395	141.4%
21/1		U	N/A	N/A	-		-	-	-	-	793	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	345	Inf	Inf	0.0%

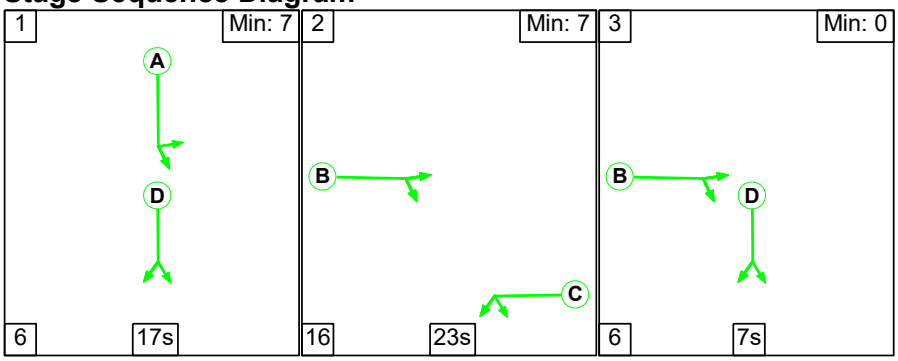
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2402**	**0**	**0**	**74.7**	**295.1**	**0.0**	**369.8**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2402**	**0**	**0**	**74.7**	**295.1**	**0.0**	**369.8**	**-**	**-**	**-**	**-**	
1/2+1/1	890	890	-	-	-	4.8	3.3	-	8.1	33.0	11.3	3.3	14.6	
1/3	577	577	-	-	-	3.3	1.5	-	4.8	29.7	10.4	1.5	11.9	
2/1	473	473	-	-	-	1.7	0.5	-	2.2	16.6	6.6	0.5	7.1	
2/2+2/3	1325	1325	-	-	-	5.5	3.4	-	8.9	24.2	11.9	3.4	15.3	
3/1	724	724	-	-	-	2.5	1.0	-	3.5	17.2	12.8	1.0	13.7	
3/2	930	930	-	-	-	2.2	2.8	-	5.0	19.3	17.6	2.8	20.4	
3/3	584	584	-	-	-	4.6	0.6	-	5.1	31.7	12.1	0.6	12.7	
4/1	830	830	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	196	196	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	677	677	-	-	-	3.9	0.6	-	4.5	24.2	5.9	0.6	6.5	
5/3	442	442	-	-	-	2.7	1.0	-	3.7	30.2	7.9	1.0	8.9	
6/1	694	694	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
6/2	716	716	-	-	-	0.0	0.3	-	0.3	1.5	2.8	0.3	3.1	
6/3	1026	1026	-	-	-	0.0	0.6	-	0.6	2.0	5.5	0.6	6.0	
7/1	921	921	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
8/1	921	921	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	462	462	924	0	0	1.2	2.2	-	3.4	26.5	3.2	2.2	5.4	
9/3	432	327	327	0	0	5.6	54.3	-	59.9	499.2	24.5	54.3	78.8	
10/1	887	887	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
10/2	985	985	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/3	1361	1361	-	-	-	0.0	1.1	-	1.1	2.9	0.6	1.1	1.6	
11/1	887	887	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	407	407	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	578	578	-	-	-	0.9	0.4	-	1.4	8.5	5.0	0.4	5.4	
12/2+12/3	1361	1361	-	-	-	2.6	2.0	-	4.6	12.2	10.9	2.0	12.9	
13/2+13/1	769	545	-	-	-	9.7	114.4	-	124.2	581.3	15.0	114.4	129.4	
13/3	421	411	-	-	-	3.0	12.9	-	16.0	136.7	7.2	12.9	20.1	
14/1	650	650	-	-	-	1.9	0.9	-	2.9	15.9	9.3	0.9	10.2	
14/2	609	609	-	-	-	2.4	0.8	-	3.2	18.8	8.7	0.8	9.5	
14/3	411	411	-	-	-	3.1	0.4	-	3.5	30.4	6.9	0.4	7.2	
15/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	513	513	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	559	559	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	628	628	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
16/3	930	930	-	-	-	0.0	0.5	-	0.5	1.8	3.9	0.5	4.3	
17/1	502	502	-	-	-	2.5	1.7	-	4.3	30.5	7.5	1.7	9.3	
17/2	538	538	-	-	-	2.7	1.7	-	4.4	29.7	8.1	1.7	9.8	
18/1	594	594	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
19/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	378	378	756	0	0	0.5	0.6	-	1.1	10.4	1.4	0.6	2.0	
20/3	558	395	395	0	0	7.2	83.3	-	90.5	584.1	27.1	83.3	110.4	
21/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-4.4	Total Delay for Signalled Lanes (pcuHr):	45.85	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-57.2	Total Delay for Signalled Lanes (pcuHr):	164.33	Cycle Time (s):	60
	PRC Over All Lanes (%):	-57.2	Total Delay Over All Lanes(pcuHr):	369.79		

Scenario 2: '2022 PM' (FG2: '2022 PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



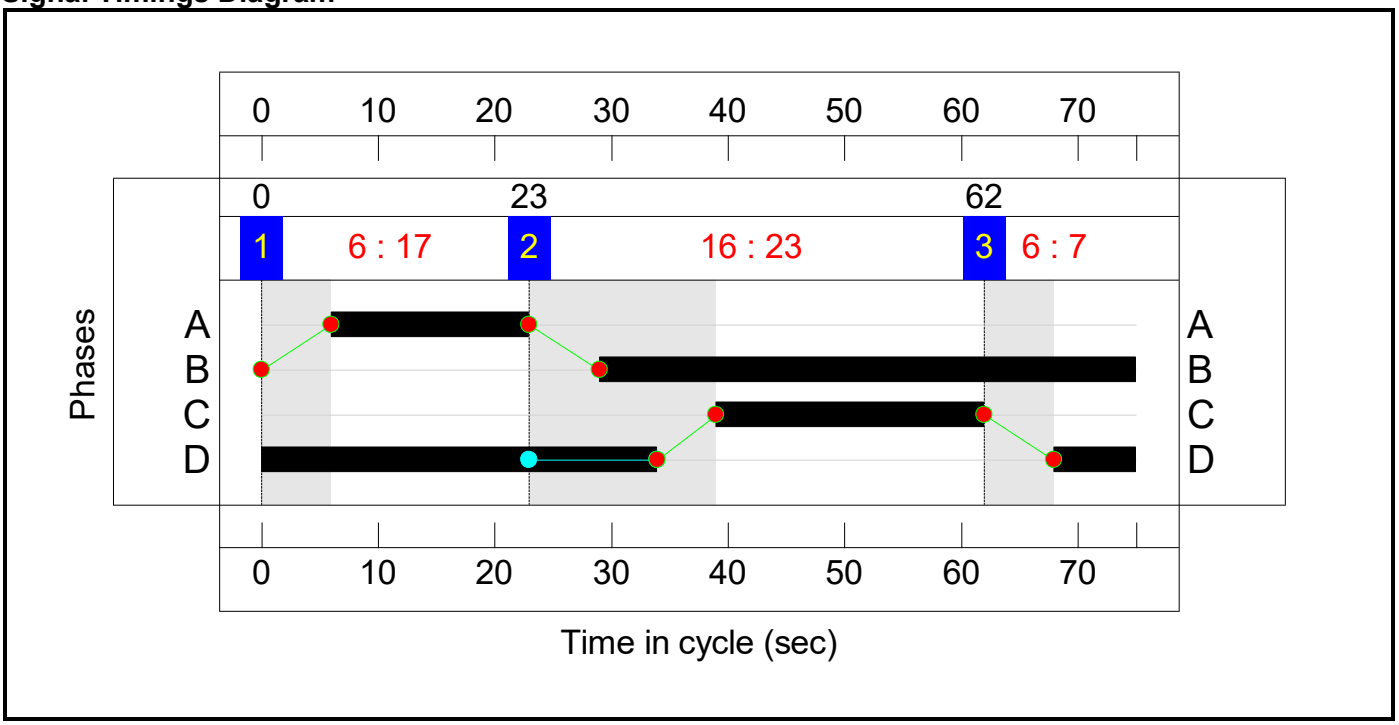
Stage Timings

Stage	1	2	3
Duration	17	23	7
Change Point	0	23	62

Phase Timings

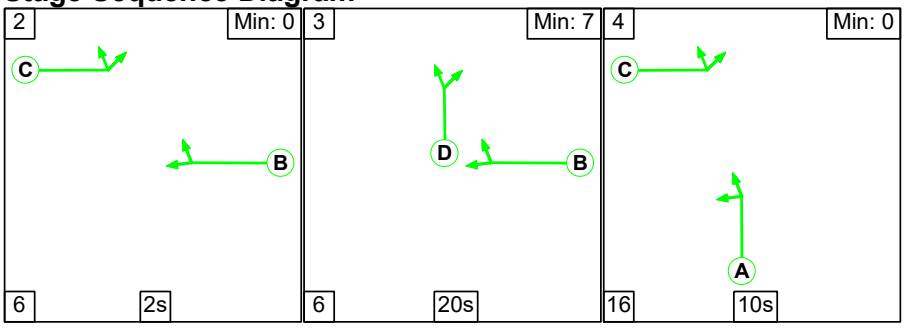
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	17	6	23
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	46	29	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	23	39	62
D	East Circ Right Ahead East Circ	Traffic	41	68	34

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



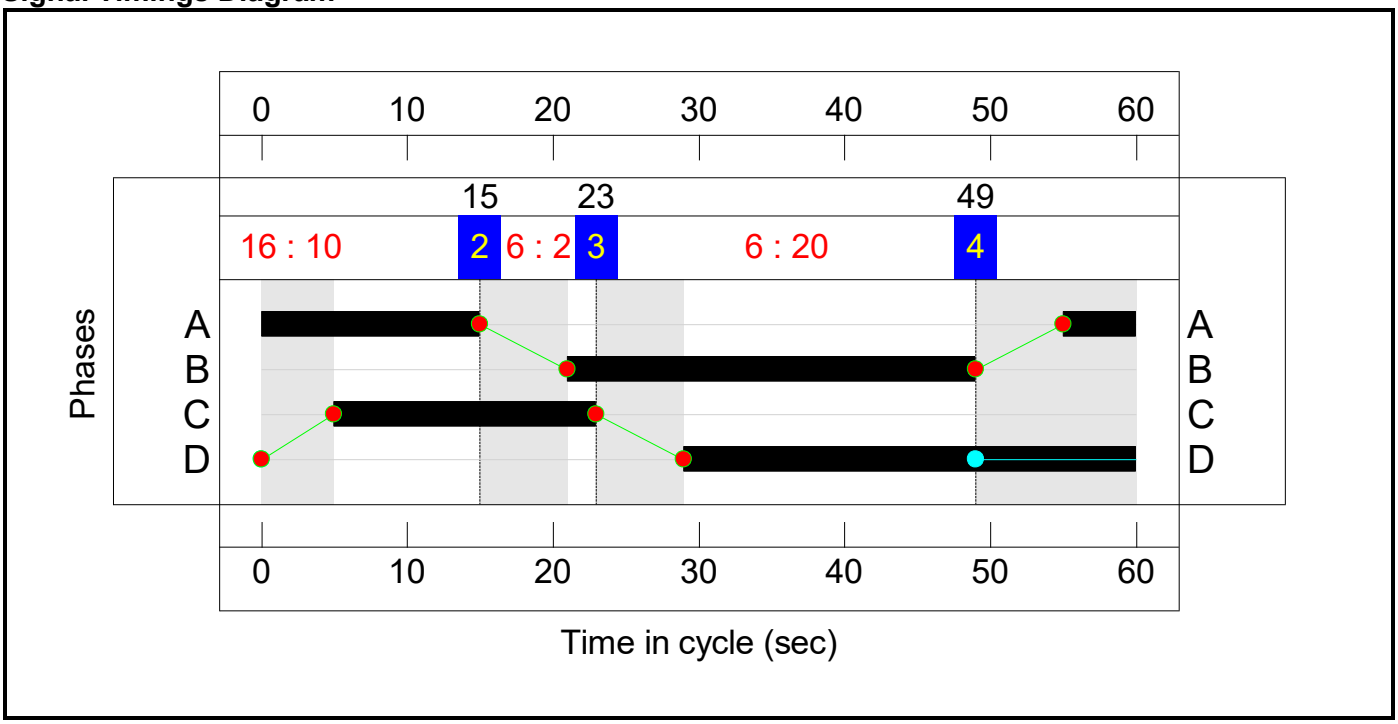
Stage Timings

Stage	2	3	4
Duration	2	20	10
Change Point	15	23	49

Phase Timings

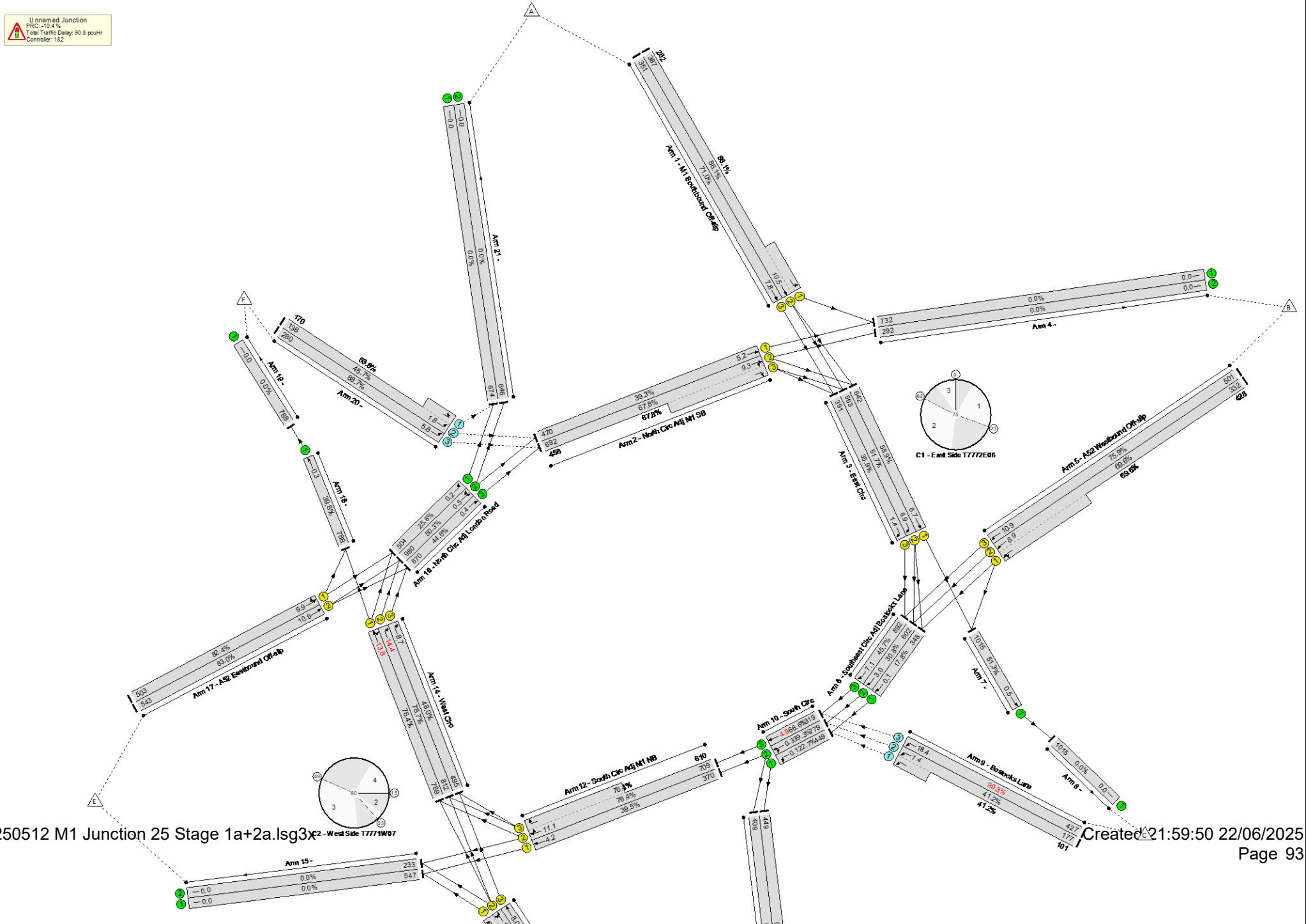
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	20	55	15
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	28	21	49
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	5	23
D	West Circ Right Ahead West Circ	Traffic	31	29	0

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	23
1/2	M1 Southbound Off-slip Ahead	U	A	6	23
1/3	M1 Southbound Off-slip Ahead	U	A	6	23
2/1	North Circ Adj M1 SB Ahead	U	B	29	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	29	0
2/3	North Circ Adj M1 SB Right	U	B	29	0
3/1	East Circ Ahead	U	D	68	34
3/2	East Circ Right	U	D	68	34
3/3	East Circ Right	U	D	68	34
5/1	A52 Westbound Off-slip Ahead Left	U	C	39	62
5/2	A52 Westbound Off-slip Ahead	U	C	39	62
5/3	A52 Westbound Off-slip Ahead	U	C	39	62
12/1	South Circ Adj M1 NB Ahead	U	B	21	49
12/2	South Circ Adj M1 NB Right Ahead	U	B	21	49
12/3	South Circ Adj M1 NB Right	U	B	21	49
13/1	M1 Northbound Off-slip Left	U	A	55	15
13/2	M1 Northbound Off-slip Ahead Left	U	A	55	15
13/3	M1 Northbound Off-slip Ahead	U	A	55	15
14/1	West Circ Right Ahead	U	D	29	0
14/2	West Circ Right	U	D	29	0
14/3	West Circ Right	U	D	29	0
17/1	A52 Eastbound Off-slip Ahead Left	U	C	5	23
17/2	A52 Eastbound Off-slip Ahead	U	C	5	23


Unnamed Junction
PRC: -10.4 %
Total Traffic Delay: 90.8 pcuHr
Controller: 1&2
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.3%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	17	-	-	649	2056:1915	449+304	86.1 : 86.1%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	17	-	-	351	2059	494	71.0%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	46	-	-	470	1908	1196	39.3%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	46	-	-	1150	1906:1904	1021+675	67.8 : 67.8%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	41	-	-	642	1946	1090	58.9%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	563	1945	1089	51.7%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	391	1943	1088	35.9%
4/1		U	N/A	N/A	-		-	-	-	-	732	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	292	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	23	-	-	760	2061:1923	477+615	69.6 : 69.6%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	23	-	-	501	2064	660	75.9%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	348	1953	1953	17.8%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	602	1952	1952	30.8%

6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	892	1951	1951	45.7%
7/1	Ahead	U	N/A	N/A	-		-	-	-	-	1015	1980	1980	51.3%
8/1		U	N/A	N/A	-		-	-	-	-	1015	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	278	1923:1919	430+245	41.2 : 41.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	427	1926	430	99.3%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	449	1980	1980	22.7%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	779	1980	1980	39.3%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1319	1980	1980	66.6%
11/1		U	N/A	N/A	-		-	-	-	-	449	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	409	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	28	-	-	370	1936	936	39.5%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	28	-	-	1319	1931:1931	928+798	76.4 : 76.4%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	20	-	-	696	2053:1912	688+235	75.4 : 75.4%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	20	-	-	491	2057	720	68.2%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	789	1937	1033	76.4%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	812	1935	1032	78.7%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	495	1932	1030	48.0%
15/1		U	N/A	N/A	-		-	-	-	-	547	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	233	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	504	1952	1952	25.8%

16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	980	1950	1950	50.3%
16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	870	1950	1950	44.6%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	503	1928	611	82.4%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	543	2067	655	83.0%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	788	1980	1980	39.8%
19/1		U	N/A	N/A	-		-	-	-	-	788	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	306	2061:1921	298+316	45.7 : 53.8%
20/3	Left	O	N/A	N/A	-		-	-	-	-	280	1928	316	88.7%
21/1		U	N/A	N/A	-		-	-	-	-	674	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	646	Inf	Inf	0.0%

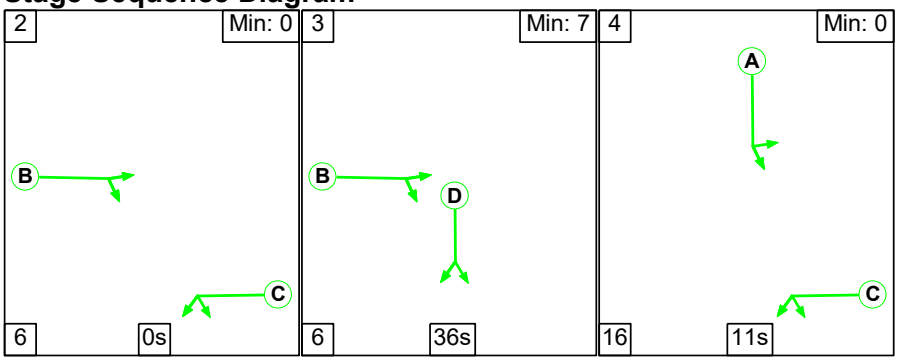
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1875**	**0**	**0**	**50.1**	**40.6**	**0.0**	**90.8**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1875**	**0**	**0**	**50.1**	**40.6**	**0.0**	**90.8**	**-**	**-**	**-**	**-**	
1/2+1/1	649	649	-	-	-	4.7	2.9	-	7.6	42.3	7.5	2.9	10.5	
1/3	351	351	-	-	-	2.5	1.2	-	3.8	38.5	6.6	1.2	7.8	
2/1	470	470	-	-	-	0.9	0.3	-	1.2	9.4	4.8	0.3	5.2	
2/2+2/3	1150	1150	-	-	-	2.5	1.0	-	3.5	11.0	8.3	1.0	9.3	
3/1	642	642	-	-	-	2.1	0.7	-	2.8	16.0	7.9	0.7	8.7	
3/2	563	563	-	-	-	2.4	0.5	-	2.9	18.6	8.4	0.5	8.9	
3/3	391	391	-	-	-	0.2	0.3	-	0.5	4.8	1.1	0.3	1.4	
4/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	292	292	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	760	760	-	-	-	4.6	1.1	-	5.7	27.0	7.7	1.1	8.9	
5/3	501	501	-	-	-	3.2	1.5	-	4.7	34.0	9.3	1.5	10.9	
6/1	348	348	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1	
6/2	602	602	-	-	-	0.0	0.2	-	0.2	1.3	2.8	0.2	3.0	
6/3	892	892	-	-	-	0.0	0.4	-	0.4	1.8	6.7	0.4	7.1	
7/1	1015	1015	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
8/1	1015	1015	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	278	278	556	0	0	0.1	0.3	-	0.5	6.5	1.0	0.3	1.4	
9/3	427	427	427	0	0	0.8	9.6	-	10.5	88.4	8.8	9.6	18.4	
10/1	449	449	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1	
10/2	779	779	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/3	1319	1319	-	-	-	0.0	1.0	-	1.0	2.7	3.9	1.0	4.9	
11/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	370	370	-	-	-	1.0	0.3	-	1.3	13.1	3.9	0.3	4.2	
12/2+12/3	1319	1319	-	-	-	4.5	1.6	-	6.1	16.6	9.5	1.6	11.1	
13/2+13/1	696	696	-	-	-	3.1	1.5	-	4.6	24.0	7.5	1.5	9.0	
13/3	491	491	-	-	-	2.3	1.1	-	3.3	24.4	7.0	1.1	8.0	
14/1	789	789	-	-	-	2.8	1.6	-	4.4	19.9	12.2	1.6	13.8	
14/2	812	812	-	-	-	2.1	1.8	-	3.9	17.5	12.5	1.8	14.4	
14/3	495	495	-	-	-	3.5	0.5	-	4.0	29.1	8.2	0.5	8.7	
15/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	504	504	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	980	980	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
16/3	870	870	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
17/1	503	503	-	-	-	2.6	2.2	-	4.9	35.0	7.7	2.2	9.9	
17/2	543	543	-	-	-	2.9	2.3	-	5.2	34.5	8.3	2.3	10.6	
18/1	788	788	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
19/1	788	788	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	306	306	612	0	0	0.5	0.5	-	1.0	12.1	1.3	0.5	1.8	
20/3	280	280	280	0	0	0.7	3.3	-	4.0	50.9	2.5	3.3	5.8	
21/1	674	674	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	4.5	Total Delay for Signalled Lanes (pcuHr):	32.81	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	8.5	Total Delay for Signalled Lanes (pcuHr):	37.80	Cycle Time (s):	60
	PRC Over All Lanes (%):	-10.4	Total Delay Over All Lanes(pcuHr):	90.78		

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



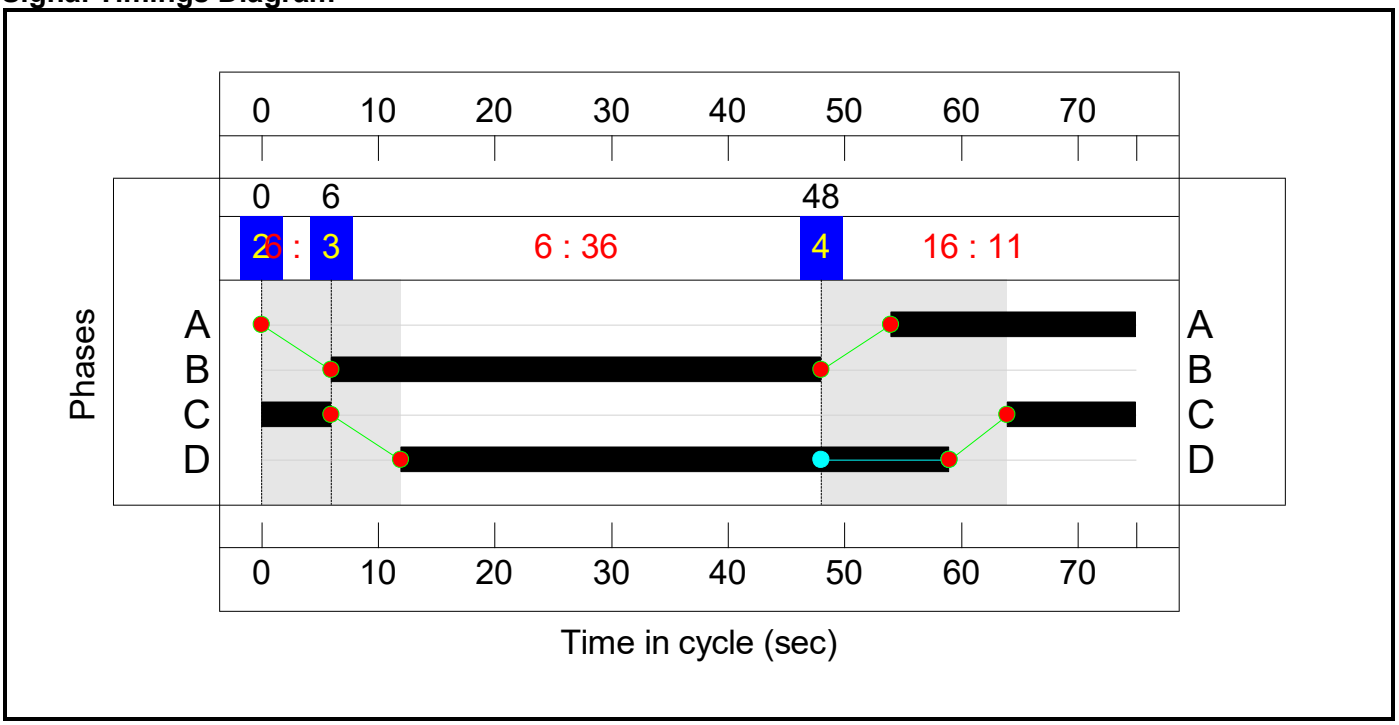
Stage Timings

Stage	2	3	4
Duration	0	36	11
Change Point	0	6	48

Phase Timings

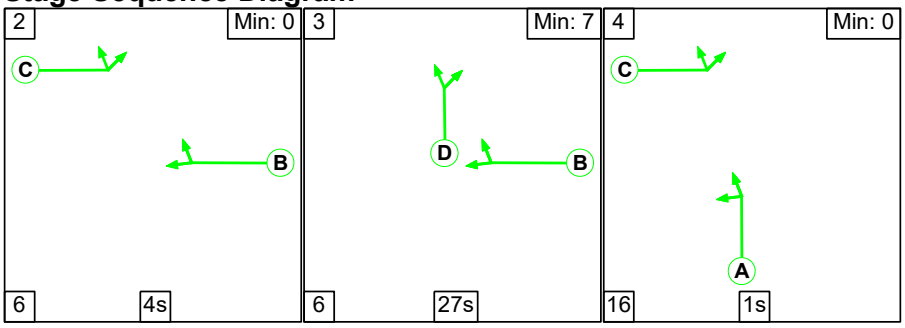
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	21	54	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	42	6	48
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	17	64	6
D	East Circ Right Ahead East Circ	Traffic	47	12	59

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



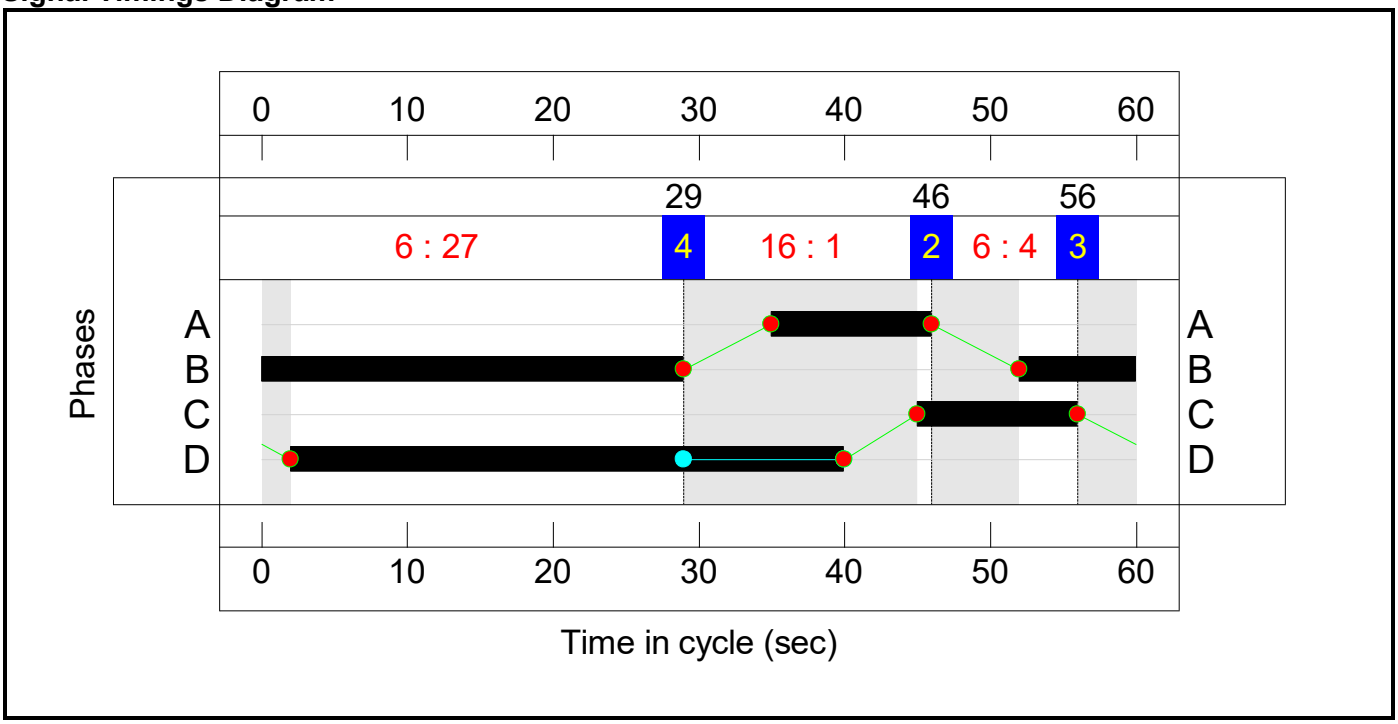
Stage Timings

Stage	2	3	4
Duration	4	27	1
Change Point	46	56	29

Phase Timings

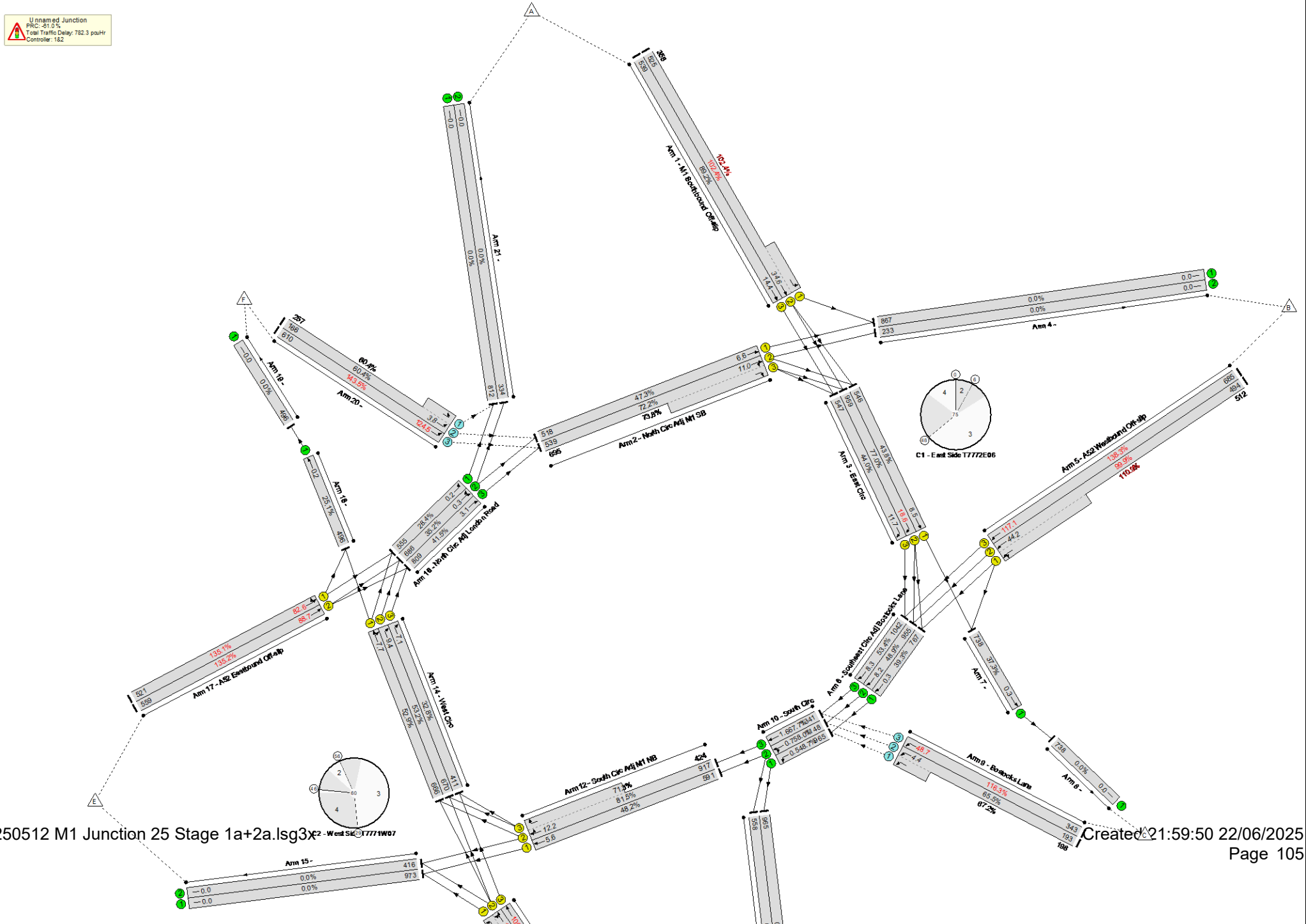
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	11	35	46
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	37	52	29
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	11	45	56
D	West Circ Right Ahead West Circ	Traffic	38	2	40

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	54	0
1/2	M1 Southbound Off-slip Ahead	U	A	54	0
1/3	M1 Southbound Off-slip Ahead	U	A	54	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	48
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	48
2/3	North Circ Adj M1 SB Right	U	B	6	48
3/1	East Circ Ahead	U	D	12	59
3/2	East Circ Right	U	D	12	59
3/3	East Circ Right	U	D	12	59
5/1	A52 Westbound Off-slip Ahead Left	U	C	64	6
5/2	A52 Westbound Off-slip Ahead	U	C	64	6
5/3	A52 Westbound Off-slip Ahead	U	C	64	6
12/1	South Circ Adj M1 NB Ahead	U	B	52	29
12/2	South Circ Adj M1 NB Right Ahead	U	B	52	29
12/3	South Circ Adj M1 NB Right	U	B	52	29
13/1	M1 Northbound Off-slip Left	U	A	35	46
13/2	M1 Northbound Off-slip Ahead Left	U	A	35	46
13/3	M1 Northbound Off-slip Ahead	U	A	35	46
14/1	West Circ Right Ahead	U	D	2	40
14/2	West Circ Right	U	D	2	40
14/3	West Circ Right	U	D	2	40
17/1	A52 Eastbound Off-slip Ahead Left	U	C	45	56
17/2	A52 Eastbound Off-slip Ahead	U	C	45	56


Unnamed Junction
PRC: -81.0 %
Total Traffic Delay: 782.3 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
C1 - East Side T777/2E06
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 19 -
Arm 20 -
Arm 21 -

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**144.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**144.9%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	21	-	-	883	2056:1915	512+349	102.4 : 102.4%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	21	-	-	539	2059	604	89.2%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	42	-	-	644	1908	1094	47.3%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	42	-	-	1740	1906:1904	746+942	72.2 : 73.8%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	47	-	-	679	1946	1245	43.8%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	47	-	-	1238	1945	1245	77.0%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	47	-	-	551	1943	1244	44.0%
4/1		U	N/A	N/A	-		-	-	-	-	1002	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	336	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	17	-	-	1006	2061:1923	495+462	99.9 : 110.9%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	17	-	-	685	2064	495	138.3%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	989	1953	1953	39.3%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1042	1952	1952	48.9%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1236	1951	1951	53.4%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	892	1980	1980	37.3%
8/1		U	N/A	N/A	-		-	-	-	-	892	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	391	1923:1919	295+295	65.5 : 67.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	343	1926	295	116.3%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1187	1980	1980	48.7%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1235	1980	1980	58.0%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1579	1980	1980	67.7%
11/1		U	N/A	N/A	-		-	-	-	-	1187	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	578	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	37	-	-	657	1936	1226	48.2%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	37	-	-	1579	1931:1931	1125+595	81.5 : 71.3%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	11	-	-	1085	2053:1912	411+382	144.9 : 128.1%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	11	-	-	593	2057	411	144.1%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	38	-	-	852	1937	1259	52.9%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	38	-	-	902	1935	1258	53.2%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	38	-	-	593	1932	1256	32.8%
15/1		U	N/A	N/A	-		-	-	-	-	1147	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	420	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	736	1952	1952	28.4%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	924	1950	1950	35.2%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1130	1950	1950	41.5%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	11	-	-	521	1928	386	135.1%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	11	-	-	559	2067	413	135.2%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	637	1980	1980	25.1%
19/1		U	N/A	N/A	-		-	-	-	-	637	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	423	2061:1921	275+425	60.4 : 60.4%
20/3	Left	O	N/A	N/A	-		-	-	-	-	610	1928	425	143.5%
21/1		U	N/A	N/A	-		-	-	-	-	993	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	446	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2348**	**0**	**0**	**107.8**	**674.5**	**0.0**	**782.3**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2348**	**0**	**0**	**107.8**	**674.5**	**0.0**	**782.3**	**-**	**-**	**-**	**-**	
1/2+1/1	883	862	-	-	-	6.7	21.0	-	27.7	113.0	13.5	21.0	34.6	
1/3	539	539	-	-	-	3.8	3.7	-	7.5	50.2	10.6	3.7	14.4	
2/1	518	518	-	-	-	1.3	0.4	-	1.8	12.5	6.2	0.4	6.6	
2/2+2/3	1234	1234	-	-	-	3.5	1.4	-	4.9	14.2	9.7	1.4	11.0	
3/1	546	546	-	-	-	1.3	0.4	-	1.7	11.1	8.2	0.4	8.5	
3/2	959	959	-	-	-	2.3	1.7	-	3.9	14.7	17.0	1.7	18.6	
3/3	547	547	-	-	-	3.4	0.4	-	3.8	25.1	11.3	0.4	11.7	
4/1	867	867	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1006	956	-	-	-	9.6	32.9	-	42.6	152.4	11.3	32.9	44.2	
5/3	685	495	-	-	-	13.4	96.6	-	109.9	577.8	20.5	96.6	117.1	
6/1	767	767	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
6/2	955	955	-	-	-	0.0	0.5	-	0.5	1.9	7.7	0.5	8.2	
6/3	1042	1042	-	-	-	0.0	0.6	-	0.6	2.1	7.7	0.6	8.3	
7/1	738	738	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
8/1	738	738	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	391	391	782	0	0	1.4	1.0	-	2.4	22.3	3.5	1.0	4.4	
9/3	343	295	295	0	0	3.9	27.2	-	31.2	327.0	21.4	27.2	48.7	
10/1	965	965	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/2	1148	1148	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
10/3	1341	1341	-	-	-	0.0	1.0	-	1.0	2.8	0.6	1.0	1.6	
11/1	965	965	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	591	591	-	-	-	1.0	0.5	-	1.4	8.6	5.1	0.5	5.6	
12/2+12/3	1341	1341	-	-	-	2.6	1.8	-	4.3	11.6	10.4	1.8	12.2	
13/2+13/1	1085	793	-	-	-	13.6	147.8	-	161.5	535.7	18.1	147.8	165.9	
13/3	593	411	-	-	-	9.1	92.4	-	101.5	616.1	14.1	92.4	106.5	
14/1	666	666	-	-	-	1.0	0.6	-	1.6	8.5	7.2	0.6	7.7	
14/2	670	670	-	-	-	1.8	0.6	-	2.4	12.8	8.8	0.6	9.4	
14/3	411	411	-	-	-	2.2	0.2	-	2.4	21.4	6.9	0.2	7.1	
15/1	973	973	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	555	555	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	686	686	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	809	809	-	-	-	0.0	0.4	-	0.4	1.6	2.7	0.4	3.1	
17/1	521	386	-	-	-	8.1	69.6	-	77.7	536.9	13.1	69.6	82.6	
17/2	559	413	-	-	-	8.7	74.7	-	83.4	537.1	14.0	74.7	88.7	
18/1	496	496	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	423	423	846	0	0	0.5	0.8	-	1.3	11.0	3.0	0.8	3.8	
20/3	610	425	425	0	0	8.5	94.0	-	102.5	604.8	30.5	94.0	124.5	
21/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	334	334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06
C2 - West Side T7771W07

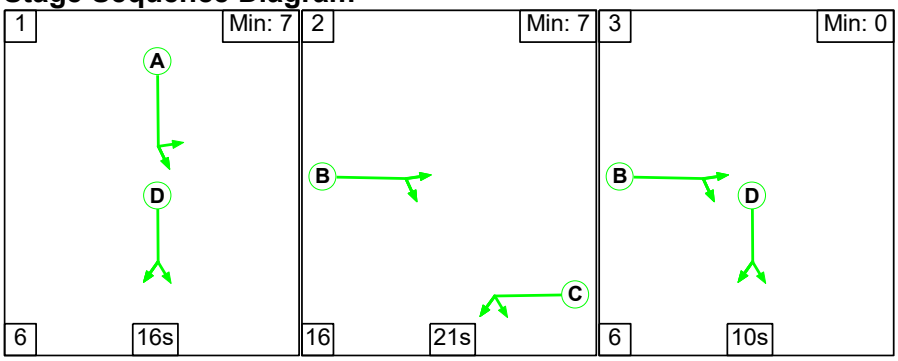
PRC for Signalled Lanes (%): -53.6
PRC for Signalled Lanes (%): -61.0
PRC Over All Lanes (%): -61.0

Total Delay for Signalled Lanes (pcuHr): 203.83
Total Delay for Signalled Lanes (pcuHr): 436.16
Total Delay Over All Lanes(pcuHr): 782.29

Cycle Time (s): 75
Cycle Time (s): 60

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



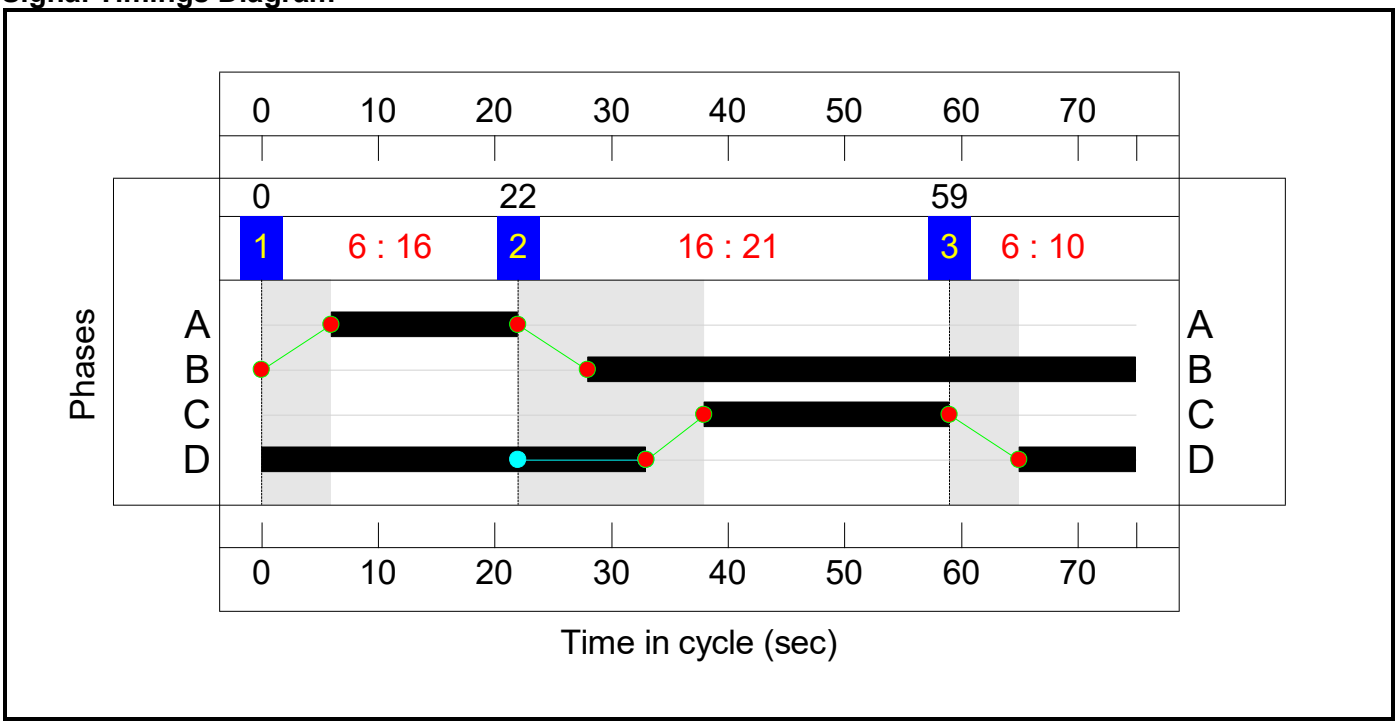
Stage Timings

Stage	1	2	3
Duration	16	21	10
Change Point	0	22	59

Phase Timings

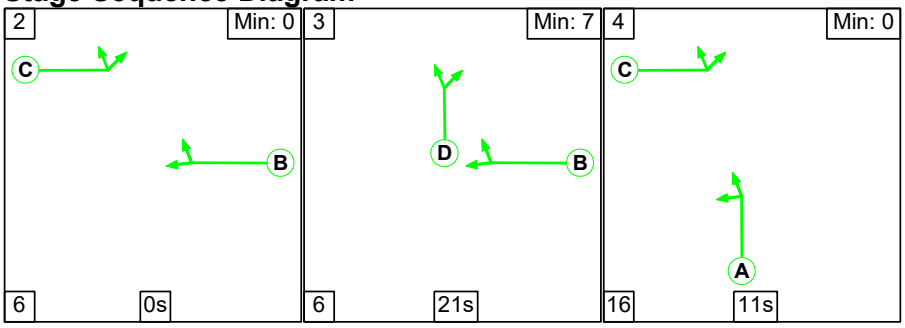
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	16	6	22
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	47	28	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	21	38	59
D	East Circ Right Ahead East Circ	Traffic	43	65	33

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



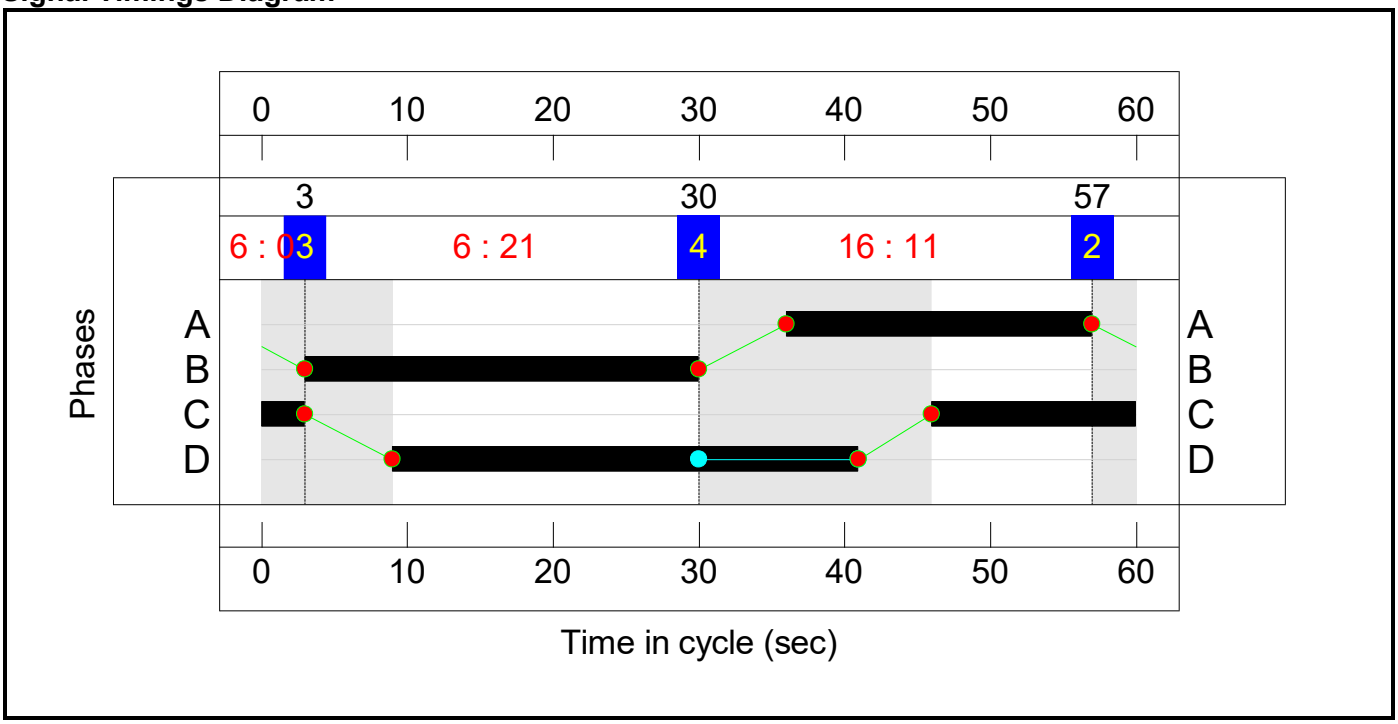
Stage Timings

Stage	2	3	4
Duration	0	21	11
Change Point	57	3	30

Phase Timings

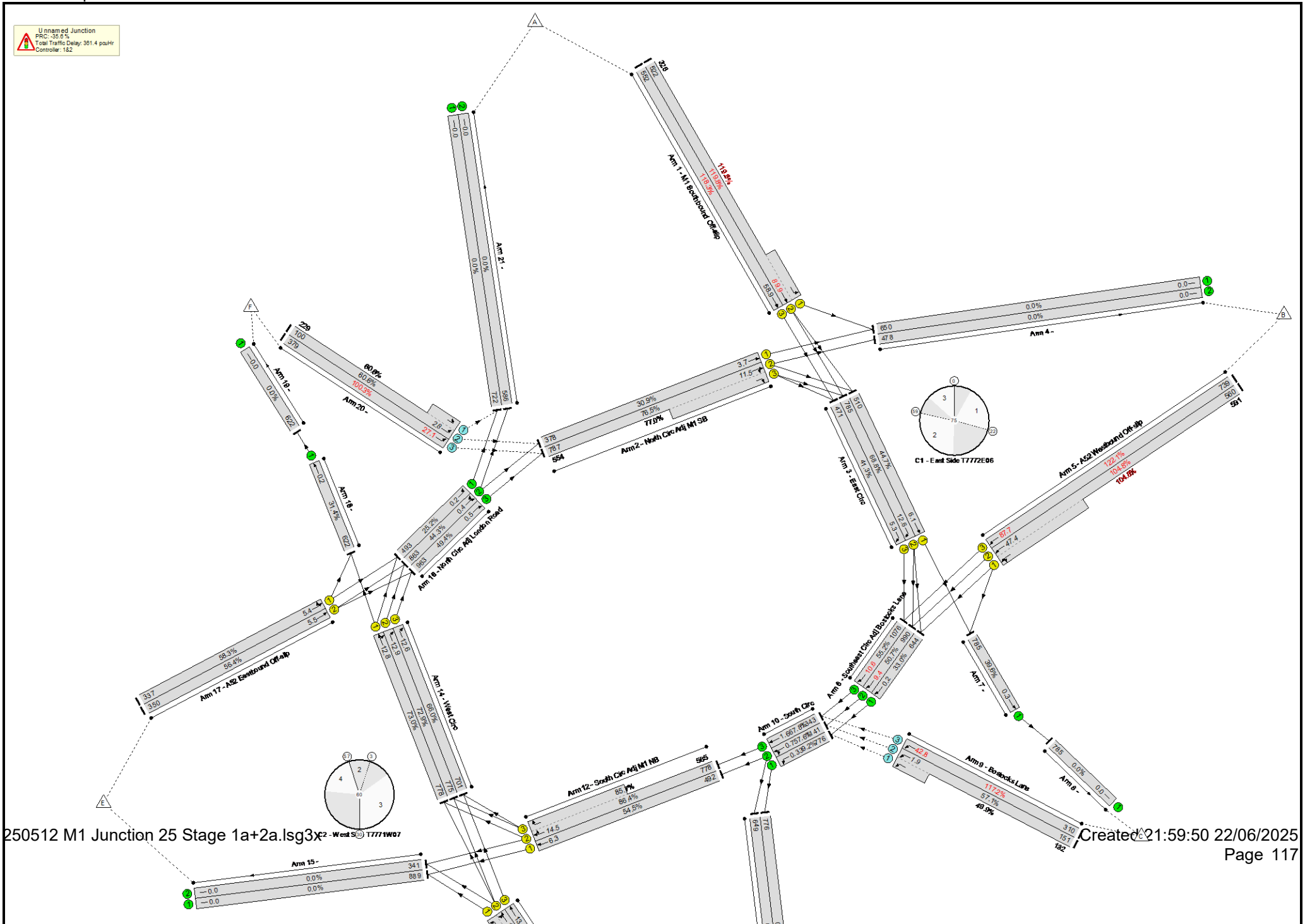
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	21	36	57
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	27	3	30
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	17	46	3
D	West Circ Right Ahead West Circ	Traffic	32	9	41

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	22
1/2	M1 Southbound Off-slip Ahead	U	A	6	22
1/3	M1 Southbound Off-slip Ahead	U	A	6	22
2/1	North Circ Adj M1 SB Ahead	U	B	28	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	28	0
2/3	North Circ Adj M1 SB Right	U	B	28	0
3/1	East Circ Ahead	U	D	65	33
3/2	East Circ Right	U	D	65	33
3/3	East Circ Right	U	D	65	33
5/1	A52 Westbound Off-slip Ahead Left	U	C	38	59
5/2	A52 Westbound Off-slip Ahead	U	C	38	59
5/3	A52 Westbound Off-slip Ahead	U	C	38	59
12/1	South Circ Adj M1 NB Ahead	U	B	3	30
12/2	South Circ Adj M1 NB Right Ahead	U	B	3	30
12/3	South Circ Adj M1 NB Right	U	B	3	30
13/1	M1 Northbound Off-slip Left	U	A	36	57
13/2	M1 Northbound Off-slip Ahead Left	U	A	36	57
13/3	M1 Northbound Off-slip Ahead	U	A	36	57
14/1	West Circ Right Ahead	U	D	9	41
14/2	West Circ Right	U	D	9	41
14/3	West Circ Right	U	D	9	41
17/1	A52 Eastbound Off-slip Ahead Left	U	C	46	3
17/2	A52 Eastbound Off-slip Ahead	U	C	46	3


Unnamed Junction
PRC: -35.6 %
Total Traffic Delay: 361.4 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**122.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**122.1%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	16	-	-	848	2056:1915	436+272	119.8 : 119.8%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	16	-	-	552	2059	467	118.3%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	47	-	-	382	1908	1221	30.9%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	47	-	-	1349	1906:1904	1029+719	76.5 : 77.0%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	43	-	-	550	1946	1142	44.7%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	43	-	-	832	1945	1141	68.8%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	43	-	-	556	1943	1140	41.3%
4/1		U	N/A	N/A	-		-	-	-	-	708	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	485	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	21	-	-	1151	2061:1923	534+564	104.8 : 104.8%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	21	-	-	739	2064	605	122.1%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	658	1953	1953	33.0%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1037	1952	1952	50.7%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1295	1951	1951	55.2%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	838	1980	1980	39.6%
8/1		U	N/A	N/A	-		-	-	-	-	838	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	283	1923:1919	265+265	57.1 : 49.9%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	310	1926	265	117.2%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	790	1980	1980	39.2%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1188	1980	1980	57.6%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1605	1980	1980	67.8%
11/1		U	N/A	N/A	-		-	-	-	-	790	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	649	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	27	-	-	539	1936	903	54.5%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	27	-	-	1605	1931:1931	901+659	86.4 : 85.7%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	21	-	-	990	2053:1912	686+459	86.4 : 86.4%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	21	-	-	660	2057	754	87.5%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	32	-	-	865	1937	1065	73.0%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	32	-	-	882	1935	1064	72.9%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	32	-	-	708	1932	1063	66.0%
15/1		U	N/A	N/A	-		-	-	-	-	936	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	403	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	532	1952	1952	25.2%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	970	1950	1950	44.3%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	970	1950	1950	49.4%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	17	-	-	337	1928	578	58.3%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	17	-	-	350	2067	620	56.4%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	670	1980	1980	31.4%
19/1		U	N/A	N/A	-		-	-	-	-	670	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	329	2061:1921	165+378	60.6 : 60.6%
20/3	Left	O	N/A	N/A	-		-	-	-	-	379	1928	378	100.3%
21/1		U	N/A	N/A	-		-	-	-	-	761	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	688	Inf	Inf	0.0%

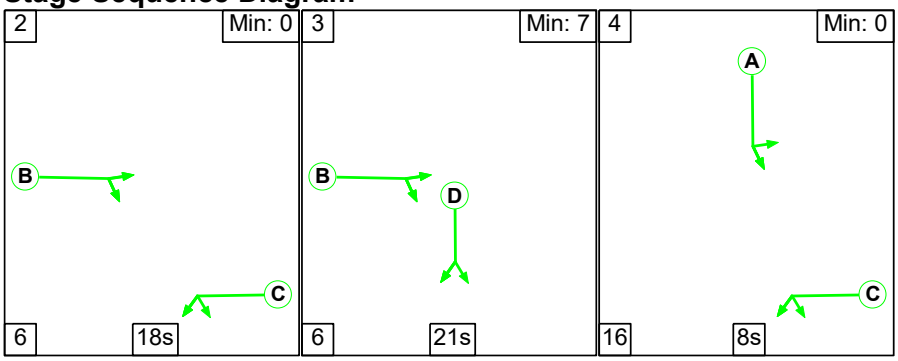
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1867**	**0**	**0**	**78.1**	**283.2**	**0.0**	**361.4**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1867**	**0**	**0**	**78.1**	**283.2**	**0.0**	**361.4**	**-**	**-**	**-**	**-**	
1/2+1/1	848	708	-	-	-	11.9	72.8	-	84.8	359.8	17.1	72.8	89.9	
1/3	552	467	-	-	-	7.6	45.7	-	53.3	347.5	13.3	45.7	58.9	
2/1	378	378	-	-	-	0.6	0.2	-	0.9	8.2	3.5	0.2	3.7	
2/2+2/3	1341	1341	-	-	-	2.9	1.6	-	4.5	12.1	9.8	1.6	11.5	
3/1	510	510	-	-	-	1.3	0.4	-	1.7	12.3	5.6	0.4	6.1	
3/2	785	785	-	-	-	3.2	1.1	-	4.2	19.5	11.5	1.1	12.6	
3/3	471	471	-	-	-	0.3	0.4	-	0.6	4.7	4.9	0.4	5.3	
4/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	478	478	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1151	1124	-	-	-	9.1	34.5	-	43.6	136.5	12.9	34.5	47.4	
5/3	739	605	-	-	-	9.2	69.4	-	78.7	383.3	18.3	69.4	87.7	
6/1	644	644	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
6/2	990	990	-	-	-	0.0	0.5	-	0.6	2.0	8.9	0.5	9.4	
6/3	1076	1076	-	-	-	0.1	0.6	-	0.7	2.2	10.0	0.6	10.6	
7/1	785	785	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	785	785	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	283	283	566	0	0	0.4	0.6	-	1.0	12.4	1.3	0.6	1.9	
9/3	310	265	265	0	0	2.8	25.7	-	28.5	330.8	17.0	25.7	42.8	
10/1	776	776	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/2	1141	1141	-	-	-	0.0	0.7	-	0.7	2.1	0.0	0.7	0.7	
10/3	1343	1343	-	-	-	0.0	1.1	-	1.1	2.8	0.6	1.1	1.6	
11/1	776	776	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	649	649	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	492	492	-	-	-	1.6	0.6	-	2.2	15.8	5.7	0.6	6.3	
12/2+12/3	1343	1343	-	-	-	5.0	3.0	-	8.0	21.4	11.5	3.0	14.5	
13/2+13/1	990	990	-	-	-	4.5	3.1	-	7.5	27.4	8.7	3.1	11.8	
13/3	660	660	-	-	-	3.2	3.3	-	6.5	35.6	10.1	3.3	13.4	
14/1	778	778	-	-	-	2.5	1.3	-	3.8	17.6	11.4	1.3	12.8	
14/2	775	775	-	-	-	2.0	1.3	-	3.4	15.7	11.6	1.3	12.9	
14/3	701	701	-	-	-	4.8	1.0	-	5.7	29.5	11.6	1.0	12.6	
15/1	889	889	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	493	493	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	863	863	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
16/3	963	963	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
17/1	337	337	-	-	-	1.7	0.7	-	2.4	25.2	4.7	0.7	5.4	
17/2	350	350	-	-	-	1.7	0.6	-	2.4	24.3	4.9	0.6	5.5	
18/1	622	622	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
19/1	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	329	329	658	0	0	0.6	0.8	-	1.3	14.7	2.0	0.8	2.8	
20/3	379	378	378	0	0	1.2	10.0	-	11.2	106.6	17.1	10.0	27.1	
21/1	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	586	586	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-35.6	Total Delay for Signalled Lanes (pcuHr):	272.34	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	2.8	Total Delay for Signalled Lanes (pcuHr):	41.86	Cycle Time (s):	60
	PRC Over All Lanes (%):	-35.6	Total Delay Over All Lanes(pcuHr):	361.35		

Scenario 5: '2028 WD AM' (FG5: '2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



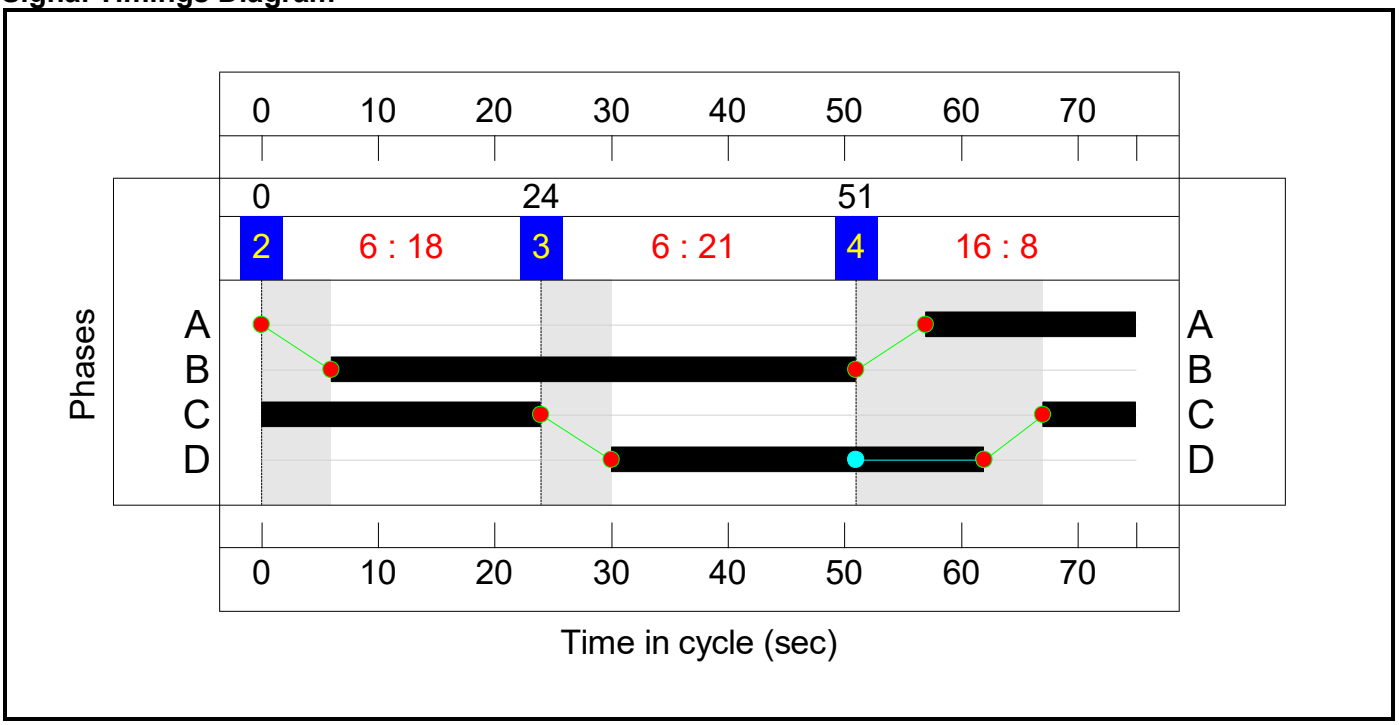
Stage Timings

Stage	2	3	4
Duration	18	21	8
Change Point	0	24	51

Phase Timings

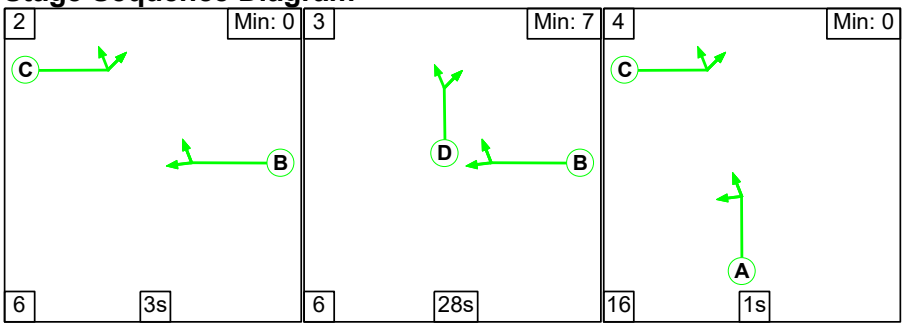
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	18	57	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	45	6	51
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	32	67	24
D	East Circ Right Ahead East Circ	Traffic	32	30	62

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



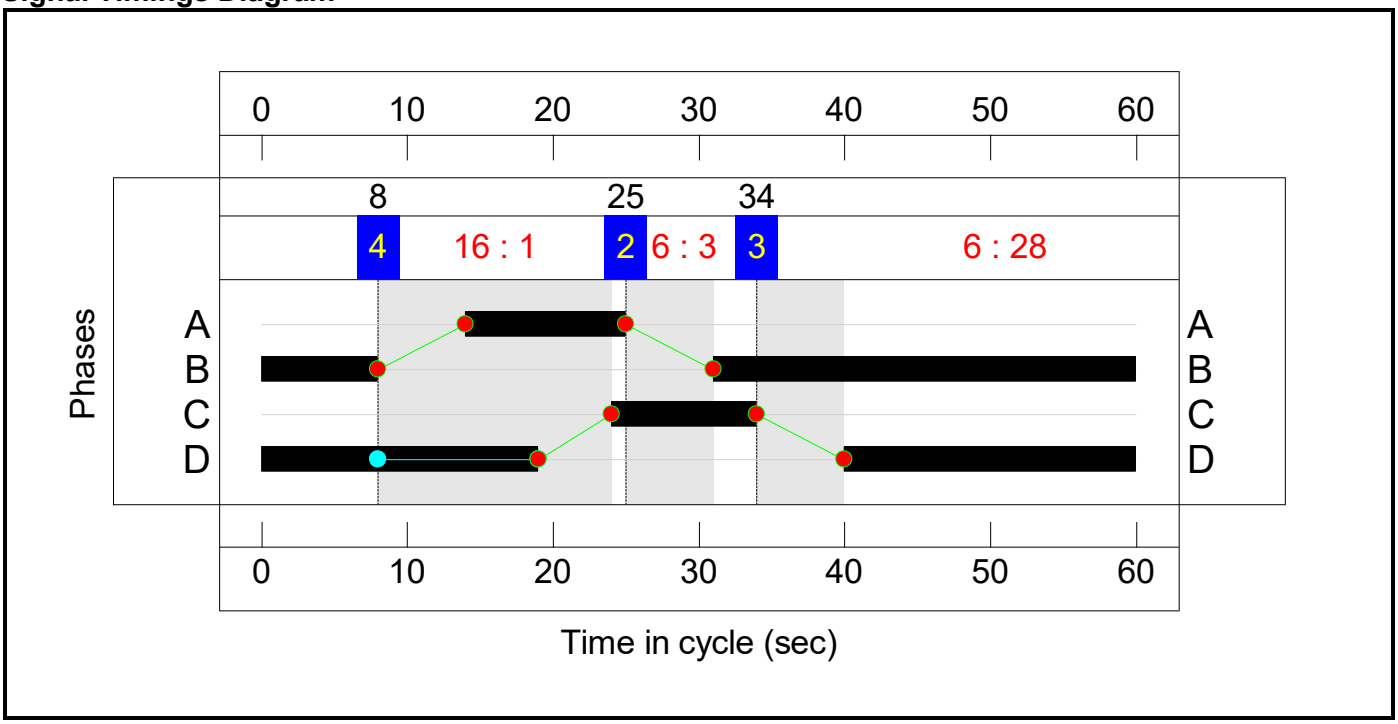
Stage Timings

Stage	2	3	4
Duration	3	28	1
Change Point	25	34	8

Phase Timings

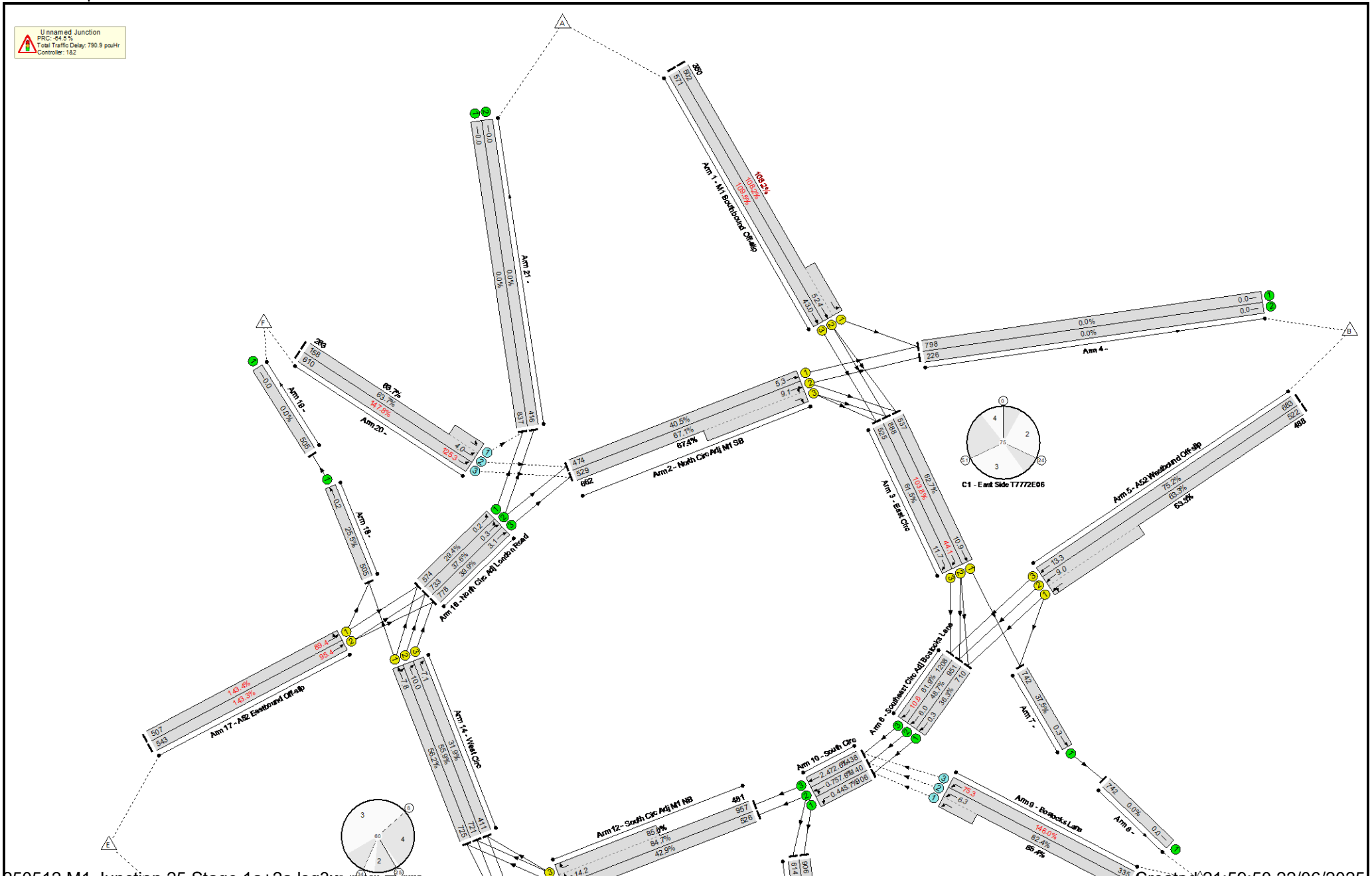
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	11	14	25
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	37	31	8
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	10	24	34
D	West Circ Right Ahead West Circ	Traffic	39	40	19

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	57	0
1/2	M1 Southbound Off-slip Ahead	U	A	57	0
1/3	M1 Southbound Off-slip Ahead	U	A	57	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	51
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	51
2/3	North Circ Adj M1 SB Right	U	B	6	51
3/1	East Circ Ahead	U	D	30	62
3/2	East Circ Right	U	D	30	62
3/3	East Circ Right	U	D	30	62
5/1	A52 Westbound Off-slip Ahead Left	U	C	67	24
5/2	A52 Westbound Off-slip Ahead	U	C	67	24
5/3	A52 Westbound Off-slip Ahead	U	C	67	24
12/1	South Circ Adj M1 NB Ahead	U	B	31	8
12/2	South Circ Adj M1 NB Right Ahead	U	B	31	8
12/3	South Circ Adj M1 NB Right	U	B	31	8
13/1	M1 Northbound Off-slip Left	U	A	14	25
13/2	M1 Northbound Off-slip Ahead Left	U	A	14	25
13/3	M1 Northbound Off-slip Ahead	U	A	14	25
14/1	West Circ Right Ahead	U	D	40	19
14/2	West Circ Right	U	D	40	19
14/3	West Circ Right	U	D	40	19
17/1	A52 Eastbound Off-slip Ahead Left	U	C	24	34
17/2	A52 Eastbound Off-slip Ahead	U	C	24	34


Unnamed Junction
PRC: -84.5 %
Total Traffic Delay: 790.9 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**148.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**148.1%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	18	-	-	852	2056:1915	464+324	108.2 : 108.2%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	18	-	-	571	2059	522	109.5%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	45	-	-	625	1908	1170	40.5%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	45	-	-	1740	1906:1904	789+982	67.1 : 67.4%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	32	-	-	696	1946	856	62.7%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	32	-	-	1208	1945	856	103.8%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	32	-	-	577	1943	855	61.5%
4/1		U	N/A	N/A	-		-	-	-	-	975	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	332	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	32	-	-	1010	2061:1923	825+771	63.3 : 63.3%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	32	-	-	683	2064	908	75.2%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	934	1953	1953	36.3%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1079	1952	1952	48.7%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1260	1951	1951	61.9%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	901	1980	1980	37.5%
8/1		U	N/A	N/A	-		-	-	-	-	901	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	385	1923:1919	229+229	82.4 : 85.4%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	335	1926	229	146.0%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1130	1980	1980	45.7%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1268	1980	1980	57.6%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1595	1980	1980	72.6%
11/1		U	N/A	N/A	-		-	-	-	-	1130	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	654	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	37	-	-	614	1936	1226	42.9%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	37	-	-	1595	1931:1931	1130+565	84.7 : 85.0%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	11	-	-	1108	2053:1912	411+382	148.1 : 130.8%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	11	-	-	604	2057	411	146.8%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	39	-	-	873	1937	1291	56.2%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	888	1935	1290	55.9%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	604	1932	1288	31.9%
15/1		U	N/A	N/A	-		-	-	-	-	1114	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	442	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	737	1952	1952	29.4%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	905	1950	1950	37.6%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1130	1950	1950	39.9%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	10	-	-	507	1928	353	143.4%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	10	-	-	543	2067	379	143.3%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	643	1980	1980	25.5%
19/1		U	N/A	N/A	-		-	-	-	-	643	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	421	2061:1921	248+413	63.7 : 63.7%
20/3	Left	O	N/A	N/A	-		-	-	-	-	610	1928	413	147.8%
21/1		U	N/A	N/A	-		-	-	-	-	1000	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	438	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2254**	**0**	**0**	**106.3**	**684.6**	**0.0**	**790.9**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2254**	**0**	**0**	**106.3**	**684.6**	**0.0**	**790.9**	**-**	**-**	**-**	**-**	
1/2+1/1	852	788	-	-	-	8.8	37.8	-	46.6	197.0	14.6	37.8	52.4	
1/3	571	522	-	-	-	6.6	29.5	-	36.1	227.7	13.5	29.5	43.0	
2/1	474	474	-	-	-	1.0	0.3	-	1.3	10.1	5.0	0.3	5.3	
2/2+2/3	1191	1191	-	-	-	2.7	1.0	-	3.7	11.3	8.1	1.0	9.1	
3/1	537	537	-	-	-	3.3	0.8	-	4.2	27.8	10.0	0.8	10.9	
3/2	888	856	-	-	-	6.3	24.9	-	31.2	126.7	19.2	24.9	44.1	
3/3	525	525	-	-	-	5.5	0.8	-	6.3	43.1	10.9	0.8	11.7	
4/1	798	798	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	226	226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1010	1010	-	-	-	4.4	0.9	-	5.3	18.8	8.1	0.9	9.0	
5/3	683	683	-	-	-	3.3	1.5	-	4.8	25.5	11.8	1.5	13.3	
6/1	710	710	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
6/2	951	951	-	-	-	0.0	0.5	-	0.5	1.9	5.5	0.5	6.0	
6/3	1208	1208	-	-	-	0.0	0.8	-	0.9	2.6	9.8	0.8	10.6	
7/1	742	742	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	742	742	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	385	385	770	0	0	1.1	2.4	-	3.6	33.4	3.8	2.4	6.3	
9/3	335	229	229	0	0	6.1	54.3	-	60.4	649.3	20.9	54.3	75.3	
10/1	906	906	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
10/2	1140	1140	-	-	-	0.0	0.7	-	0.7	2.1	0.0	0.7	0.7	
10/3	1438	1438	-	-	-	0.0	1.3	-	1.3	3.3	1.1	1.3	2.4	
11/1	906	906	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	614	614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	526	526	-	-	-	0.8	0.4	-	1.2	8.1	4.4	0.4	4.8	
12/2+12/3	1438	1438	-	-	-	2.8	2.7	-	5.6	14.0	11.4	2.7	14.2	
13/2+13/1	1108	793	-	-	-	16.0	159.2	-	175.2	569.4	18.7	159.2	178.0	
13/3	604	411	-	-	-	9.3	97.8	-	107.1	638.6	13.3	97.8	111.1	
14/1	725	725	-	-	-	1.0	0.6	-	1.6	7.9	7.2	0.6	7.8	
14/2	721	721	-	-	-	1.7	0.6	-	2.4	11.8	9.4	0.6	10.0	
14/3	411	411	-	-	-	2.1	0.2	-	2.3	20.3	6.9	0.2	7.1	
15/1	908	908	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	402	402	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	574	574	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	733	733	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
16/3	778	778	-	-	-	0.0	0.3	-	0.3	1.5	2.8	0.3	3.1	
17/1	507	353	-	-	-	7.2	78.4	-	85.6	608.0	11.0	78.4	89.4	
17/2	543	379	-	-	-	7.8	83.6	-	91.4	606.0	11.8	83.6	95.4	
18/1	505	505	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	505	505	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	421	421	842	0	0	0.6	0.9	-	1.4	12.2	3.1	0.9	4.0	
20/3	610	413	413	0	0	7.8	100.2	-	108.0	637.4	25.1	100.2	125.3	
21/1	837	837	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06
C2 - West Side T7771W07

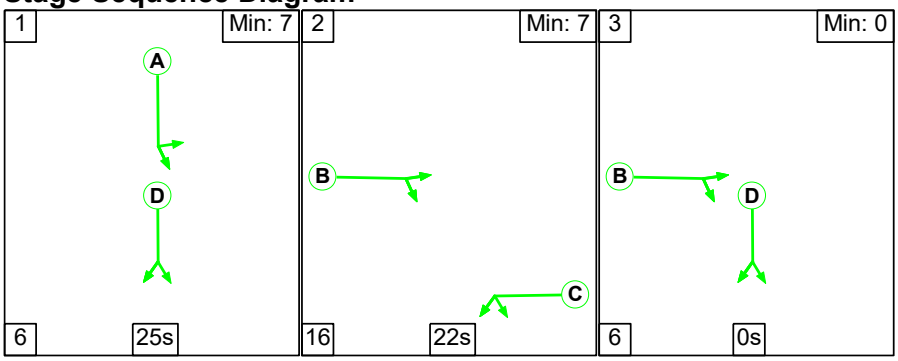
PRC for Signalled Lanes (%): -21.6
PRC for Signalled Lanes (%): -64.5
PRC Over All Lanes (%): -64.5

Total Delay for Signalled Lanes (pcuHr): 139.61
Total Delay for Signalled Lanes (pcuHr): 472.46
Total Delay Over All Lanes(pcuHr): 790.86

Cycle Time (s): 75
Cycle Time (s): 60

Scenario 6: '2028 WD PM' (FG6: '2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



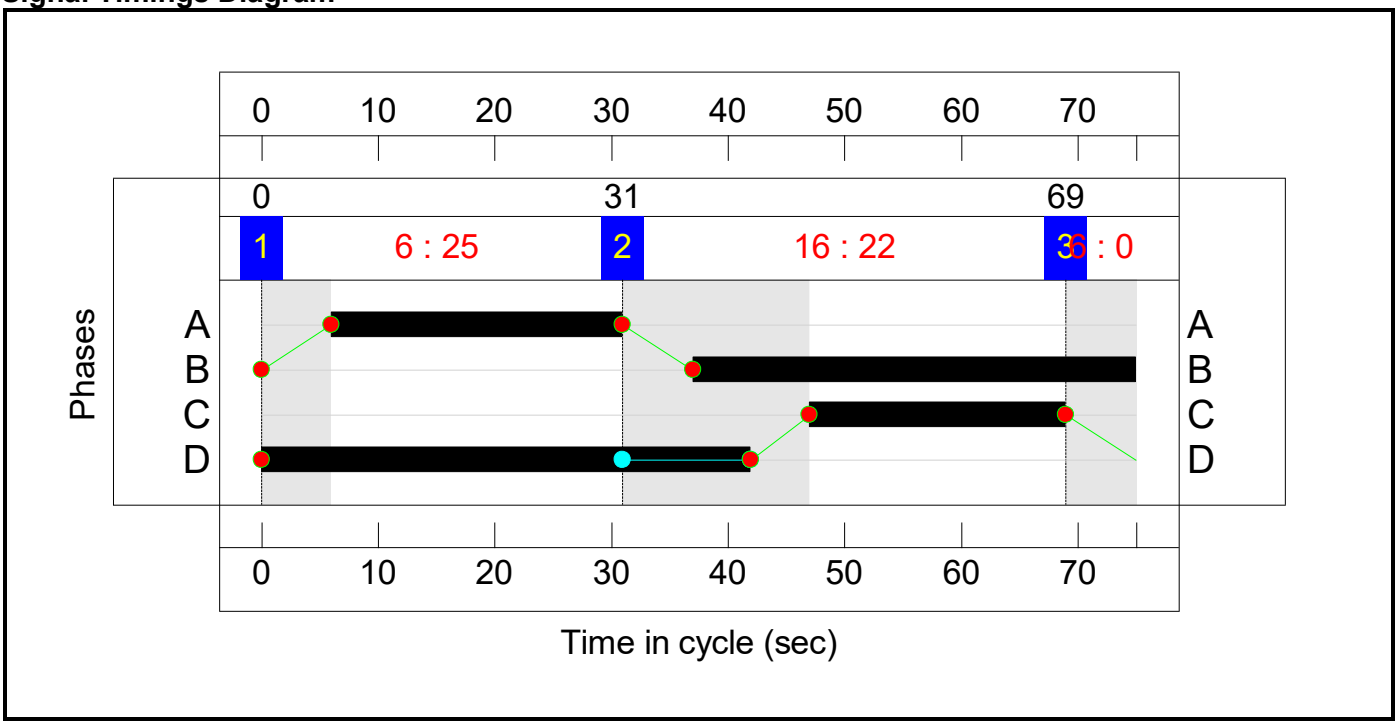
Stage Timings

Stage	1	2	3
Duration	25	22	0
Change Point	0	31	69

Phase Timings

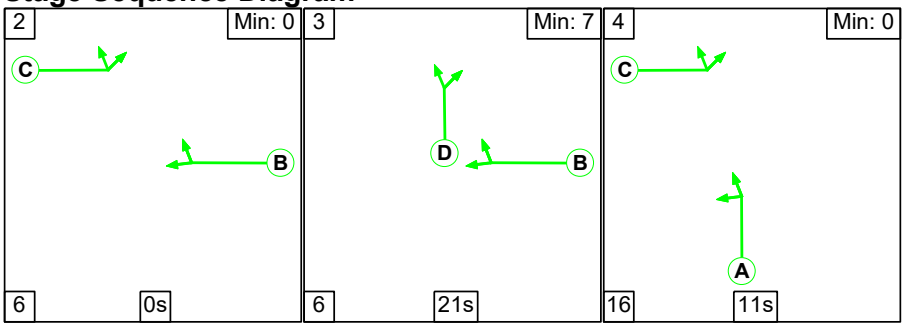
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	25	6	31
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	38	37	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	22	47	69
D	East Circ Right Ahead East Circ	Traffic	42	0	42

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



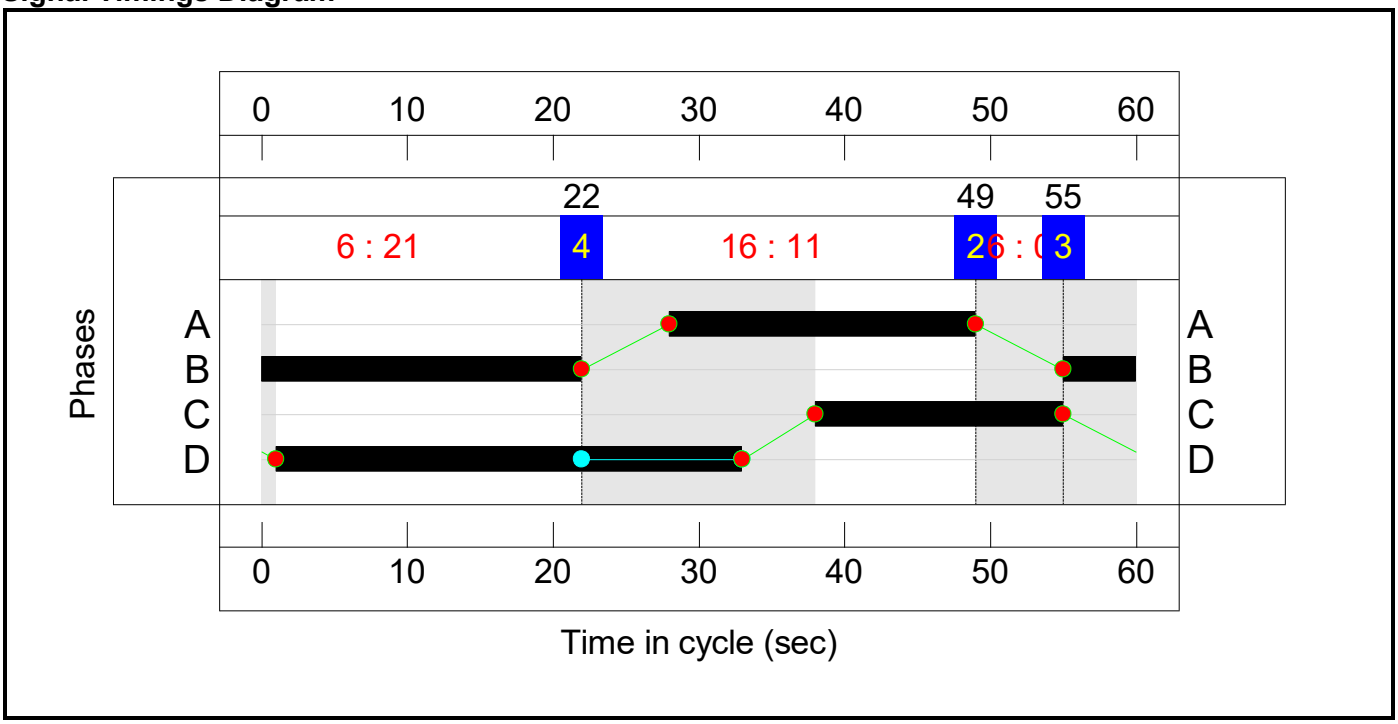
Stage Timings

Stage	2	3	4
Duration	0	21	11
Change Point	49	55	22

Phase Timings

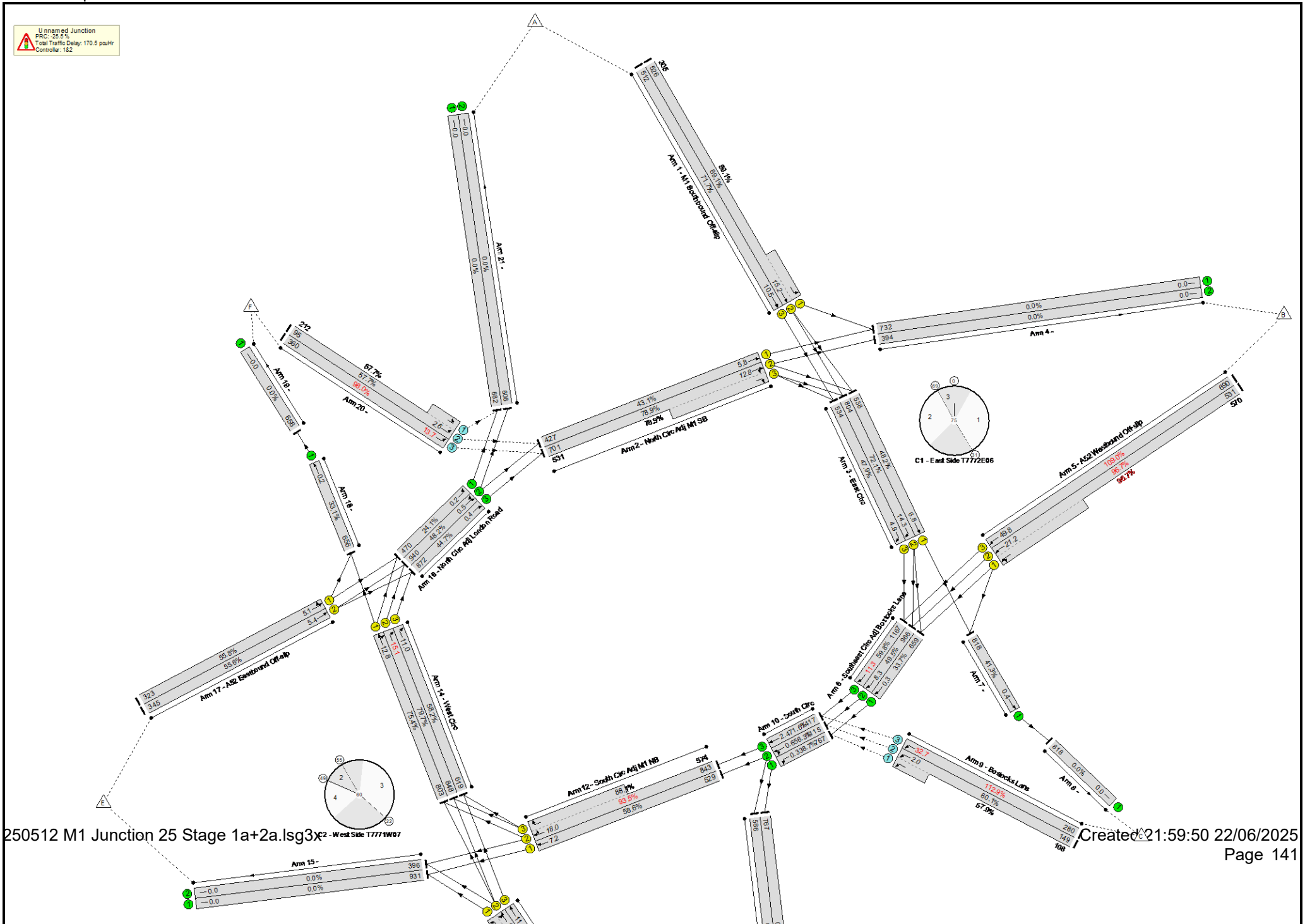
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	21	28	49
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	27	55	22
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	17	38	55
D	West Circ Right Ahead West Circ	Traffic	32	1	33

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	31
1/2	M1 Southbound Off-slip Ahead	U	A	6	31
1/3	M1 Southbound Off-slip Ahead	U	A	6	31
2/1	North Circ Adj M1 SB Ahead	U	B	37	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	37	0
2/3	North Circ Adj M1 SB Right	U	B	37	0
3/1	East Circ Ahead	U	D	0	42
3/2	East Circ Right	U	D	0	42
3/3	East Circ Right	U	D	0	42
5/1	A52 Westbound Off-slip Ahead Left	U	C	47	69
5/2	A52 Westbound Off-slip Ahead	U	C	47	69
5/3	A52 Westbound Off-slip Ahead	U	C	47	69
12/1	South Circ Adj M1 NB Ahead	U	B	55	22
12/2	South Circ Adj M1 NB Right Ahead	U	B	55	22
12/3	South Circ Adj M1 NB Right	U	B	55	22
13/1	M1 Northbound Off-slip Left	U	A	28	49
13/2	M1 Northbound Off-slip Ahead Left	U	A	28	49
13/3	M1 Northbound Off-slip Ahead	U	A	28	49
14/1	West Circ Right Ahead	U	D	1	33
14/2	West Circ Right	U	D	1	33
14/3	West Circ Right	U	D	1	33
17/1	A52 Eastbound Off-slip Ahead Left	U	C	38	55
17/2	A52 Eastbound Off-slip Ahead	U	C	38	55


Unnamed Junction
PRC: -25.5 %
Total Traffic Delay: 170.5 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**112.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**112.9%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	25	-	-	831	2056:1915	590+342	89.1 : 89.1%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	25	-	-	512	2059	714	71.7%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	38	-	-	434	1908	992	43.1%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	38	-	-	1232	1906:1904	888+673	78.9 : 78.9%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	42	-	-	538	1946	1116	48.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	804	1945	1115	72.1%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	534	1943	1114	47.9%
4/1		U	N/A	N/A	-		-	-	-	-	739	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	394	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	22	-	-	1101	2061:1923	549+590	96.7 : 96.7%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	22	-	-	690	2064	633	109.0%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	659	1953	1953	33.7%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	966	1952	1952	49.5%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1224	1951	1951	59.8%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	818	1980	1980	41.3%
8/1		U	N/A	N/A	-		-	-	-	-	818	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	257	1923:1919	248+186	60.1 : 57.9%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	280	1926	248	112.9%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	767	1980	1980	38.7%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1115	1980	1980	56.3%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1504	1980	1980	71.6%
11/1		U	N/A	N/A	-		-	-	-	-	767	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	586	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	27	-	-	529	1936	903	58.6%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	27	-	-	1504	1931:1931	901+651	93.5 : 88.1%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	21	-	-	1034	2053:1912	688+438	91.8 : 91.8%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	21	-	-	617	2057	754	81.8%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	32	-	-	833	1937	1065	75.4%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	32	-	-	905	1935	1064	79.7%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	32	-	-	619	1932	1063	58.2%
15/1		U	N/A	N/A	-		-	-	-	-	931	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	396	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	488	1952	1952	24.1%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	997	1950	1950	48.2%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	872	1950	1950	44.7%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	17	-	-	323	1928	578	55.8%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	17	-	-	345	2067	620	55.6%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	668	1980	1980	33.1%
19/1		U	N/A	N/A	-		-	-	-	-	668	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	307	2061:1921	165+367	57.7 : 57.7%
20/3	Left	O	N/A	N/A	-		-	-	-	-	360	1928	367	98.0%
21/1		U	N/A	N/A	-		-	-	-	-	700	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	658	Inf	Inf	0.0%

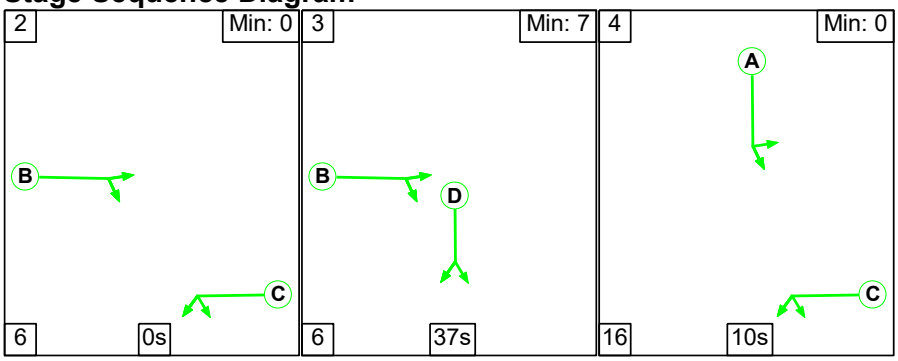
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1736**	**0**	**0**	**65.4**	**105.1**	**0.0**	**170.5**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1736**	**0**	**0**	**65.4**	**105.1**	**0.0**	**170.5**	**-**	**-**	**-**	**-**	
1/2+1/1	831	831	-	-	-	4.9	3.8	-	8.7	37.6	11.3	3.8	15.2	
1/3	512	512	-	-	-	3.0	1.3	-	4.3	30.1	9.2	1.3	10.5	
2/1	427	427	-	-	-	1.3	0.4	-	1.7	14.3	5.5	0.4	5.8	
2/2+2/3	1232	1232	-	-	-	4.4	1.8	-	6.3	18.3	10.9	1.8	12.8	
3/1	538	538	-	-	-	1.6	0.5	-	2.0	13.7	6.4	0.5	6.8	
3/2	804	804	-	-	-	3.5	1.3	-	4.8	21.3	13.1	1.3	14.3	
3/3	534	534	-	-	-	0.2	0.5	-	0.6	4.3	4.4	0.5	4.9	
4/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	394	394	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1101	1101	-	-	-	7.6	9.6	-	17.2	56.4	11.6	9.6	21.2	
5/3	690	633	-	-	-	7.0	33.6	-	40.7	212.2	16.2	33.6	49.8	
6/1	659	659	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
6/2	966	966	-	-	-	0.0	0.5	-	0.5	1.9	7.8	0.5	8.3	
6/3	1167	1167	-	-	-	0.1	0.7	-	0.8	2.5	10.6	0.7	11.3	
7/1	818	818	-	-	-	0.0	0.4	-	0.4	1.5	0.0	0.4	0.4	
8/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	257	257	514	0	0	0.5	0.7	-	1.2	16.9	1.3	0.7	2.0	
9/3	280	248	248	0	0	2.1	19.6	-	21.7	279.2	13.1	19.6	32.7	
10/1	767	767	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/2	1115	1115	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6	
10/3	1417	1417	-	-	-	0.0	1.3	-	1.3	3.2	1.1	1.3	2.4	
11/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	586	586	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	529	529	-	-	-	1.7	0.7	-	2.4	16.5	6.5	0.7	7.2
12/2+12/3	1417	1417	-	-	-	5.5	4.9	-	10.4	26.3	13.1	4.9	18.0
13/2+13/1	1034	1034	-	-	-	4.8	5.0	-	9.8	34.1	9.5	5.0	14.5
13/3	617	617	-	-	-	2.9	2.2	-	5.1	29.9	9.3	2.2	11.4
14/1	803	803	-	-	-	2.5	1.5	-	4.0	17.8	11.3	1.5	12.8
14/2	848	848	-	-	-	2.4	1.9	-	4.3	18.4	13.2	1.9	15.1
14/3	619	619	-	-	-	4.3	0.7	-	5.0	29.3	10.3	0.7	11.0
15/1	931	931	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	470	470	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
16/2	940	940	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
16/3	872	872	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
17/1	323	323	-	-	-	1.6	0.6	-	2.2	24.7	4.5	0.6	5.1
17/2	345	345	-	-	-	1.7	0.6	-	2.3	24.2	4.8	0.6	5.4
18/1	656	656	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
19/1	656	656	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/2+20/1	307	307	614	0	0	0.6	0.7	-	1.2	14.5	1.9	0.7	2.6
20/3	360	360	360	0	0	1.2	7.9	-	9.0	90.1	5.8	7.9	13.7
21/1	682	682	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
21/2	608	608	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-21.1	Total Delay for Signalled Lanes (pcuHr):	86.28	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-3.9	Total Delay for Signalled Lanes (pcuHr):	45.60	Cycle Time (s): 60
	PRC Over All Lanes (%):	-25.5	Total Delay Over All Lanes(pcuHr):	170.47	

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



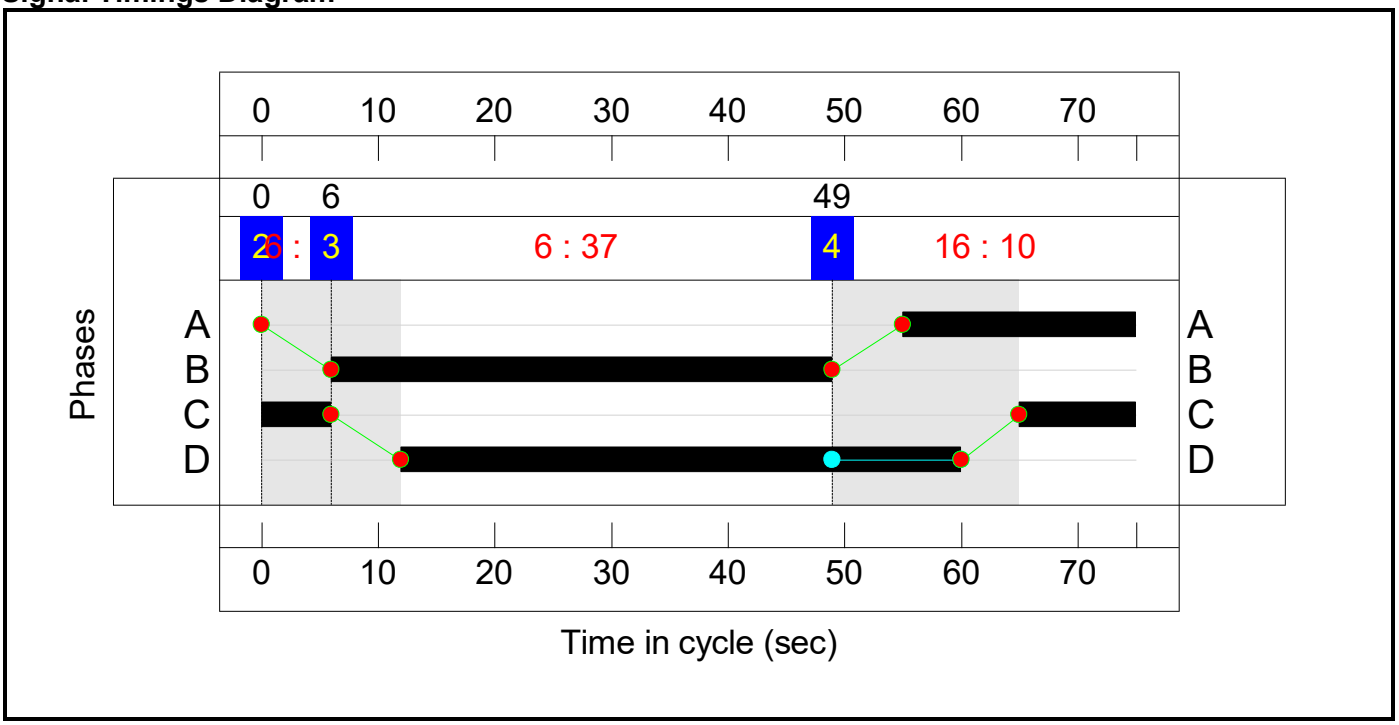
Stage Timings

Stage	2	3	4
Duration	0	37	10
Change Point	0	6	49

Phase Timings

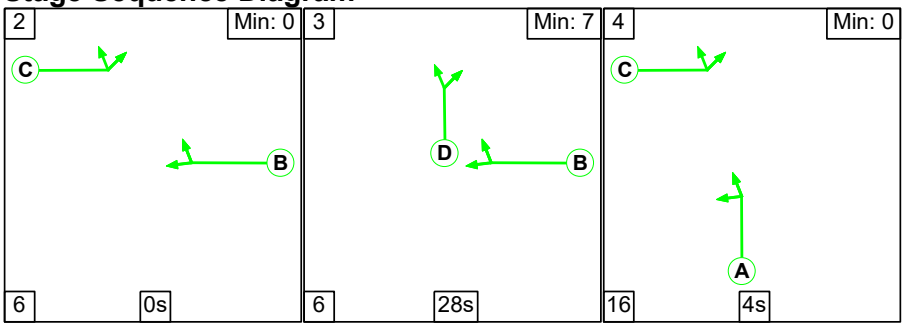
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	20	55	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	43	6	49
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	16	65	6
D	East Circ Right Ahead East Circ	Traffic	48	12	60

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



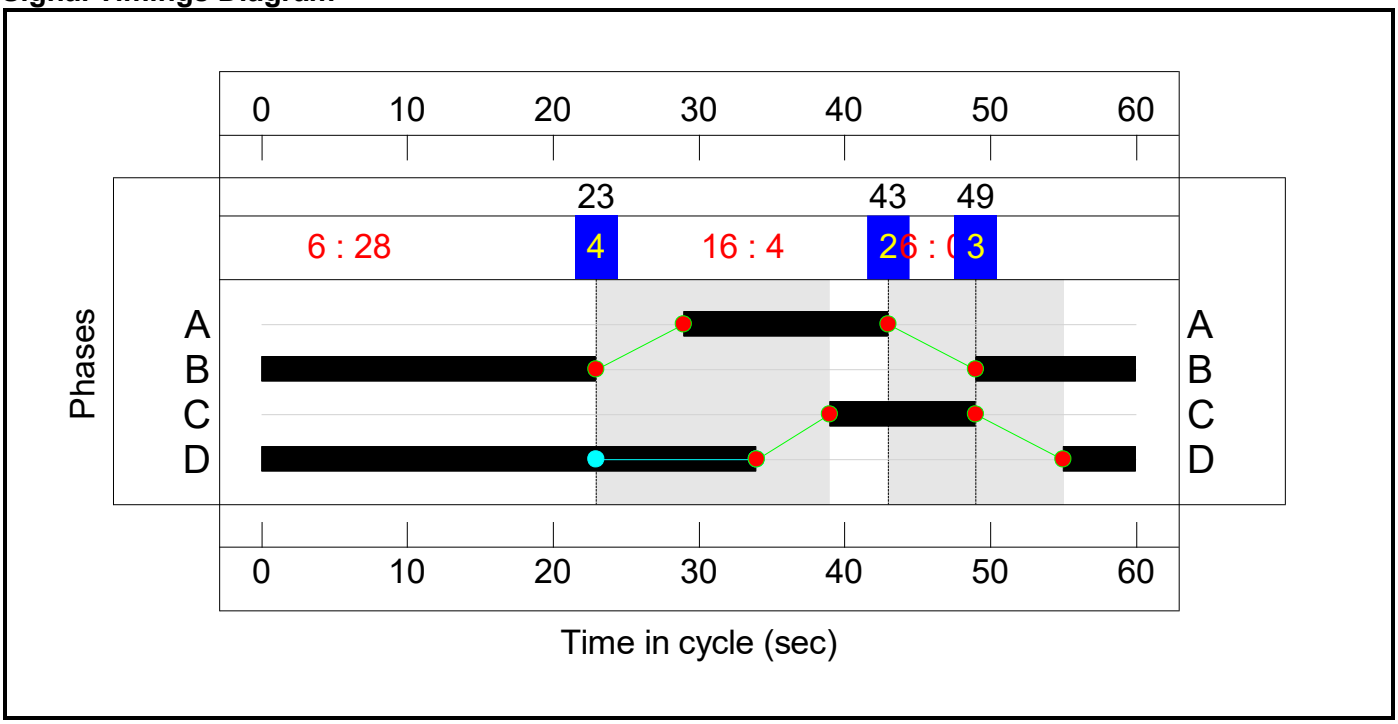
Stage Timings

Stage	2	3	4
Duration	0	28	4
Change Point	43	49	23

Phase Timings

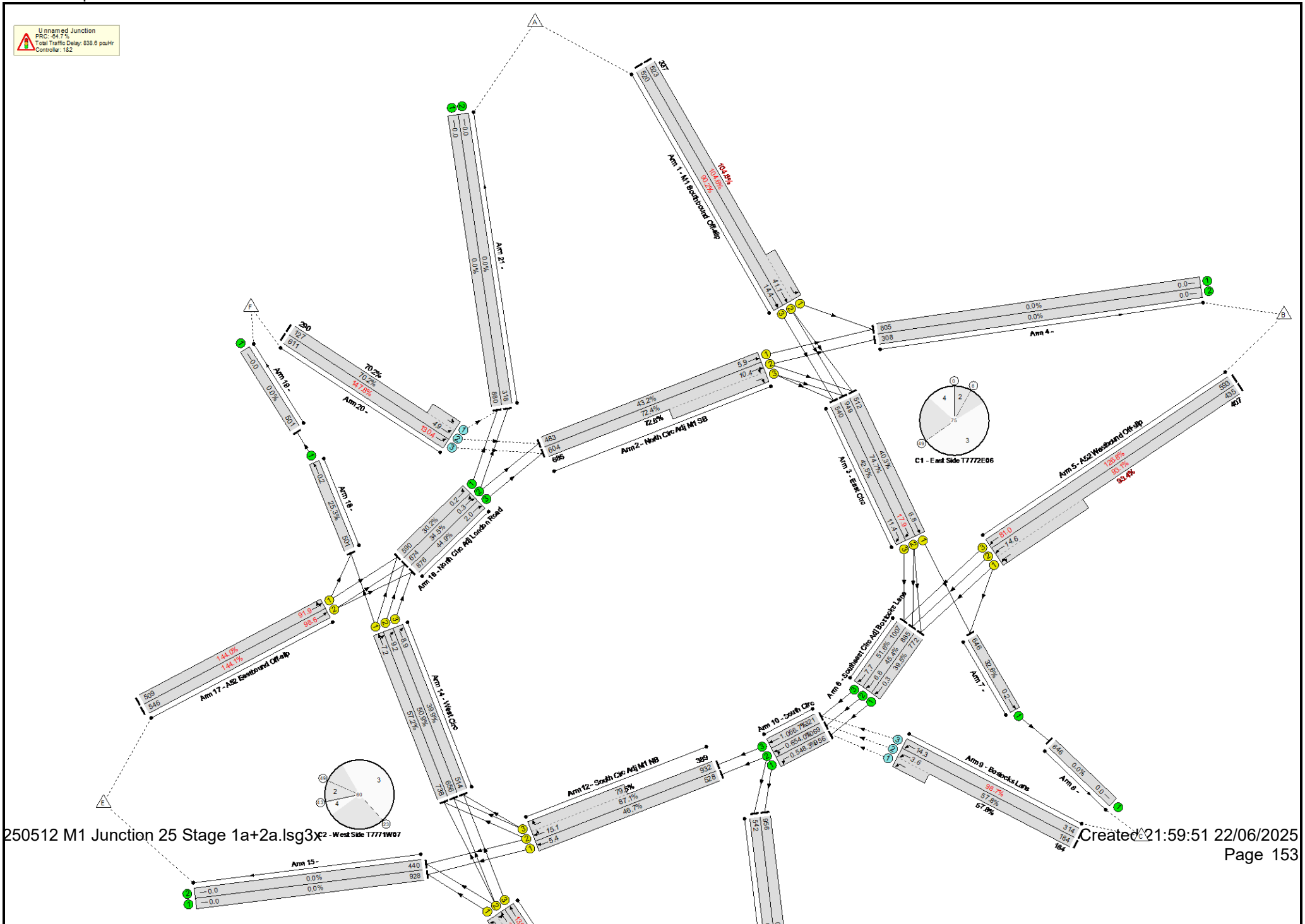
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	14	29	43
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	34	49	23
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	10	39	49
D	West Circ Right Ahead West Circ	Traffic	39	55	34

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	55	0
1/2	M1 Southbound Off-slip Ahead	U	A	55	0
1/3	M1 Southbound Off-slip Ahead	U	A	55	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	49
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	49
2/3	North Circ Adj M1 SB Right	U	B	6	49
3/1	East Circ Ahead	U	D	12	60
3/2	East Circ Right	U	D	12	60
3/3	East Circ Right	U	D	12	60
5/1	A52 Westbound Off-slip Ahead Left	U	C	65	6
5/2	A52 Westbound Off-slip Ahead	U	C	65	6
5/3	A52 Westbound Off-slip Ahead	U	C	65	6
12/1	South Circ Adj M1 NB Ahead	U	B	49	23
12/2	South Circ Adj M1 NB Right Ahead	U	B	49	23
12/3	South Circ Adj M1 NB Right	U	B	49	23
13/1	M1 Northbound Off-slip Left	U	A	29	43
13/2	M1 Northbound Off-slip Ahead Left	U	A	29	43
13/3	M1 Northbound Off-slip Ahead	U	A	29	43
14/1	West Circ Right Ahead	U	D	55	34
14/2	West Circ Right	U	D	55	34
14/3	West Circ Right	U	D	55	34
17/1	A52 Eastbound Off-slip Ahead Left	U	C	39	49
17/2	A52 Eastbound Off-slip Ahead	U	C	39	49


Unnamed Junction
PRC: -84.7 %
Total Traffic Delay: 838.6 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**148.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**148.3%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	20	-	-	860	2056:1915	500+322	104.6 : 104.6%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	20	-	-	520	2059	577	90.2%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	43	-	-	612	1908	1119	43.2%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	43	-	-	1886	1906:1904	835+944	72.4 : 72.6%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	48	-	-	659	1946	1271	40.3%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	48	-	-	1269	1945	1271	74.7%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	48	-	-	549	1943	1269	42.5%
4/1		U	N/A	N/A	-		-	-	-	-	949	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	452	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	16	-	-	842	2061:1923	467+436	93.1 : 93.4%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	16	-	-	593	2064	468	126.8%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1000	1953	1953	39.5%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	977	1952	1952	45.4%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1142	1951	1951	51.6%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	793	1980	1980	32.6%
8/1		U	N/A	N/A	-		-	-	-	-	793	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	368	1923:1919	318+318	57.8 : 57.8%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	314	1926	318	98.7%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1184	1980	1980	48.3%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1161	1980	1980	54.0%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1456	1980	1980	66.7%
11/1		U	N/A	N/A	-		-	-	-	-	1184	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	574	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	34	-	-	587	1936	1129	46.7%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	34	-	-	1456	1931:1931	1071+490	87.1 : 79.5%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	14	-	-	1354	2053:1912	513+400	148.3 : 148.3%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	14	-	-	754	2057	514	146.6%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	39	-	-	898	1937	1291	57.2%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	853	1935	1290	50.9%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	754	1932	1288	39.9%
15/1		U	N/A	N/A	-		-	-	-	-	1180	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	466	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	759	1952	1952	30.2%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	878	1950	1950	34.5%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1275	1950	1950	44.9%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	10	-	-	509	1928	353	144.0%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	10	-	-	546	2067	379	144.1%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	648	1980	1980	25.3%
19/1		U	N/A	N/A	-		-	-	-	-	648	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	417	2061:1921	181+413	70.2 : 70.2%
20/3	Left	O	N/A	N/A	-		-	-	-	-	611	1928	413	147.8%
21/1		U	N/A	N/A	-		-	-	-	-	1049	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	393	Inf	Inf	0.0%

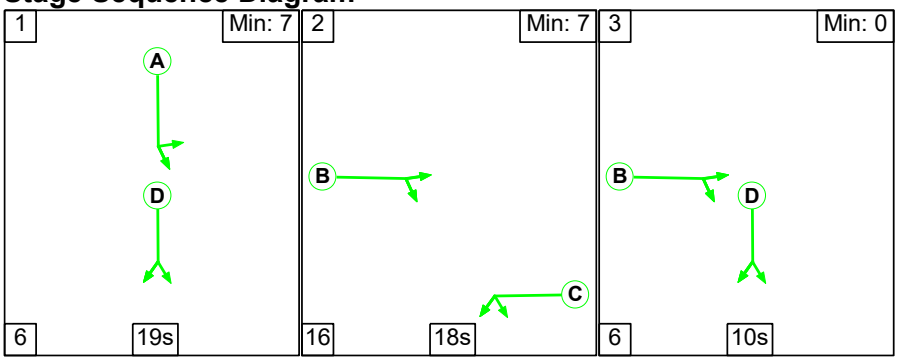
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2297**	**0**	**0**	**105.8**	**732.7**	**0.0**	**838.6**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2297**	**0**	**0**	**105.8**	**732.7**	**0.0**	**838.6**	**-**	**-**	**-**	**-**	
1/2+1/1	860	822	-	-	-	7.4	27.0	-	34.4	144.0	14.1	27.0	41.1	
1/3	520	520	-	-	-	3.8	4.0	-	7.8	53.9	10.4	4.0	14.4	
2/1	483	483	-	-	-	1.2	0.4	-	1.5	11.4	5.5	0.4	5.9	
2/2+2/3	1289	1289	-	-	-	3.5	1.3	-	4.8	13.4	9.1	1.3	10.4	
3/1	512	512	-	-	-	1.1	0.3	-	1.4	9.8	6.5	0.3	6.8	
3/2	949	949	-	-	-	2.3	1.5	-	3.7	14.1	16.5	1.5	17.9	
3/3	540	540	-	-	-	3.2	0.4	-	3.5	23.6	11.1	0.4	11.4	
4/1	805	805	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	842	842	-	-	-	6.7	5.8	-	12.4	53.2	8.8	5.8	14.6	
5/3	593	468	-	-	-	10.0	64.9	-	74.9	454.4	16.1	64.9	81.0	
6/1	772	772	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
6/2	885	885	-	-	-	0.0	0.4	-	0.4	1.8	6.2	0.4	6.6	
6/3	1007	1007	-	-	-	0.0	0.5	-	0.6	2.0	7.2	0.5	7.7	
7/1	646	646	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
8/1	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	368	368	736	0	0	1.0	0.7	-	1.7	16.6	3.0	0.7	3.6	
9/3	314	314	314	0	0	1.6	7.9	-	9.4	108.2	6.5	7.9	14.3	
10/1	956	956	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/2	1069	1069	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/3	1321	1321	-	-	-	0.0	1.0	-	1.0	2.7	0.0	1.0	1.0	
11/1	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	542	542	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	528	528	-	-	-	1.1	0.4	-	1.5	10.2	5.0	0.4	5.4	
12/2+12/3	1321	1321	-	-	-	3.3	2.7	-	6.0	16.4	12.4	2.7	15.1	
13/2+13/1	1354	913	-	-	-	17.4	221.9	-	239.3	636.3	25.1	221.9	247.0	
13/3	754	514	-	-	-	11.2	121.4	-	132.7	633.4	17.6	121.4	139.1	
14/1	738	738	-	-	-	1.0	0.7	-	1.6	7.9	6.6	0.7	7.2	
14/2	656	656	-	-	-	1.5	0.5	-	2.0	11.0	8.7	0.5	9.2	
14/3	514	514	-	-	-	2.6	0.3	-	3.0	20.7	8.6	0.3	8.9	
15/1	928	928	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	590	590	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	674	674	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	876	876	-	-	-	0.0	0.4	-	0.4	1.7	1.6	0.4	2.0	
17/1	509	353	-	-	-	8.1	79.4	-	87.5	618.8	12.5	79.4	91.9	
17/2	546	379	-	-	-	8.7	85.1	-	93.8	618.8	13.5	85.1	98.6	
18/1	501	501	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	501	501	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	417	417	834	0	0	0.6	1.2	-	1.8	15.6	3.7	1.2	4.9	
20/3	611	413	413	0	0	8.7	100.3	-	109.0	642.5	30.0	100.3	130.4	
21/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	318	318	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-40.8	Total Delay for Signalled Lanes (pcuHr):	144.46	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-64.7	Total Delay for Signalled Lanes (pcuHr):	567.43	Cycle Time (s): 60
	PRC Over All Lanes (%):	-64.7	Total Delay Over All Lanes(pcuHr):	838.55	

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



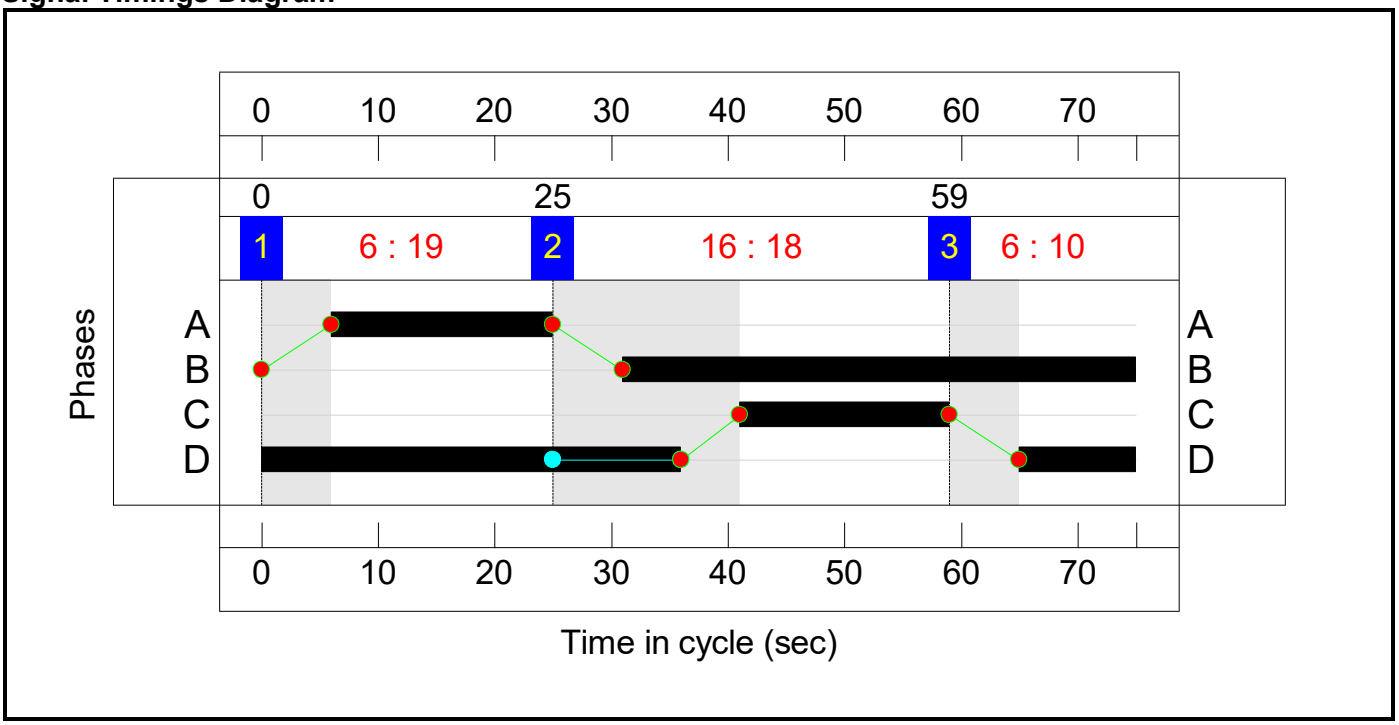
Stage Timings

Stage	1	2	3
Duration	19	18	10
Change Point	0	25	59

Phase Timings

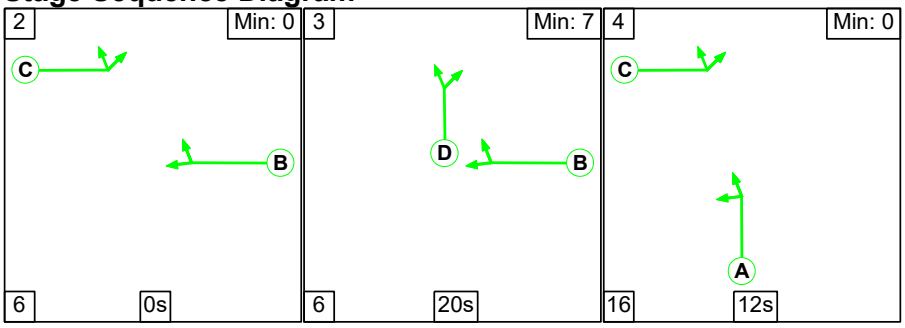
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	19	6	25
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	44	31	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	18	41	59
D	East Circ Right Ahead East Circ	Traffic	46	65	36

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



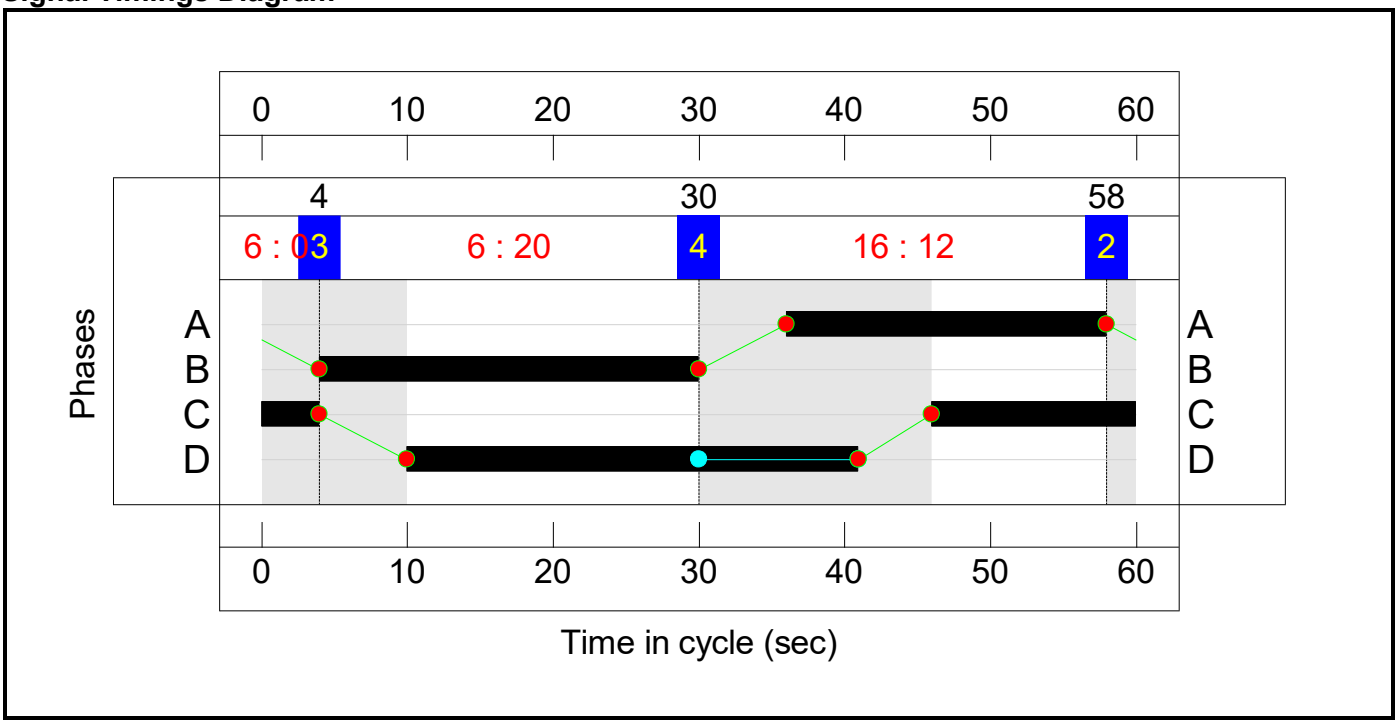
Stage Timings

Stage	2	3	4
Duration	0	20	12
Change Point	58	4	30

Phase Timings

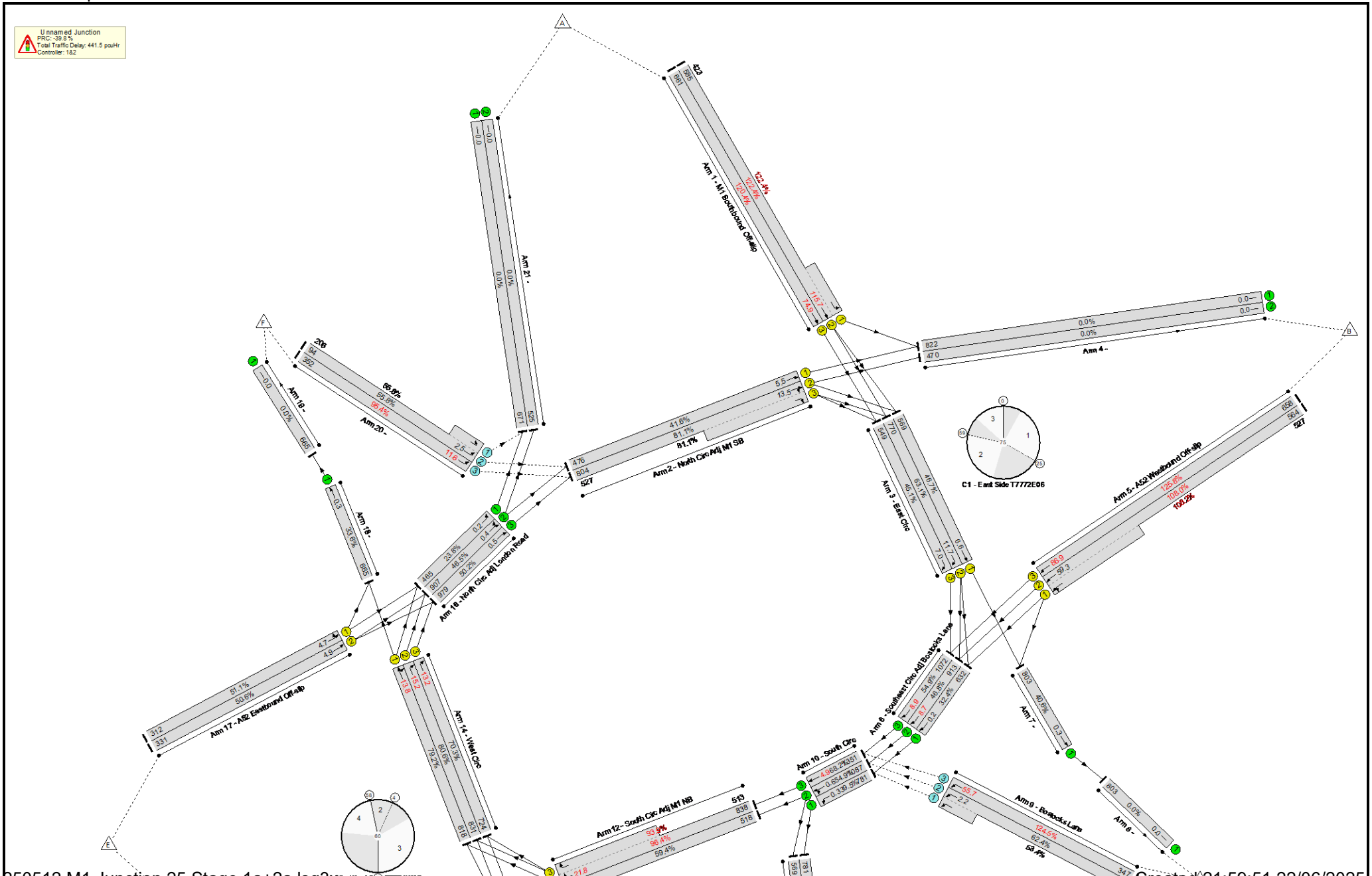
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	22	36	58
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	26	4	30
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	46	4
D	West Circ Right Ahead West Circ	Traffic	31	10	41

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	25
1/2	M1 Southbound Off-slip Ahead	U	A	6	25
1/3	M1 Southbound Off-slip Ahead	U	A	6	25
2/1	North Circ Adj M1 SB Ahead	U	B	31	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	31	0
2/3	North Circ Adj M1 SB Right	U	B	31	0
3/1	East Circ Ahead	U	D	65	36
3/2	East Circ Right	U	D	65	36
3/3	East Circ Right	U	D	65	36
5/1	A52 Westbound Off-slip Ahead Left	U	C	41	59
5/2	A52 Westbound Off-slip Ahead	U	C	41	59
5/3	A52 Westbound Off-slip Ahead	U	C	41	59
12/1	South Circ Adj M1 NB Ahead	U	B	4	30
12/2	South Circ Adj M1 NB Right Ahead	U	B	4	30
12/3	South Circ Adj M1 NB Right	U	B	4	30
13/1	M1 Northbound Off-slip Left	U	A	36	58
13/2	M1 Northbound Off-slip Ahead Left	U	A	36	58
13/3	M1 Northbound Off-slip Ahead	U	A	36	58
14/1	West Circ Right Ahead	U	D	10	41
14/2	West Circ Right	U	D	10	41
14/3	West Circ Right	U	D	10	41
17/1	A52 Eastbound Off-slip Ahead Left	U	C	46	4
17/2	A52 Eastbound Off-slip Ahead	U	C	46	4


Unnamed Junction
PRC: -39.8 %
Total Traffic Delay: 441.5 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**125.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**125.8%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	19	-	-	1008	2056:1915	478+346	122.4 : 122.4%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	19	-	-	661	2059	549	120.4%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	44	-	-	492	1908	1145	41.6%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	44	-	-	1331	1906:1904	991+650	81.1 : 81.1%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	46	-	-	622	1946	1219	46.7%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	46	-	-	824	1945	1219	63.1%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	46	-	-	661	1943	1218	45.1%
4/1		U	N/A	N/A	-		-	-	-	-	915	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	470	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	18	-	-	1091	2061:1923	522+487	108.0 : 108.2%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	18	-	-	658	2064	523	125.8%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	653	1953	1953	32.4%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1009	1952	1952	46.8%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1319	1951	1951	54.9%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	875	1980	1980	40.6%
8/1		U	N/A	N/A	-		-	-	-	-	875	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	323	1923:1919	279+279	62.4 : 53.4%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	347	1926	279	124.5%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	802	1980	1980	39.5%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1183	1980	1980	54.9%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1666	1980	1980	68.2%
11/1		U	N/A	N/A	-		-	-	-	-	802	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	611	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	26	-	-	572	1936	871	59.4%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	26	-	-	1666	1932:1931	869+546	96.4 : 93.9%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	22	-	-	1111	2053:1912	711+434	97.1 : 97.1%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	22	-	-	724	2057	789	91.8%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	924	1937	1033	79.2%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	961	1935	1032	80.6%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	724	1932	1030	70.3%
15/1		U	N/A	N/A	-		-	-	-	-	993	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	471	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	513	1952	1952	23.8%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1037	1950	1950	46.5%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	979	1950	1950	50.2%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	312	1928	611	51.1%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	331	2067	655	50.6%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	723	1980	1980	33.6%
19/1		U	N/A	N/A	-		-	-	-	-	723	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	300	2061:1921	168+369	55.8 : 55.8%
20/3	Left	O	N/A	N/A	-		-	-	-	-	352	1928	369	95.4%
21/1		U	N/A	N/A	-		-	-	-	-	719	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	639	Inf	Inf	0.0%

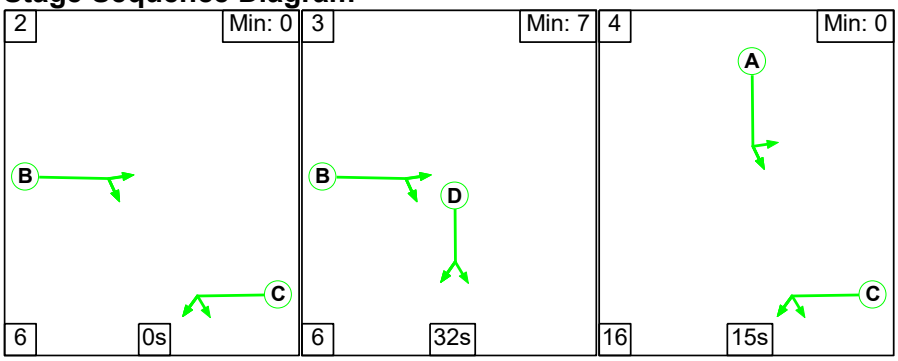
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1877**	**0**	**0**	**87.9**	**353.6**	**0.0**	**441.5**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1877**	**0**	**0**	**87.9**	**353.6**	**0.0**	**441.5**	**-**	**-**	**-**	**-**	
1/2+1/1	1008	823	-	-	-	14.3	94.9	-	109.2	389.9	20.8	94.9	115.7	
1/3	661	549	-	-	-	9.2	58.8	-	67.9	370.1	16.1	58.8	74.9	
2/1	476	476	-	-	-	1.1	0.4	-	1.4	10.7	5.2	0.4	5.5	
2/2+2/3	1331	1331	-	-	-	3.5	2.1	-	5.7	15.3	11.4	2.1	13.5	
3/1	569	569	-	-	-	1.3	0.4	-	1.7	10.7	6.2	0.4	6.6	
3/2	770	770	-	-	-	2.7	0.9	-	3.6	16.7	10.9	0.9	11.7	
3/3	549	549	-	-	-	0.2	0.4	-	0.6	4.2	6.6	0.4	7.0	
4/1	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1091	1009	-	-	-	10.7	46.7	-	57.4	189.4	12.6	46.7	59.3	
5/3	658	523	-	-	-	9.2	69.9	-	79.1	433.0	17.0	69.9	86.9	
6/1	632	632	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
6/2	913	913	-	-	-	0.0	0.4	-	0.5	1.9	8.3	0.4	8.7	
6/3	1072	1072	-	-	-	0.0	0.6	-	0.6	2.2	8.3	0.6	8.9	
7/1	803	803	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	803	803	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	323	323	646	0	0	0.4	0.7	-	1.1	12.3	1.5	0.7	2.2	
9/3	347	279	279	0	0	3.9	36.5	-	40.3	418.6	19.2	36.5	55.7	
10/1	781	781	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/2	1087	1087	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/3	1351	1351	-	-	-	0.0	1.1	-	1.1	2.9	3.9	1.1	4.9	
11/1	781	781	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	569	569	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	518	518	-	-	-	1.8	0.7	-	2.5	17.5	6.5	0.7	7.2	
12/2+12/3	1351	1351	-	-	-	5.5	8.3	-	13.8	36.8	13.5	8.3	21.8	
13/2+13/1	1111	1111	-	-	-	5.0	10.3	-	15.3	49.6	12.1	10.3	22.3	
13/3	724	724	-	-	-	3.5	4.9	-	8.4	41.8	11.5	4.9	16.3	
14/1	818	818	-	-	-	2.7	1.9	-	4.6	20.3	12.0	1.9	13.8	
14/2	831	831	-	-	-	2.8	2.0	-	4.8	20.9	13.2	2.0	15.2	
14/3	724	724	-	-	-	5.3	1.2	-	6.5	32.4	12.1	1.2	13.2	
15/1	939	939	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	465	465	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	907	907	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
16/3	979	979	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
17/1	312	312	-	-	-	1.4	0.5	-	2.0	22.7	4.2	0.5	4.7	
17/2	331	331	-	-	-	1.5	0.5	-	2.0	22.2	4.4	0.5	4.9	
18/1	665	665	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
19/1	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	300	300	600	0	0	0.6	0.6	-	1.2	14.3	1.8	0.6	2.5	
20/3	352	352	352	0	0	1.2	6.0	-	7.2	73.8	5.6	6.0	11.6	
21/1	671	671	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-39.8	Total Delay for Signalled Lanes (pcuHr):	326.65	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-7.8	Total Delay for Signalled Lanes (pcuHr):	59.97	Cycle Time (s): 60
	PRC Over All Lanes (%):	-39.8	Total Delay Over All Lanes(pcuHr):	441.52	

Scenario 9: '2038 WD AM' (FG9: '2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



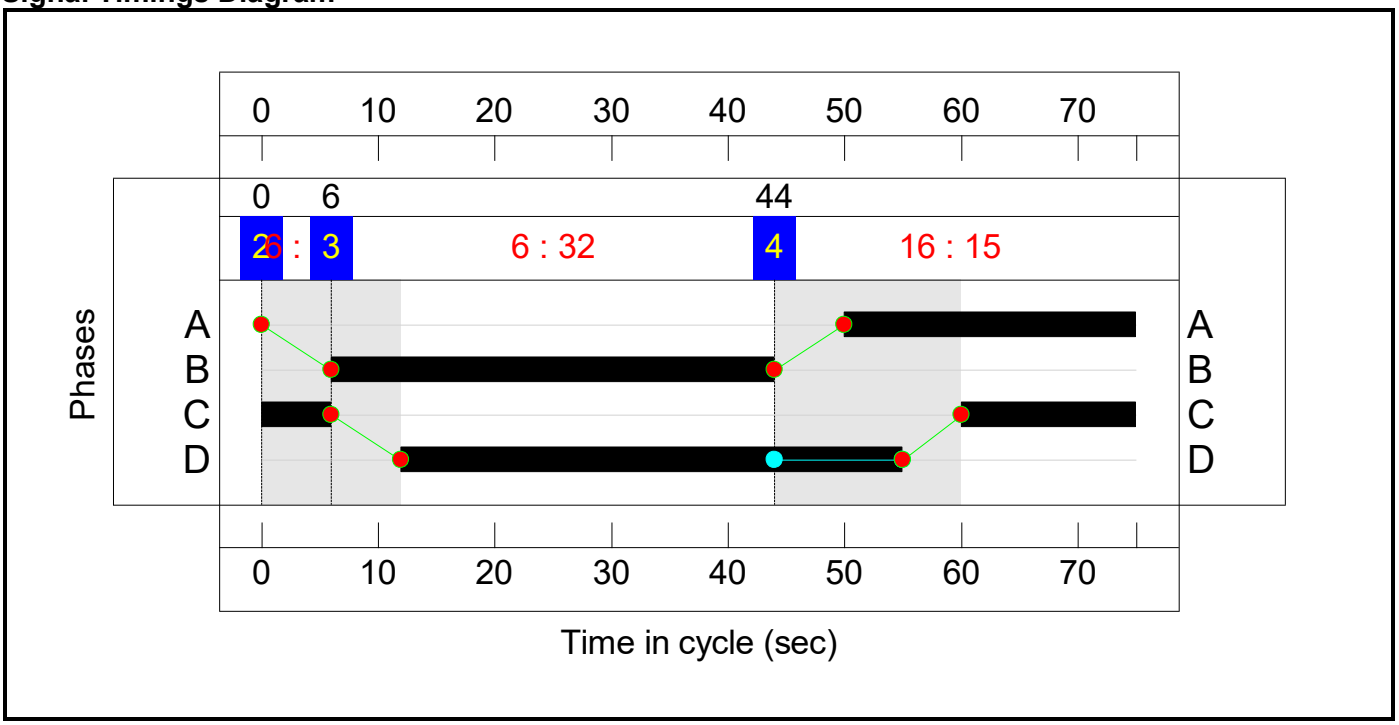
Stage Timings

Stage	2	3	4
Duration	0	32	15
Change Point	0	6	44

Phase Timings

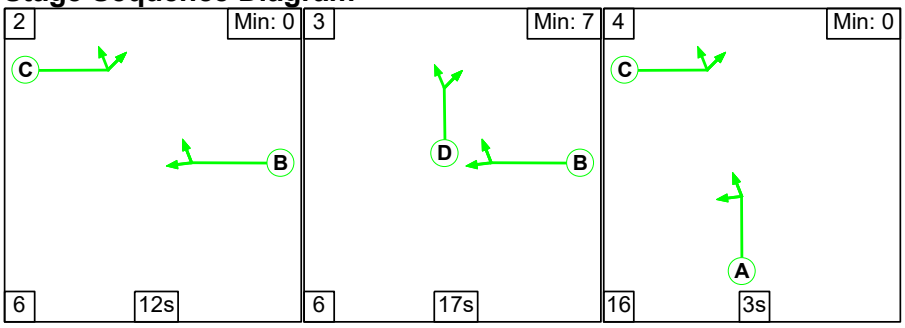
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	25	50	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	38	6	44
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	21	60	6
D	East Circ Right Ahead East Circ	Traffic	43	12	55

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



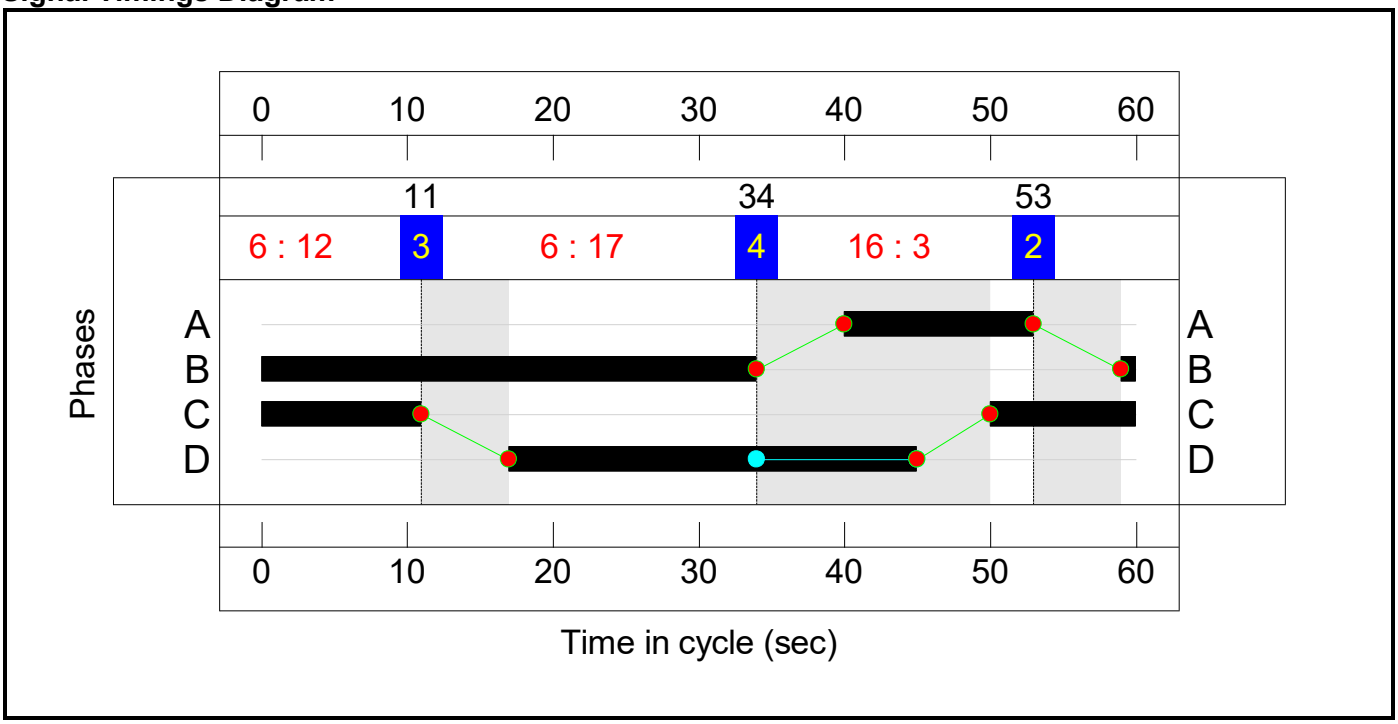
Stage Timings

Stage	2	3	4
Duration	12	17	3
Change Point	53	11	34

Phase Timings

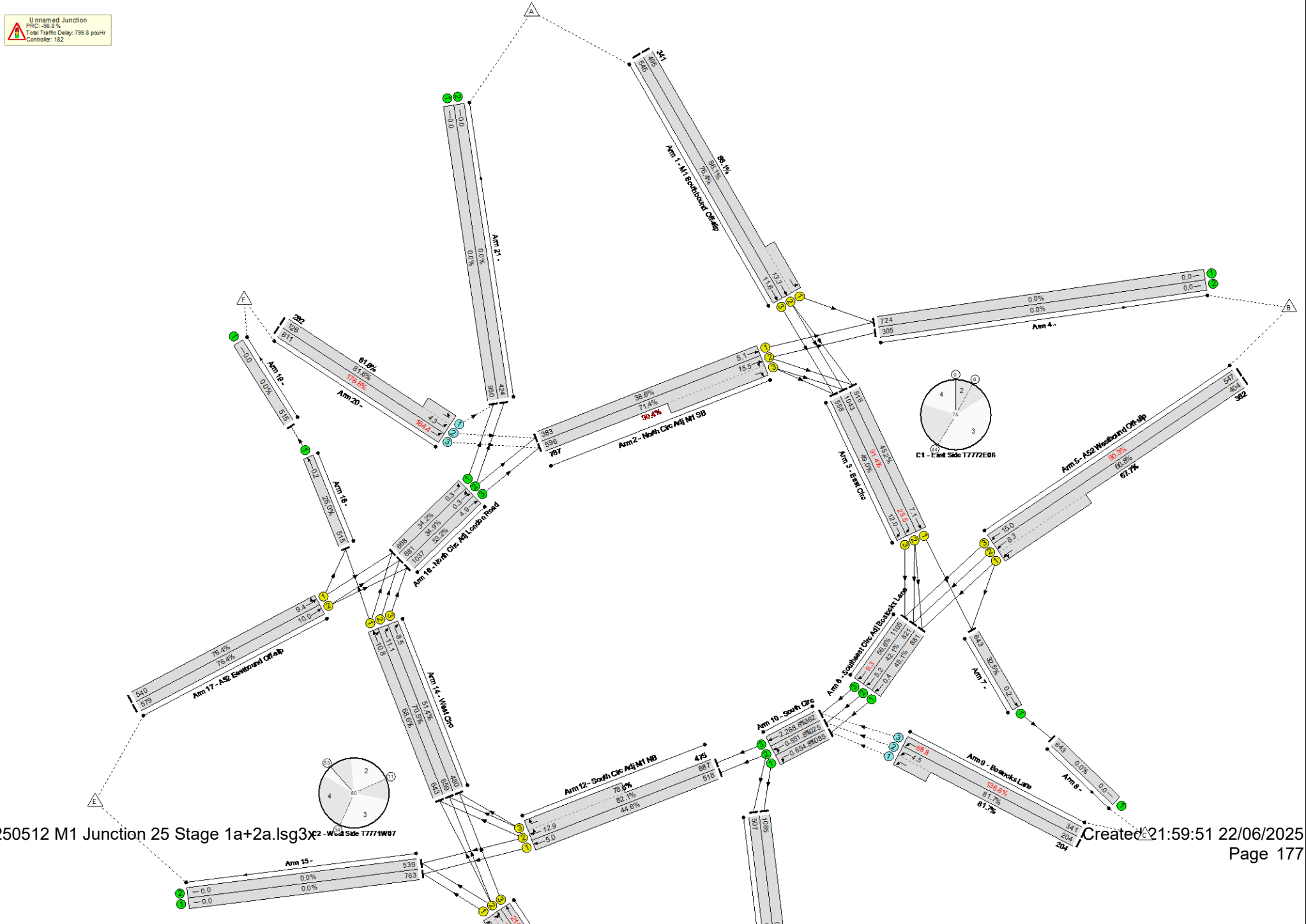
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	13	40	53
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	35	59	34
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	21	50	11
D	West Circ Right Ahead West Circ	Traffic	28	17	45

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	50	0
1/2	M1 Southbound Off-slip Ahead	U	A	50	0
1/3	M1 Southbound Off-slip Ahead	U	A	50	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	44
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	44
2/3	North Circ Adj M1 SB Right	U	B	6	44
3/1	East Circ Ahead	U	D	12	55
3/2	East Circ Right	U	D	12	55
3/3	East Circ Right	U	D	12	55
5/1	A52 Westbound Off-slip Ahead Left	U	C	60	6
5/2	A52 Westbound Off-slip Ahead	U	C	60	6
5/3	A52 Westbound Off-slip Ahead	U	C	60	6
12/1	South Circ Adj M1 NB Ahead	U	B	59	34
12/2	South Circ Adj M1 NB Right Ahead	U	B	59	34
12/3	South Circ Adj M1 NB Right	U	B	59	34
13/1	M1 Northbound Off-slip Left	U	A	40	53
13/2	M1 Northbound Off-slip Ahead Left	U	A	40	53
13/3	M1 Northbound Off-slip Ahead	U	A	40	53
14/1	West Circ Right Ahead	U	D	17	45
14/2	West Circ Right	U	D	17	45
14/3	West Circ Right	U	D	17	45
17/1	A52 Eastbound Off-slip Ahead Left	U	C	50	11
17/2	A52 Eastbound Off-slip Ahead	U	C	50	11


Unnamed Junction
PRC: -98.8 %
Total Traffic Delay: 799.8 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**178.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**178.9%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	25	-	-	836	2056:1915	575+396	86.1 : 86.1%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	25	-	-	545	2059	714	76.4%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	38	-	-	553	1908	992	38.6%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	38	-	-	2015	1906:1904	834+870	71.4 : 90.4%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	43	-	-	673	1946	1142	45.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	43	-	-	1274	1945	1141	91.4%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	43	-	-	570	1943	1140	49.0%
4/1		U	N/A	N/A	-		-	-	-	-	894	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	538	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	21	-	-	786	2061:1923	605+564	66.8 : 67.7%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	21	-	-	547	2064	605	90.3%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1032	1953	1953	45.1%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	901	1952	1952	42.1%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1117	1951	1951	56.6%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	800	1980	1980	32.5%
8/1		U	N/A	N/A	-		-	-	-	-	800	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	408	1923:1919	250+250	81.7 : 81.7%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	341	1926	250	136.6%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1236	1980	1980	54.8%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1105	1980	1980	51.8%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1458	1980	1980	68.8%
11/1		U	N/A	N/A	-		-	-	-	-	1236	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	524	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	35	-	-	581	1936	1162	44.6%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	35	-	-	1458	1932:1931	1080+604	82.1 : 78.6%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	13	-	-	1296	2053:1912	479+245	178.9 : 178.9%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	13	-	-	847	2057	480	176.5%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	28	-	-	821	1937	936	68.6%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	28	-	-	853	1935	935	70.5%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	28	-	-	847	1932	934	51.4%
15/1		U	N/A	N/A	-		-	-	-	-	1020	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	641	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	696	1952	1952	34.2%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	875	1950	1950	34.9%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1404	1950	1950	53.2%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	21	-	-	540	1928	707	76.4%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	21	-	-	579	2067	758	76.4%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	665	1980	1980	26.0%
19/1		U	N/A	N/A	-		-	-	-	-	665	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	408	2061:1921	154+346	81.6 : 81.6%
20/3	Left	O	N/A	N/A	-		-	-	-	-	611	1928	346	176.8%
21/1		U	N/A	N/A	-		-	-	-	-	978	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	448	Inf	Inf	0.0%

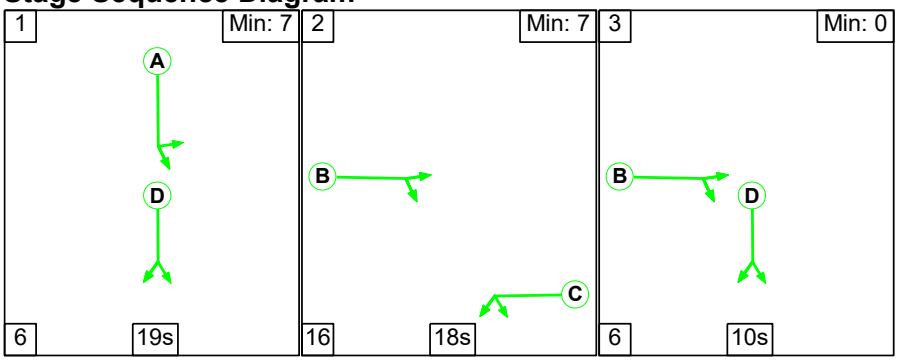
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2227**	**0**	**0**	**111.1**	**688.7**	**0.0**	**799.8**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2227**	**0**	**0**	**111.1**	**688.7**	**0.0**	**799.8**	**-**	**-**	**-**	**-**	
1/2+1/1	836	836	-	-	-	4.8	3.0	-	7.8	33.4	10.3	3.0	13.3	
1/3	545	545	-	-	-	3.3	1.6	-	4.9	32.2	10.0	1.6	11.6	
2/1	383	383	-	-	-	1.2	0.3	-	1.5	13.8	4.8	0.3	5.1	
2/2+2/3	1382	1382	-	-	-	5.3	2.1	-	7.4	19.3	13.3	2.1	15.5	
3/1	516	516	-	-	-	1.4	0.4	-	1.8	12.8	6.7	0.4	7.1	
3/2	1043	1043	-	-	-	2.8	4.8	-	7.6	26.4	20.7	4.8	25.5	
3/3	558	558	-	-	-	4.0	0.5	-	4.5	29.0	11.5	0.5	12.0	
4/1	724	724	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	786	786	-	-	-	5.1	1.0	-	6.1	28.0	7.3	1.0	8.3	
5/3	547	547	-	-	-	3.9	4.1	-	8.0	52.5	10.9	4.1	15.0	
6/1	881	881	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
6/2	821	821	-	-	-	0.0	0.4	-	0.4	1.6	4.9	0.4	5.2	
6/3	1105	1105	-	-	-	0.0	0.7	-	0.7	2.3	8.7	0.7	9.3	
7/1	643	643	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
8/1	643	643	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	408	408	816	0	0	1.2	2.1	-	3.3	29.2	2.4	2.1	4.5	
9/3	341	250	250	0	0	5.3	47.5	-	52.8	557.6	21.3	47.5	68.8	
10/1	1085	1085	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/2	1025	1025	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
10/3	1362	1362	-	-	-	0.0	1.1	-	1.1	2.9	1.1	1.1	2.2	
11/1	1085	1085	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	518	518	-	-	-	0.9	0.4	-	1.3	9.3	4.6	0.4	5.0	
12/2+12/3	1362	1362	-	-	-	3.0	2.1	-	5.1	13.5	10.8	2.1	12.9	
13/2+13/1	1296	724	-	-	-	24.0	286.9	-	311.0	863.8	33.2	286.9	320.1	
13/3	847	480	-	-	-	17.9	184.7	-	202.5	860.9	25.4	184.7	210.1	
14/1	643	643	-	-	-	2.3	1.1	-	3.4	19.1	9.7	1.1	10.8	
14/2	659	659	-	-	-	2.8	1.2	-	3.9	21.5	10.0	1.2	11.1	
14/3	480	480	-	-	-	3.9	0.5	-	4.4	33.3	8.0	0.5	8.5	
15/1	763	763	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	668	668	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/2	681	681	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	1037	1037	-	-	-	0.0	0.6	-	0.6	2.0	4.4	0.6	4.9	
17/1	540	540	-	-	-	2.5	1.6	-	4.1	27.3	7.8	1.6	9.4	
17/2	579	579	-	-	-	2.7	1.6	-	4.3	26.6	8.4	1.6	10.0	
18/1	515	515	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	408	408	816	0	0	0.8	2.1	-	2.9	25.4	2.2	2.1	4.3	
20/3	611	346	346	0	0	12.0	133.9	-	145.8	859.3	30.5	133.9	164.4	
21/1	950	950	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	424	424	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-1.5	Total Delay for Signalled Lanes (pcuHr):	49.60	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-98.8	Total Delay for Signalled Lanes (pcuHr):	540.12	Cycle Time (s): 60
	PRC Over All Lanes (%):	-98.8	Total Delay Over All Lanes(pcuHr):	799.79	

Scenario 10: '2038 WD PM' (FG10: '2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



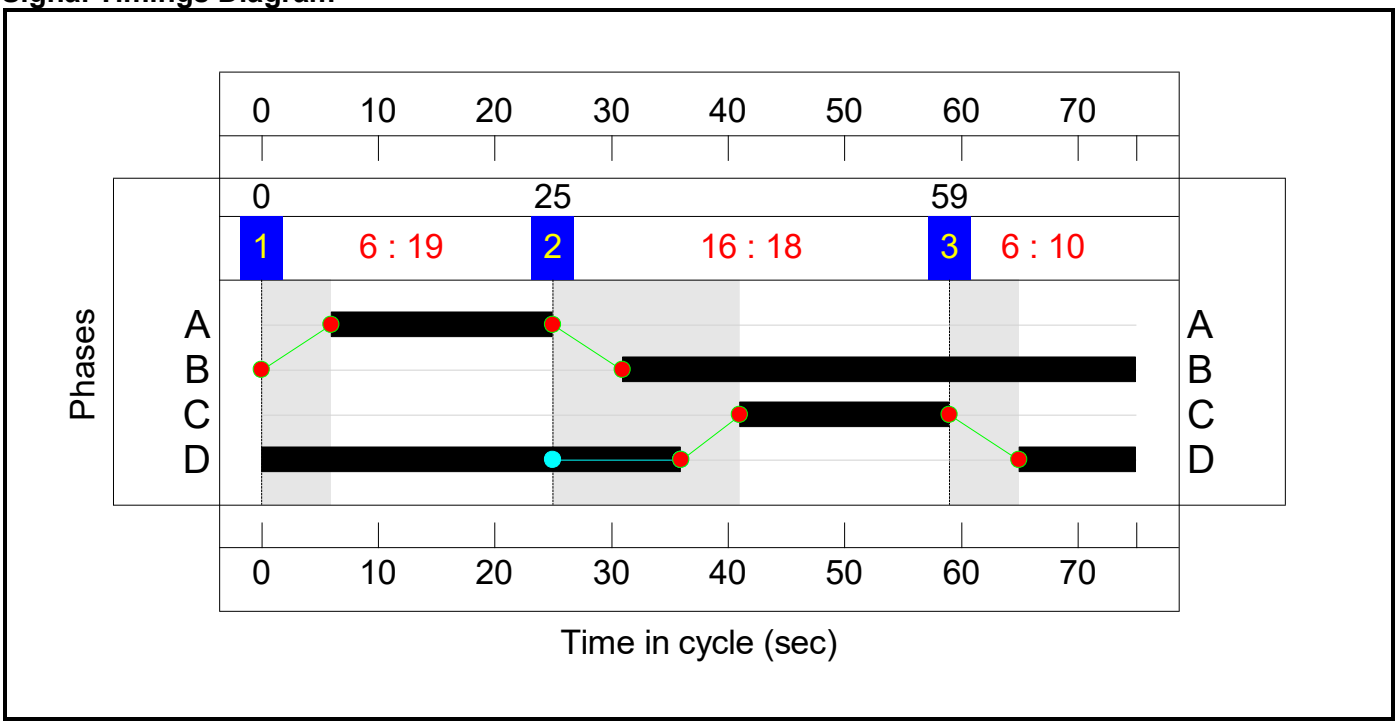
Stage Timings

Stage	1	2	3
Duration	19	18	10
Change Point	0	25	59

Phase Timings

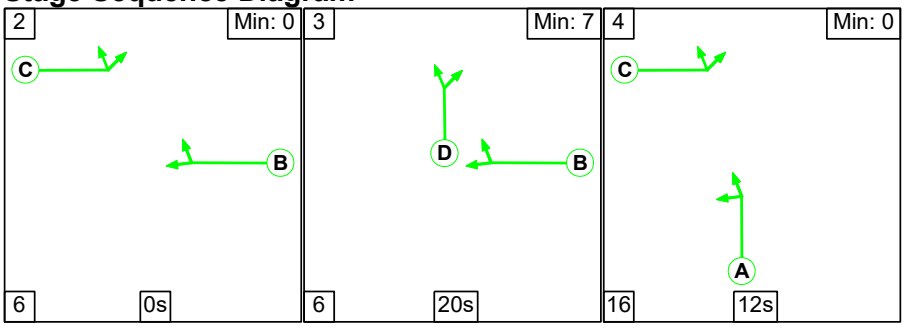
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	19	6	25
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	44	31	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	18	41	59
D	East Circ Right Ahead East Circ	Traffic	46	65	36

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



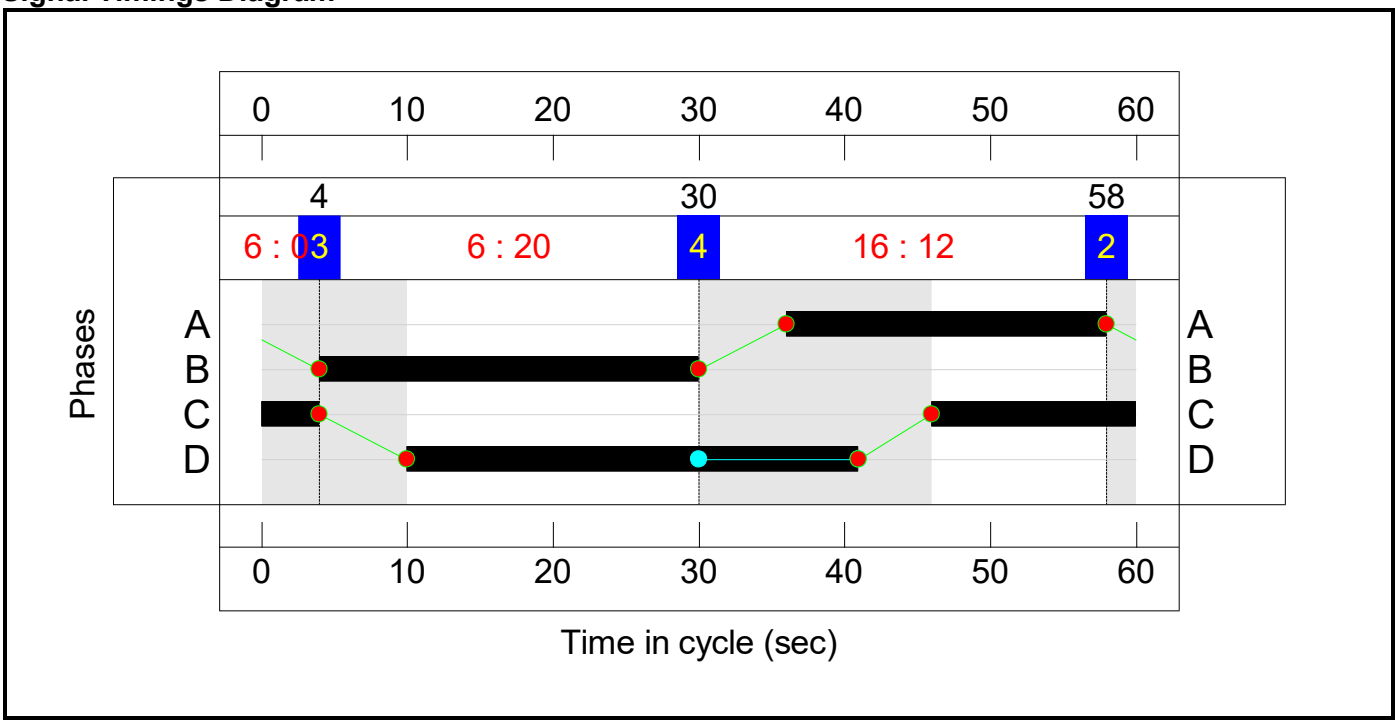
Stage Timings

Stage	2	3	4
Duration	0	20	12
Change Point	58	4	30

Phase Timings

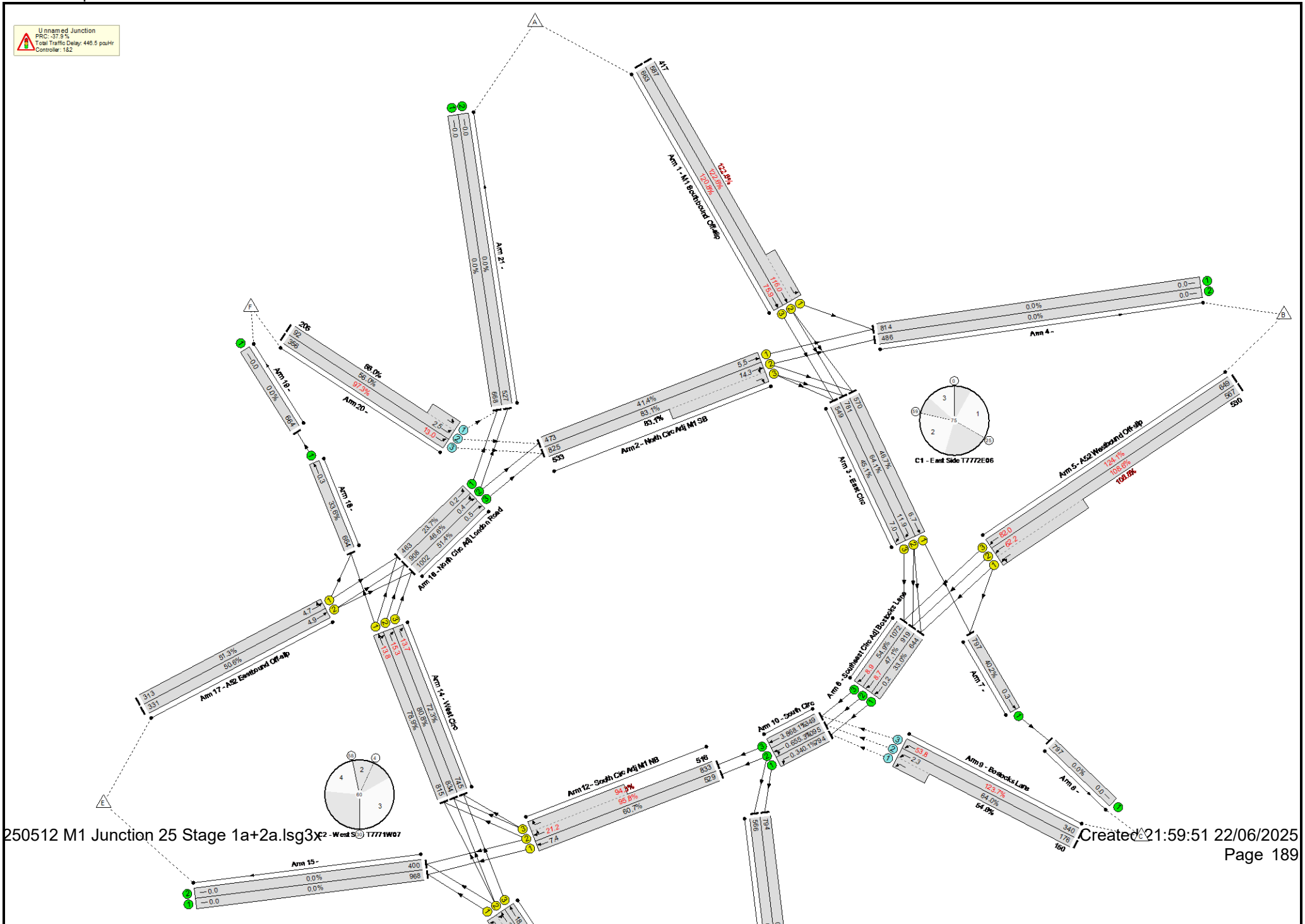
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	22	36	58
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	26	4	30
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	46	4
D	West Circ Right Ahead West Circ	Traffic	31	10	41

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	25
1/2	M1 Southbound Off-slip Ahead	U	A	6	25
1/3	M1 Southbound Off-slip Ahead	U	A	6	25
2/1	North Circ Adj M1 SB Ahead	U	B	31	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	31	0
2/3	North Circ Adj M1 SB Right	U	B	31	0
3/1	East Circ Ahead	U	D	65	36
3/2	East Circ Right	U	D	65	36
3/3	East Circ Right	U	D	65	36
5/1	A52 Westbound Off-slip Ahead Left	U	C	41	59
5/2	A52 Westbound Off-slip Ahead	U	C	41	59
5/3	A52 Westbound Off-slip Ahead	U	C	41	59
12/1	South Circ Adj M1 NB Ahead	U	B	4	30
12/2	South Circ Adj M1 NB Right Ahead	U	B	4	30
12/3	South Circ Adj M1 NB Right	U	B	4	30
13/1	M1 Northbound Off-slip Left	U	A	36	58
13/2	M1 Northbound Off-slip Ahead Left	U	A	36	58
13/3	M1 Northbound Off-slip Ahead	U	A	36	58
14/1	West Circ Right Ahead	U	D	10	41
14/2	West Circ Right	U	D	10	41
14/3	West Circ Right	U	D	10	41
17/1	A52 Eastbound Off-slip Ahead Left	U	C	46	4
17/2	A52 Eastbound Off-slip Ahead	U	C	46	4


Unnamed Junction
PRC: -37.9 %
Total Traffic Delay: 446.5 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**124.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**124.1%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	19	-	-	1004	2056:1915	479+340	122.6 : 122.6%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	19	-	-	663	2059	549	120.8%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	44	-	-	488	1908	1145	41.4%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	44	-	-	1358	1906:1904	993+641	83.1 : 83.1%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	46	-	-	622	1946	1219	46.7%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	46	-	-	837	1945	1219	64.1%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	46	-	-	663	1943	1218	45.1%
4/1		U	N/A	N/A	-		-	-	-	-	905	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	486	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	18	-	-	1097	2061:1923	522+487	108.6 : 108.8%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	18	-	-	649	2064	523	124.1%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	667	1953	1953	33.0%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1020	1952	1952	47.1%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1312	1951	1951	54.9%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	869	1980	1980	40.2%
8/1		U	N/A	N/A	-		-	-	-	-	869	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	326	1923:1919	275+275	64.0 : 54.6%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	340	1926	275	123.7%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	817	1980	1980	40.1%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1196	1980	1980	55.3%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1652	1980	1980	68.1%
11/1		U	N/A	N/A	-		-	-	-	-	817	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	611	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	26	-	-	585	1936	871	60.7%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	26	-	-	1652	1932:1931	869+547	95.8 : 94.3%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	22	-	-	1139	2053:1912	709+445	98.7 : 98.7%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	22	-	-	745	2057	789	94.5%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	914	1937	1033	78.9%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	956	1935	1032	80.8%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	745	1932	1030	72.3%
15/1		U	N/A	N/A	-		-	-	-	-	1024	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	482	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	507	1952	1952	23.7%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1030	1950	1950	46.6%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1002	1950	1950	51.4%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	313	1928	611	51.3%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	331	2067	655	50.6%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	720	1980	1980	33.6%
19/1		U	N/A	N/A	-		-	-	-	-	720	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	297	2061:1921	164+366	56.0 : 56.0%
20/3	Left	O	N/A	N/A	-		-	-	-	-	356	1928	366	97.3%
21/1		U	N/A	N/A	-		-	-	-	-	712	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	634	Inf	Inf	0.0%

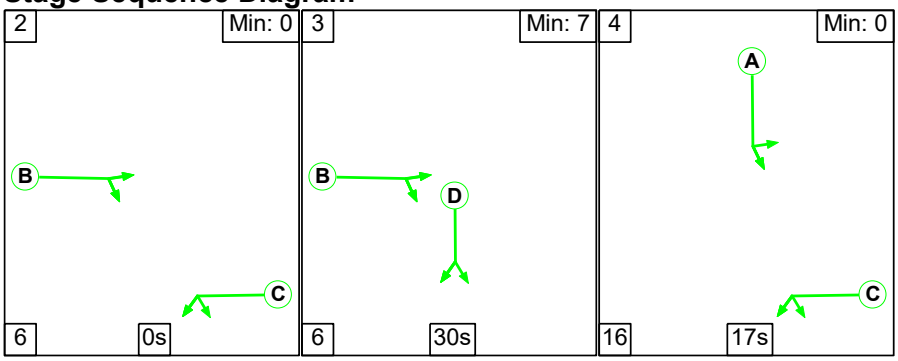
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1877**	**0**	**0**	**88.4**	**358.1**	**0.0**	**446.5**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1877**	**0**	**0**	**88.4**	**358.1**	**0.0**	**446.5**	**-**	**-**	**-**	**-**	
1/2+1/1	1004	819	-	-	-	14.2	95.2	-	109.4	392.4	20.8	95.2	116.0	
1/3	663	549	-	-	-	9.3	59.7	-	69.0	374.7	16.2	59.7	75.9	
2/1	473	473	-	-	-	1.0	0.4	-	1.4	10.7	5.1	0.4	5.5	
2/2+2/3	1358	1358	-	-	-	3.7	2.4	-	6.1	16.1	11.9	2.4	14.3	
3/1	570	570	-	-	-	1.3	0.4	-	1.7	10.7	6.2	0.4	6.7	
3/2	781	781	-	-	-	2.8	0.9	-	3.6	16.8	11.0	0.9	11.9	
3/3	549	549	-	-	-	0.2	0.4	-	0.6	4.2	6.6	0.4	7.0	
4/1	814	814	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	486	486	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1097	1009	-	-	-	10.9	49.4	-	60.3	198.0	12.7	49.4	62.2	
5/3	649	523	-	-	-	8.8	65.5	-	74.3	412.1	16.4	65.5	82.0	
6/1	644	644	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
6/2	919	919	-	-	-	0.0	0.4	-	0.5	1.9	8.3	0.4	8.7	
6/3	1072	1072	-	-	-	0.0	0.6	-	0.6	2.2	8.3	0.6	8.9	
7/1	797	797	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	797	797	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	326	326	652	0	0	0.4	0.7	-	1.2	12.8	1.6	0.7	2.3	
9/3	340	275	275	0	0	3.7	35.0	-	38.7	409.7	18.8	35.0	53.8	
10/1	794	794	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/2	1095	1095	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/3	1349	1349	-	-	-	0.0	1.1	-	1.1	2.8	2.8	1.1	3.8	
11/1	794	794	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	566	566	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	529	529	-	-	-	1.8	0.8	-	2.6	17.7	6.6	0.8	7.4	
12/2+12/3	1349	1349	-	-	-	5.5	8.0	-	13.5	36.1	13.2	8.0	21.2	
13/2+13/1	1139	1139	-	-	-	5.2	13.5	-	18.7	59.1	12.4	13.5	25.9	
13/3	745	745	-	-	-	3.7	6.6	-	10.3	49.7	12.0	6.6	18.6	
14/1	815	815	-	-	-	2.8	1.8	-	4.6	20.3	12.0	1.8	13.8	
14/2	834	834	-	-	-	2.8	2.1	-	4.8	20.9	13.2	2.1	15.3	
14/3	745	745	-	-	-	5.5	1.3	-	6.8	32.8	12.4	1.3	13.7	
15/1	968	968	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	463	463	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	908	908	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
16/3	1002	1002	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
17/1	313	313	-	-	-	1.5	0.5	-	2.0	22.8	4.2	0.5	4.7	
17/2	331	331	-	-	-	1.5	0.5	-	2.0	22.2	4.4	0.5	4.9	
18/1	664	664	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
19/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	297	297	594	0	0	0.6	0.6	-	1.2	14.5	1.9	0.6	2.5	
20/3	356	356	356	0	0	1.2	7.3	-	8.5	86.1	5.7	7.3	13.0	
21/1	668	668	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	527	527	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-37.9	Total Delay for Signalled Lanes (pcuHr):	326.51	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-9.6	Total Delay for Signalled Lanes (pcuHr):	65.32	Cycle Time (s): 60
	PRC Over All Lanes (%):	-37.9	Total Delay Over All Lanes(pcuHr):	446.49	

Scenario 11: '2a 2028 WD AM' (FG11: '2a 2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



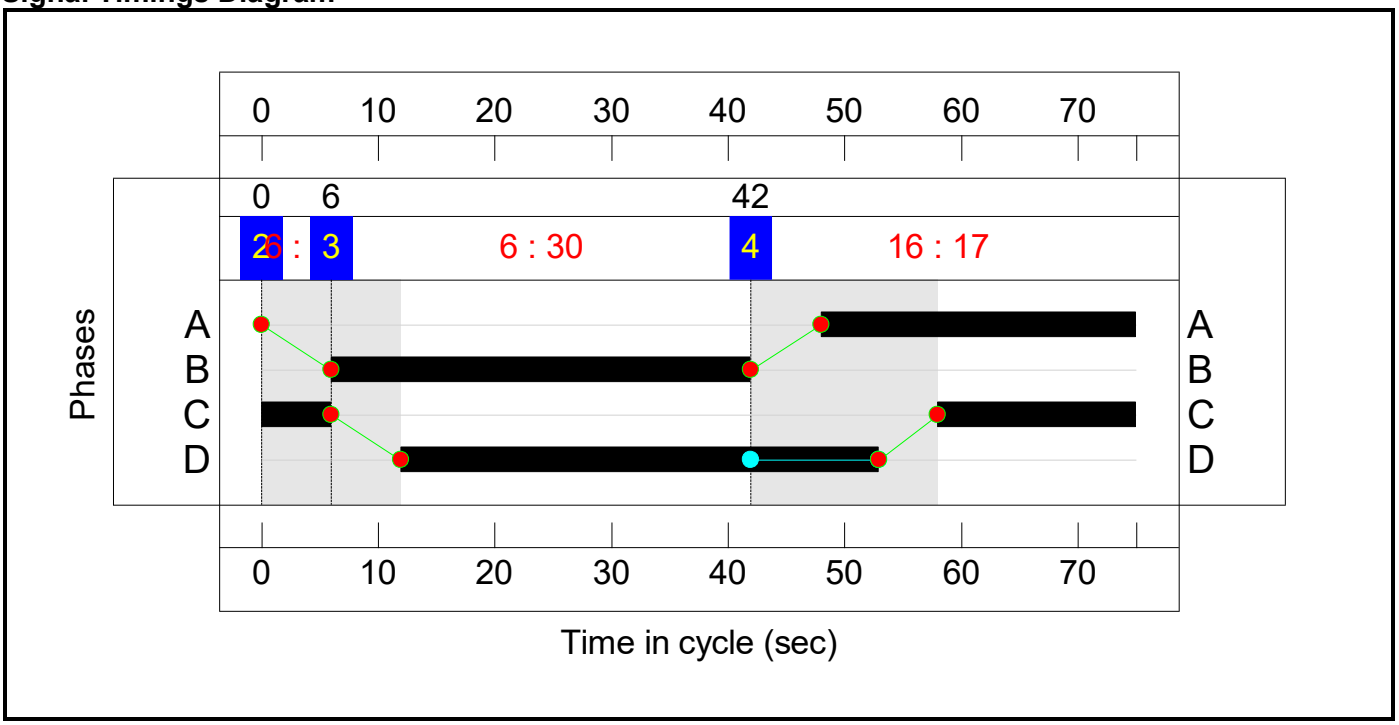
Stage Timings

Stage	2	3	4
Duration	0	30	17
Change Point	0	6	42

Phase Timings

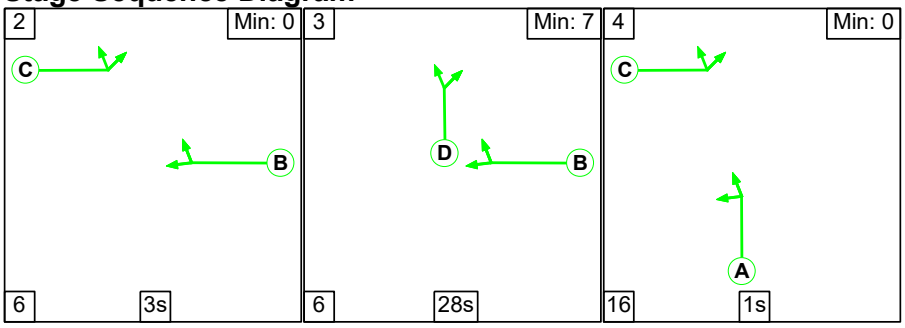
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	27	48	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	36	6	42
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	23	58	6
D	East Circ Right Ahead East Circ	Traffic	41	12	53

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



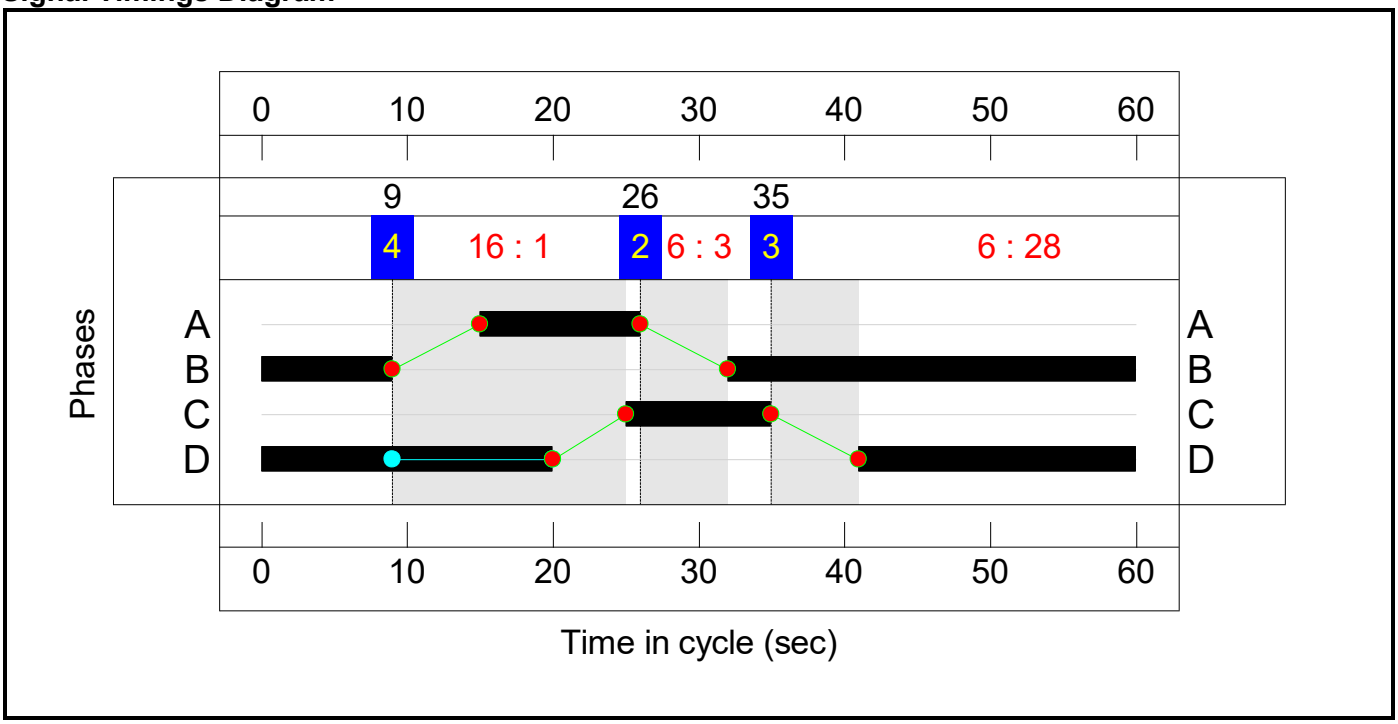
Stage Timings

Stage	2	3	4
Duration	3	28	1
Change Point	26	35	9

Phase Timings

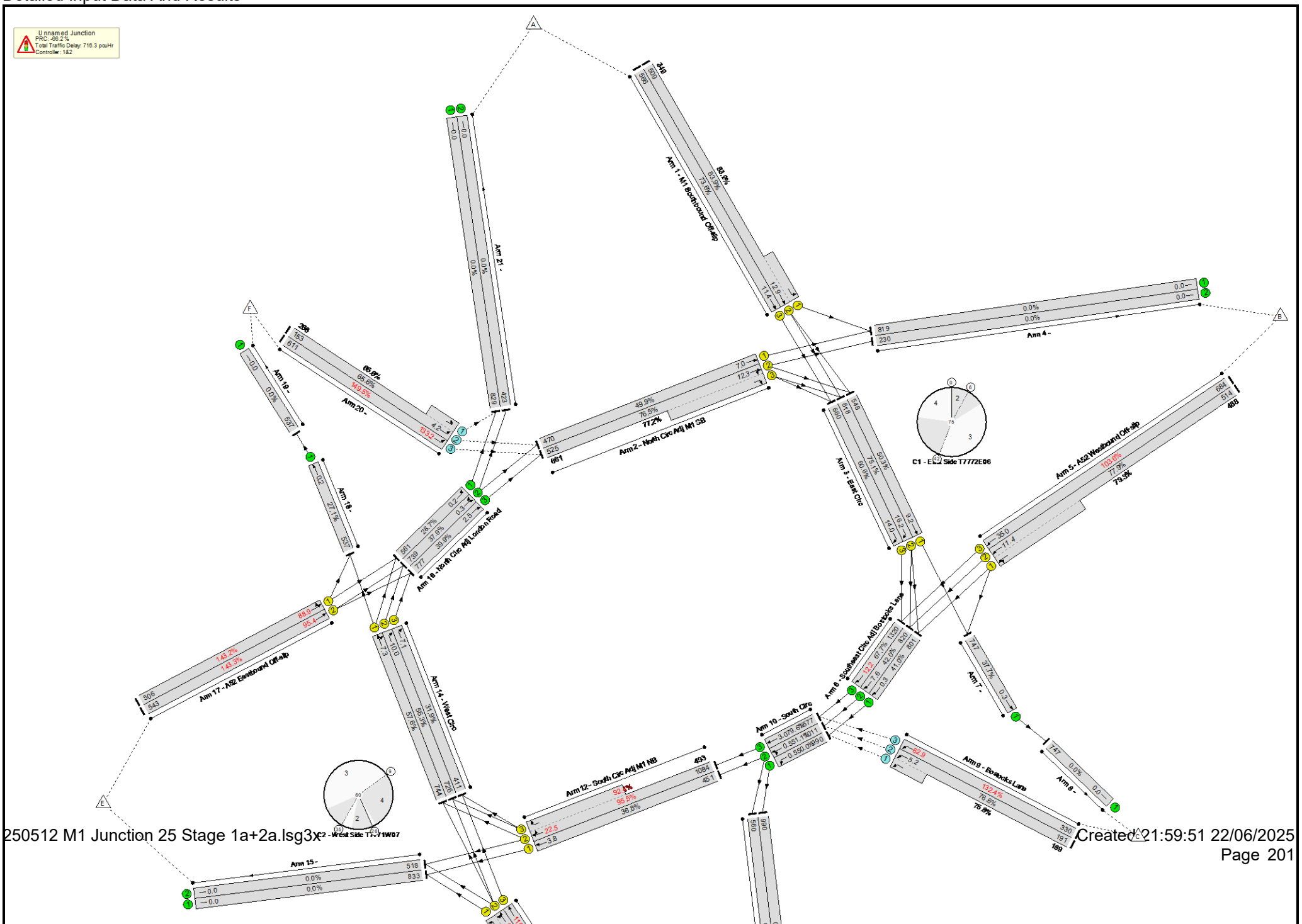
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	11	15	26
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	37	32	9
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	10	25	35
D	West Circ Right Ahead West Circ	Traffic	39	41	20

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	48	0
1/2	M1 Southbound Off-slip Ahead	U	A	48	0
1/3	M1 Southbound Off-slip Ahead	U	A	48	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	42
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	42
2/3	North Circ Adj M1 SB Right	U	B	6	42
3/1	East Circ Ahead	U	D	12	53
3/2	East Circ Right	U	D	12	53
3/3	East Circ Right	U	D	12	53
5/1	A52 Westbound Off-slip Ahead Left	U	C	58	6
5/2	A52 Westbound Off-slip Ahead	U	C	58	6
5/3	A52 Westbound Off-slip Ahead	U	C	58	6
12/1	South Circ Adj M1 NB Ahead	U	B	32	9
12/2	South Circ Adj M1 NB Right Ahead	U	B	32	9
12/3	South Circ Adj M1 NB Right	U	B	32	9
13/1	M1 Northbound Off-slip Left	U	A	15	26
13/2	M1 Northbound Off-slip Ahead Left	U	A	15	26
13/3	M1 Northbound Off-slip Ahead	U	A	15	26
14/1	West Circ Right Ahead	U	D	41	20
14/2	West Circ Right	U	D	41	20
14/3	West Circ Right	U	D	41	20
17/1	A52 Eastbound Off-slip Ahead Left	U	C	25	35
17/2	A52 Eastbound Off-slip Ahead	U	C	25	35


Unnamed Junction
PRC: -66.2 %
Total Traffic Delay: 716.3 pcuHr
Controller: 1&2
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 16 - North Circ Adj London Road
Arm 17 - A52 Eastbound Off-slip
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T7772E06
C2 - West Side T7771W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**149.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**149.5%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	27	-	-	858	2056:1915	607+416	83.9 : 83.9%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	27	-	-	566	2059	769	73.6%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	36	-	-	609	1908	941	49.9%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	36	-	-	1747	1906:1904	687+856	76.5 : 77.2%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	41	-	-	689	1946	1090	50.3%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	1078	1945	1089	75.1%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	713	1943	1088	60.6%
4/1		U	N/A	N/A	-		-	-	-	-	958	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	342	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	23	-	-	1002	2061:1923	660+615	77.9 : 79.3%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	23	-	-	684	2064	660	103.6%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1037	1953	1953	41.0%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	844	1952	1952	42.0%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1397	1951	1951	67.7%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	888	1980	1980	37.7%
8/1		U	N/A	N/A	-		-	-	-	-	888	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	380	1923:1919	249+249	76.6 : 75.8%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	330	1926	249	132.4%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1226	1980	1980	50.0%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1035	1980	1980	51.1%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1727	1980	1980	79.6%
11/1		U	N/A	N/A	-		-	-	-	-	1226	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	568	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	37	-	-	467	1936	1226	36.8%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	37	-	-	1727	1932:1931	1135+533	95.5 : 92.4%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	11	-	-	1109	2053:1912	411+382	149.5 : 129.4%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	11	-	-	612	2057	411	148.8%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	39	-	-	869	1937	1291	57.6%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	901	1935	1290	56.3%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	612	1932	1288	31.9%
15/1		U	N/A	N/A	-		-	-	-	-	962	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	571	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	705	1952	1952	28.7%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	920	1950	1950	37.9%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1136	1950	1950	39.9%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	10	-	-	506	1928	353	143.2%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	10	-	-	543	2067	379	143.3%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	670	1980	1980	27.1%
19/1		U	N/A	N/A	-		-	-	-	-	670	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	421	2061:1921	233+409	65.6 : 65.6%
20/3	Left	O	N/A	N/A	-		-	-	-	-	611	1928	409	149.5%
21/1		U	N/A	N/A	-		-	-	-	-	973	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	464	Inf	Inf	0.0%

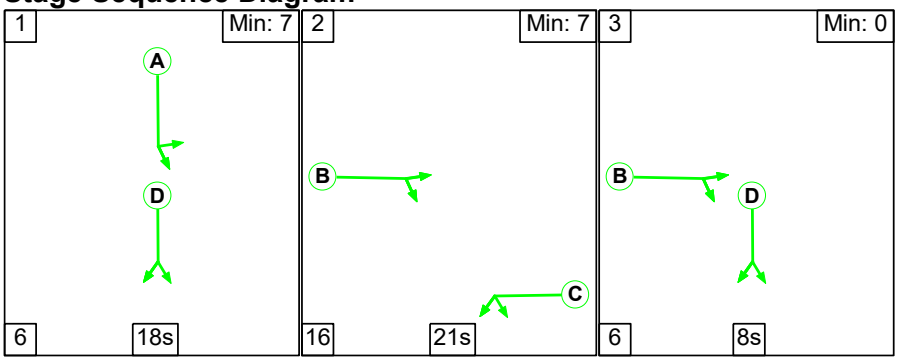
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2260**	**0**	**0**	**99.6**	**616.6**	**0.0**	**716.3**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2260**	**0**	**0**	**99.6**	**616.6**	**0.0**	**716.3**	**-**	**-**	**-**	**-**	
1/2+1/1	858	858	-	-	-	4.6	2.5	-	7.1	29.7	10.4	2.5	12.9	
1/3	566	566	-	-	-	3.2	1.4	-	4.6	29.1	10.1	1.4	11.4	
2/1	470	470	-	-	-	1.7	0.5	-	2.2	16.6	6.5	0.5	7.0	
2/2+2/3	1186	1186	-	-	-	4.6	1.6	-	6.3	19.1	10.6	1.6	12.3	
3/1	548	548	-	-	-	1.8	0.5	-	2.3	15.1	8.7	0.5	9.2	
3/2	818	818	-	-	-	2.2	1.5	-	3.7	16.3	14.7	1.5	16.2	
3/3	660	660	-	-	-	4.7	0.8	-	5.4	29.6	13.2	0.8	14.0	
4/1	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	230	230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1002	1002	-	-	-	6.4	1.8	-	8.3	29.7	9.6	1.8	11.4	
5/3	684	660	-	-	-	5.8	20.2	-	26.1	137.2	14.7	20.2	35.0	
6/1	801	801	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3	
6/2	820	820	-	-	-	0.0	0.4	-	0.4	1.7	7.2	0.4	7.6	
6/3	1320	1320	-	-	-	0.1	1.0	-	1.1	3.0	11.2	1.0	12.2	
7/1	747	747	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	380	380	760	0	0	1.7	1.6	-	3.2	30.6	3.6	1.6	5.2	
9/3	330	249	249	0	0	5.1	42.3	-	47.3	516.4	20.6	42.3	62.9	
10/1	990	990	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/2	1011	1011	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
10/3	1577	1577	-	-	-	0.0	1.9	-	1.9	4.4	1.1	1.9	3.0	
11/1	990	990	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	451	451	-	-	-	0.7	0.3	-	0.9	7.6	3.5	0.3	3.8	
12/2+12/3	1577	1577	-	-	-	3.5	7.4	-	11.0	25.0	15.1	7.4	22.5	
13/2+13/1	1109	793	-	-	-	16.0	159.7	-	175.7	570.3	19.0	159.7	178.8	
13/3	612	411	-	-	-	9.5	101.8	-	111.3	654.8	13.5	101.8	115.3	
14/1	744	744	-	-	-	1.0	0.7	-	1.6	7.9	6.6	0.7	7.3	
14/2	726	726	-	-	-	1.7	0.6	-	2.3	11.5	9.4	0.6	10.0	
14/3	411	411	-	-	-	2.1	0.2	-	2.3	20.3	6.9	0.2	7.1	
15/1	833	833	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	518	518	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	561	561	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	739	739	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
16/3	777	777	-	-	-	0.0	0.3	-	0.3	1.5	2.2	0.3	2.5	
17/1	506	353	-	-	-	7.2	77.9	-	85.1	605.2	11.0	77.9	88.9	
17/2	543	379	-	-	-	7.7	83.6	-	91.4	605.7	11.8	83.6	95.4	
18/1	537	537	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	421	421	842	0	0	0.6	0.9	-	1.5	12.9	3.3	0.9	4.2	
20/3	611	409	409	0	0	8.0	102.6	-	110.6	651.5	30.5	102.6	133.2	
21/1	829	829	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	423	423	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-15.1	Total Delay for Signalled Lanes (pcuHr):	65.85	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-66.2	Total Delay for Signalled Lanes (pcuHr):	481.62	Cycle Time (s):	60
	PRC Over All Lanes (%):	-66.2	Total Delay Over All Lanes(pcuHr):	716.26		

Scenario 12: '2a 2028 WD PM' (FG12: '2a 2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



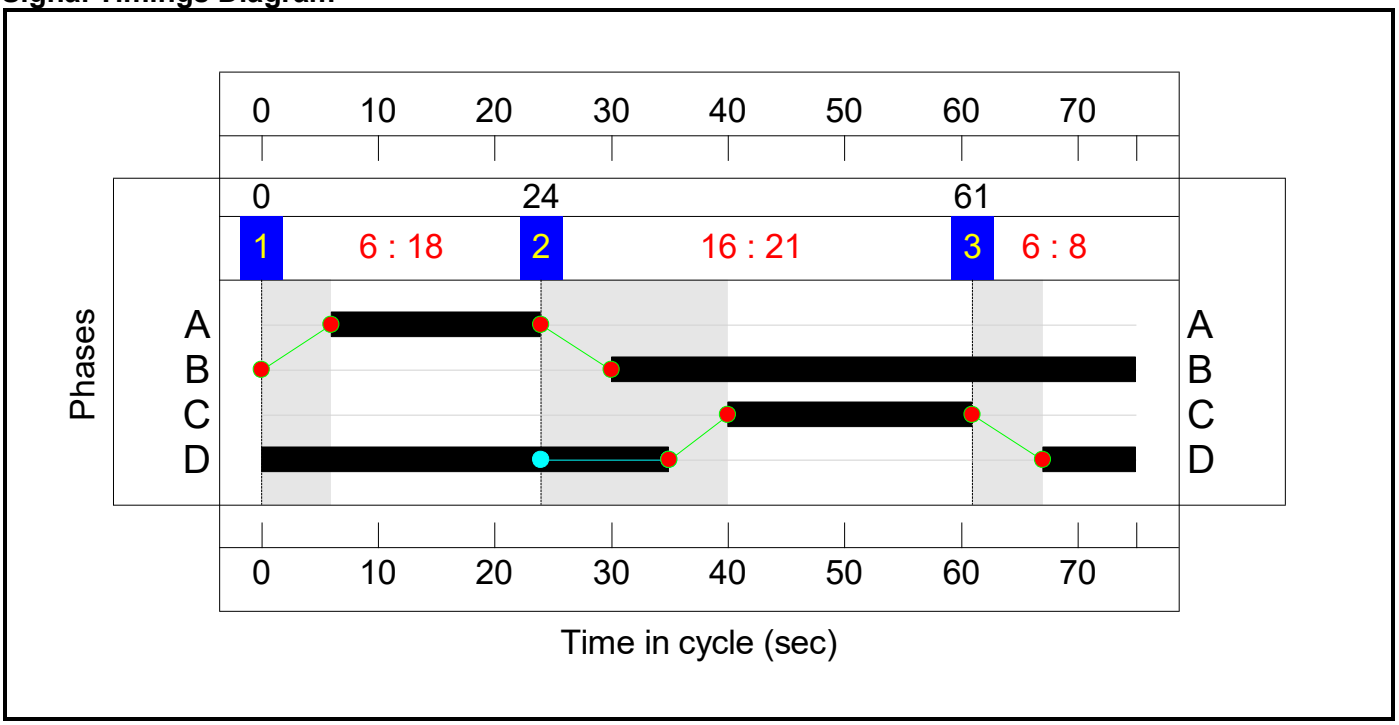
Stage Timings

Stage	1	2	3
Duration	18	21	8
Change Point	0	24	61

Phase Timings

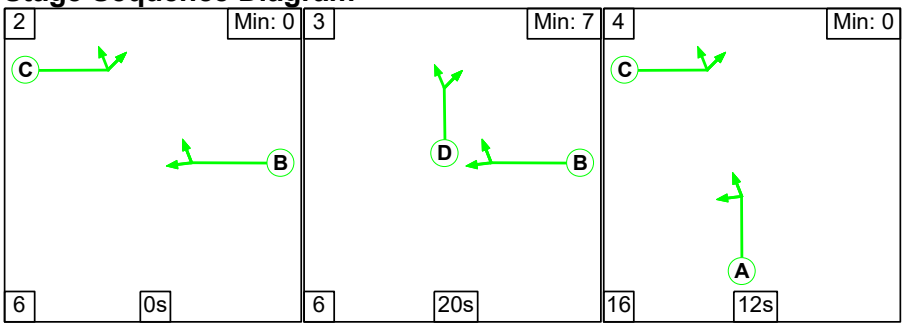
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	18	6	24
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	45	30	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	21	40	61
D	East Circ Right Ahead East Circ	Traffic	43	67	35

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



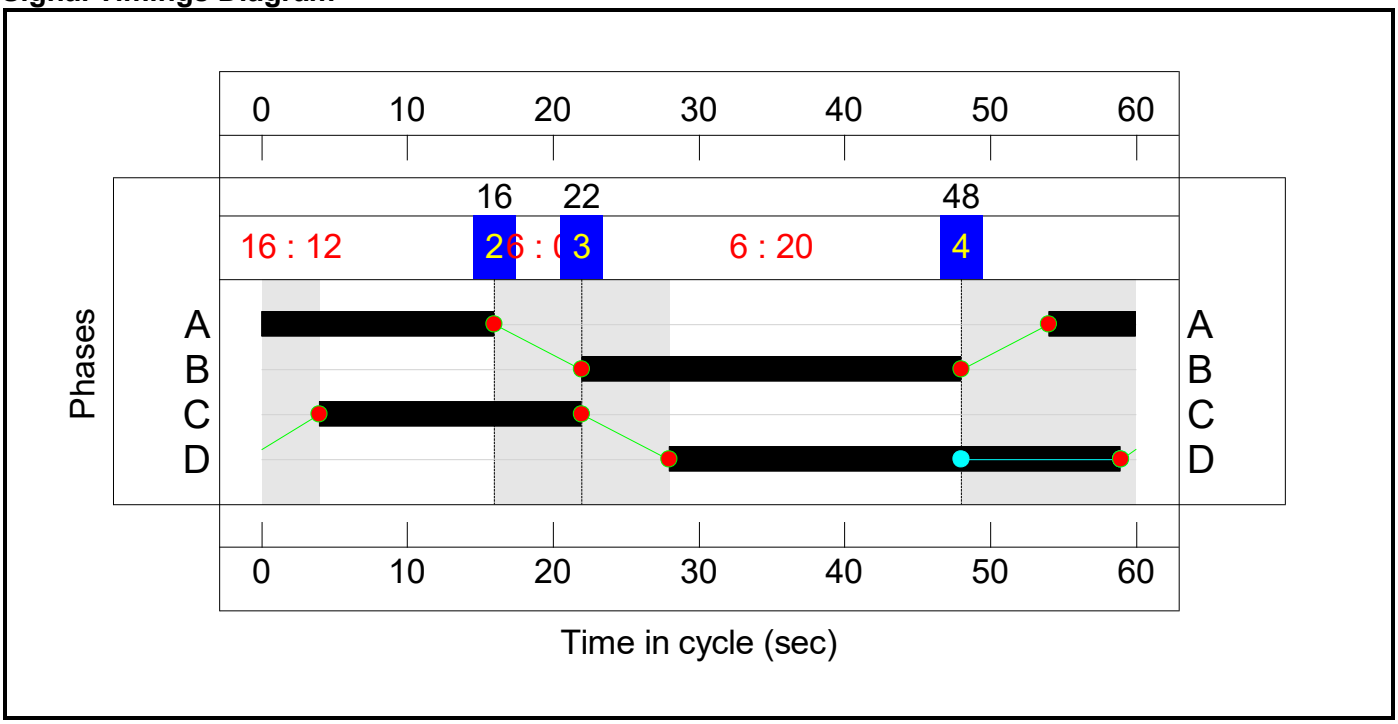
Stage Timings

Stage	2	3	4
Duration	0	20	12
Change Point	16	22	48

Phase Timings

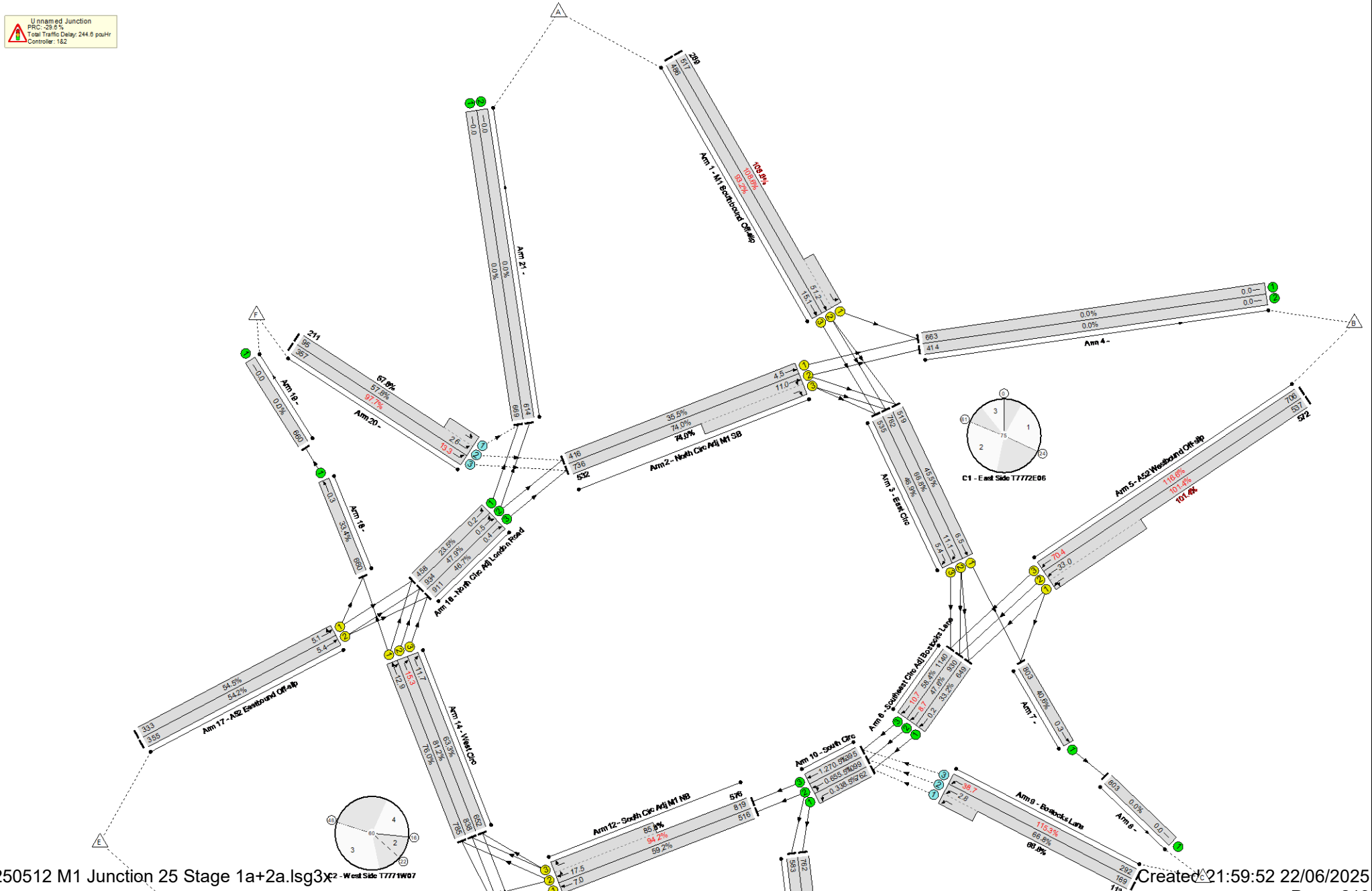
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	22	54	16
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	26	22	48
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	4	22
D	West Circ Right Ahead West Circ	Traffic	31	28	59

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	24
1/2	M1 Southbound Off-slip Ahead	U	A	6	24
1/3	M1 Southbound Off-slip Ahead	U	A	6	24
2/1	North Circ Adj M1 SB Ahead	U	B	30	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	30	0
2/3	North Circ Adj M1 SB Right	U	B	30	0
3/1	East Circ Ahead	U	D	67	35
3/2	East Circ Right	U	D	67	35
3/3	East Circ Right	U	D	67	35
5/1	A52 Westbound Off-slip Ahead Left	U	C	40	61
5/2	A52 Westbound Off-slip Ahead	U	C	40	61
5/3	A52 Westbound Off-slip Ahead	U	C	40	61
12/1	South Circ Adj M1 NB Ahead	U	B	22	48
12/2	South Circ Adj M1 NB Right Ahead	U	B	22	48
12/3	South Circ Adj M1 NB Right	U	B	22	48
13/1	M1 Northbound Off-slip Left	U	A	54	16
13/2	M1 Northbound Off-slip Ahead Left	U	A	54	16
13/3	M1 Northbound Off-slip Ahead	U	A	54	16
14/1	West Circ Right Ahead	U	D	28	59
14/2	West Circ Right	U	D	28	59
14/3	West Circ Right	U	D	28	59
17/1	A52 Eastbound Off-slip Ahead Left	U	C	4	22
17/2	A52 Eastbound Off-slip Ahead	U	C	4	22


Unnamed Junction
PRC: -29.6 %
Total Traffic Delay: 244.6 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**116.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**116.6%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	18	-	-	786	2056:1915	476+248	108.6 : 108.6%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	18	-	-	486	2059	522	93.2%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	45	-	-	424	1908	1170	35.5%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	45	-	-	1268	1906:1904	995+719	74.0 : 74.0%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	43	-	-	536	1946	1142	45.5%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	43	-	-	786	1945	1141	66.8%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	43	-	-	535	1943	1140	46.9%
4/1		U	N/A	N/A	-		-	-	-	-	693	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	414	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	21	-	-	1109	2061:1923	530+564	101.4 : 101.4%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	21	-	-	706	2064	605	116.6%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	653	1953	1953	33.2%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	954	1952	1952	47.6%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1241	1951	1951	58.4%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	824	1980	1980	40.6%
8/1		U	N/A	N/A	-		-	-	-	-	824	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	282	1923:1919	253+169	66.8 : 66.8%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	292	1926	253	115.3%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	766	1980	1980	38.5%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1123	1980	1980	55.5%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1533	1980	1980	70.5%
11/1		U	N/A	N/A	-		-	-	-	-	766	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	583	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	26	-	-	540	1936	871	59.2%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	26	-	-	1533	1932:1931	869+671	94.2 : 85.8%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	22	-	-	1082	2053:1912	706+471	91.9 : 91.9%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	22	-	-	651	2057	789	82.6%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	831	1937	1033	76.0%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	930	1935	1032	81.2%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	652	1932	1030	63.3%
15/1		U	N/A	N/A	-		-	-	-	-	973	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	420	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	484	1952	1952	23.5%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1026	1950	1950	47.9%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	911	1950	1950	46.7%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	333	1928	611	54.5%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	355	2067	655	54.2%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	680	1980	1980	33.4%
19/1		U	N/A	N/A	-		-	-	-	-	680	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	306	2061:1921	164+365	57.8 : 57.8%
20/3	Left	O	N/A	N/A	-		-	-	-	-	357	1928	365	97.7%
21/1		U	N/A	N/A	-		-	-	-	-	695	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	697	Inf	Inf	0.0%

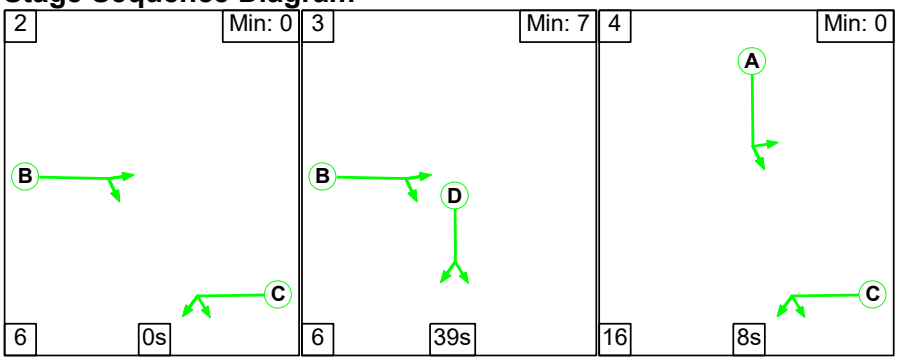
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1786**	**0**	**0**	**69.5**	**175.1**	**0.0**	**244.6**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1786**	**0**	**0**	**69.5**	**175.1**	**0.0**	**244.6**	**-**	**-**	**-**	**-**	
1/2+1/1	786	724	-	-	-	8.2	36.4	-	44.6	204.3	14.9	36.4	51.2	
1/3	486	486	-	-	-	3.7	5.3	-	9.0	66.4	9.9	5.3	15.1	
2/1	416	416	-	-	-	0.8	0.3	-	1.1	9.6	4.3	0.3	4.5	
2/2+2/3	1268	1268	-	-	-	3.0	1.4	-	4.4	12.6	9.6	1.4	11.0	
3/1	519	519	-	-	-	1.5	0.4	-	1.9	13.1	6.1	0.4	6.5	
3/2	762	762	-	-	-	2.8	1.0	-	3.8	17.8	10.1	1.0	11.1	
3/3	535	535	-	-	-	0.4	0.4	-	0.8	5.4	5.0	0.4	5.4	
4/1	663	663	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1109	1101	-	-	-	8.2	20.9	-	29.1	94.6	12.1	20.9	33.0	
5/3	706	605	-	-	-	7.9	53.6	-	61.5	313.6	16.8	53.6	70.4	
6/1	649	649	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
6/2	930	930	-	-	-	0.0	0.5	-	0.5	1.9	8.3	0.5	8.7	
6/3	1140	1140	-	-	-	0.1	0.7	-	0.8	2.4	10.0	0.7	10.7	
7/1	803	803	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	803	803	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	282	282	564	0	0	0.5	1.0	-	1.5	18.5	1.8	1.0	2.8	
9/3	292	253	253	0	0	2.5	22.6	-	25.1	309.6	16.1	22.6	38.7	
10/1	762	762	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/2	1099	1099	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/3	1395	1395	-	-	-	0.0	1.2	-	1.2	3.1	0.0	1.2	1.2	
11/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	583	583	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	516	516	-	-	-	1.8	0.7	-	2.5	17.4	6.3	0.7	7.0	
12/2+12/3	1395	1395	-	-	-	5.7	4.5	-	10.2	26.2	13.0	4.5	17.5	
13/2+13/1	1082	1082	-	-	-	4.8	5.1	-	9.9	32.9	9.9	5.1	15.0	
13/3	651	651	-	-	-	3.0	2.3	-	5.3	29.4	9.8	2.3	12.1	
14/1	785	785	-	-	-	2.7	1.6	-	4.2	19.4	11.3	1.6	12.9	
14/2	838	838	-	-	-	2.4	2.1	-	4.5	19.2	13.2	2.1	15.3	
14/3	652	652	-	-	-	4.8	0.9	-	5.6	31.0	10.9	0.9	11.7	
15/1	949	949	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	458	458	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	934	934	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
16/3	911	911	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
17/1	333	333	-	-	-	1.6	0.6	-	2.2	23.4	4.5	0.6	5.1	
17/2	355	355	-	-	-	1.7	0.6	-	2.3	22.9	4.8	0.6	5.4	
18/1	660	660	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
19/1	660	660	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	306	306	612	0	0	0.6	0.7	-	1.2	14.6	1.9	0.7	2.6	
20/3	357	357	357	0	0	1.2	7.6	-	8.8	88.4	5.8	7.6	13.3	
21/1	669	669	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	614	614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-29.6	Total Delay for Signalled Lanes (pcuHr):	156.16	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-4.7	Total Delay for Signalled Lanes (pcuHr):	46.62	Cycle Time (s):	60
	PRC Over All Lanes (%):	-29.6	Total Delay Over All Lanes(pcuHr):	244.61		

Scenario 13: '2a 2038 WD AM' (FG13: '2a 2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



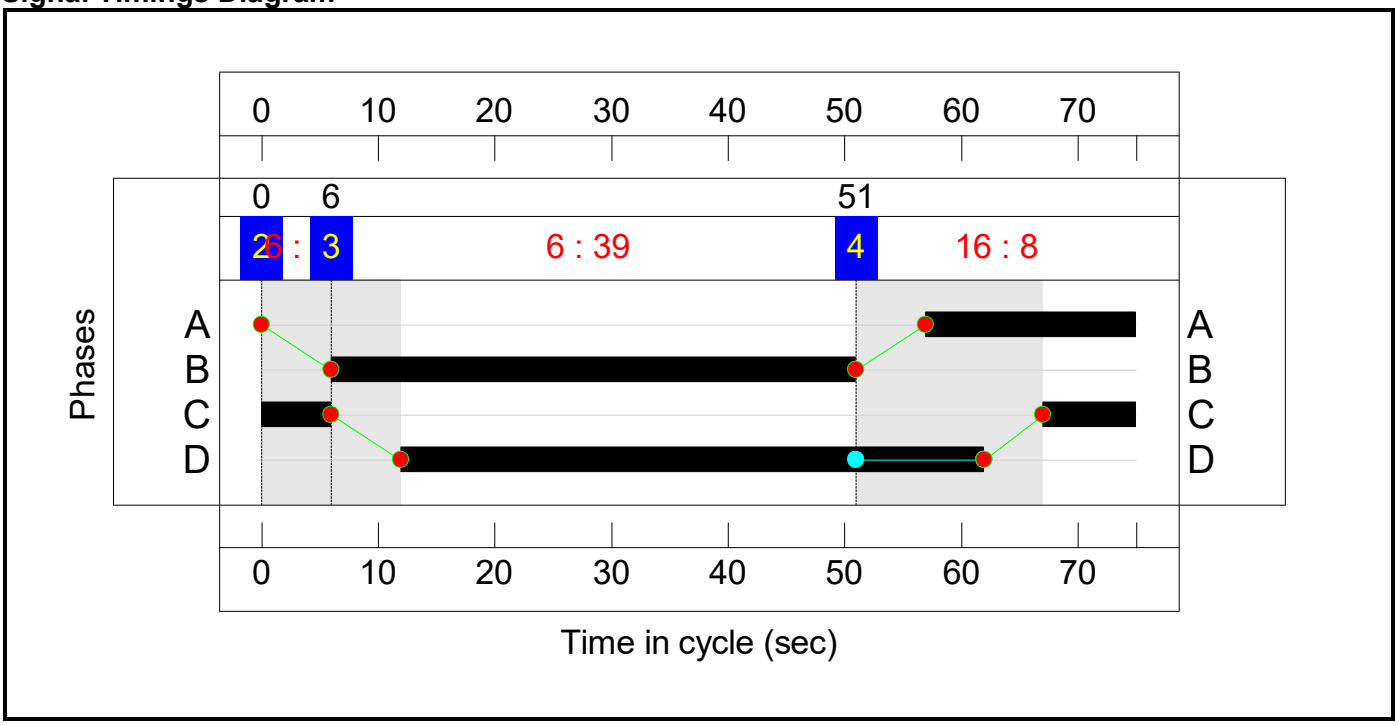
Stage Timings

Stage	2	3	4
Duration	0	39	8
Change Point	0	6	51

Phase Timings

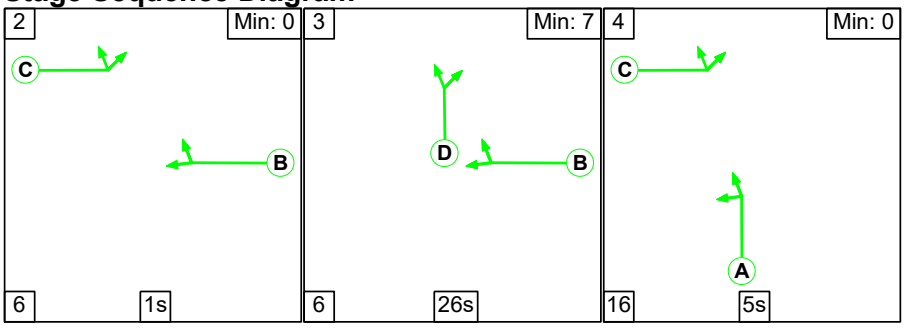
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	18	57	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	45	6	51
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	14	67	6
D	East Circ Right Ahead East Circ	Traffic	50	12	62

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



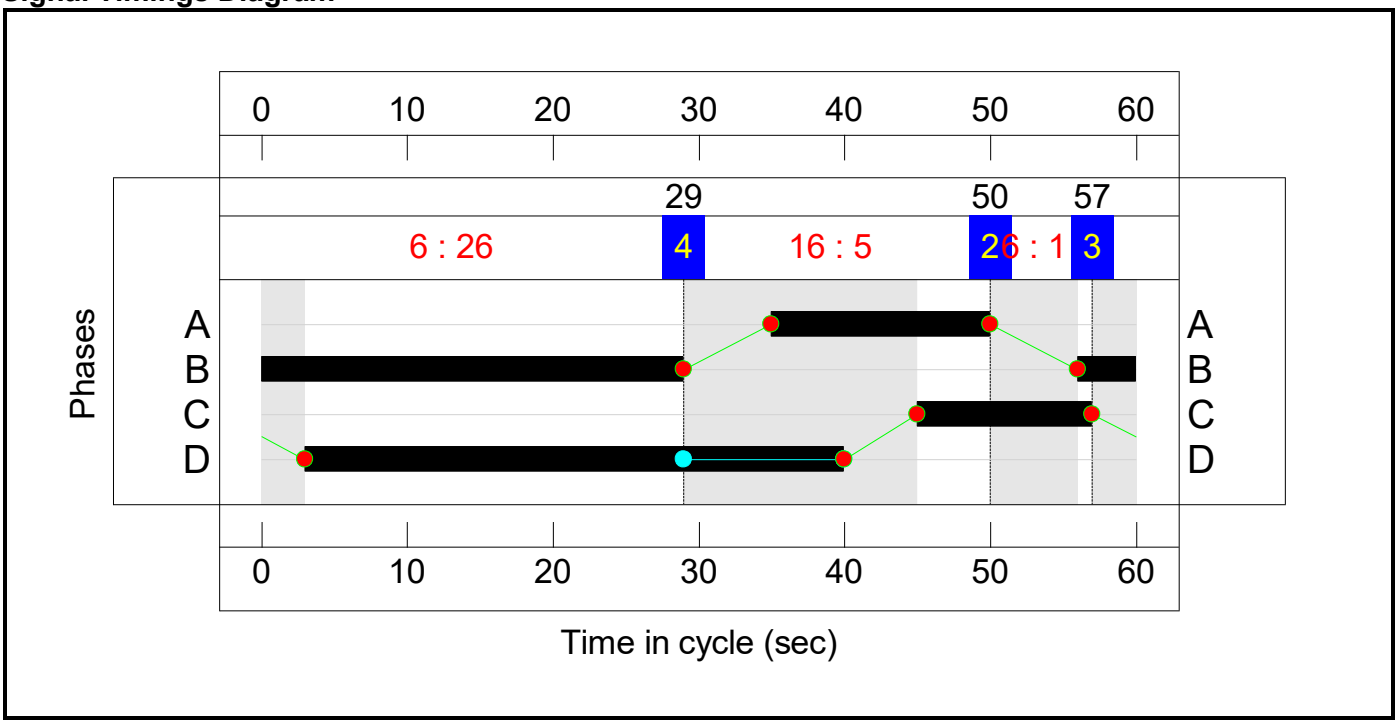
Stage Timings

Stage	2	3	4
Duration	1	26	5
Change Point	50	57	29

Phase Timings

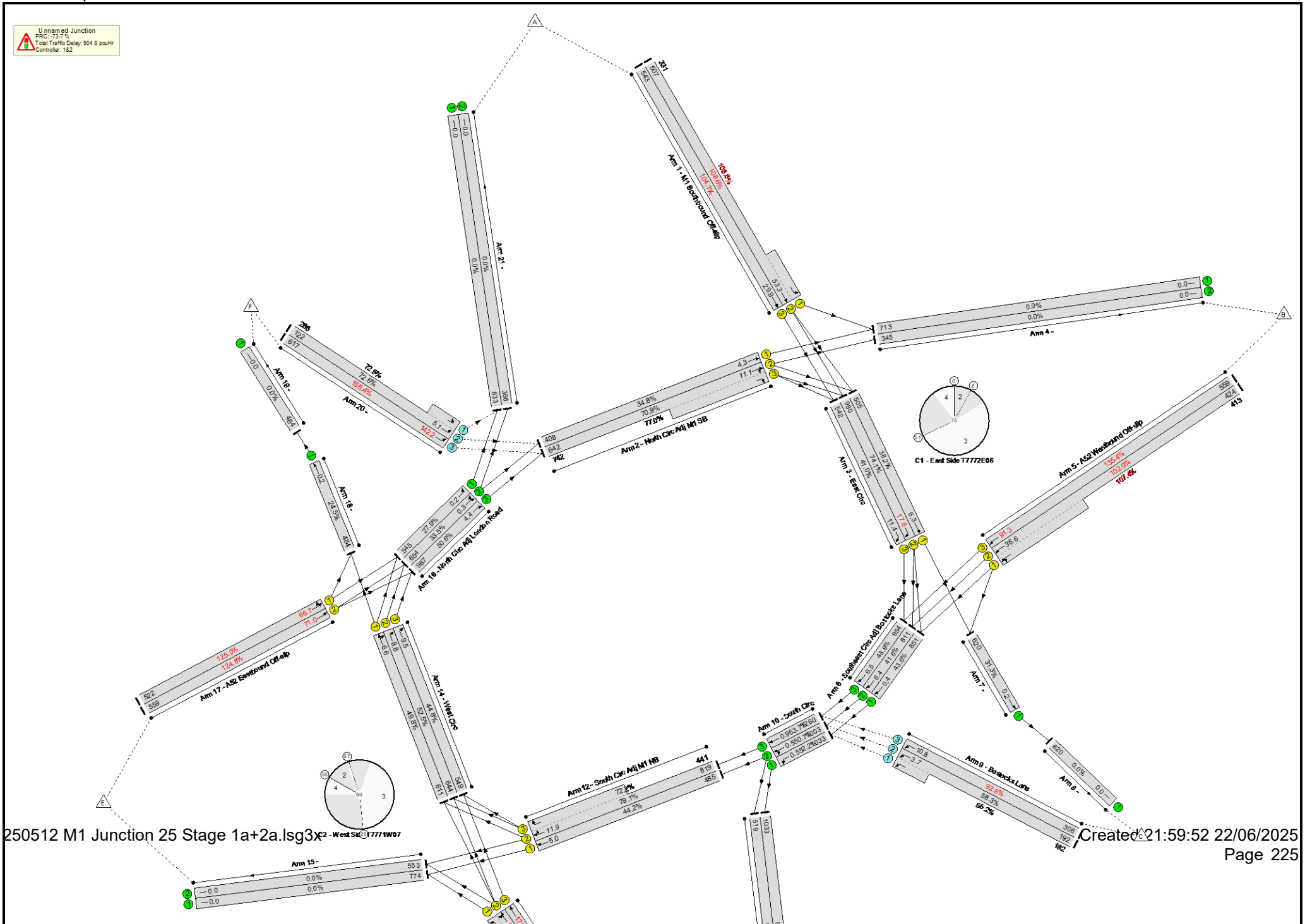
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	15	35	50
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	33	56	29
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	12	45	57
D	West Circ Right Ahead West Circ	Traffic	37	3	40

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	57	0
1/2	M1 Southbound Off-slip Ahead	U	A	57	0
1/3	M1 Southbound Off-slip Ahead	U	A	57	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	51
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	51
2/3	North Circ Adj M1 SB Right	U	B	6	51
3/1	East Circ Ahead	U	D	12	62
3/2	East Circ Right	U	D	12	62
3/3	East Circ Right	U	D	12	62
5/1	A52 Westbound Off-slip Ahead Left	U	C	67	6
5/2	A52 Westbound Off-slip Ahead	U	C	67	6
5/3	A52 Westbound Off-slip Ahead	U	C	67	6
12/1	South Circ Adj M1 NB Ahead	U	B	56	29
12/2	South Circ Adj M1 NB Right Ahead	U	B	56	29
12/3	South Circ Adj M1 NB Right	U	B	56	29
13/1	M1 Northbound Off-slip Left	U	A	35	50
13/2	M1 Northbound Off-slip Ahead Left	U	A	35	50
13/3	M1 Northbound Off-slip Ahead	U	A	35	50
14/1	West Circ Right Ahead	U	D	3	40
14/2	West Circ Right	U	D	3	40
14/3	West Circ Right	U	D	3	40
17/1	A52 Eastbound Off-slip Ahead Left	U	C	45	57
17/2	A52 Eastbound Off-slip Ahead	U	C	45	57


Unnamed Junction
PRC: -73.1 %
Total Traffic Delay: 904.8 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**156.4%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**156.4%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	18	-	-	838	2056:1915	467+305	108.6 : 108.6%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	18	-	-	543	2059	522	104.1%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	45	-	-	522	1908	1170	34.8%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	45	-	-	2012	1906:1904	904+964	70.9 : 77.0%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	50	-	-	667	1946	1323	38.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	50	-	-	1287	1945	1323	74.1%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	50	-	-	574	1943	1321	41.0%
4/1		U	N/A	N/A	-		-	-	-	-	853	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	534	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	14	-	-	837	2061:1923	412+385	102.9 : 107.4%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	14	-	-	559	2064	413	135.4%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1086	1953	1953	43.6%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	915	1952	1952	41.6%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1133	1951	1951	48.9%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	790	1980	1980	31.3%
8/1		U	N/A	N/A	-		-	-	-	-	790	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	374	1923:1919	329+329	58.3 : 55.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	306	1926	329	92.9%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1268	1980	1980	52.2%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1107	1980	1980	50.7%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1439	1980	1980	63.7%
11/1		U	N/A	N/A	-		-	-	-	-	1268	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	552	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	33	-	-	555	1936	1097	44.2%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	33	-	-	1439	1932:1931	1035+611	79.1 : 72.2%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	15	-	-	1308	2053:1912	547+289	156.4 : 156.4%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	15	-	-	848	2057	549	154.6%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	37	-	-	786	1937	1227	49.8%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	37	-	-	851	1935	1226	52.5%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	37	-	-	848	1932	1224	44.8%
15/1		U	N/A	N/A	-		-	-	-	-	1007	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	658	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	666	1952	1952	27.9%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	863	1950	1950	33.5%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1395	1950	1950	50.6%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	12	-	-	522	1928	418	125.0%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	12	-	-	559	2067	448	124.8%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	642	1980	1980	24.5%
19/1		U	N/A	N/A	-		-	-	-	-	642	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	410	2061:1921	168+397	72.5 : 72.5%
20/3	Left	O	N/A	N/A	-		-	-	-	-	617	1928	397	155.4%
21/1		U	N/A	N/A	-		-	-	-	-	954	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	463	Inf	Inf	0.0%

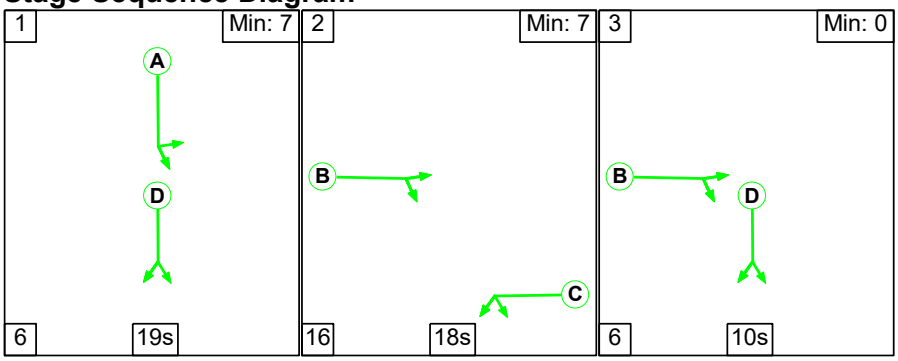
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2271**	**0**	**0**	**115.0**	**789.9**	**0.0**	**904.8**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2271**	**0**	**0**	**115.0**	**789.9**	**0.0**	**904.8**	**-**	**-**	**-**	**-**	
1/2+1/1	838	772	-	-	-	8.8	38.6	-	47.4	203.5	14.6	38.6	53.3	
1/3	543	522	-	-	-	5.2	18.2	-	23.3	154.6	11.8	18.2	29.9	
2/1	408	408	-	-	-	0.8	0.3	-	1.1	9.5	4.1	0.3	4.3	
2/2+2/3	1384	1384	-	-	-	3.4	1.4	-	4.8	12.5	9.7	1.4	11.1	
3/1	505	505	-	-	-	0.9	0.3	-	1.2	8.8	6.0	0.3	6.3	
3/2	980	980	-	-	-	1.9	1.4	-	3.3	12.2	16.4	1.4	17.8	
3/3	542	542	-	-	-	2.9	0.3	-	3.2	21.5	11.1	0.3	11.4	
4/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	837	797	-	-	-	8.2	27.7	-	35.8	154.2	9.0	27.7	36.6	
5/3	559	413	-	-	-	10.7	75.0	-	85.7	551.7	16.3	75.0	91.3	
6/1	851	851	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
6/2	811	811	-	-	-	0.0	0.4	-	0.4	1.7	6.0	0.4	6.4	
6/3	954	954	-	-	-	0.0	0.5	-	0.5	1.9	6.0	0.5	6.5	
7/1	620	620	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
8/1	620	620	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	374	374	748	0	0	1.0	0.7	-	1.7	16.0	3.0	0.7	3.7	
9/3	306	306	306	0	0	1.4	4.7	-	6.1	71.6	6.1	4.7	10.8	
10/1	1033	1033	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
10/2	1003	1003	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/3	1260	1260	-	-	-	0.0	0.9	-	0.9	2.5	0.0	0.9	0.9	
11/1	1033	1033	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	485	485	-	-	-	1.0	0.4	-	1.4	10.5	4.6	0.4	5.0	
12/2+12/3	1260	1260	-	-	-	3.1	1.6	-	4.7	13.5	10.2	1.6	11.9	
13/2+13/1	1308	837	-	-	-	20.0	237.1	-	257.1	707.6	29.9	237.1	267.0	
13/3	848	549	-	-	-	14.8	151.1	-	165.9	704.5	22.5	151.1	173.6	
14/1	611	611	-	-	-	1.0	0.5	-	1.5	8.9	6.1	0.5	6.6	
14/2	644	644	-	-	-	1.3	0.6	-	1.8	10.2	8.3	0.6	8.8	
14/3	549	549	-	-	-	3.1	0.4	-	3.5	23.1	9.1	0.4	9.5	
15/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	545	545	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	654	654	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	987	987	-	-	-	0.0	0.5	-	0.5	1.9	3.9	0.5	4.4	
17/1	522	418	-	-	-	7.1	54.5	-	61.6	424.9	12.2	54.5	66.7	
17/2	559	448	-	-	-	7.6	58.0	-	65.6	422.2	13.0	58.0	71.0	
18/1	484	484	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	410	410	820	0	0	0.8	1.3	-	2.1	18.3	3.8	1.3	5.1	
20/3	617	397	397	0	0	10.0	111.4	-	121.4	708.1	30.9	111.4	142.2	
21/1	833	833	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-50.5	Total Delay for Signalled Lanes (pcuHr):	205.91	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-73.7	Total Delay for Signalled Lanes (pcuHr):	563.21	Cycle Time (s):	60
	PRC Over All Lanes (%):	-73.7	Total Delay Over All Lanes(pcuHr):	904.84		

Scenario 14: '2a 2038 WD PM' (FG14: '2a 2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



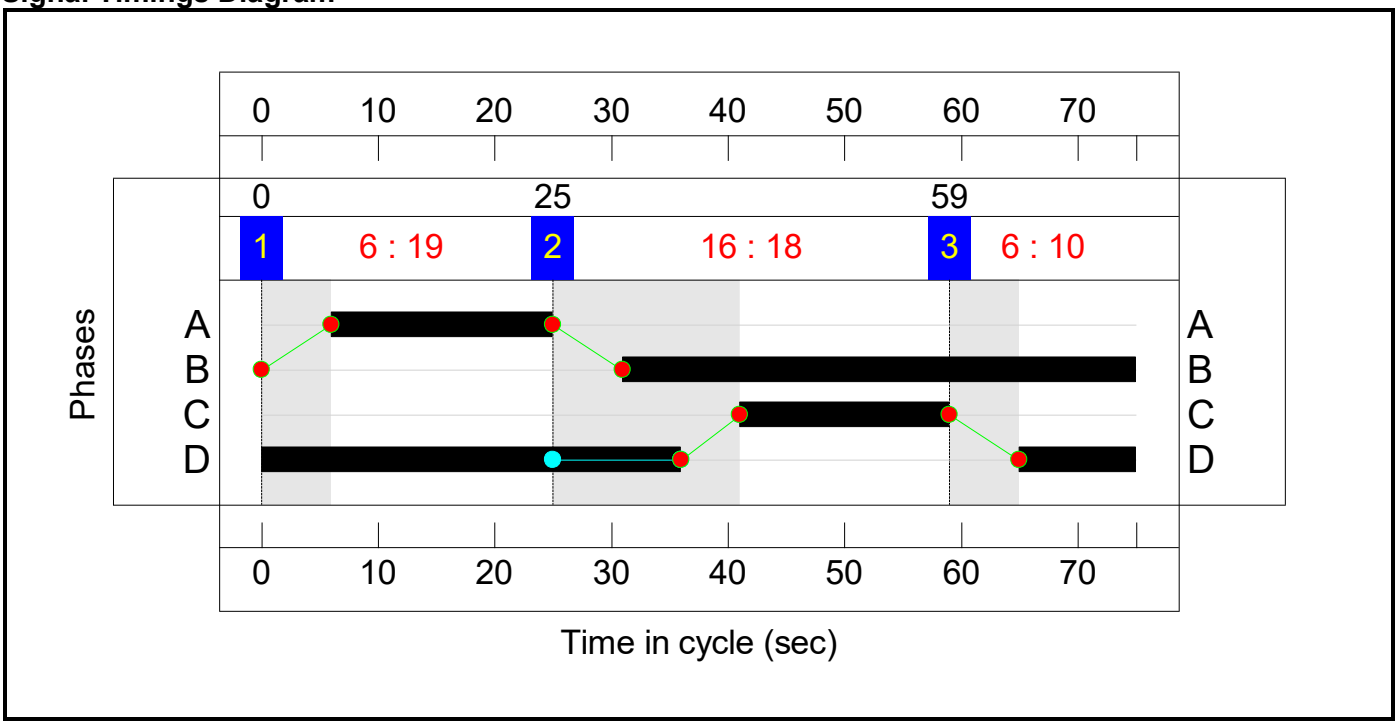
Stage Timings

Stage	1	2	3
Duration	19	18	10
Change Point	0	25	59

Phase Timings

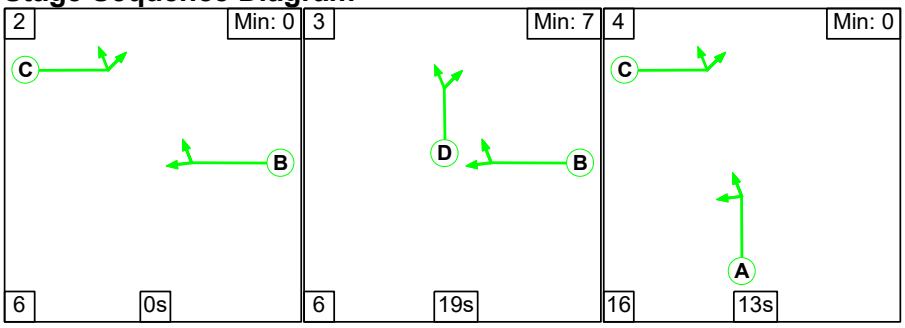
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	19	6	25
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	44	31	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	18	41	59
D	East Circ Right Ahead East Circ	Traffic	46	65	36

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



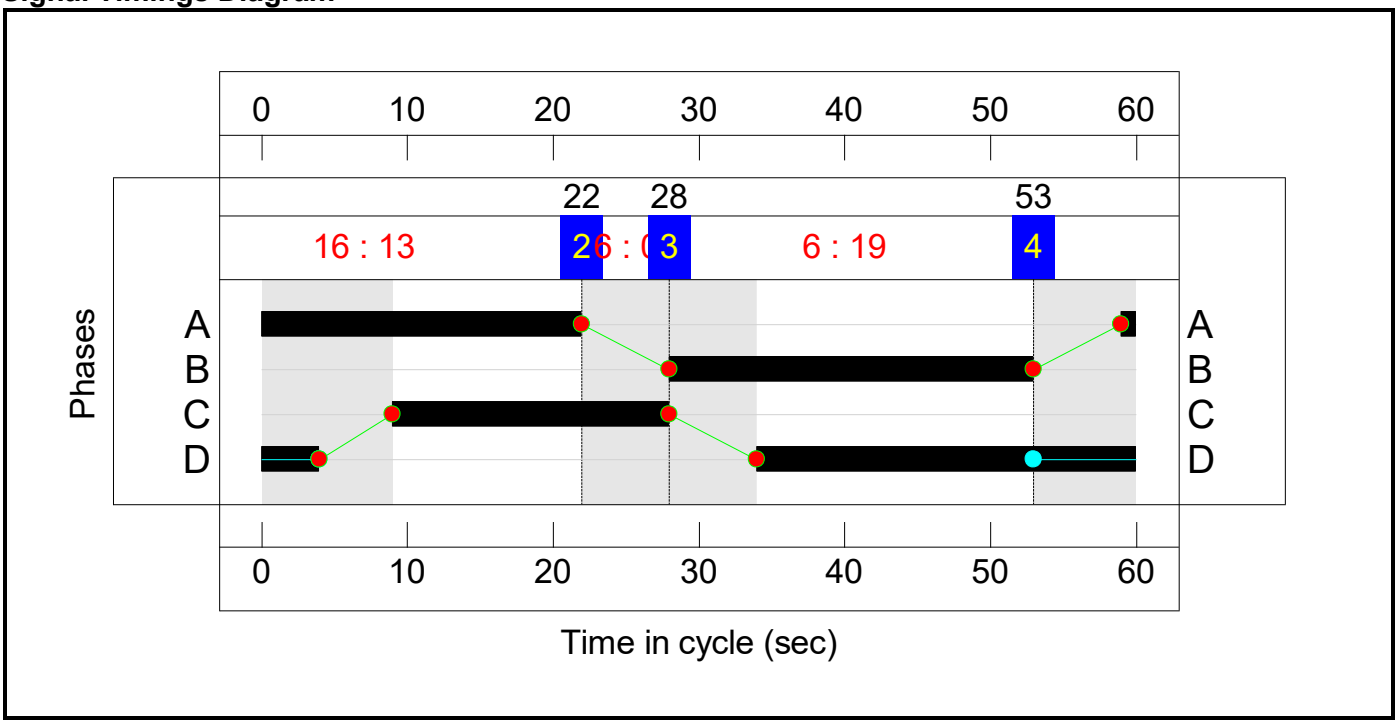
Stage Timings

Stage	2	3	4
Duration	0	19	13
Change Point	22	28	53

Phase Timings

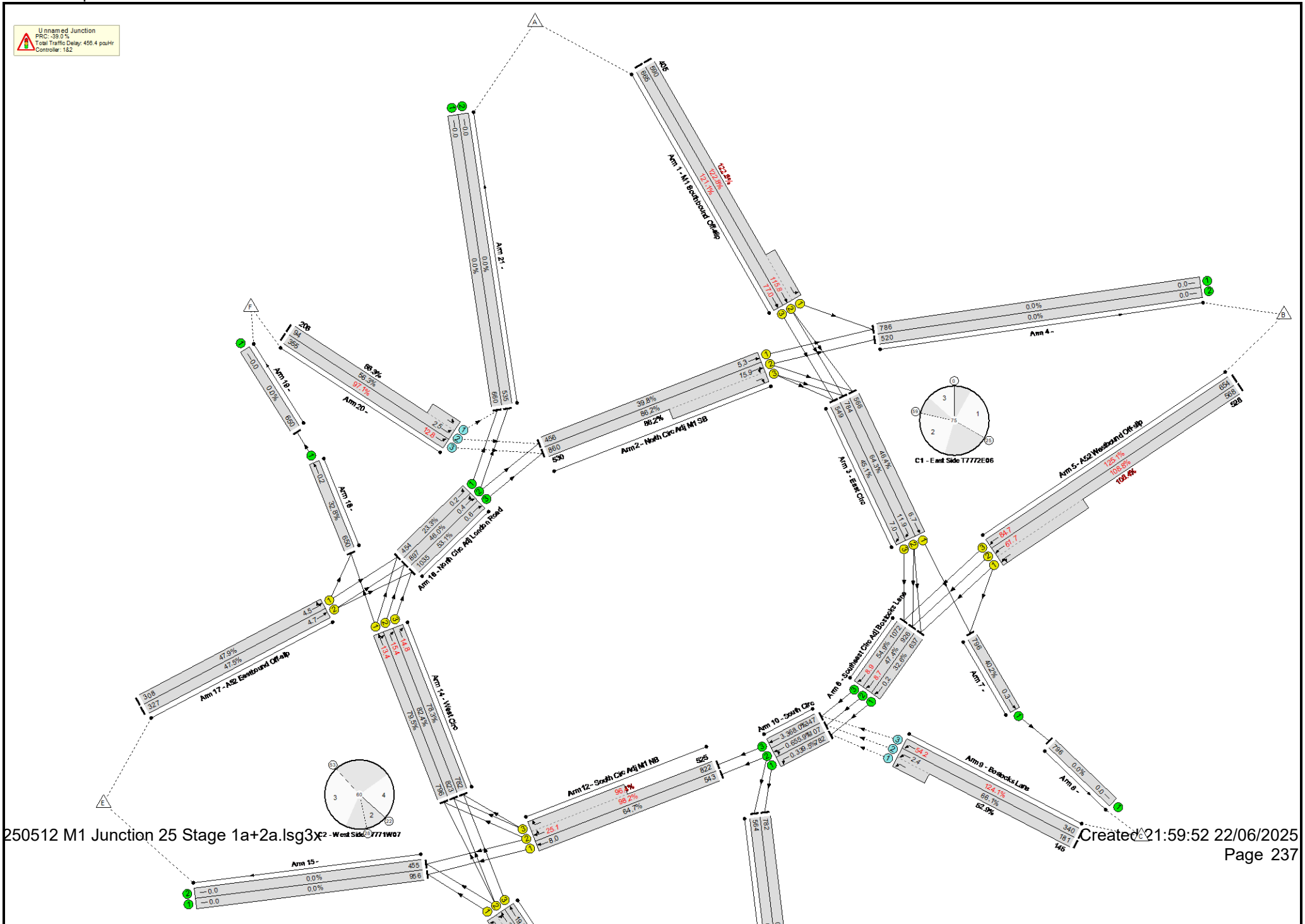
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	23	59	22
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	25	28	53
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	19	9	28
D	West Circ Right Ahead West Circ	Traffic	30	34	4

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	25
1/2	M1 Southbound Off-slip Ahead	U	A	6	25
1/3	M1 Southbound Off-slip Ahead	U	A	6	25
2/1	North Circ Adj M1 SB Ahead	U	B	31	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	31	0
2/3	North Circ Adj M1 SB Right	U	B	31	0
3/1	East Circ Ahead	U	D	65	36
3/2	East Circ Right	U	D	65	36
3/3	East Circ Right	U	D	65	36
5/1	A52 Westbound Off-slip Ahead Left	U	C	41	59
5/2	A52 Westbound Off-slip Ahead	U	C	41	59
5/3	A52 Westbound Off-slip Ahead	U	C	41	59
12/1	South Circ Adj M1 NB Ahead	U	B	28	53
12/2	South Circ Adj M1 NB Right Ahead	U	B	28	53
12/3	South Circ Adj M1 NB Right	U	B	28	53
13/1	M1 Northbound Off-slip Left	U	A	59	22
13/2	M1 Northbound Off-slip Ahead Left	U	A	59	22
13/3	M1 Northbound Off-slip Ahead	U	A	59	22
14/1	West Circ Right Ahead	U	D	34	4
14/2	West Circ Right	U	D	34	4
14/3	West Circ Right	U	D	34	4
17/1	A52 Eastbound Off-slip Ahead Left	U	C	9	28
17/2	A52 Eastbound Off-slip Ahead	U	C	9	28


Unnamed Junction
PRC: -39.0 %
Total Traffic Delay: 456.4 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T771W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**125.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**125.1%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	19	-	-	995	2056:1915	480+330	122.8 : 122.8%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	19	-	-	665	2059	549	121.1%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	44	-	-	471	1908	1145	39.8%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	44	-	-	1390	1906:1904	998+615	86.2 : 86.2%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	46	-	-	618	1946	1219	46.4%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	46	-	-	842	1945	1219	64.3%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	46	-	-	665	1943	1218	45.1%
4/1		U	N/A	N/A	-		-	-	-	-	876	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	520	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	18	-	-	1096	2061:1923	522+487	108.8 : 108.4%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	18	-	-	654	2064	523	125.1%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	659	1953	1953	32.6%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1030	1952	1952	47.4%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1319	1951	1951	54.9%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	867	1980	1980	40.2%
8/1		U	N/A	N/A	-		-	-	-	-	867	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	326	1923:1919	274+274	66.1 : 52.9%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	340	1926	274	124.1%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	804	1980	1980	39.5%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1211	1980	1980	55.9%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1659	1980	1980	68.0%
11/1		U	N/A	N/A	-		-	-	-	-	804	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	610	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	25	-	-	601	1936	839	64.7%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	25	-	-	1659	1932:1931	837+545	98.2 : 96.4%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	23	-	-	1140	2053:1912	736+418	98.8 : 98.8%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	23	-	-	782	2057	823	95.0%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	30	-	-	894	1937	1001	79.5%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	30	-	-	952	1935	1000	82.4%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	30	-	-	782	1932	998	78.3%
15/1		U	N/A	N/A	-		-	-	-	-	1014	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	540	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	498	1952	1952	23.3%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1026	1950	1950	46.0%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1035	1950	1950	53.1%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	19	-	-	308	1928	643	47.9%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	19	-	-	327	2067	689	47.5%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	704	1980	1980	32.8%
19/1		U	N/A	N/A	-		-	-	-	-	704	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	300	2061:1921	167+366	56.3 : 56.3%
20/3	Left	O	N/A	N/A	-		-	-	-	-	355	1928	366	97.1%
21/1		U	N/A	N/A	-		-	-	-	-	704	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	649	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1881**	**0**	**0**	**89.4**	**367.0**	**0.0**	**456.4**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1881**	**0**	**0**	**89.4**	**367.0**	**0.0**	**456.4**	**-**	**-**	**-**	**-**	
1/2+1/1	995	810	-	-	-	14.2	95.0	-	109.1	394.8	20.8	95.0	115.8	
1/3	665	549	-	-	-	9.3	60.7	-	70.1	379.2	16.3	60.7	77.0	
2/1	456	456	-	-	-	1.0	0.3	-	1.3	10.5	4.9	0.3	5.3	
2/2+2/3	1390	1390	-	-	-	3.8	3.0	-	6.9	17.8	12.9	3.0	15.9	
3/1	566	566	-	-	-	1.2	0.4	-	1.7	10.6	6.3	0.4	6.7	
3/2	784	784	-	-	-	2.7	0.9	-	3.6	16.7	11.0	0.9	11.9	
3/3	549	549	-	-	-	0.2	0.4	-	0.6	4.2	6.6	0.4	7.0	
4/1	786	786	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1096	1009	-	-	-	10.9	49.0	-	59.8	196.6	12.8	49.0	61.7	
5/3	654	523	-	-	-	9.0	68.0	-	77.0	423.8	16.7	68.0	84.7	
6/1	637	637	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
6/2	926	926	-	-	-	0.0	0.5	-	0.5	1.9	8.3	0.5	8.7	
6/3	1072	1072	-	-	-	0.0	0.6	-	0.6	2.2	8.3	0.6	8.9	
7/1	796	796	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	326	326	652	0	0	0.4	0.7	-	1.2	13.0	1.7	0.7	2.4	
9/3	340	274	274	0	0	3.8	35.4	-	39.2	415.2	18.8	35.4	54.2	
10/1	782	782	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/2	1107	1107	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6	
10/3	1347	1347	-	-	-	0.0	1.1	-	1.1	2.8	2.2	1.1	3.3	
11/1	782	782	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	543	543	-	-	-	2.0	0.9	-	2.9	19.4	7.1	0.9	8.0	
12/2+12/3	1347	1347	-	-	-	5.8	11.6	-	17.4	46.4	13.5	11.6	25.1	
13/2+13/1	1140	1140	-	-	-	5.0	13.8	-	18.8	59.5	13.4	13.8	27.2	
13/3	782	782	-	-	-	3.8	7.1	-	10.9	50.1	12.6	7.1	19.7	
14/1	796	796	-	-	-	2.8	1.9	-	4.7	21.2	11.5	1.9	13.4	
14/2	823	823	-	-	-	2.7	2.3	-	4.9	21.5	13.2	2.3	15.4	
14/3	782	782	-	-	-	6.0	1.8	-	7.8	35.8	13.0	1.8	14.8	
15/1	956	956	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	455	455	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	454	454	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	897	897	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
16/3	1035	1035	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
17/1	308	308	-	-	-	1.4	0.5	-	1.8	21.2	4.0	0.5	4.5	
17/2	327	327	-	-	-	1.4	0.5	-	1.9	20.8	4.3	0.5	4.7	
18/1	650	650	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
19/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	300	300	600	0	0	0.6	0.6	-	1.2	14.6	1.9	0.6	2.5	
20/3	355	355	355	0	0	1.3	7.1	-	8.4	85.2	5.7	7.1	12.8	
21/1	660	660	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	535	535	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-39.0	Total Delay for Signalled Lanes (pcuHr):	330.15	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-9.8	Total Delay for Signalled Lanes (pcuHr):	71.12	Cycle Time (s):	60
	PRC Over All Lanes (%):	-39.0	Total Delay Over All Lanes(pcuHr):	456.39		

APPENDIX 60: Junction 15: Station Road/Broad Rushes Roundabout Stage 1A/2A Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 250819 Station Road_Broad Rushes roundabout (LANE SIM)_Stage_1a.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\15. Station Road_Broad Rushes roundabout (Castle Donington)
Report generation date: 19/08/2025 14:42:59

»2022 | base | AM
»2022 | base | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2022 - base									
1 - Station Road (N)	D1	3.0	8.25	0.67	A	D2	2.2	7.02	0.58	A
2 - Station Road (S)		1.6	9.12	0.49	A		4.6	23.39	0.85	C
3 - Broad Rushes		1.1	6.95	0.47	A		1.8	10.84	0.65	B
	[Lane Simulation] - 2028 - 2a WD Flows									
1 - Station Road (N)	D11	7.9	18.72	0.83	C	D12	1.3	5.90	0.45	A
2 - Station Road (S)		0.2	6.69	0.11	A		0.3	5.31	0.13	A
3 - Broad Rushes		3.5	14.55	0.75	B		4.1	18.60	0.82	C
	[Lane Simulation] - 2028 - WD Flows									
1 - Station Road (N)	D5	7.4	18.38	0.85	C	D6	2.7	7.84	0.63	A
2 - Station Road (S)		1.2	9.97	0.49	A		8.0	39.01	0.90	E
3 - Broad Rushes		3.5	15.82	0.75	C		3.3	16.11	0.73	C
	[Lane Simulation] - 2028 - WoD Flows									
1 - Station Road (N)	D3	7.3	16.63	0.83	C	D4	3.4	9.07	0.68	A
2 - Station Road (S)		0.9	9.61	0.46	A		10.2	46.20	0.91	E
3 - Broad Rushes		2.8	13.90	0.70	B		6.0	24.11	0.82	C
	[Lane Simulation] - 2038 - 2a WD Flows									
1 - Station Road (N)	D13	5.8	14.99	0.81	B	D14	3.0	8.25	0.65	A
2 - Station Road (S)		0.9	10.50	0.44	B		0.5	7.25	0.33	A
3 - Broad Rushes		5.4	24.81	0.81	C		8.6	34.84	0.90	D
	[Lane Simulation] - 2038 - WD Flows									
1 - Station Road (N)	D9	9.7	21.15	0.87	C	D10	5.2	12.72	0.81	B
2 - Station Road (S)		7.6	42.26	0.87	E		40.9	157.53	1.07	F
3 - Broad Rushes		51.7	171.50	1.08	F		14.7	62.36	0.95	F
	[Lane Simulation] - 2038 - WoD Flows									
1 - Station Road (N)	D7	8.4	19.85	0.87	C	D8	4.7	12.23	0.77	B
2 - Station Road (S)		4.0	24.45	0.80	C		33.5	135.43	1.07	F
3 - Broad Rushes		39.0	132.26	1.07	F		13.0	58.10	0.95	F

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	Station Road_Broad Rushes roundabout
Location	
Site number	Junction 15
Date	18/10/2023
Version	
Status	(new file)
Identifier	Aaiza
Client	
Jobnumber	220500
Enumerator	BWB\Aaiza.Shafiq
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			1240491363	58

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2022 | base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	8.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.13	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Station Road (N)		
2	Station Road (S)		
3	Broad Rushes		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Station Road (N)	3.44	7.51	62.0	28.0	50.0	45.2		
2 - Station Road (S)	3.80	7.58	24.0	46.0	50.0	32.6		
3 - Broad Rushes	3.58	9.41	28.0	35.0	50.0	26.4		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Station Road (N)	0.651	1982
2 - Station Road (S)	0.661	1949
3 - Broad Rushes	0.716	2217

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
1 - Station Road (N)	Direct		100

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - Station Road (N)	Evenly split	10.00
2 - Station Road (S)	Evenly split	10.00
3 - Broad Rushes	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - Station Road (N)	Entry	1	1	2	✓	7.00			0	99999	
			2	1, 3	✓	7.00			0	99999	
		2	1	(1, 3, 2)		Infinity					
	Exit	1	1			Infinity					
2 - Station Road (S)	Entry	1	1	3	✓	5.00			0	99999	
			2	1, 2	✓	5.00			0	99999	
		2	1	(1, 3, 2)		Infinity					
	Exit	1	1			Infinity					
3 - Broad Rushes	Entry	1	1	1	✓	7.00			0	99999	
			2	3, 2	✓	7.00			0	99999	
		2	1	(1, 3, 2)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Station Road (N)	Entry	1	1	0.325	991
			2	0.325	991
2 - Station Road (S)	Entry	1	1	0.330	974
			2	0.330	974
3 - Broad Rushes	Entry	1	1	0.358	1108
			2	0.358	1108

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm		
			Station Road (N)	Broad Rushes	Station Road (S)
1 - Station Road (N)	1	1			✓
		2	✓	✓	
	2	1	✓	✓	✓
3 - Broad Rushes	1	1	✓		
		2		✓	✓
	2	1	✓	✓	✓
2 - Station Road (S)	1	1		✓	
		2	✓		✓
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1126	100.000
2 - Station Road (S)		ONE HOUR	✓	371	100.000
3 - Broad Rushes		ONE HOUR	✓	426	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	626	500
	2 - Station Road (S)	349	0	22
	3 - Broad Rushes	414	12	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	0	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.67	8.25	3.0	A	1028	1542
2 - Station Road (S)	0.49	9.12	1.6	A	339	508
3 - Broad Rushes	0.47	6.95	1.1	A	391	586

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	833	208	9	1811	0.460	833	849	558	0.0	1.2	5.344	A
2 - Station Road (S)	265	66	374	902	0.293	265	270	468	0.0	0.4	5.888	A
3 - Broad Rushes	318	80	249	1056	0.301	318	317	391	0.0	0.6	5.338	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	998	249	7	1867	0.534	999	1015	690	1.2	1.6	6.163	A
2 - Station Road (S)	338	84	446	887	0.381	342	334	560	0.4	0.4	6.834	A
3 - Broad Rushes	376	94	322	1023	0.368	376	388	466	0.6	0.5	5.869	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1230	308	12	1840	0.669	1224	1241	839	1.6	3.0	8.245	A
2 - Station Road (S)	414	104	538	842	0.491	403	412	697	0.4	1.6	8.689	A
3 - Broad Rushes	478	119	378	1008	0.474	473	472	563	0.5	1.1	6.950	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1242	310	13	1861	0.667	1243	1248	815	3.0	2.6	8.102	A
2 - Station Road (S)	390	98	555	872	0.448	390	412	701	1.6	0.8	9.124	A
3 - Broad Rushes	459	115	369	988	0.464	459	474	576	1.1	0.6	6.404	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1009	252	10	1872	0.539	1015	1019	697	2.6	1.8	6.646	A
2 - Station Road (S)	342	85	443	884	0.386	343	343	582	0.8	0.7	7.097	A
3 - Broad Rushes	384	96	322	1007	0.382	385	389	464	0.6	0.6	5.782	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	857	214	7	1864	0.459	854	855	588	1.8	1.1	5.488	A
2 - Station Road (S)	283	71	382	904	0.313	284	283	480	0.7	0.5	6.134	A
3 - Broad Rushes	329	82	268	1070	0.307	328	331	398	0.6	0.5	5.262	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	459	1088	0.422	458	464	0.0	0.6	5.500	A
			2	1, 3	375	1088	0.344	374	385	0.0	0.6	5.132	A
		2	1	(1, 3, 2)	833			833	854	0.0	0.0	0.010	A
	Exit	1	1		558			558	564	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	851	0.019	17	15	0.0	0.0	4.128	A
			2	1, 2	248	851	0.292	249	255	0.0	0.4	5.985	A
		2	1	(1, 3, 2)	265			265	272	0.0	0.0	0.004	A
	Exit	1	1		468			468	472	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	308	1019	0.302	309	309	0.0	0.5	5.351	A
			2	3, 2	9	1019	0.009	9	8	0.0	0.0	3.146	A
		2	1	(1, 3, 2)	318			317	319	0.0	0.1	0.023	A
	Exit	1	1		391			391	400	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	554	1088	0.509	553	558	0.6	1.1	6.532	A
			2	1, 3	443	1088	0.407	446	457	0.6	0.5	5.644	A
		2	1	(1, 3, 2)	998			998	1017	0.0	0.0	0.029	A
	Exit	1	1		690			690	694	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	20	827	0.024	20	18	0.0	0.0	4.606	A
			2	1, 2	318	827	0.384	322	316	0.4	0.4	6.953	A
		2	1	(1, 3, 2)	338			338	335	0.0	0.0	0.010	A
	Exit	1	1		560			560	569	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	369	993	0.371	368	378	0.5	0.5	5.911	A
			2	3, 2	7	993	0.008	7	11	0.0	0.0	3.641	A
		2	1	(1, 3, 2)	376			376	388	0.1	0.0	0.036	A
	Exit	1	1		466			466	475	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	686	1087	0.631	686	696	1.1	1.8	8.786	A
			2	1, 3	542	1087	0.499	538	545	0.5	1.0	6.469	A
		2	1	(1, 3, 2)	1230			1228	1246	0.0	0.2	0.472	A
	Exit	1	1		839			839	846	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	25	796	0.031	25	25	0.0	0.0	4.845	A
			2	1, 2	387	796	0.486	378	387	0.4	1.4	8.581	A
		2	1	(1, 3, 2)	414			412	416	0.0	0.1	0.293	A
	Exit	1	1		697			697	709	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	466	973	0.479	462	459	0.5	1.1	6.960	A
			2	3, 2	12	973	0.012	12	13	0.0	0.0	3.796	A
		2	1	(1, 3, 2)	478			478	475	0.0	0.0	0.074	A
	Exit	1	1		563			563	570	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	686	1087	0.632	688	694	1.8	1.4	8.764	A
			2	1, 3	553	1087	0.509	555	555	1.0	1.0	6.469	A
		2	1	(1, 3, 2)	1242			1240	1247	0.2	0.2	0.355	A
	Exit	1	1		815			815	848	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	22	791	0.027	21	24	0.0	0.0	4.896	A
			2	1, 2	369	791	0.466	369	388	1.4	0.7	8.750	A
		2	1	(1, 3, 2)	390			390	409	0.1	0.0	0.646	A
	Exit	1	1		701			701	708	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	446	976	0.457	446	460	1.1	0.6	6.464	A
			2	3, 2	13	976	0.013	13	14	0.0	0.0	3.519	A
		2	1	(1, 3, 2)	459			459	472	0.0	0.0	0.028	A
	Exit	1	1		576			576	579	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	570	1088	0.524	572	568	1.4	1.1	7.177	A
			2	1, 3	437	1088	0.402	443	451	1.0	0.5	5.541	A
		2	1	(1, 3, 2)	1009			1007	1016	0.2	0.2	0.201	A
	Exit	1	1		697			697	700	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	828	0.025	21	21	0.0	0.1	4.468	A
			2	1, 2	322	828	0.389	322	322	0.7	0.6	7.146	A
		2	1	(1, 3, 2)	342			343	342	0.0	0.0	0.116	A
	Exit	1	1		582			582	578	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	374	993	0.377	375	378	0.6	0.6	5.844	A
			2	3, 2	10	993	0.010	10	11	0.0	0.0	3.533	A
		2	1	(1, 3, 2)	384			384	389	0.0	0.0	0.002	A
	Exit	1	1		464			464	472	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	473	1088	0.435	473	476	1.1	0.6	5.841	A
			2	1, 3	383	1088	0.352	382	378	0.5	0.5	5.020	A
		2	1	(1, 3, 2)	857			857	852	0.2	0.0	0.016	A
	Exit	1	1		588			588	589	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	848	0.019	16	16	0.1	0.0	4.290	A
			2	1, 2	266	848	0.314	268	266	0.6	0.5	6.224	A
		2	1	(1, 3, 2)	283			283	282	0.0	0.0	0.021	A
	Exit	1	1		480			480	484	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	322	1013	0.318	320	323	0.6	0.5	5.302	A
			2	3, 2	7	1013	0.007	7	8	0.0	0.0	3.663	A
		2	1	(1, 3, 2)	329			329	331	0.0	0.0	0.000	A
	Exit	1	1		398			398	395	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	459	115	991	1088	0.422	458	464	0.0	0.6	5.500	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	375	94	991	1088	0.344	374	385	0.0	0.6	5.132	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	459	115	-	-	-	459	467	0.0	0.0	0.010	A
				3	375	94	-	-	-	375	387	0.0	0.0	0.011	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	957	834	0.020	17	15	0.0	0.0	4.128	A
			2	1	248	62	974	849	0.293	249	255	0.0	0.4	5.985	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	248	62	-	-	-	248	257	0.0	0.0	0.004	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	15	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	308	77	1108	1020	0.302	309	309	0.0	0.5	5.351	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	9	2	1013	925	0.010	9	8	0.0	0.0	3.146	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	309	77	-	-	-	308	311	0.0	0.1	0.024	A
				2	9	2	-	-	-	9	8	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	554	139	991	1088	0.510	553	558	0.6	1.1	6.532	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	443	111	991	1088	0.407	446	457	0.6	0.5	5.644	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	554	139	-	-	-	554	560	0.0	0.0	0.036	A
				3	443	111	-	-	-	443	457	0.0	0.0	0.022	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	957	813	0.025	20	18	0.0	0.0	4.606	A
			2	1	318	79	974	826	0.385	322	316	0.4	0.4	6.953	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	318	79	-	-	-	318	316	0.0	0.0	0.010	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	18	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	369	92	1108	993	0.371	368	378	0.5	0.5	5.911	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	7	2	1051	942	0.008	7	11	0.0	0.0	3.641	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	369	92	-	-	-	369	377	0.1	0.0	0.037	A
				2	7	2	-	-	-	7	11	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	686	172	991	1087	0.631	686	696	1.1	1.8	8.786	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	542	136	991	1087	0.499	538	545	0.5	1.0	6.469	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	687	172	-	-	-	686	699	0.0	0.1	0.486	A
				3	543	136	-	-	-	542	547	0.0	0.1	0.454	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	25	6	957	780	0.032	25	25	0.0	0.0	4.845	A
			2	1	387	97	974	796	0.486	378	387	0.4	1.4	8.581	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	389	97	-	-	-	387	391	0.0	0.1	0.300	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	25	6	-	-	-	25	25	0.0	0.0	0.185	A
3 - Broad Rushes	Entry	1	1	1	466	116	1108	973	0.479	462	459	0.5	1.1	6.960	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1089	957	0.013	12	13	0.0	0.0	3.796	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	466	116	-	-	-	466	462	0.0	0.0	0.076	A
				2	12	3	-	-	-	12	13	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	686	172	991	1087	0.632	688	694	1.8	1.4	8.764	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	553	138	991	1086	0.509	555	555	1.0	1.0	6.469	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	688	172	-	-	-	686	692	0.1	0.1	0.375	A
				3	554	139	-	-	-	553	555	0.1	0.1	0.329	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	974	790	0.027	21	24	0.0	0.0	4.896	A
			2	1	369	92	974	791	0.466	369	388	1.4	0.7	8.750	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	369	92	-	-	-	369	385	0.1	0.0	0.637	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	-	-	-	22	24	0.0	0.0	0.792	A
3 - Broad Rushes	Entry	1	1	1	446	111	1108	976	0.457	446	460	1.1	0.6	6.464	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1089	954	0.013	13	14	0.0	0.0	3.519	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	446	111	-	-	-	446	458	0.0	0.0	0.029	A
				2	13	3	-	-	-	13	14	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	570	143	991	1088	0.524	572	568	1.4	1.1	7.177	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	437	109	991	1088	0.402	443	451	1.0	0.5	5.541	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	570	143	-	-	-	570	566	0.1	0.0	0.208	A
				3	439	110	-	-	-	437	449	0.1	0.2	0.193	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	957	809	0.026	21	21	0.0	0.1	4.468	A
			2	1	322	81	974	828	0.389	322	322	0.7	0.6	7.146	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	321	80	-	-	-	322	321	0.0	0.0	0.119	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	21	0.0	0.0	0.068	A
3 - Broad Rushes	Entry	1	1	1	374	94	1108	994	0.376	375	378	0.6	0.6	5.844	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	10	2	994	887	0.011	10	11	0.0	0.0	3.533	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	374	94	-	-	-	374	378	0.0	0.0	0.002	A
				2	10	2	-	-	-	10	11	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	473	118	991	1089	0.435	473	476	1.1	0.6	5.841	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	383	96	991	1089	0.352	382	378	0.5	0.5	5.020	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	473	118	-	-	-	473	474	0.0	0.0	0.018	A
				3	383	96	-	-	-	383	378	0.2	0.0	0.014	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	957	838	0.020	16	16	0.1	0.0	4.290	A
			2	1	266	67	974	848	0.314	268	266	0.6	0.5	6.224	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	266	67	-	-	-	266	266	0.0	0.0	0.022	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	16	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	322	80	1108	1013	0.318	320	323	0.6	0.5	5.302	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	7	2	936	855	0.008	7	8	0.0	0.0	3.663	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	322	80	-	-	-	322	322	0.0	0.0	0.000	A
				2	7	2	-	-	-	7	8	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2022 | base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	12.68	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.68	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	991	100.000
2 - Station Road (S)		ONE HOUR	✓	608	100.000
3 - Broad Rushes		ONE HOUR	✓	511	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	551	440
	2 - Station Road (S)	596	0	12
	3 - Broad Rushes	490	21	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	0	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.58	7.02	2.2	A	908	1361
2 - Station Road (S)	0.85	23.39	4.6	C	562	842
3 - Broad Rushes	0.65	10.84	1.8	B	473	710

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	751	188	16	1874	0.401	750	747	818	0.0	1.1	5.054	A
2 - Station Road (S)	456	114	334	884	0.515	455	456	432	0.0	1.1	8.507	A
3 - Broad Rushes	386	97	447	1035	0.373	388	394	342	0.0	0.6	6.156	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	888	222	20	1883	0.471	884	899	976	1.1	1.7	5.816	A
2 - Station Road (S)	540	135	387	844	0.641	538	547	517	1.1	2.1	10.801	B
3 - Broad Rushes	468	117	528	953	0.491	468	471	397	0.6	0.9	7.321	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1097	274	23	1886	0.582	1099	1098	1221	1.7	2.1	7.021	A
2 - Station Road (S)	671	168	489	788	0.851	675	670	633	2.1	3.9	21.489	C
3 - Broad Rushes	580	145	663	896	0.648	580	561	501	0.9	1.8	10.538	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1072	268	22	1854	0.578	1069	1084	1207	2.1	2.2	6.833	A
2 - Station Road (S)	687	172	478	820	0.838	676	671	614	3.9	4.6	23.385	C
3 - Broad Rushes	563	141	663	935	0.602	566	575	491	1.8	1.4	10.842	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	884	221	20	1845	0.479	885	898	983	2.2	1.2	5.885	A
2 - Station Road (S)	556	139	383	866	0.642	552	563	522	4.6	2.1	12.983	B
3 - Broad Rushes	460	115	540	987	0.466	463	467	395	1.4	0.7	7.844	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	754	188	12	1876	0.402	757	763	815	1.2	1.0	5.347	A
2 - Station Road (S)	459	115	337	872	0.526	456	467	432	2.1	1.3	9.432	A
3 - Broad Rushes	381	95	447	1007	0.378	380	395	346	0.7	0.8	6.294	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	418	1086	0.385	416	417	0.0	0.7	5.334	A
			2	1, 3	333	1086	0.307	334	329	0.0	0.4	4.695	A
		2	1	(1, 3, 2)	751			751	751	0.0	0.0	0.002	A
	Exit	1	1		818			818	824	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	8	864	0.009	8	9	0.0	0.0	4.448	A
			2	1, 2	447	864	0.518	447	447	0.0	1.1	8.333	A
		2	1	(1, 3, 2)	456			455	460	0.0	0.0	0.250	A
	Exit	1	1		432			432	434	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	370	949	0.390	372	377	0.0	0.6	6.234	A
			2	3, 2	16	949	0.017	16	17	0.0	0.0	4.052	A
		2	1	(1, 3, 2)	386			386	396	0.0	0.0	0.014	A
	Exit	1	1		342			342	339	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	499	1084	0.460	498	502	0.7	1.1	6.303	A
			2	1, 3	389	1084	0.359	387	396	0.4	0.6	5.075	A
		2	1	(1, 3, 2)	888			888	901	0.0	0.0	0.054	A
	Exit	1	1		976			976	987	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	846	0.012	11	12	0.0	0.0	4.111	A
			2	1, 2	530	846	0.626	528	535	1.1	1.8	10.039	B
		2	1	(1, 3, 2)	540			541	550	0.0	0.3	0.872	A
	Exit	1	1		517			517	521	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	448	920	0.487	448	452	0.6	0.9	7.429	A
			2	3, 2	20	920	0.022	20	19	0.0	0.0	4.005	A
		2	1	(1, 3, 2)	468			468	472	0.0	0.0	0.028	A
	Exit	1	1		397			397	408	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	610	1083	0.563	610	612	1.1	1.2	7.437	A
			2	1, 3	488	1083	0.450	489	485	0.6	0.9	6.192	A
		2	1	(1, 3, 2)	1097			1098	1100	0.0	0.0	0.135	A
	Exit	1	1		1221			1221	1195	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	813	0.015	12	13	0.0	0.0	4.486	A
			2	1, 2	661	813	0.813	663	657	1.8	2.4	14.890	B
		2	1	(1, 3, 2)	671			673	672	0.3	1.5	6.776	A
	Exit	1	1		633			633	636	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	558	871	0.640	558	538	0.9	1.7	10.447	B
			2	3, 2	23	871	0.026	23	23	0.0	0.0	4.084	A
		2	1	(1, 3, 2)	580			581	565	0.0	0.1	0.342	A
	Exit	1	1		501			501	498	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	590	1083	0.545	591	602	1.2	1.1	7.297	A
			2	1, 3	481	1083	0.444	478	482	0.9	1.0	5.984	A
		2	1	(1, 3, 2)	1072			1071	1084	0.0	0.0	0.121	A
	Exit	1	1		1207			1207	1210	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	816	0.016	13	14	0.0	0.0	4.050	A
			2	1, 2	669	816	0.820	663	657	2.4	3.0	14.950	B
		2	1	(1, 3, 2)	687			683	674	1.5	1.6	8.633	A
	Exit	1	1		614			614	624	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	541	871	0.621	544	552	1.7	1.3	10.626	B
			2	3, 2	22	871	0.026	22	22	0.0	0.0	4.303	A
		2	1	(1, 3, 2)	563			564	573	0.1	0.0	0.475	A
	Exit	1	1		491			491	496	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	501	1084	0.462	501	503	1.1	0.7	6.323	A
			2	1, 3	384	1084	0.354	383	395	1.0	0.5	5.246	A
		2	1	(1, 3, 2)	884			884	894	0.0	0.0	0.035	A
	Exit	1	1		983			983	1001	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	848	0.014	12	11	0.0	0.0	4.428	A
			2	1, 2	542	848	0.640	540	552	3.0	1.7	11.116	B
		2	1	(1, 3, 2)	556			554	558	1.6	0.4	2.078	A
	Exit	1	1		522			522	522	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	440	915	0.481	442	449	1.3	0.7	7.954	A
			2	3, 2	20	915	0.022	20	19	0.0	0.0	3.786	A
		2	1	(1, 3, 2)	460			460	464	0.0	0.0	0.057	A
	Exit	1	1		395			395	405	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	418	1087	0.385	420	424	0.7	0.6	5.490	A
			2	1, 3	336	1087	0.309	337	339	0.5	0.4	5.096	A
		2	1	(1, 3, 2)	754			754	762	0.0	0.0	0.032	A
	Exit	1	1		815			815	837	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	863	0.010	9	9	0.0	0.0	4.441	A
			2	1, 2	450	863	0.521	447	458	1.7	1.2	8.999	A
		2	1	(1, 3, 2)	459			458	466	0.4	0.1	0.577	A
	Exit	1	1		432			432	440	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	369	948	0.389	368	379	0.7	0.7	6.369	A
			2	3, 2	12	948	0.013	12	16	0.0	0.0	4.064	A
		2	1	(1, 3, 2)	381			381	395	0.0	0.0	0.016	A
	Exit	1	1		346			346	348	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	418	104	991	1085	0.385	416	417	0.0	0.7	5.334	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	333	83	991	1085	0.307	334	329	0.0	0.4	4.695	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	418	104	-	-	-	418	420	0.0	0.0	0.003	A
				3	333	83	-	-	-	333	331	0.0	0.0	0.001	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	8	2	887	787	0.010	8	9	0.0	0.0	4.448	A
			2	1	447	112	974	864	0.518	447	447	0.0	1.1	8.333	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	448	112	-	-	-	447	451	0.0	0.0	0.254	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	8	2	-	-	-	8	9	0.0	0.0	0.044	A
3 - Broad Rushes	Entry	1	1	1	370	93	1108	948	0.391	372	377	0.0	0.6	6.234	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1097	939	0.017	16	17	0.0	0.0	4.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	370	93	-	-	-	370	379	0.0	0.0	0.014	A
				2	16	4	-	-	-	16	17	0.0	0.0	0.011	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	499	125	991	1084	0.460	498	502	0.7	1.1	6.303	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	389	97	991	1084	0.359	387	396	0.4	0.6	5.075	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	499	125	-	-	-	499	504	0.0	0.0	0.059	A
				3	389	97	-	-	-	389	397	0.0	0.0	0.047	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	926	802	0.013	11	12	0.0	0.0	4.111	A
			2	1	530	133	974	846	0.626	528	535	1.1	1.8	10.039	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	530	133	-	-	-	530	538	0.0	0.3	0.882	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	-	-	-	10	12	0.0	0.0	0.419	A
3 - Broad Rushes	Entry	1	1	1	448	112	1108	919	0.487	448	452	0.6	0.9	7.429	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1108	917	0.022	20	19	0.0	0.0	4.005	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	448	112	-	-	-	448	454	0.0	0.0	0.029	A
				2	20	5	-	-	-	20	19	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	610	152	991	1083	0.563	610	612	1.1	1.2	7.437	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	488	122	991	1083	0.450	489	485	0.6	0.9	6.192	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	610	152	-	-	-	610	613	0.0	0.0	0.139	A
				3	488	122	-	-	-	488	487	0.0	0.0	0.129	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	906	760	0.016	12	13	0.0	0.0	4.486	A
			2	1	661	165	974	813	0.813	663	657	1.8	2.4	14.890	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	659	165	-	-	-	661	659	0.3	1.5	6.806	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	13	0.0	0.0	5.264	A
3 - Broad Rushes	Entry	1	1	1	558	139	1108	871	0.640	558	538	0.9	1.7	10.447	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	23	6	1108	876	0.026	23	23	0.0	0.0	4.084	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	558	139	-	-	-	558	541	0.0	0.1	0.347	A
				2	23	6	-	-	-	23	24	0.0	0.0	0.229	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	590	148	991	1083	0.545	591	602	1.2	1.1	7.297	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	481	120	991	1083	0.444	478	482	0.9	1.0	5.984	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	590	148	-	-	-	590	601	0.0	0.0	0.121	A
				3	481	120	-	-	-	481	483	0.0	0.0	0.121	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	935	781	0.017	13	14	0.0	0.0	4.050	A
			2	1	669	167	974	816	0.820	663	657	2.4	3.0	14.950	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	673	168	-	-	-	669	660	1.5	1.6	8.659	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	13	14	0.0	0.0	7.390	A
3 - Broad Rushes	Entry	1	1	1	541	135	1108	871	0.621	544	552	1.7	1.3	10.626	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	1097	865	0.026	22	22	0.0	0.0	4.303	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	540	135	-	-	-	541	551	0.1	0.0	0.474	A
				2	22	6	-	-	-	22	22	0.0	0.0	0.485	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	501	125	991	1084	0.462	501	503	1.1	0.7	6.323	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	384	96	991	1084	0.354	383	395	1.0	0.5	5.246	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	501	125	-	-	-	501	502	0.0	0.0	0.039	A
				3	384	96	-	-	-	384	392	0.0	0.0	0.030	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	916	790	0.015	12	11	0.0	0.0	4.428	A
			2	1	542	136	974	847	0.640	540	552	3.0	1.7	11.116	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	545	136	-	-	-	542	547	1.6	0.4	2.085	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	11	0.0	0.0	1.699	A
3 - Broad Rushes	Entry	1	1	1	440	110	1108	915	0.481	442	449	1.3	0.7	7.954	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1086	898	0.022	20	19	0.0	0.0	3.786	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	440	110	-	-	-	440	446	0.0	0.0	0.058	A
				2	20	5	-	-	-	20	18	0.0	0.0	0.030	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	418	105	991	1087	0.385	420	424	0.7	0.6	5.490	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	336	84	991	1087	0.309	337	339	0.5	0.4	5.096	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	418	104	-	-	-	418	424	0.0	0.0	0.029	A
				3	336	84	-	-	-	336	338	0.0	0.0	0.036	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	877	776	0.011	9	9	0.0	0.0	4.441	A
			2	1	450	112	974	863	0.521	447	458	1.7	1.2	8.999	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	450	113	-	-	-	450	456	0.4	0.1	0.588	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	9	0.0	0.0	0.061	A
3 - Broad Rushes	Entry	1	1	1	369	92	1108	948	0.389	368	379	0.7	0.7	6.369	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1086	928	0.013	12	16	0.0	0.0	4.064	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	369	92	-	-	-	369	380	0.0	0.0	0.016	A
				2	12	3	-	-	-	12	16	0.0	0.0	0.022	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	14.93	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.93	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1391	100.000
2 - Station Road (S)		ONE HOUR	✓	317	100.000
3 - Broad Rushes		ONE HOUR	✓	632	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	740	651
	2 - Station Road (S)	298	0	19
	3 - Broad Rushes	614	18	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	6	10
	2 - Station Road (S)	10	0	6
	3 - Broad Rushes	13	6	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.83	16.63	7.3	C	1270	1905
2 - Station Road (S)	0.46	9.61	0.9	A	294	441
3 - Broad Rushes	0.70	13.90	2.8	B	580	871

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1053	263	13	1855	0.567	1054	1041	676	0.0	2.1	7.145	A
2 - Station Road (S)	236	59	502	904	0.261	237	241	565	0.0	0.5	6.864	A
3 - Broad Rushes	468	117	222	1067	0.439	468	473	516	0.0	1.0	7.507	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1246	312	18	1835	0.679	1252	1254	829	2.1	3.0	9.594	A
2 - Station Road (S)	293	73	591	815	0.359	293	294	680	0.5	0.6	7.715	A
3 - Broad Rushes	570	143	276	1091	0.523	572	574	608	1.0	1.6	9.304	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1517	379	20	1903	0.797	1514	1528	1017	3.0	7.3	15.035	C
2 - Station Road (S)	354	89	710	794	0.446	356	357	825	0.6	0.9	9.611	A
3 - Broad Rushes	701	175	337	1000	0.701	701	704	729	1.6	2.6	13.897	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1515	379	19	1825	0.830	1525	1533	1011	7.3	6.8	16.628	C
2 - Station Road (S)	358	90	697	780	0.459	356	356	848	0.9	0.9	9.489	A
3 - Broad Rushes	695	174	335	1047	0.663	694	698	717	2.6	2.8	13.544	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1248	312	16	1853	0.673	1246	1269	830	6.8	3.3	9.837	A
2 - Station Road (S)	287	72	581	829	0.346	286	293	681	0.9	0.7	7.975	A
3 - Broad Rushes	576	144	269	1044	0.551	578	586	598	2.8	1.5	10.083	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1042	261	15	1843	0.566	1042	1059	681	3.3	2.3	7.517	A
2 - Station Road (S)	236	59	484	899	0.263	236	249	573	0.7	0.5	6.860	A
3 - Broad Rushes	472	118	222	1070	0.441	474	476	498	1.5	0.9	7.704	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	550	1086	0.506	552	551	0.0	1.0	7.082	A
			2	1, 3	503	1086	0.463	502	489	0.0	1.0	6.748	A
		2	1	(1, 3, 2)	1053			1053	1049	0.0	0.0	0.215	A
	Exit	1	1		676			676	687	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	809	0.018	15	14	0.0	0.0	4.616	A
			2	1, 2	222	809	0.274	222	227	0.0	0.5	6.929	A
		2	1	(1, 3, 2)	236			236	243	0.0	0.0	0.074	A
	Exit	1	1		565			565	565	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	455	1029	0.442	454	459	0.0	1.0	7.502	A
			2	3, 2	13	1029	0.013	13	14	0.0	0.0	3.798	A
		2	1	(1, 3, 2)	468			468	477	0.0	0.0	0.120	A
	Exit	1	1		516			516	503	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	658	1085	0.607	661	667	1.0	1.6	8.975	A
			2	1, 3	589	1085	0.543	591	587	1.0	1.2	8.046	A
		2	1	(1, 3, 2)	1246			1247	1257	0.0	0.3	1.046	A
	Exit	1	1		829			829	834	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	17	779	0.022	17	17	0.0	0.0	5.094	A
			2	1, 2	275	779	0.353	276	277	0.5	0.5	7.788	A
		2	1	(1, 3, 2)	293			293	295	0.0	0.0	0.088	A
	Exit	1	1		680			680	684	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	552	1010	0.547	554	557	1.0	1.5	9.133	A
			2	3, 2	18	1010	0.018	18	17	0.0	0.0	4.059	A
		2	1	(1, 3, 2)	570			570	576	0.0	0.1	0.323	A
	Exit	1	1		608			608	605	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	805	1084	0.743	805	810	1.6	3.1	11.806	B
			2	1, 3	707	1084	0.653	710	718	1.2	1.9	10.333	B
		2	1	(1, 3, 2)	1517			1512	1536	0.3	2.3	3.886	A
	Exit	1	1		1017			1017	1020	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	19	740	0.026	20	21	0.0	0.0	5.097	A
			2	1, 2	335	740	0.453	337	337	0.5	0.8	9.528	A
		2	1	(1, 3, 2)	354			354	359	0.0	0.0	0.350	A
	Exit	1	1		825			825	830	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	680	988	0.689	680	684	1.5	2.2	12.214	B
			2	3, 2	20	988	0.021	20	20	0.0	0.0	3.612	A
		2	1	(1, 3, 2)	701			701	707	0.1	0.3	1.932	A
	Exit	1	1		729			729	739	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	826	1084	0.762	829	826	3.1	2.7	12.469	B
			2	1, 3	698	1084	0.643	697	708	1.9	2.2	10.266	B
		2	1	(1, 3, 2)	1515			1524	1533	2.3	1.9	5.158	A
	Exit	1	1		1011			1011	1012	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	744	0.028	21	22	0.0	0.0	4.823	A
			2	1, 2	336	744	0.452	335	334	0.8	0.8	9.402	A
		2	1	(1, 3, 2)	358			357	356	0.0	0.1	0.383	A
	Exit	1	1		848			848	845	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	677	988	0.685	675	678	2.2	2.5	12.115	B
			2	3, 2	19	988	0.019	19	20	0.0	0.0	3.898	A
		2	1	(1, 3, 2)	695			696	698	0.3	0.3	1.668	A
	Exit	1	1		717			717	729	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	661	1085	0.609	665	674	2.7	1.6	9.338	A
			2	1, 3	584	1085	0.538	581	594	2.2	1.3	8.061	A
		2	1	(1, 3, 2)	1248			1245	1261	1.9	0.4	1.119	A
	Exit	1	1		830			830	846	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	17	782	0.021	17	17	0.0	0.0	4.923	A
			2	1, 2	270	782	0.345	269	276	0.8	0.7	8.008	A
		2	1	(1, 3, 2)	287			287	293	0.1	0.0	0.155	A
	Exit	1	1		681			681	690	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	561	1012	0.554	561	570	2.5	1.4	9.608	A
			2	3, 2	16	1012	0.016	16	16	0.0	0.0	4.120	A
		2	1	(1, 3, 2)	576			577	582	0.3	0.1	0.660	A
	Exit	1	1		598			598	612	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	560	1086	0.516	558	565	1.6	1.4	7.484	A
			2	1, 3	482	1086	0.444	484	493	1.3	0.8	6.867	A
		2	1	(1, 3, 2)	1042			1043	1056	0.4	0.1	0.327	A
	Exit	1	1		681			681	696	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	814	0.017	13	15	0.0	0.0	4.561	A
			2	1, 2	223	814	0.274	222	234	0.7	0.5	6.902	A
		2	1	(1, 3, 2)	236			236	249	0.0	0.0	0.111	A
	Exit	1	1		573			573	579	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	457	1029	0.444	459	462	1.4	0.9	7.586	A
			2	3, 2	15	1029	0.015	15	14	0.0	0.0	3.829	A
		2	1	(1, 3, 2)	472			472	474	0.1	0.0	0.246	A
	Exit	1	1		498			498	509	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	550	137	991	1086	0.506	552	551	0.0	1.0	7.082	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	503	126	991	1086	0.463	502	489	0.0	1.0	6.748	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	549	137	-	-	-	550	556	0.0	0.0	0.237	A
				3	503	126	-	-	-	503	493	0.0	0.0	0.189	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	948	792	0.018	15	14	0.0	0.0	4.616	A
			2	1	222	55	974	809	0.274	222	227	0.0	0.5	6.929	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	222	55	-	-	-	222	229	0.0	0.0	0.078	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	-	-	-	14	14	0.0	0.0	0.009	A
3 - Broad Rushes	Entry	1	1	1	455	114	1108	1029	0.442	454	459	0.0	1.0	7.502	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1049	970	0.014	13	14	0.0	0.0	3.798	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	455	114	-	-	-	455	463	0.0	0.0	0.119	A
				2	13	3	-	-	-	13	14	0.0	0.0	0.141	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	658	165	991	1085	0.607	661	667	1.0	1.6	8.975	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	589	147	991	1085	0.543	591	587	1.0	1.2	8.046	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	658	164	-	-	-	658	669	0.0	0.1	1.052	A
				3	589	147	-	-	-	589	588	0.0	0.1	1.039	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	968	777	0.022	17	17	0.0	0.0	5.094	A
			2	1	275	69	974	779	0.353	276	277	0.5	0.5	7.788	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	275	69	-	-	-	275	277	0.0	0.0	0.093	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	17	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	552	138	1108	1010	0.547	554	557	1.0	1.5	9.133	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	5	1101	1004	0.018	18	17	0.0	0.0	4.059	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	553	138	-	-	-	552	559	0.0	0.1	0.324	A
				2	18	5	-	-	-	18	17	0.0	0.0	0.294	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	805	201	991	1084	0.743	805	810	1.6	3.1	11.806	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	707	177	991	1084	0.653	710	718	1.2	1.9	10.333	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	806	202	-	-	-	805	816	0.1	1.2	3.873	A
				3	710	178	-	-	-	707	721	0.1	1.1	3.903	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	955	721	0.027	20	21	0.0	0.0	5.097	A
			2	1	335	84	974	739	0.453	337	337	0.5	0.8	9.528	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	335	84	-	-	-	335	338	0.0	0.0	0.363	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	21	0.0	0.0	0.153	A
3 - Broad Rushes	Entry	1	1	1	680	170	1108	988	0.688	680	684	1.5	2.2	12.214	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1101	981	0.021	20	20	0.0	0.0	3.612	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	681	170	-	-	-	680	687	0.1	0.3	1.923	A
				2	20	5	-	-	-	20	20	0.0	0.0	2.224	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	826	207	991	1085	0.762	829	826	3.1	2.7	12.469	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	698	174	991	1084	0.643	697	708	1.9	2.2	10.266	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	820	205	-	-	-	826	824	1.2	1.0	5.149	A
				3	695	174	-	-	-	698	709	1.1	0.9	5.169	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	968	738	0.028	21	22	0.0	0.0	4.823	A
			2	1	336	84	974	743	0.453	335	334	0.8	0.8	9.402	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	337	84	-	-	-	336	334	0.0	0.1	0.396	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	22	0.0	0.0	0.200	A
3 - Broad Rushes	Entry	1	1	1	677	169	1108	989	0.685	675	678	2.2	2.5	12.115	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1101	982	0.019	19	20	0.0	0.0	3.898	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	676	169	-	-	-	677	679	0.3	0.2	1.678	A
				2	19	5	-	-	-	19	19	0.0	0.0	1.369	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	661	165	991	1085	0.609	665	674	2.7	1.6	9.338	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	584	146	991	1085	0.538	581	594	2.2	1.3	8.061	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	663	166	-	-	-	661	670	1.0	0.2	1.134	A
				3	585	146	-	-	-	584	591	0.9	0.2	1.101	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	955	764	0.022	17	17	0.0	0.0	4.923	A
			2	1	270	67	974	781	0.345	269	276	0.8	0.7	8.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	270	68	-	-	-	270	276	0.1	0.0	0.157	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	17	0.0	0.0	0.133	A
3 - Broad Rushes	Entry	1	1	1	561	140	1108	1012	0.554	561	570	2.5	1.4	9.608	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1079	984	0.017	16	16	0.0	0.0	4.120	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	560	140	-	-	-	561	566	0.2	0.1	0.662	A
				2	16	4	-	-	-	16	16	0.0	0.0	0.588	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	560	140	991	1086	0.516	558	565	1.6	1.4	7.484	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	482	121	991	1086	0.444	484	493	1.3	0.8	6.867	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	561	140	-	-	-	560	564	0.2	0.1	0.334	A
				3	482	120	-	-	-	482	491	0.2	0.0	0.319	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	942	786	0.017	13	15	0.0	0.0	4.561	A
			2	1	223	56	974	814	0.274	222	234	0.7	0.5	6.902	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	223	56	-	-	-	223	233	0.0	0.0	0.114	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	13	15	0.0	0.0	0.068	A
3 - Broad Rushes	Entry	1	1	1	457	114	1108	1029	0.444	459	462	1.4	0.9	7.586	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1057	978	0.015	15	14	0.0	0.0	3.829	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	457	114	-	-	-	457	460	0.1	0.0	0.245	A
				2	15	4	-	-	-	15	14	0.0	0.0	0.266	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	22.69	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	22.69	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1156	100.000
2 - Station Road (S)		ONE HOUR	✓	629	100.000
3 - Broad Rushes		ONE HOUR	✓	657	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	570	586
	2 - Station Road (S)	616	0	13
	3 - Broad Rushes	635	22	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	13
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	13	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.68	9.07	3.4	A	1056	1585
2 - Station Road (S)	0.91	46.20	10.2	E	576	864
3 - Broad Rushes	0.82	24.11	6.0	C	599	899

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	864	216	16	1875	0.461	861	862	935	0.0	1.6	5.976	A
2 - Station Road (S)	462	115	425	850	0.544	462	472	451	0.0	1.3	9.701	A
3 - Broad Rushes	495	124	451	983	0.503	499	490	435	0.0	1.2	8.957	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1038	259	20	1861	0.558	1039	1041	1117	1.6	2.2	7.528	A
2 - Station Road (S)	568	142	527	819	0.693	565	566	532	1.3	2.6	14.673	B
3 - Broad Rushes	585	146	554	965	0.607	584	593	539	1.2	1.8	11.554	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1259	315	25	1892	0.665	1258	1272	1367	2.2	3.2	9.065	A
2 - Station Road (S)	683	171	635	800	0.854	680	672	648	2.6	8.1	35.533	E
3 - Broad Rushes	728	182	666	887	0.821	726	720	649	1.8	5.0	20.972	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1267	317	22	1857	0.682	1264	1273	1361	3.2	3.4	8.971	A
2 - Station Road (S)	708	177	632	778	0.910	689	694	654	8.1	10.2	46.203	E
3 - Broad Rushes	723	181	674	931	0.776	709	726	647	5.0	6.0	24.106	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1040	260	18	1828	0.569	1034	1049	1124	3.4	2.4	7.116	A
2 - Station Road (S)	566	141	522	829	0.682	575	602	530	10.2	2.6	25.227	D
3 - Broad Rushes	577	144	564	958	0.602	578	606	533	6.0	2.0	15.498	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	872	218	16	1872	0.466	869	882	938	2.4	1.6	6.310	A
2 - Station Road (S)	471	118	436	841	0.560	472	482	449	2.6	1.2	10.228	B
3 - Broad Rushes	487	122	463	995	0.489	492	501	446	2.0	1.2	9.252	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	435	1086	0.401	436	430	0.0	0.6	5.554	A
			2	1, 3	428	1086	0.395	425	432	0.0	0.9	6.378	A
		2	1	(1, 3, 2)	864			864	868	0.0	0.0	0.028	A
	Exit	1	1		935			935	937	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	834	0.013	11	10	0.0	0.0	5.081	A
			2	1, 2	450	834	0.540	451	462	0.0	1.2	9.242	A
		2	1	(1, 3, 2)	462			461	476	0.0	0.1	0.534	A
	Exit	1	1		451			451	446	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	480	947	0.506	484	474	0.0	1.1	8.910	A
			2	3, 2	16	947	0.016	16	15	0.0	0.0	3.925	A
		2	1	(1, 3, 2)	495			495	495	0.0	0.0	0.223	A
	Exit	1	1		435			435	442	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	510	1084	0.471	511	511	0.6	0.9	6.587	A
			2	1, 3	529	1084	0.488	527	529	0.9	1.3	7.843	A
		2	1	(1, 3, 2)	1038			1039	1043	0.0	0.0	0.332	A
	Exit	1	1		1117			1117	1128	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	800	0.014	11	12	0.0	0.0	4.751	A
			2	1, 2	556	800	0.694	554	554	1.2	2.0	12.243	B
		2	1	(1, 3, 2)	568			567	569	0.1	0.6	2.548	A
	Exit	1	1		532			532	531	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	564	910	0.620	563	573	1.1	1.7	11.082	B
			2	3, 2	21	910	0.023	20	20	0.0	0.0	4.124	A
		2	1	(1, 3, 2)	585			585	595	0.0	0.1	0.719	A
	Exit	1	1		539			539	541	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	621	1083	0.574	623	622	0.9	1.3	7.689	A
			2	1, 3	636	1083	0.588	635	650	1.3	1.7	9.042	A
		2	1	(1, 3, 2)	1259			1257	1275	0.0	0.2	0.721	A
	Exit	1	1		1367			1367	1353	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	764	0.018	14	14	0.0	0.0	4.833	A
			2	1, 2	665	764	0.870	666	658	2.0	3.7	18.577	C
		2	1	(1, 3, 2)	683			679	679	0.6	4.4	17.128	C
	Exit	1	1		648			648	647	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	705	870	0.811	701	695	1.7	3.8	16.629	C
			2	3, 2	25	870	0.028	25	25	0.0	0.0	4.262	A
		2	1	(1, 3, 2)	728			730	729	0.1	1.1	4.752	A
	Exit	1	1		649			649	664	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	632	1084	0.584	632	635	1.3	1.4	8.081	A
			2	1, 3	634	1084	0.585	632	638	1.7	1.8	8.769	A
		2	1	(1, 3, 2)	1267			1266	1274	0.2	0.2	0.562	A
	Exit	1	1		1361			1361	1382	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	765	0.020	15	15	0.0	0.0	4.843	A
			2	1, 2	678	765	0.886	674	679	3.7	3.9	19.195	C
		2	1	(1, 3, 2)	708			693	695	4.4	6.2	27.286	D
	Exit	1	1		654			654	659	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	695	867	0.802	687	702	3.8	4.3	18.308	C
			2	3, 2	22	867	0.026	22	24	0.0	0.0	4.036	A
		2	1	(1, 3, 2)	723			718	728	1.1	1.6	6.294	A
	Exit	1	1		647			647	652	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	516	1085	0.476	512	519	1.4	1.2	6.583	A
			2	1, 3	524	1085	0.483	522	530	1.8	1.2	7.373	A
		2	1	(1, 3, 2)	1040			1040	1046	0.2	0.0	0.159	A
	Exit	1	1		1124			1124	1176	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	802	0.014	11	12	0.0	0.0	4.691	A
			2	1, 2	559	802	0.698	564	590	3.9	2.0	14.830	B
		2	1	(1, 3, 2)	566			570	594	6.2	0.6	10.947	B
	Exit	1	1		530			530	539	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	560	906	0.618	560	586	4.3	1.9	13.449	B
			2	3, 2	19	906	0.020	18	20	0.0	0.0	4.273	A
		2	1	(1, 3, 2)	577			578	596	1.6	0.1	2.542	A
	Exit	1	1		533			533	542	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	436	1086	0.401	433	436	1.2	0.8	5.912	A
			2	1, 3	436	1086	0.401	436	446	1.2	0.8	6.583	A
		2	1	(1, 3, 2)	872			872	879	0.0	0.0	0.077	A
	Exit	1	1		938			938	956	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	830	0.011	9	10	0.0	0.0	4.231	A
			2	1, 2	461	830	0.556	463	472	2.0	1.1	9.513	A
		2	1	(1, 3, 2)	471			471	478	0.6	0.1	0.876	A
	Exit	1	1		449			449	453	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	472	943	0.500	476	484	1.9	1.1	9.239	A
			2	3, 2	16	943	0.017	16	17	0.0	0.0	4.103	A
		2	1	(1, 3, 2)	487			487	498	0.1	0.1	0.232	A
	Exit	1	1		446			446	455	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	435	109	991	1086	0.401	436	430	0.0	0.6	5.554	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	428	107	991	1086	0.395	425	432	0.0	0.9	6.378	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	435	109	-	-	-	435	432	0.0	0.0	0.025	A
				3	428	107	-	-	-	428	436	0.0	0.0	0.031	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	904	773	0.014	11	10	0.0	0.0	5.081	A
			2	1	450	113	974	834	0.540	451	462	0.0	1.2	9.242	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	451	113	-	-	-	450	467	0.0	0.1	0.534	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	10	0.0	0.0	0.497	A
3 - Broad Rushes	Entry	1	1	1	480	120	1108	946	0.507	484	474	0.0	1.1	8.910	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1080	917	0.017	16	15	0.0	0.0	3.925	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	480	120	-	-	-	480	479	0.0	0.0	0.227	A
				2	16	4	-	-	-	16	16	0.0	0.0	0.121	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	510	128	991	1084	0.471	511	511	0.6	0.9	6.587	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	529	132	991	1084	0.488	527	529	0.9	1.3	7.843	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	510	127	-	-	-	510	512	0.0	0.0	0.283	A
				3	528	132	-	-	-	529	531	0.0	0.0	0.384	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	930	767	0.015	11	12	0.0	0.0	4.751	A
			2	1	556	139	974	800	0.695	554	554	1.2	2.0	12.243	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	556	139	-	-	-	556	558	0.1	0.6	2.566	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	12	0.0	0.0	1.721	A
3 - Broad Rushes	Entry	1	1	1	564	141	1108	911	0.619	563	573	1.1	1.7	11.082	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	1094	898	0.023	20	20	0.0	0.0	4.124	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	564	141	-	-	-	564	576	0.0	0.1	0.718	A
				2	21	5	-	-	-	21	20	0.0	0.0	0.760	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	621	155	991	1083	0.574	623	622	0.9	1.3	7.689	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	636	159	991	1083	0.588	635	650	1.3	1.7	9.042	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	622	156	-	-	-	621	623	0.0	0.1	0.721	A
				3	637	159	-	-	-	636	651	0.0	0.1	0.720	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	962	754	0.018	14	14	0.0	0.0	4.833	A
			2	1	665	166	974	764	0.870	666	658	2.0	3.7	18.577	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	669	167	-	-	-	665	665	0.6	4.3	17.146	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	-	-	-	14	14	0.0	0.1	16.295	C
3 - Broad Rushes	Entry	1	1	1	705	176	1108	870	0.811	701	695	1.7	3.8	16.629	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	25	6	1108	870	0.028	25	25	0.0	0.0	4.262	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	703	176	-	-	-	705	704	0.1	1.1	4.772	A
				2	25	6	-	-	-	25	25	0.0	0.0	4.245	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	991	1083	0.584	632	635	1.3	1.4	8.081	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	634	159	991	1083	0.585	632	638	1.7	1.8	8.769	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	-	-	-	632	636	0.1	0.1	0.549	A
				3	635	159	-	-	-	634	638	0.1	0.1	0.575	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	949	746	0.020	15	15	0.0	0.0	4.843	A
			2	1	678	169	974	765	0.886	674	679	3.7	3.9	19.195	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	693	173	-	-	-	678	680	4.3	6.1	27.321	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	15	0.1	0.1	25.667	D
3 - Broad Rushes	Entry	1	1	1	695	174	1108	867	0.802	687	702	3.8	4.3	18.308	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	1108	870	0.026	22	24	0.0	0.0	4.036	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	701	175	-	-	-	695	704	1.1	1.6	6.320	A
				2	23	6	-	-	-	22	24	0.0	0.1	5.606	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	516	129	991	1085	0.476	512	519	1.4	1.2	6.583	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	524	131	991	1085	0.483	522	530	1.8	1.2	7.373	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	517	129	-	-	-	516	518	0.1	0.0	0.151	A
				3	523	131	-	-	-	524	527	0.1	0.0	0.167	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	911	749	0.014	11	12	0.0	0.0	4.691	A
			2	1	559	140	974	802	0.697	564	590	3.9	2.0	14.830	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	555	139	-	-	-	559	582	6.1	0.5	10.882	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	12	0.1	0.0	14.023	B
3 - Broad Rushes	Entry	1	1	1	560	140	1108	907	0.617	560	586	4.3	1.9	13.449	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1101	897	0.021	18	20	0.0	0.0	4.273	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	559	140	-	-	-	560	576	1.6	0.1	2.569	A
				2	18	5	-	-	-	19	20	0.1	0.0	1.851	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	436	109	991	1086	0.401	433	436	1.2	0.8	5.912	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	436	109	991	1086	0.401	436	446	1.2	0.8	6.583	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	436	109	-	-	-	436	435	0.0	0.0	0.067	A
				3	436	109	-	-	-	436	444	0.0	0.0	0.087	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	885	750	0.013	9	10	0.0	0.0	4.231	A
			2	1	461	115	974	831	0.556	463	472	2.0	1.1	9.513	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	461	115	-	-	-	461	468	0.5	0.1	0.871	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	10	0.0	0.0	1.114	A
3 - Broad Rushes	Entry	1	1	1	472	118	1108	943	0.500	476	484	1.9	1.1	9.239	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1094	931	0.017	16	17	0.0	0.0	4.103	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	471	118	-	-	-	472	481	0.1	0.1	0.235	A
				2	16	4	-	-	-	16	17	0.0	0.0	0.159	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	16.55	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.55	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1455	100.000
2 - Station Road (S)		ONE HOUR	✓	323	100.000
3 - Broad Rushes		ONE HOUR	✓	677	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	784	671
	2 - Station Road (S)	304	0	19
	3 - Broad Rushes	658	19	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	5	10
	2 - Station Road (S)	10	0	6
	3 - Broad Rushes	12	6	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.85	18.38	7.4	C	1337	2005
2 - Station Road (S)	0.49	9.97	1.2	A	302	453
3 - Broad Rushes	0.75	15.82	3.5	C	622	933

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1120	280	14	1890	0.592	1119	1107	731	0.0	2.3	7.666	A
2 - Station Road (S)	250	62	519	853	0.293	250	244	614	0.0	0.5	6.953	A
3 - Broad Rushes	511	128	235	1055	0.485	511	507	534	0.0	1.0	7.480	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1323	331	16	1865	0.710	1324	1321	880	2.3	3.1	9.940	A
2 - Station Road (S)	298	75	599	839	0.356	296	303	742	0.5	0.8	8.264	A
3 - Broad Rushes	616	154	277	1048	0.587	619	613	618	1.0	1.6	9.817	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1578	395	24	1846	0.855	1580	1578	1072	3.1	7.4	17.081	C
2 - Station Road (S)	363	91	735	764	0.475	360	360	868	0.8	1.2	9.701	A
3 - Broad Rushes	750	187	338	1015	0.739	757	752	757	1.6	3.3	15.556	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1589	397	21	1861	0.854	1611	1616	1049	7.4	7.3	18.383	C
2 - Station Road (S)	356	89	738	729	0.488	354	363	894	1.2	0.9	9.968	A
3 - Broad Rushes	741	185	331	994	0.746	739	749	761	3.3	3.5	15.815	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1320	330	18	1813	0.728	1309	1330	877	7.3	4.0	10.757	B
2 - Station Road (S)	296	74	598	830	0.356	296	302	729	0.9	0.5	8.196	A
3 - Broad Rushes	618	154	278	1032	0.599	617	625	615	3.5	1.7	10.799	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1091	273	15	1833	0.595	1091	1114	719	4.0	2.5	7.910	A
2 - Station Road (S)	249	62	501	860	0.290	247	252	605	0.5	0.5	7.291	A
3 - Broad Rushes	495	124	232	1047	0.473	502	520	516	1.7	0.9	8.516	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	601	1086	0.553	600	592	0.0	1.3	7.530	A
			2	1, 3	516	1086	0.475	519	515	0.0	0.7	7.113	A
		2	1	(1, 3, 2)	1120			1117	1115	0.0	0.3	0.312	A
	Exit	1	1		731			731	724	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	803	0.018	15	14	0.0	0.0	4.644	A
			2	1, 2	235	803	0.293	235	230	0.0	0.5	7.049	A
		2	1	(1, 3, 2)	250			250	246	0.0	0.0	0.048	A
	Exit	1	1		614			614	606	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	497	1024	0.485	497	493	0.0	1.0	7.476	A
			2	3, 2	14	1024	0.014	14	14	0.0	0.0	3.378	A
		2	1	(1, 3, 2)	511			511	511	0.0	0.0	0.123	A
	Exit	1	1		534			534	529	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	724	1086	0.667	725	717	1.3	1.8	9.323	A
			2	1, 3	600	1086	0.553	599	604	0.7	1.1	8.366	A
		2	1	(1, 3, 2)	1323			1324	1324	0.3	0.2	1.040	A
	Exit	1	1		880			880	879	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	19	776	0.024	19	19	0.0	0.0	5.199	A
			2	1, 2	279	776	0.360	277	284	0.5	0.7	8.336	A
		2	1	(1, 3, 2)	298			298	304	0.0	0.0	0.127	A
	Exit	1	1		742			742	734	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	602	1009	0.597	603	595	1.0	1.6	9.515	A
			2	3, 2	16	1009	0.016	16	17	0.0	0.0	3.847	A
		2	1	(1, 3, 2)	616			618	615	0.0	0.0	0.470	A
	Exit	1	1		618			618	623	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	842	1083	0.778	845	850	1.8	2.9	12.486	B
			2	1, 3	742	1083	0.685	735	727	1.1	2.8	10.984	B
		2	1	(1, 3, 2)	1578			1584	1589	0.2	1.7	5.271	A
	Exit	1	1		1072			1072	1069	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	22	731	0.029	21	21	0.0	0.0	5.867	A
			2	1, 2	342	731	0.467	338	340	0.7	1.1	9.558	A
		2	1	(1, 3, 2)	363			363	362	0.0	0.0	0.361	A
	Exit	1	1		868			868	873	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	729	987	0.738	733	729	1.6	2.9	13.172	B
			2	3, 2	24	987	0.024	24	23	0.0	0.0	3.718	A
		2	1	(1, 3, 2)	750			753	757	0.0	0.4	2.656	A
	Exit	1	1		757			757	748	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	868	1084	0.801	873	866	2.9	2.8	12.832	B
			2	1, 3	736	1084	0.679	738	751	2.8	2.4	10.716	B
		2	1	(1, 3, 2)	1589			1604	1614	1.7	2.1	6.502	A
	Exit	1	1		1049			1049	1070	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	22	730	0.030	22	21	0.0	0.0	5.656	A
			2	1, 2	334	730	0.457	331	342	1.1	0.9	9.842	A
		2	1	(1, 3, 2)	356			356	361	0.0	0.0	0.361	A
	Exit	1	1		894			894	886	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	720	990	0.727	718	728	2.9	2.9	13.438	B
			2	3, 2	21	990	0.022	21	21	0.0	0.0	4.173	A
		2	1	(1, 3, 2)	741			741	750	0.4	0.6	2.636	A
	Exit	1	1		761			761	771	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	717	1085	0.660	711	716	2.8	2.0	9.712	A
			2	1, 3	600	1085	0.553	598	615	2.4	1.4	8.480	A
		2	1	(1, 3, 2)	1320			1316	1324	2.1	0.5	1.626	A
	Exit	1	1		877			877	889	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	17	777	0.022	17	19	0.0	0.0	5.614	A
			2	1, 2	278	777	0.358	278	283	0.9	0.5	8.158	A
		2	1	(1, 3, 2)	296			296	301	0.0	0.0	0.221	A
	Exit	1	1		729			729	734	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	598	1009	0.593	599	606	2.9	1.6	10.231	B
			2	3, 2	18	1009	0.018	18	18	0.0	0.0	4.048	A
		2	1	(1, 3, 2)	618			616	619	0.6	0.1	0.807	A
	Exit	1	1		615			615	634	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	590	1086	0.544	590	599	2.0	1.4	7.930	A
			2	1, 3	502	1086	0.462	501	515	1.4	1.0	7.139	A
		2	1	(1, 3, 2)	1091			1092	1110	0.5	0.1	0.347	A
	Exit	1	1		719			719	744	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	809	0.019	16	15	0.0	0.0	4.936	A
			2	1, 2	234	809	0.289	232	238	0.5	0.5	7.317	A
		2	1	(1, 3, 2)	249			249	252	0.0	0.0	0.120	A
	Exit	1	1		605			605	614	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	480	1025	0.468	487	506	1.6	0.9	8.312	A
			2	3, 2	15	1025	0.014	15	14	0.0	0.0	3.728	A
		2	1	(1, 3, 2)	495			495	517	0.1	0.0	0.353	A
	Exit	1	1		516			516	529	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	601	150	991	1086	0.553	600	592	0.0	1.3	7.530	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	516	129	991	1086	0.475	519	515	0.0	0.7	7.113	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	603	151	-	-	-	601	597	0.0	0.2	0.322	A
				3	517	129	-	-	-	516	518	0.0	0.1	0.300	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	926	765	0.019	15	14	0.0	0.0	4.644	A
			2	1	235	59	974	803	0.293	235	230	0.0	0.5	7.049	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	235	59	-	-	-	235	232	0.0	0.0	0.048	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	14	0.0	0.0	0.061	A
3 - Broad Rushes	Entry	1	1	1	497	124	1108	1025	0.485	497	493	0.0	1.0	7.476	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	14	4	1021	942	0.015	14	14	0.0	0.0	3.378	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	497	124	-	-	-	497	497	0.0	0.0	0.124	A
				2	14	4	-	-	-	14	14	0.0	0.0	0.100	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	724	181	991	1086	0.667	725	717	1.3	1.8	9.323	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	600	150	991	1085	0.553	599	604	0.7	1.1	8.366	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	724	181	-	-	-	724	718	0.2	0.2	1.025	A
				3	599	150	-	-	-	600	606	0.1	0.1	1.059	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	965	770	0.025	19	19	0.0	0.0	5.199	A
			2	1	279	70	974	775	0.360	277	284	0.5	0.7	8.336	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	279	70	-	-	-	279	285	0.0	0.0	0.130	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	19	0.0	0.0	0.086	A
3 - Broad Rushes	Entry	1	1	1	602	151	1108	1009	0.596	603	595	1.0	1.6	9.515	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1087	987	0.016	16	17	0.0	0.0	3.847	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	600	150	-	-	-	602	598	0.0	0.0	0.478	A
				2	16	4	-	-	-	16	17	0.0	0.0	0.207	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	842	211	991	1083	0.778	845	850	1.8	2.9	12.486	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	742	185	991	1083	0.685	735	727	1.1	2.8	10.984	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	840	210	-	-	-	842	855	0.2	0.9	5.294	A
				3	739	185	-	-	-	742	734	0.1	0.9	5.243	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	965	727	0.030	21	21	0.0	0.0	5.867	A
			2	1	342	85	974	732	0.466	338	340	0.7	1.1	9.558	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	342	85	-	-	-	342	341	0.0	0.0	0.359	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	-	-	-	22	21	0.0	0.0	0.401	A
3 - Broad Rushes	Entry	1	1	1	729	182	1108	988	0.738	733	729	1.6	2.9	13.172	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1098	978	0.024	24	23	0.0	0.0	3.718	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	726	182	-	-	-	729	734	0.0	0.4	2.672	A
				2	23	6	-	-	-	24	23	0.0	0.0	2.170	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	868	217	991	1084	0.801	873	866	2.9	2.8	12.832	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	736	184	991	1084	0.679	738	751	2.8	2.4	10.716	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	862	215	-	-	-	868	865	0.9	1.2	6.613	A
				3	727	182	-	-	-	736	749	0.9	0.9	6.369	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	6	974	727	0.030	22	21	0.0	0.0	5.656	A
			2	1	334	83	974	731	0.457	331	342	1.1	0.9	9.842	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	334	83	-	-	-	334	341	0.0	0.0	0.369	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	6	-	-	-	22	21	0.0	0.0	0.231	A
3 - Broad Rushes	Entry	1	1	1	720	180	1108	990	0.727	718	728	2.9	2.9	13.438	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	1098	980	0.022	21	21	0.0	0.0	4.173	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	720	180	-	-	-	720	729	0.4	0.6	2.659	A
				2	21	5	-	-	-	21	21	0.0	0.0	1.876	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	717	179	991	1085	0.660	711	716	2.8	2.0	9.712	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	600	150	991	1085	0.553	598	615	2.4	1.4	8.480	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	719	180	-	-	-	717	713	1.2	0.3	1.662	A
				3	601	150	-	-	-	600	611	0.9	0.2	1.581	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	955	761	0.023	17	19	0.0	0.0	5.614	A
			2	1	278	70	974	778	0.358	278	283	0.9	0.5	8.158	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	278	70	-	-	-	278	282	0.0	0.0	0.228	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	19	0.0	0.0	0.122	A
3 - Broad Rushes	Entry	1	1	1	598	150	1108	1009	0.593	599	606	2.9	1.6	10.231	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	4	1098	996	0.018	18	18	0.0	0.0	4.048	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	600	150	-	-	-	598	601	0.6	0.1	0.814	A
				2	18	4	-	-	-	18	18	0.0	0.0	0.594	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	590	148	991	1086	0.544	590	599	2.0	1.4	7.930	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	502	125	991	1086	0.462	501	515	1.4	1.0	7.139	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	590	147	-	-	-	590	597	0.3	0.1	0.349	A
				3	501	125	-	-	-	502	513	0.2	0.0	0.345	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	965	797	0.020	16	15	0.0	0.0	4.936	A
			2	1	234	58	974	808	0.289	232	238	0.5	0.5	7.317	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	234	58	-	-	-	234	238	0.0	0.0	0.115	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	15	0.0	0.0	0.192	A
3 - Broad Rushes	Entry	1	1	1	480	120	1108	1025	0.468	487	506	1.6	0.9	8.312	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1076	998	0.015	15	14	0.0	0.0	3.728	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	481	120	-	-	-	480	504	0.1	0.0	0.357	A
				2	15	4	-	-	-	15	14	0.0	0.0	0.202	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	18.60	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.60	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1067	100.000
2 - Station Road (S)		ONE HOUR	✓	634	100.000
3 - Broad Rushes		ONE HOUR	✓	582	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	570	497
	2 - Station Road (S)	621	0	13
	3 - Broad Rushes	560	22	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	6
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	6	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.63	7.84	2.7	A	979	1468
2 - Station Road (S)	0.90	39.01	8.0	E	581	872
3 - Broad Rushes	0.73	16.11	3.3	C	532	799

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	799	200	15	1865	0.429	801	799	891	0.0	1.2	5.528	A
2 - Station Road (S)	484	121	374	851	0.568	484	479	443	0.0	1.4	9.825	A
3 - Broad Rushes	431	108	473	978	0.441	433	432	384	0.0	0.8	7.539	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	974	243	21	1870	0.521	977	978	1051	1.2	1.6	6.422	A
2 - Station Road (S)	561	140	456	873	0.642	560	575	542	1.4	2.4	13.483	B
3 - Broad Rushes	522	131	548	956	0.546	524	525	467	0.8	1.4	9.562	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1174	294	23	1850	0.635	1175	1171	1295	1.6	2.7	7.839	A
2 - Station Road (S)	695	174	549	800	0.869	691	691	648	2.4	6.3	27.958	D
3 - Broad Rushes	639	160	676	882	0.725	641	640	564	1.4	2.7	14.830	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1167	292	24	1843	0.633	1166	1174	1284	2.7	2.7	7.795	A
2 - Station Road (S)	700	175	554	778	0.900	693	702	637	6.3	8.0	39.009	E
3 - Broad Rushes	637	159	677	914	0.697	632	647	569	2.7	3.3	16.106	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	962	240	22	1878	0.512	963	967	1068	2.7	1.8	6.494	A
2 - Station Road (S)	576	144	448	814	0.708	569	596	538	8.0	2.5	19.405	C
3 - Broad Rushes	529	132	558	927	0.571	532	537	459	3.3	1.4	10.990	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	797	199	15	1862	0.428	795	808	884	1.8	1.4	5.650	A
2 - Station Road (S)	473	118	369	839	0.564	474	489	442	2.5	1.3	10.458	B
3 - Broad Rushes	436	109	465	972	0.448	435	447	377	1.4	1.0	7.838	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	428	1086	0.394	428	428	0.0	0.8	5.606	A
			2	1, 3	372	1086	0.342	374	370	0.0	0.5	5.403	A
		2	1	(1, 3, 2)	799			800	804	0.0	0.0	0.014	A
	Exit	1	1		891			891	887	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	851	0.012	10	9	0.0	0.0	3.921	A
			2	1, 2	474	851	0.557	473	470	0.0	1.3	9.192	A
		2	1	(1, 3, 2)	484			484	484	0.0	0.1	0.727	A
	Exit	1	1		443			443	444	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	416	939	0.443	417	416	0.0	0.8	7.616	A
			2	3, 2	15	939	0.016	15	16	0.0	0.0	3.864	A
		2	1	(1, 3, 2)	431			431	436	0.0	0.0	0.070	A
	Exit	1	1		384			384	379	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	519	1084	0.479	522	523	0.8	0.9	6.439	A
			2	1, 3	455	1084	0.420	456	456	0.5	0.8	6.236	A
		2	1	(1, 3, 2)	974			974	980	0.0	0.0	0.075	A
	Exit	1	1		1051			1051	1067	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	824	0.014	12	12	0.0	0.0	4.293	A
			2	1, 2	550	824	0.668	548	562	1.3	2.0	11.719	B
		2	1	(1, 3, 2)	561			562	577	0.1	0.4	1.896	A
	Exit	1	1		542			542	543	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	501	912	0.550	503	505	0.8	1.3	9.476	A
			2	3, 2	20	912	0.022	21	20	0.0	0.0	4.256	A
		2	1	(1, 3, 2)	522			522	528	0.0	0.1	0.279	A
	Exit	1	1		467			467	468	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	625	1083	0.577	625	625	0.9	1.3	7.997	A
			2	1, 3	552	1083	0.509	549	546	0.8	1.3	6.977	A
		2	1	(1, 3, 2)	1174			1176	1175	0.0	0.1	0.306	A
	Exit	1	1		1295			1295	1292	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	793	0.018	14	15	0.0	0.0	4.945	A
			2	1, 2	678	793	0.855	676	676	2.0	3.3	16.669	C
		2	1	(1, 3, 2)	695			692	696	0.4	3.0	11.441	B
	Exit	1	1		648			648	649	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	617	866	0.712	618	616	1.3	2.4	13.418	B
			2	3, 2	23	866	0.026	23	24	0.0	0.0	3.968	A
		2	1	(1, 3, 2)	639			639	644	0.1	0.3	1.754	A
	Exit	1	1		564			564	561	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	611	1083	0.565	613	620	1.3	1.4	7.787	A
			2	1, 3	556	1083	0.514	554	554	1.3	1.3	7.213	A
		2	1	(1, 3, 2)	1167			1168	1174	0.1	0.0	0.275	A
	Exit	1	1		1284			1284	1308	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	791	0.020	16	15	0.0	0.0	4.481	A
			2	1, 2	679	791	0.858	677	686	3.3	3.5	17.825	C
		2	1	(1, 3, 2)	700			695	703	3.0	4.4	21.458	C
	Exit	1	1		637			637	646	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	612	866	0.706	607	622	2.4	2.9	14.424	B
			2	3, 2	24	866	0.028	24	25	0.0	0.0	4.344	A
		2	1	(1, 3, 2)	637			636	649	0.3	0.4	2.108	A
	Exit	1	1		569			569	569	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	517	1083	0.477	515	516	1.4	0.9	6.541	A
			2	1, 3	445	1083	0.410	448	451	1.3	0.7	6.141	A
		2	1	(1, 3, 2)	962			961	963	0.0	0.1	0.133	A
	Exit	1	1		1068			1068	1101	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	826	0.013	11	11	0.0	0.0	4.147	A
			2	1, 2	563	826	0.681	558	585	3.5	2.0	13.388	B
		2	1	(1, 3, 2)	576			574	589	4.4	0.5	6.447	A
	Exit	1	1		538			538	537	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	506	909	0.557	509	516	2.9	1.3	10.690	B
			2	3, 2	22	909	0.024	22	21	0.0	0.0	4.417	A
		2	1	(1, 3, 2)	529			529	531	0.4	0.0	0.598	A
	Exit	1	1		459			459	461	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	428	1086	0.395	426	433	0.9	0.8	5.752	A
			2	1, 3	369	1086	0.339	369	375	0.7	0.5	5.437	A
		2	1	(1, 3, 2)	797			797	807	0.1	0.0	0.046	A
	Exit	1	1		884			884	909	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	853	0.010	9	10	0.0	0.0	4.201	A
			2	1, 2	464	853	0.544	465	479	2.0	1.2	9.814	A
		2	1	(1, 3, 2)	473			473	485	0.5	0.2	0.807	A
	Exit	1	1		442			442	450	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	420	942	0.446	419	430	1.3	1.0	7.865	A
			2	3, 2	15	942	0.016	15	17	0.0	0.0	3.993	A
		2	1	(1, 3, 2)	436			436	445	0.0	0.0	0.136	A
	Exit	1	1		377			377	385	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	428	107	991	1086	0.394	428	428	0.0	0.8	5.606	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	372	93	991	1086	0.342	374	370	0.0	0.5	5.403	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	428	107	-	-	-	428	431	0.0	0.0	0.015	A
				3	372	93	-	-	-	372	372	0.0	0.0	0.013	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	844	740	0.014	10	9	0.0	0.0	3.921	A
			2	1	474	119	974	851	0.557	473	470	0.0	1.3	9.192	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	473	118	-	-	-	474	475	0.0	0.1	0.723	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	-	-	-	10	9	0.0	0.0	0.934	A
3 - Broad Rushes	Entry	1	1	1	416	104	1108	939	0.443	417	416	0.0	0.8	7.616	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1101	933	0.016	15	16	0.0	0.0	3.864	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	416	104	-	-	-	416	420	0.0	0.0	0.072	A
				2	15	4	-	-	-	15	16	0.0	0.0	0.027	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	519	130	991	1084	0.479	522	523	0.8	0.9	6.439	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	455	114	991	1084	0.420	456	456	0.5	0.8	6.236	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	519	130	-	-	-	519	523	0.0	0.0	0.079	A
				3	455	114	-	-	-	455	457	0.0	0.0	0.071	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	929	787	0.015	12	12	0.0	0.0	4.293	A
			2	1	550	138	974	824	0.668	548	562	1.3	2.0	11.719	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	549	137	-	-	-	550	565	0.1	0.4	1.911	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	12	0.0	0.0	1.185	A
3 - Broad Rushes	Entry	1	1	1	501	125	1108	911	0.550	503	505	0.8	1.3	9.476	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1101	901	0.023	21	20	0.0	0.0	4.256	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	502	125	-	-	-	501	507	0.0	0.1	0.284	A
				2	20	5	-	-	-	20	20	0.0	0.0	0.170	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	625	156	991	1083	0.577	625	625	0.9	1.3	7.997	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	552	138	991	1083	0.509	549	546	0.8	1.3	6.977	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	624	156	-	-	-	625	627	0.0	0.1	0.308	A
				3	551	138	-	-	-	552	548	0.0	0.0	0.304	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	955	779	0.018	14	15	0.0	0.0	4.945	A
			2	1	678	169	974	793	0.855	676	676	2.0	3.3	16.669	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	681	170	-	-	-	678	681	0.4	3.0	11.489	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	14	15	0.0	0.1	9.297	A
3 - Broad Rushes	Entry	1	1	1	617	154	1108	867	0.712	618	616	1.3	2.4	13.418	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	23	6	1108	865	0.026	23	24	0.0	0.0	3.968	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	617	154	-	-	-	617	621	0.1	0.3	1.775	A
				2	22	6	-	-	-	23	24	0.0	0.0	1.236	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	611	153	991	1083	0.565	613	620	1.3	1.4	7.787	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	556	139	991	1083	0.514	554	554	1.3	1.3	7.213	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	611	153	-	-	-	611	620	0.1	0.0	0.296	A
				3	556	139	-	-	-	556	553	0.0	0.0	0.251	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	961	784	0.020	16	15	0.0	0.0	4.481	A
			2	1	679	170	974	791	0.858	677	686	3.3	3.5	17.825	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	684	171	-	-	-	679	687	3.0	4.3	21.503	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	16	15	0.1	0.1	19.446	C
3 - Broad Rushes	Entry	1	1	1	612	153	1108	866	0.706	607	622	2.4	2.9	14.424	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1101	858	0.029	24	25	0.0	0.0	4.344	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	612	153	-	-	-	612	624	0.3	0.4	2.125	A
				2	24	6	-	-	-	24	25	0.0	0.0	1.717	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	517	129	991	1083	0.477	515	516	1.4	0.9	6.541	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	445	111	991	1084	0.410	448	451	1.3	0.7	6.141	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	517	129	-	-	-	517	515	0.0	0.0	0.137	A
				3	445	111	-	-	-	445	448	0.0	0.1	0.130	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	896	758	0.014	11	11	0.0	0.0	4.147	A
			2	1	563	141	974	826	0.681	558	585	3.5	2.0	13.388	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	565	141	-	-	-	563	579	4.3	0.5	6.479	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.1	0.0	4.742	A
3 - Broad Rushes	Entry	1	1	1	506	127	1108	909	0.557	509	516	2.9	1.3	10.690	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	1108	906	0.024	22	21	0.0	0.0	4.417	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	507	127	-	-	-	506	510	0.4	0.0	0.598	A
				2	22	6	-	-	-	22	21	0.0	0.0	0.597	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	428	107	991	1086	0.395	426	433	0.9	0.8	5.752	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	369	92	991	1086	0.339	369	375	0.7	0.5	5.437	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	428	107	-	-	-	428	433	0.0	0.0	0.046	A
				3	369	92	-	-	-	369	374	0.1	0.0	0.046	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	896	781	0.011	9	10	0.0	0.0	4.201	A
			2	1	464	116	974	852	0.544	465	479	2.0	1.2	9.814	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	464	116	-	-	-	464	475	0.5	0.1	0.816	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	10	0.0	0.0	0.398	A
3 - Broad Rushes	Entry	1	1	1	420	105	1108	942	0.446	419	430	1.3	1.0	7.865	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1101	933	0.016	15	17	0.0	0.0	3.993	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	420	105	-	-	-	420	428	0.0	0.0	0.138	A
				2	15	4	-	-	-	15	17	0.0	0.0	0.095	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	55.08	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	55.08	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1429	100.000
2 - Station Road (S)		ONE HOUR	✓	544	100.000
3 - Broad Rushes		ONE HOUR	✓	867	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	776	653
	2 - Station Road (S)	521	0	23
	3 - Broad Rushes	850	17	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	5	10
	2 - Station Road (S)	6	0	5
	3 - Broad Rushes	10	6	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.87	19.85	8.4	C	1312	1968
2 - Station Road (S)	0.80	24.45	4.0	C	499	749
3 - Broad Rushes	1.07	132.26	39.0	F	797	1196

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1072	268	12	1870	0.573	1068	1069	1038	0.0	2.5	7.181	A
2 - Station Road (S)	417	104	489	831	0.502	417	412	591	0.0	1.2	9.063	A
3 - Broad Rushes	650	163	399	1004	0.648	651	644	507	0.0	2.2	11.809	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1281	320	15	1859	0.689	1284	1284	1236	2.5	3.3	9.628	A
2 - Station Road (S)	488	122	581	801	0.609	489	493	718	1.2	1.7	12.287	B
3 - Broad Rushes	775	194	468	950	0.815	783	772	602	2.2	4.9	22.559	C

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1583	396	19	1813	0.873	1586	1564	1455	3.3	8.4	17.788	C
2 - Station Road (S)	593	148	714	805	0.737	598	599	891	1.7	4.0	22.582	C
3 - Broad Rushes	958	240	573	900	1.065	901	892	739	4.9	25.0	68.393	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1572	393	17	1873	0.840	1576	1583	1456	8.4	8.3	19.849	C
2 - Station Road (S)	599	150	731	750	0.799	597	602	862	4.0	3.9	24.447	C
3 - Broad Rushes	957	239	573	894	1.071	901	899	755	25.0	39.0	132.258	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1292	323	17	1825	0.708	1290	1312	1303	8.3	3.5	10.726	B
2 - Station Road (S)	489	122	582	850	0.575	491	502	725	3.9	1.7	14.585	B
3 - Broad Rushes	779	195	470	948	0.822	850	882	603	39.0	14.1	102.107	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1070	268	12	1866	0.573	1069	1080	1048	3.5	2.4	7.701	A
2 - Station Road (S)	409	102	485	848	0.483	411	424	596	1.7	1.0	9.939	A
3 - Broad Rushes	663	166	394	986	0.672	667	705	503	14.1	2.9	26.409	D

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	583	1087	0.536	579	578	0.0	1.4	7.225	A
			2	1, 3	487	1087	0.448	489	491	0.0	0.9	6.687	A
		2	1	(1, 3, 2)	1072			1070	1078	0.0	0.2	0.192	A
	Exit	1	1		1038			1038	1025	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	18	813	0.022	18	18	0.0	0.0	4.863	A
			2	1, 2	399	813	0.491	399	394	0.0	1.1	8.795	A
		2	1	(1, 3, 2)	417			417	416	0.0	0.1	0.429	A
	Exit	1	1		591			591	591	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	639	966	0.661	639	631	0.0	1.9	10.900	B
			2	3, 2	12	966	0.012	12	13	0.0	0.0	3.835	A
		2	1	(1, 3, 2)	650			650	651	0.0	0.3	1.032	A
	Exit	1	1		507			507	509	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	703	1086	0.647	703	696	1.4	1.9	9.159	A
			2	1, 3	582	1086	0.536	581	587	0.9	1.3	8.110	A
		2	1	(1, 3, 2)	1281			1285	1287	0.2	0.1	0.935	A
	Exit	1	1		1236			1236	1229	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	782	0.027	21	21	0.0	0.0	4.969	A
			2	1, 2	467	782	0.597	468	471	1.1	1.5	11.288	B
		2	1	(1, 3, 2)	488			488	494	0.1	0.2	1.261	A
	Exit	1	1		718			718	711	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	768	941	0.816	768	757	1.9	3.6	16.453	C
			2	3, 2	15	941	0.016	15	15	0.0	0.0	3.876	A
		2	1	(1, 3, 2)	775			782	779	0.3	1.3	6.299	A
	Exit	1	1		602			602	609	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	872	1085	0.804	872	854	1.9	3.1	12.962	B
			2	1, 3	714	1085	0.658	714	710	1.3	2.1	10.262	B
		2	1	(1, 3, 2)	1583			1586	1572	0.1	3.2	5.985	A
	Exit	1	1		1455			1455	1447	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	24	738	0.033	25	25	0.0	0.0	5.282	A
			2	1, 2	569	738	0.771	573	573	1.5	2.5	15.712	C
		2	1	(1, 3, 2)	593			593	603	0.2	1.5	7.235	A
	Exit	1	1		891			891	872	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	883	903	0.978	882	874	3.6	6.6	24.412	C
			2	3, 2	19	903	0.021	19	18	0.0	0.0	4.339	A
		2	1	(1, 3, 2)	958			902	904	1.3	18.4	44.124	E
	Exit	1	1		739			739	735	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	849	1085	0.782	845	855	3.1	3.3	13.161	B
			2	1, 3	730	1085	0.673	731	728	2.1	2.3	10.776	B
		2	1	(1, 3, 2)	1572			1579	1584	3.2	2.7	7.761	A
	Exit	1	1		1456			1456	1459	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	25	733	0.034	25	25	0.0	0.1	5.278	A
			2	1, 2	574	733	0.783	573	577	2.5	2.6	16.448	C
		2	1	(1, 3, 2)	599			599	603	1.5	1.2	8.485	A
	Exit	1	1		862			862	872	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	884	903	0.979	883	882	6.6	6.8	26.977	D
			2	3, 2	17	903	0.019	17	17	0.0	0.0	4.409	A
		2	1	(1, 3, 2)	957			902	900	18.4	32.2	105.703	F
	Exit	1	1		755			755	752	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	708	1085	0.652	708	716	3.3	1.8	9.733	A
			2	1, 3	583	1085	0.537	582	596	2.3	1.4	8.583	A
		2	1	(1, 3, 2)	1292			1291	1302	2.7	0.3	1.556	A
	Exit	1	1		1303			1303	1345	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	782	0.027	21	22	0.1	0.0	5.214	A
			2	1, 2	469	782	0.600	470	480	2.6	1.5	12.524	B
		2	1	(1, 3, 2)	489			490	497	1.2	0.2	2.472	A
	Exit	1	1		725			725	734	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	831	940	0.883	833	865	6.8	4.7	23.271	C
			2	3, 2	16	940	0.018	17	17	0.0	0.0	4.026	A
		2	1	(1, 3, 2)	779			847	874	32.2	9.3	79.813	F
	Exit	1	1		603			603	617	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	586	1087	0.539	584	593	1.8	1.3	7.744	A
			2	1, 3	485	1087	0.447	485	488	1.4	1.0	6.873	A
		2	1	(1, 3, 2)	1070			1071	1077	0.3	0.1	0.350	A
	Exit	1	1		1048			1048	1098	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	17	814	0.021	17	18	0.0	0.0	4.997	A
			2	1, 2	392	814	0.482	394	406	1.5	1.0	9.498	A
		2	1	(1, 3, 2)	409			409	421	0.2	0.0	0.657	A
	Exit	1	1		596			596	605	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	657	967	0.679	654	692	4.7	2.3	14.698	B
			2	3, 2	12	967	0.013	12	13	0.0	0.0	4.006	A
		2	1	(1, 3, 2)	663			669	696	9.3	0.6	12.524	B
	Exit	1	1		503			503	506	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	583	146	991	1087	0.536	579	578	0.0	1.4	7.225	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	487	122	991	1087	0.448	489	491	0.0	0.9	6.687	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	584	146	-	-	-	583	584	0.0	0.1	0.201	A
				3	488	122	-	-	-	487	495	0.0	0.1	0.181	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	957	796	0.023	18	18	0.0	0.0	4.863	A
			2	1	399	100	974	813	0.491	399	394	0.0	1.1	8.795	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	399	100	-	-	-	399	398	0.0	0.1	0.440	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	18	0.0	0.0	0.180	A
3 - Broad Rushes	Entry	1	1	1	639	160	1108	966	0.661	639	631	0.0	1.9	10.900	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1039	907	0.013	12	13	0.0	0.0	3.835	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	639	160	-	-	-	639	639	0.0	0.3	1.035	A
				2	12	3	-	-	-	12	13	0.0	0.0	0.891	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	703	176	991	1086	0.647	703	696	1.4	1.9	9.159	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	582	145	991	1086	0.536	581	587	0.9	1.3	8.110	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	701	175	-	-	-	703	698	0.1	0.1	0.939	A
				3	580	145	-	-	-	582	589	0.1	0.1	0.930	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	966	774	0.027	21	21	0.0	0.0	4.969	A
			2	1	467	117	974	782	0.597	468	471	1.1	1.5	11.288	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	467	117	-	-	-	467	473	0.1	0.2	1.278	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	21	0.0	0.0	0.880	A
3 - Broad Rushes	Entry	1	1	1	768	192	1108	941	0.816	768	757	1.9	3.6	16.453	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1069	908	0.016	15	15	0.0	0.0	3.876	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	760	190	-	-	-	768	764	0.3	1.3	6.315	A
				2	15	4	-	-	-	15	15	0.0	0.0	5.509	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	872	218	991	1085	0.804	872	854	1.9	3.1	12.962	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	714	178	991	1084	0.658	714	710	1.3	2.1	10.262	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	869	217	-	-	-	872	859	0.1	1.7	6.071	A
				3	714	179	-	-	-	714	713	0.1	1.5	5.877	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	970	734	0.033	25	25	0.0	0.0	5.282	A
			2	1	569	142	974	738	0.771	573	573	1.5	2.5	15.712	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	569	142	-	-	-	569	577	0.2	1.4	7.319	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	-	-	-	24	25	0.0	0.0	5.345	A
3 - Broad Rushes	Entry	1	1	1	883	221	1108	903	0.978	882	874	3.6	6.6	24.412	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1089	887	0.022	19	18	0.0	0.0	4.339	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	938	235	-	-	-	883	886	1.3	18.0	44.194	E
				2	20	5	-	-	-	19	18	0.0	0.4	40.777	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignali level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	849	212	991	1085	0.782	845	855	3.1	3.3	13.161	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	730	183	991	1085	0.673	731	728	2.1	2.3	10.776	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	845	211	-	-	-	849	856	1.7	1.5	7.746	A
				3	727	182	-	-	-	730	728	1.5	1.2	7.781	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	25	6	970	732	0.034	25	25	0.0	0.1	5.278	A
			2	1	574	144	974	733	0.783	573	577	2.5	2.6	16.448	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	574	144	-	-	-	574	578	1.4	1.2	8.519	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	25	6	-	-	-	25	25	0.0	0.0	7.712	A
3 - Broad Rushes	Entry	1	1	1	884	221	1108	903	0.979	883	882	6.6	6.8	26.977	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1084	885	0.019	17	17	0.0	0.0	4.409	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	939	235	-	-	-	884	883	18.0	31.7	105.758	F
				2	18	5	-	-	-	17	17	0.4	0.6	102.912	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	708	177	991	1085	0.652	708	716	3.3	1.8	9.733	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	583	146	991	1085	0.537	582	596	2.3	1.4	8.583	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	708	177	-	-	-	708	710	1.5	0.2	1.567	A
				3	584	146	-	-	-	583	592	1.2	0.1	1.543	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	970	774	0.027	21	22	0.1	0.0	5.214	A
			2	1	469	117	974	782	0.600	470	480	2.6	1.5	12.524	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	468	117	-	-	-	469	476	1.2	0.2	2.480	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	21	0.0	0.0	2.276	A
3 - Broad Rushes	Entry	1	1	1	831	208	1108	940	0.883	833	865	6.8	4.7	23.271	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1099	932	0.018	17	17	0.0	0.0	4.026	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	764	191	-	-	-	831	857	31.7	9.1	79.889	F
				2	16	4	-	-	-	16	17	0.6	0.2	76.262	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	586	146	991	1087	0.539	584	593	1.8	1.3	7.744	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	485	121	991	1087	0.447	485	488	1.4	1.0	6.873	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	585	146	-	-	-	586	591	0.2	0.0	0.361	A
				3	485	121	-	-	-	485	486	0.1	0.0	0.335	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	939	784	0.022	17	18	0.0	0.0	4.997	A
			2	1	392	98	974	814	0.482	394	406	1.5	1.0	9.498	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	392	98	-	-	-	392	404	0.2	0.0	0.660	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	18	0.0	0.0	0.579	A
3 - Broad Rushes	Entry	1	1	1	657	164	1108	967	0.679	654	692	4.7	2.3	14.698	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1064	925	0.013	12	13	0.0	0.0	4.006	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	651	163	-	-	-	657	683	9.1	0.6	12.559	B
				2	12	3	-	-	-	12	13	0.2	0.0	10.731	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	57.49	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	57.49	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1270	100.000
2 - Station Road (S)		ONE HOUR	✓	735	100.000
3 - Broad Rushes		ONE HOUR	✓	739	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	699	571
	2 - Station Road (S)	721	0	14
	3 - Broad Rushes	710	29	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	6
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	5	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.77	12.23	4.7	B	1168	1751
2 - Station Road (S)	1.07	135.43	33.5	F	673	1009
3 - Broad Rushes	0.95	58.10	13.0	F	676	1014

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	953	238	21	1840	0.518	953	950	1074	0.0	1.8	6.462	A
2 - Station Road (S)	549	137	421	844	0.650	545	547	552	0.0	2.0	11.967	B
3 - Broad Rushes	558	140	535	934	0.597	560	558	431	0.0	1.5	9.943	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1147	287	23	1834	0.625	1148	1148	1284	1.8	2.3	7.710	A
2 - Station Road (S)	659	165	516	820	0.804	657	659	655	2.0	4.5	23.158	C
3 - Broad Rushes	664	166	643	924	0.719	664	665	529	1.5	3.0	15.117	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1393	348	32	1854	0.752	1394	1393	1507	2.3	4.4	11.066	B
2 - Station Road (S)	810	202	622	779	1.039	750	750	803	4.5	21.3	67.947	F
3 - Broad Rushes	817	204	736	868	0.942	803	792	637	3.0	10.9	38.851	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1407	352	32	1838	0.765	1412	1410	1538	4.4	4.7	12.226	B
2 - Station Road (S)	813	203	636	756	1.075	780	769	808	21.3	33.5	135.432	F
3 - Broad Rushes	806	202	766	852	0.946	805	814	650	10.9	13.0	58.101	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1144	286	26	1845	0.620	1140	1153	1353	4.7	2.6	8.100	A
2 - Station Road (S)	647	162	512	831	0.778	721	756	654	33.5	11.1	103.003	F
3 - Broad Rushes	659	165	708	885	0.745	671	699	525	13.0	4.0	33.332	D

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	962	240	25	1851	0.520	961	971	1078	2.6	1.7	6.399	A
2 - Station Road (S)	559	140	431	848	0.659	567	596	555	11.1	2.4	26.539	D
3 - Broad Rushes	550	138	556	935	0.589	547	569	442	4.0	1.9	12.199	B

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	530	1084	0.489	531	527	0.0	0.9	6.607	A
			2	1, 3	424	1084	0.391	421	424	0.0	0.8	5.952	A
		2	1	(1, 3, 2)	953			954	957	0.0	0.0	0.141	A
	Exit	1	1		1074			1074	1072	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	835	0.012	10	10	0.0	0.0	4.259	A
			2	1, 2	538	835	0.645	535	536	0.0	1.8	10.781	B
		2	1	(1, 3, 2)	549			548	554	0.0	0.2	1.292	A
	Exit	1	1		552			552	549	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	537	917	0.586	539	536	0.0	1.4	9.821	A
			2	3, 2	21	917	0.023	21	23	0.0	0.0	3.916	A
		2	1	(1, 3, 2)	558			558	564	0.0	0.1	0.363	A
	Exit	1	1		431			431	434	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	632	1083	0.584	632	634	0.9	1.4	7.844	A
			2	1, 3	515	1083	0.475	516	514	0.8	1.0	6.835	A
		2	1	(1, 3, 2)	1147			1147	1150	0.0	0.0	0.308	A
	Exit	1	1		1284			1284	1286	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	804	0.016	13	13	0.0	0.0	4.429	A
			2	1, 2	644	804	0.801	643	646	1.8	2.7	15.251	C
		2	1	(1, 3, 2)	659			657	663	0.2	1.7	8.046	A
	Exit	1	1		655			655	660	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	642	878	0.731	641	639	1.4	2.7	13.671	B
			2	3, 2	23	878	0.026	23	25	0.0	0.0	4.083	A
		2	1	(1, 3, 2)	664			665	670	0.1	0.4	1.792	A
	Exit	1	1		529			529	526	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	771	1080	0.714	771	767	1.4	2.3	10.209	B
			2	1, 3	621	1080	0.575	622	626	1.0	1.5	8.760	A
		2	1	(1, 3, 2)	1393			1393	1399	0.0	0.7	1.485	A
	Exit	1	1		1507			1507	1495	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	769	0.019	14	15	0.0	0.0	4.627	A
			2	1, 2	737	769	0.958	736	735	2.7	4.6	20.882	C
		2	1	(1, 3, 2)	810			751	758	1.7	16.7	47.173	E
	Exit	1	1		803			803	798	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	771	845	0.912	771	760	2.7	5.1	22.212	C
			2	3, 2	31	845	0.037	32	31	0.0	0.0	4.440	A
		2	1	(1, 3, 2)	817			802	802	0.4	5.8	17.194	C
	Exit	1	1		637			637	641	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	774	1080	0.716	776	780	2.3	2.2	10.808	B
			2	1, 3	633	1080	0.586	636	630	1.5	1.6	8.768	A
		2	1	(1, 3, 2)	1407			1407	1410	0.7	1.0	2.299	A
	Exit	1	1		1538			1538	1536	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	764	0.019	14	14	0.0	0.0	4.840	A
			2	1, 2	767	764	1.004	766	755	4.6	4.9	22.751	C
		2	1	(1, 3, 2)	813			782	770	16.7	28.6	113.088	F
	Exit	1	1		808			808	813	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	770	834	0.923	773	782	5.1	5.1	24.872	C
			2	3, 2	32	834	0.039	32	32	0.0	0.1	4.630	A
		2	1	(1, 3, 2)	806			802	814	5.8	7.8	34.009	D
	Exit	1	1		650			650	645	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	631	1082	0.583	628	636	2.2	1.6	8.129	A
			2	1, 3	512	1082	0.473	512	517	1.6	0.9	6.912	A
		2	1	(1, 3, 2)	1144			1144	1148	1.0	0.1	0.535	A
	Exit	1	1		1353			1353	1413	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	805	0.016	13	13	0.0	0.0	4.763	A
			2	1, 2	701	805	0.871	708	742	4.9	3.1	19.889	C
		2	1	(1, 3, 2)	647			714	749	28.6	8.0	83.780	F
	Exit	1	1		654			654	664	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	641	855	0.750	645	671	5.1	2.9	19.280	C
			2	3, 2	27	855	0.031	26	28	0.1	0.0	4.446	A
		2	1	(1, 3, 2)	659			668	690	7.8	1.1	15.091	C
	Exit	1	1		525			525	530	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	532	1083	0.492	530	535	1.6	1.1	6.667	A
			2	1, 3	430	1083	0.397	431	436	0.9	0.6	5.865	A
		2	1	(1, 3, 2)	962			962	968	0.1	0.0	0.087	A
	Exit	1	1		1078			1078	1131	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	832	0.013	11	11	0.0	0.0	4.502	A
			2	1, 2	556	832	0.669	556	585	3.1	1.9	13.264	B
		2	1	(1, 3, 2)	559			567	591	8.0	0.5	13.859	B
	Exit	1	1		555			555	557	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	525	909	0.578	522	546	2.9	1.8	11.414	B
			2	3, 2	24	909	0.027	25	23	0.0	0.0	4.103	A
		2	1	(1, 3, 2)	550			550	564	1.1	0.1	1.226	A
	Exit	1	1		442			442	447	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	530	133	991	1084	0.489	531	527	0.0	0.9	6.607	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	424	106	991	1084	0.391	421	424	0.0	0.8	5.952	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	530	132	-	-	-	530	530	0.0	0.0	0.148	A
				3	423	106	-	-	-	424	427	0.0	0.0	0.132	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	906	777	0.013	10	10	0.0	0.0	4.259	A
			2	1	538	135	974	835	0.644	535	536	0.0	1.8	10.781	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	539	135	-	-	-	538	544	0.0	0.2	1.302	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	-	-	-	10	11	0.0	0.0	0.795	A
3 - Broad Rushes	Entry	1	1	1	537	134	1108	916	0.587	539	536	0.0	1.4	9.821	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	1103	911	0.023	21	23	0.0	0.0	3.916	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	537	134	-	-	-	537	541	0.0	0.1	0.367	A
				2	21	5	-	-	-	21	23	0.0	0.0	0.279	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	991	1083	0.584	632	634	0.9	1.4	7.844	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	515	129	991	1083	0.475	516	514	0.8	1.0	6.835	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	-	-	-	632	636	0.0	0.0	0.308	A
				3	515	129	-	-	-	515	514	0.0	0.0	0.307	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	938	778	0.017	13	13	0.0	0.0	4.429	A
			2	1	644	161	974	804	0.801	643	646	1.8	2.7	15.251	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	646	161	-	-	-	644	650	0.2	1.7	8.061	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	13	13	0.0	0.0	7.326	A
3 - Broad Rushes	Entry	1	1	1	642	160	1108	879	0.730	641	639	1.4	2.7	13.671	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	23	6	1108	880	0.026	23	25	0.0	0.0	4.083	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	641	160	-	-	-	642	645	0.1	0.4	1.811	A
				2	23	6	-	-	-	23	25	0.0	0.0	1.337	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	771	193	991	1080	0.714	771	767	1.4	2.3	10.209	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	621	155	991	1080	0.575	622	626	1.0	1.5	8.760	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	772	193	-	-	-	771	770	0.0	0.4	1.522	A
				3	621	155	-	-	-	621	628	0.0	0.3	1.437	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	933	736	0.020	14	15	0.0	0.0	4.627	A
			2	1	737	184	974	769	0.958	736	735	2.7	4.6	20.882	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	793	198	-	-	-	737	742	1.7	16.3	47.232	E
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	15	15	0.0	0.4	44.414	E
3 - Broad Rushes	Entry	1	1	1	771	193	1108	845	0.912	771	760	2.7	5.1	22.212	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1108	846	0.037	32	31	0.0	0.0	4.440	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	785	196	-	-	-	771	770	0.4	5.5	17.188	C
				2	32	8	-	-	-	31	31	0.0	0.3	17.332	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignali level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	774	194	991	1080	0.716	776	780	2.3	2.2	10.808	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	633	158	991	1080	0.586	636	630	1.5	1.6	8.768	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	775	194	-	-	-	774	780	0.4	0.6	2.296	A
				3	632	158	-	-	-	633	630	0.3	0.4	2.302	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	956	752	0.019	14	14	0.0	0.0	4.840	A
			2	1	767	192	974	764	1.004	766	755	4.6	4.9	22.751	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	798	199	-	-	-	767	756	16.3	28.1	113.097	F
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	14	0.4	0.5	112.635	F
3 - Broad Rushes	Entry	1	1	1	770	192	1108	835	0.923	773	782	5.1	5.1	24.872	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	32	8	1108	837	0.039	32	32	0.0	0.1	4.630	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	773	193	-	-	-	770	781	5.5	7.5	34.002	D
				2	33	8	-	-	-	32	32	0.3	0.3	34.185	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	631	158	991	1082	0.583	628	636	2.2	1.6	8.129	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	512	128	991	1082	0.473	512	517	1.6	0.9	6.912	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	-	-	-	631	634	0.6	0.0	0.548	A
				3	513	128	-	-	-	512	514	0.4	0.0	0.519	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	947	784	0.017	13	13	0.0	0.0	4.763	A
			2	1	701	175	974	805	0.871	708	742	4.9	3.1	19.889	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	636	159	-	-	-	701	735	28.1	7.9	83.776	F
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	13	13	0.5	0.1	84.048	F
3 - Broad Rushes	Entry	1	1	1	641	160	1108	855	0.750	645	671	5.1	2.9	19.280	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	1108	846	0.031	26	28	0.1	0.0	4.446	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	633	158	-	-	-	641	662	7.5	1.1	15.150	C
				2	26	7	-	-	-	27	28	0.3	0.0	13.736	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	532	133	991	1083	0.492	530	535	1.6	1.1	6.667	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	430	107	991	1083	0.397	431	436	0.9	0.6	5.865	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	532	133	-	-	-	532	532	0.0	0.0	0.093	A
				3	430	107	-	-	-	430	435	0.0	0.0	0.081	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	888	756	0.014	11	11	0.0	0.0	4.502	A
			2	1	556	139	974	832	0.669	556	585	3.1	1.9	13.264	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	548	137	-	-	-	556	580	7.9	0.5	13.842	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.1	0.0	14.712	B
3 - Broad Rushes	Entry	1	1	1	525	131	1108	909	0.578	522	546	2.9	1.8	11.414	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1103	903	0.027	25	23	0.0	0.0	4.103	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	526	131	-	-	-	525	542	1.1	0.1	1.238	A
				2	24	6	-	-	-	24	23	0.0	0.0	0.950	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	70.61	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	70.61	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1453	100.000
2 - Station Road (S)		ONE HOUR	✓	597	100.000
3 - Broad Rushes		ONE HOUR	✓	878	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	779	674
	2 - Station Road (S)	573	0	24
	3 - Broad Rushes	862	16	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From	To			
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
	1 - Station Road (N)	0	5	10
	2 - Station Road (S)	5	0	4
	3 - Broad Rushes	10	7	0

Cyclist %

From	To			
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.87	21.15	9.7	C	1330	1995
2 - Station Road (S)	0.87	42.26	7.6	E	547	820
3 - Broad Rushes	1.08	171.50	51.7	F	806	1209

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1087	272	12	1834	0.593	1085	1082	1071	0.0	2.3	7.439	A
2 - Station Road (S)	445	111	508	852	0.522	442	444	589	0.0	1.4	9.875	A
3 - Broad Rushes	660	165	423	971	0.680	660	652	527	0.0	2.3	12.720	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1293	323	13	1850	0.699	1290	1300	1289	2.3	3.8	10.091	B
2 - Station Road (S)	533	133	600	809	0.660	535	540	703	1.4	2.0	14.534	B
3 - Broad Rushes	793	198	512	933	0.850	790	784	623	2.3	6.3	25.570	D

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1600	400	17	1836	0.871	1601	1588	1502	3.8	9.1	18.894	C
2 - Station Road (S)	656	164	745	756	0.867	651	646	872	2.0	6.7	30.151	D
3 - Broad Rushes	968	242	625	917	1.056	893	880	771	6.3	29.6	81.107	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1603	401	16	1851	0.866	1600	1606	1519	9.1	9.7	21.147	C
2 - Station Road (S)	658	165	748	777	0.847	661	664	868	6.7	7.6	42.258	E
3 - Broad Rushes	979	245	635	910	1.075	901	893	775	29.6	51.7	171.497	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1304	326	15	1833	0.711	1306	1340	1369	9.7	3.7	11.779	B
2 - Station Road (S)	538	135	607	803	0.670	538	562	715	7.6	2.2	21.093	C
3 - Broad Rushes	780	195	514	948	0.823	869	888	630	51.7	27.3	160.717	F

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1094	274	12	1890	0.579	1099	1110	1122	3.7	2.2	7.809	A
2 - Station Road (S)	449	112	510	820	0.547	450	462	601	2.2	1.3	11.095	B
3 - Broad Rushes	655	164	431	978	0.669	703	759	529	27.3	4.6	53.275	F

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	579	1087	0.533	577	580	0.0	1.2	7.480	A
			2	1, 3	507	1087	0.467	508	502	0.0	1.0	6.852	A
		2	1	(1, 3, 2)	1087			1087	1090	0.0	0.1	0.239	A
	Exit	1	1		1071			1071	1066	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	20	807	0.024	20	18	0.0	0.0	4.803	A
			2	1, 2	424	807	0.526	423	426	0.0	1.2	9.464	A
		2	1	(1, 3, 2)	445			444	449	0.0	0.1	0.590	A
	Exit	1	1		589			589	592	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	649	957	0.678	648	640	0.0	2.2	11.626	B
			2	3, 2	12	957	0.013	12	12	0.0	0.0	4.049	A
		2	1	(1, 3, 2)	660			661	661	0.0	0.1	1.225	A
	Exit	1	1		527			527	521	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	690	1087	0.635	690	694	1.2	1.8	9.216	A
			2	1, 3	602	1087	0.554	600	606	1.0	1.6	8.457	A
		2	1	(1, 3, 2)	1293			1292	1304	0.1	0.5	1.209	A
	Exit	1	1		1289			1289	1288	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	23	776	0.030	23	22	0.0	0.1	4.973	A
			2	1, 2	511	776	0.659	512	518	1.2	1.7	12.590	B
		2	1	(1, 3, 2)	533			535	542	0.1	0.3	2.246	A
	Exit	1	1		703			703	708	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	775	925	0.838	777	769	2.2	3.9	17.579	C
			2	3, 2	13	925	0.014	13	14	0.0	0.0	4.090	A
		2	1	(1, 3, 2)	793			788	790	0.1	2.4	8.131	A
	Exit	1	1		623			623	628	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	856	1085	0.789	856	852	1.8	3.2	12.921	B
			2	1, 3	744	1085	0.686	745	736	1.6	2.4	10.913	B
		2	1	(1, 3, 2)	1600			1600	1597	0.5	3.6	6.852	A
	Exit	1	1		1502			1502	1483	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	25	728	0.035	26	27	0.1	0.0	5.323	A
			2	1, 2	626	728	0.859	625	619	1.7	3.5	17.882	C
		2	1	(1, 3, 2)	656			651	653	0.3	3.2	12.643	B
	Exit	1	1		872			872	868	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	878	885	0.993	877	864	3.9	6.6	25.394	D
			2	3, 2	17	885	0.019	17	16	0.0	0.0	4.352	A
		2	1	(1, 3, 2)	968			895	891	2.4	23.0	55.833	F
	Exit	1	1		771			771	763	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	856	1085	0.789	851	859	3.2	3.4	13.278	B
			2	1, 3	747	1085	0.688	748	746	2.4	2.4	11.189	B
		2	1	(1, 3, 2)	1603			1603	1606	3.6	3.9	8.811	A
	Exit	1	1		1519			1519	1514	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	26	727	0.036	26	27	0.0	0.0	5.343	A
			2	1, 2	633	727	0.871	635	637	3.5	3.5	19.837	C
		2	1	(1, 3, 2)	658			659	664	3.2	4.1	23.014	C
	Exit	1	1		868			868	875	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	885	881	1.004	884	877	6.6	6.9	27.895	D
			2	3, 2	16	881	0.019	16	16	0.0	0.0	4.631	A
		2	1	(1, 3, 2)	979			901	894	23.0	44.7	143.959	F
	Exit	1	1		775			775	773	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	699	1086	0.644	699	718	3.4	1.9	10.068	B
			2	1, 3	606	1086	0.558	607	622	2.4	1.4	8.642	A
		2	1	(1, 3, 2)	1304			1305	1330	3.9	0.4	2.431	A
	Exit	1	1		1369			1369	1412	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	23	774	0.030	23	23	0.0	0.0	5.021	A
			2	1, 2	516	774	0.666	514	539	3.5	1.8	14.426	B
		2	1	(1, 3, 2)	538			539	555	4.1	0.4	7.337	A
	Exit	1	1		715			715	733	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	847	924	0.916	854	873	6.9	5.5	25.834	D
			2	3, 2	15	924	0.017	15	15	0.0	0.0	4.402	A
		2	1	(1, 3, 2)	780			862	883	44.7	21.7	135.716	F
	Exit	1	1		630			630	644	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	587	1087	0.540	589	596	1.9	1.1	7.730	A
			2	1, 3	509	1087	0.468	510	514	1.4	1.0	6.987	A
		2	1	(1, 3, 2)	1094			1096	1106	0.4	0.0	0.424	A
	Exit	1	1		1122			1122	1189	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	18	806	0.023	18	18	0.0	0.0	4.847	A
			2	1, 2	431	806	0.535	431	444	1.8	1.1	10.328	B
		2	1	(1, 3, 2)	449			449	460	0.4	0.1	1.026	A
	Exit	1	1		601			601	609	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	683	954	0.716	691	745	5.5	2.5	17.726	C
			2	3, 2	12	954	0.013	12	13	0.0	0.0	4.081	A
		2	1	(1, 3, 2)	655			695	747	21.7	2.1	36.822	E
	Exit	1	1		529			529	533	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	579	145	991	1087	0.533	577	580	0.0	1.2	7.480	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	507	127	991	1087	0.467	508	502	0.0	1.0	6.852	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	579	145	-	-	-	579	584	0.0	0.1	0.246	A
				3	507	127	-	-	-	507	506	0.0	0.0	0.232	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	953	789	0.025	20	18	0.0	0.0	4.803	A
			2	1	424	106	974	806	0.526	423	426	0.0	1.2	9.464	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	425	106	-	-	-	424	431	0.0	0.1	0.601	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	19	0.0	0.0	0.340	A
3 - Broad Rushes	Entry	1	1	1	649	162	1108	957	0.678	648	640	0.0	2.2	11.626	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1025	883	0.014	12	12	0.0	0.0	4.049	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	648	162	-	-	-	649	649	0.0	0.1	1.232	A
				2	12	3	-	-	-	12	12	0.0	0.0	0.848	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
			1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	690	173	991	1087	0.635	690	694	1.2	1.8	9.216	A
1 - Station Road (N)	Entry	1	2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	602	150	991	1087	0.554	600	606	1.0	1.6	8.457	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	691	173	-	-	-	690	696	0.1	0.2	1.199	A
				3	603	151	-	-	-	602	609	0.0	0.2	1.221	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	966	768	0.031	23	22	0.0	0.1	4.973	A
			2	1	511	128	974	776	0.659	512	518	1.2	1.7	12.590	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	510	128	-	-	-	511	520	0.1	0.3	2.279	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	-	-	-	23	22	0.0	0.0	1.490	A
3 - Broad Rushes	Entry	1	1	1	775	194	1108	925	0.838	777	769	2.2	3.9	17.579	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1057	882	0.015	13	14	0.0	0.0	4.090	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	780	195	-	-	-	775	776	0.1	2.4	8.155	A
				2	13	3	-	-	-	13	14	0.0	0.0	6.870	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	856	214	991	1085	0.789	856	852	1.8	3.2	12.921	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	744	186	991	1085	0.686	745	736	1.6	2.4	10.913	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	857	214	-	-	-	856	858	0.2	2.0	6.829	A
				3	743	186	-	-	-	744	740	0.2	1.6	6.880	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	25	6	974	730	0.035	26	27	0.1	0.0	5.323	A
			2	1	626	156	974	728	0.859	625	619	1.7	3.5	17.882	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	630	157	-	-	-	626	626	0.3	3.1	12.694	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	-	-	-	25	27	0.0	0.1	11.478	B
3 - Broad Rushes	Entry	1	1	1	878	220	1108	885	0.993	877	864	3.9	6.6	25.394	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1086	869	0.020	17	16	0.0	0.0	4.352	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	949	237	-	-	-	878	875	2.4	22.5	55.862	F
				2	19	5	-	-	-	17	16	0.0	0.4	54.345	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignali level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	856	214	991	1085	0.789	851	859	3.2	3.4	13.278	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	747	187	991	1085	0.688	748	746	2.4	2.4	11.189	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	856	214	-	-	-	856	860	2.0	2.1	8.799	A
				3	746	187	-	-	-	747	746	1.6	1.8	8.825	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	972	725	0.036	26	27	0.0	0.0	5.343	A
			2	1	633	158	974	727	0.871	635	637	3.5	3.5	19.837	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	632	158	-	-	-	633	637	3.1	3.9	23.135	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	-	-	-	26	27	0.1	0.2	20.193	C
3 - Broad Rushes	Entry	1	1	1	885	221	1108	881	1.004	884	877	6.6	6.9	27.895	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1071	851	0.019	16	16	0.0	0.0	4.631	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	961	240	-	-	-	885	878	22.5	43.9	143.938	F
				2	17	4	-	-	-	16	16	0.4	0.8	145.069	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignali level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	699	175	991	1086	0.644	699	718	3.4	1.9	10.068	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	606	152	991	1086	0.558	607	622	2.4	1.4	8.642	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	698	175	-	-	-	699	712	2.1	0.2	2.468	A
				3	606	151	-	-	-	606	618	1.8	0.2	2.386	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	970	769	0.030	23	23	0.0	0.0	5.021	A
			2	1	516	129	974	774	0.667	514	539	3.5	1.8	14.426	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	515	129	-	-	-	516	532	3.9	0.3	7.371	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	-	-	-	23	23	0.2	0.0	6.547	A
3 - Broad Rushes	Entry	1	1	1	847	212	1108	924	0.916	854	873	6.9	5.5	25.834	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1081	897	0.017	15	15	0.0	0.0	4.402	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	766	191	-	-	-	847	867	43.9	21.4	135.787	F
				2	14	4	-	-	-	15	15	0.8	0.4	131.804	F
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	587	147	991	1087	0.540	589	596	1.9	1.1	7.730	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	509	127	991	1087	0.468	510	514	1.4	1.0	6.987	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	586	147	-	-	-	587	593	0.2	0.0	0.422	A
				3	508	127	-	-	-	509	513	0.2	0.0	0.426	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	963	794	0.023	18	18	0.0	0.0	4.847	A
			2	1	431	108	974	806	0.534	431	444	1.8	1.1	10.328	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	430	108	-	-	-	431	441	0.3	0.1	1.044	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	18	0.0	0.0	0.592	A
3 - Broad Rushes	Entry	1	1	1	683	171	1108	954	0.716	691	745	5.5	2.5	17.726	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1059	909	0.013	12	13	0.0	0.0	4.081	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	644	161	-	-	-	683	733	21.4	2.0	36.776	E
				2	11	3	-	-	-	12	13	0.4	0.0	39.331	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	64.77	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	64.77	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1302	100.000
2 - Station Road (S)		ONE HOUR	✓	752	100.000
3 - Broad Rushes		ONE HOUR	✓	750	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	724	578
	2 - Station Road (S)	738	0	14
	3 - Broad Rushes	721	29	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	5
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	5	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.81	12.72	5.2	B	1196	1794
2 - Station Road (S)	1.07	157.53	40.9	F	689	1034
3 - Broad Rushes	0.95	62.36	14.7	F	687	1031

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	984	246	23	1850	0.532	982	983	1107	0.0	1.9	6.306	A
2 - Station Road (S)	575	144	433	829	0.693	571	560	572	0.0	2.3	12.708	B
3 - Broad Rushes	569	142	561	978	0.581	568	561	443	0.0	1.5	9.904	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1169	292	27	1820	0.643	1172	1180	1303	1.9	2.7	8.063	A
2 - Station Road (S)	669	167	529	822	0.813	680	670	670	2.3	4.9	26.414	D
3 - Broad Rushes	669	167	667	918	0.729	663	669	542	1.5	3.2	15.996	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1419	355	31	1858	0.764	1424	1425	1530	2.7	5.1	12.331	B
2 - Station Road (S)	820	205	644	770	1.065	774	761	811	4.9	23.1	76.741	F
3 - Broad Rushes	826	207	759	871	0.949	801	799	659	3.2	12.1	39.325	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1448	362	32	1787	0.810	1444	1439	1549	5.1	5.2	12.719	B
2 - Station Road (S)	827	207	639	778	1.063	771	766	837	23.1	40.9	157.532	F
3 - Broad Rushes	824	206	755	887	0.930	825	821	655	12.1	14.7	62.356	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1174	294	27	1875	0.626	1181	1191	1403	5.2	2.4	8.304	A
2 - Station Road (S)	684	171	521	819	0.836	758	770	686	40.9	19.5	136.871	F
3 - Broad Rushes	679	170	744	883	0.769	687	716	536	14.7	4.3	34.449	D

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	983	246	20	1881	0.523	981	986	1115	2.4	2.0	6.516	A
2 - Station Road (S)	560	140	433	844	0.663	591	637	568	19.5	2.8	42.772	E
3 - Broad Rushes	557	139	579	929	0.600	555	578	445	4.3	1.7	13.688	B

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	551	1083	0.508	549	550	0.0	1.1	6.641	A
			2	1, 3	433	1083	0.400	433	433	0.0	0.7	5.706	A
		2	1	(1, 3, 2)	984			984	990	0.0	0.0	0.070	A
	Exit	1	1		1107			1107	1089	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	831	0.013	10	11	0.0	0.0	4.292	A
			2	1, 2	561	831	0.675	561	550	0.0	1.9	11.063	B
		2	1	(1, 3, 2)	575			572	568	0.0	0.4	1.757	A
	Exit	1	1		572			572	571	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	546	908	0.601	545	540	0.0	1.4	9.825	A
			2	3, 2	23	908	0.026	23	21	0.0	0.1	3.895	A
		2	1	(1, 3, 2)	569			569	567	0.0	0.0	0.310	A
	Exit	1	1		443			443	444	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	644	1082	0.595	643	653	1.1	1.6	8.352	A
			2	1, 3	527	1082	0.487	529	526	0.7	1.0	6.794	A
		2	1	(1, 3, 2)	1169			1171	1183	0.0	0.0	0.394	A
	Exit	1	1		1303			1303	1302	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	799	0.016	13	12	0.0	0.0	4.442	A
			2	1, 2	664	799	0.830	667	659	1.9	2.8	15.871	C
		2	1	(1, 3, 2)	669			677	674	0.4	2.0	10.667	B
	Exit	1	1		670			670	679	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	641	870	0.737	636	643	1.4	2.7	14.149	B
			2	3, 2	27	870	0.031	27	26	0.1	0.0	4.188	A
		2	1	(1, 3, 2)	669			668	674	0.0	0.5	2.215	A
	Exit	1	1		542			542	538	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	780	1081	0.721	780	790	1.6	2.4	11.283	B
			2	1, 3	645	1081	0.597	644	634	1.0	1.7	8.570	A
		2	1	(1, 3, 2)	1419			1424	1430	0.0	1.0	2.229	A
	Exit	1	1		1530			1530	1516	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	762	0.019	15	14	0.0	0.0	4.551	A
			2	1, 2	761	762	0.999	759	747	2.8	4.7	21.385	C
		2	1	(1, 3, 2)	820			775	769	2.0	18.4	55.530	F
	Exit	1	1		811			811	821	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	776	837	0.928	771	768	2.7	5.5	22.215	C
			2	3, 2	31	837	0.037	31	31	0.0	0.0	4.343	A
		2	1	(1, 3, 2)	826			807	811	0.5	6.5	17.606	C
	Exit	1	1		659			659	648	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	806	1080	0.746	805	799	2.4	2.5	11.457	B
			2	1, 3	637	1080	0.589	639	640	1.7	1.4	8.511	A
		2	1	(1, 3, 2)	1448			1443	1438	1.0	1.3	2.536	A
	Exit	1	1		1549			1549	1540	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	763	0.021	16	15	0.0	0.0	4.565	A
			2	1, 2	756	763	0.990	755	752	4.7	4.9	23.167	C
		2	1	(1, 3, 2)	827			772	767	18.4	36.0	134.731	F
	Exit	1	1		837			837	831	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	795	838	0.949	794	789	5.5	5.6	25.065	D
			2	3, 2	32	838	0.038	32	32	0.0	0.0	4.687	A
		2	1	(1, 3, 2)	824			827	821	6.5	9.0	38.078	E
	Exit	1	1		655			655	655	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	655	1082	0.605	660	662	2.5	1.3	8.389	A
			2	1, 3	520	1082	0.480	521	529	1.4	1.0	7.002	A
		2	1	(1, 3, 2)	1174			1174	1185	1.3	0.1	0.555	A
	Exit	1	1		1403			1403	1444	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	802	0.018	15	14	0.0	0.0	4.801	A
			2	1, 2	739	802	0.922	744	756	4.9	3.9	20.925	C
		2	1	(1, 3, 2)	684			754	766	36.0	15.7	116.676	F
	Exit	1	1		686			686	690	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	661	842	0.785	660	688	5.6	3.3	19.709	C
			2	3, 2	27	842	0.032	27	28	0.0	0.0	4.487	A
		2	1	(1, 3, 2)	679			688	707	9.0	1.0	15.798	C
	Exit	1	1		536			536	543	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	550	1084	0.507	548	551	1.3	1.2	6.783	A
			2	1, 3	433	1084	0.399	433	435	1.0	0.8	5.925	A
		2	1	(1, 3, 2)	983			982	984	0.1	0.0	0.111	A
	Exit	1	1		1115			1115	1180	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	831	0.014	12	12	0.0	0.0	4.785	A
			2	1, 2	574	831	0.691	579	625	3.9	2.0	15.376	C
		2	1	(1, 3, 2)	560			586	629	15.7	0.8	28.015	D
	Exit	1	1		568			568	573	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	537	901	0.596	536	556	3.3	1.6	12.203	B
			2	3, 2	20	901	0.022	20	22	0.0	0.0	4.405	A
		2	1	(1, 3, 2)	557			557	571	1.0	0.0	1.956	A
	Exit	1	1		445			445	447	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	551	138	991	1083	0.508	549	550	0.0	1.1	6.641	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	433	108	991	1084	0.400	433	433	0.0	0.7	5.706	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	551	138	-	-	-	551	554	0.0	0.0	0.073	A
				3	433	108	-	-	-	433	436	0.0	0.0	0.066	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	911	777	0.014	10	11	0.0	0.0	4.292	A
			2	1	561	140	974	831	0.675	561	550	0.0	1.9	11.063	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	564	141	-	-	-	561	557	0.0	0.4	1.766	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	1.329	A
3 - Broad Rushes	Entry	1	1	1	546	136	1108	908	0.601	545	540	0.0	1.4	9.825	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	23	6	1108	910	0.026	23	21	0.0	0.1	3.895	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	546	136	-	-	-	546	545	0.0	0.0	0.314	A
				2	23	6	-	-	-	23	21	0.0	0.0	0.220	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	644	161	991	1082	0.595	643	653	1.1	1.6	8.352	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	527	132	991	1082	0.487	529	526	0.7	1.0	6.794	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	643	161	-	-	-	644	655	0.0	0.0	0.399	A
				3	527	132	-	-	-	527	528	0.0	0.0	0.387	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	911	748	0.018	13	12	0.0	0.0	4.442	A
			2	1	664	166	974	799	0.830	667	659	1.9	2.8	15.871	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	656	164	-	-	-	664	662	0.4	2.0	10.689	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	13	12	0.0	0.0	9.456	A
3 - Broad Rushes	Entry	1	1	1	641	160	1108	870	0.737	636	643	1.4	2.7	14.149	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	1108	870	0.031	27	26	0.1	0.0	4.188	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	642	160	-	-	-	641	648	0.0	0.5	2.250	A
				2	27	7	-	-	-	27	26	0.0	0.0	1.388	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	780	195	991	1081	0.721	780	790	1.6	2.4	11.283	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	645	161	991	1081	0.597	644	634	1.0	1.7	8.570	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	777	194	-	-	-	780	793	0.0	0.6	2.266	A
				3	643	161	-	-	-	645	637	0.0	0.4	2.182	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	948	745	0.020	15	14	0.0	0.0	4.551	A
			2	1	761	190	974	761	0.999	759	747	2.8	4.7	21.385	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	805	201	-	-	-	761	755	2.0	18.1	55.585	F
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	14	0.0	0.3	52.550	F
3 - Broad Rushes	Entry	1	1	1	776	194	1108	837	0.928	771	768	2.7	5.5	22.215	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1108	840	0.037	31	31	0.0	0.0	4.343	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	796	199	-	-	-	776	780	0.5	6.3	17.571	C
				2	31	8	-	-	-	31	31	0.0	0.2	18.447	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignali level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	806	202	991	1080	0.746	805	799	2.4	2.5	11.457	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	637	159	991	1080	0.589	639	640	1.7	1.4	8.511	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	809	202	-	-	-	806	800	0.6	0.7	2.581	A
				3	639	160	-	-	-	637	639	0.4	0.6	2.479	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	927	726	0.022	16	15	0.0	0.0	4.565	A
			2	1	756	189	974	763	0.990	755	752	4.7	4.9	23.167	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	812	203	-	-	-	756	752	18.1	35.4	134.867	F
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	16	15	0.3	0.6	127.803	F
3 - Broad Rushes	Entry	1	1	1	795	199	1108	838	0.949	794	789	5.5	5.6	25.065	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	32	8	1108	839	0.038	32	32	0.0	0.0	4.687	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	792	198	-	-	-	795	789	6.3	8.7	38.163	E
				2	32	8	-	-	-	32	32	0.2	0.3	36.106	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignali level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	655	164	991	1082	0.605	660	662	2.5	1.3	8.389	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	520	130	991	1082	0.480	521	529	1.4	1.0	7.002	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	655	164	-	-	-	655	658	0.7	0.0	0.568	A
				3	520	130	-	-	-	520	527	0.6	0.0	0.539	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	948	782	0.019	15	14	0.0	0.0	4.801	A
			2	1	739	185	974	802	0.922	744	756	4.9	3.9	20.925	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	671	168	-	-	-	739	752	35.4	15.4	116.669	F
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	15	14	0.6	0.3	117.041	F
3 - Broad Rushes	Entry	1	1	1	661	165	1108	842	0.785	660	688	5.6	3.3	19.709	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	1108	836	0.032	27	28	0.0	0.0	4.487	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	653	163	-	-	-	661	679	8.7	1.0	15.863	C
				2	27	7	-	-	-	27	28	0.3	0.0	14.325	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	550	137	991	1084	0.507	548	551	1.3	1.2	6.783	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	433	108	991	1084	0.399	433	435	1.0	0.8	5.925	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	550	138	-	-	-	550	550	0.0	0.0	0.122	A
				3	433	108	-	-	-	433	434	0.0	0.0	0.097	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	927	789	0.015	12	12	0.0	0.0	4.785	A
			2	1	574	144	974	832	0.690	579	625	3.9	2.0	15.376	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	549	137	-	-	-	574	617	15.4	0.8	27.909	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	12	12	0.3	0.0	33.513	D
3 - Broad Rushes	Entry	1	1	1	537	134	1108	901	0.597	536	556	3.3	1.6	12.203	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1097	886	0.022	20	22	0.0	0.0	4.405	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	538	134	-	-	-	537	549	1.0	0.0	1.932	A
				2	20	5	-	-	-	20	22	0.0	0.0	2.531	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	16.90	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.90	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1300	100.000
2 - Station Road (S)		ONE HOUR	✓	65	100.000
3 - Broad Rushes		ONE HOUR	✓	729	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	478	822
	2 - Station Road (S)	65	0	0
	3 - Broad Rushes	729	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	5	10
	2 - Station Road (S)	10	0	6
	3 - Broad Rushes	12	6	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.83	18.72	7.9	C	1193	1790
2 - Station Road (S)	0.11	6.69	0.2	A	58	87
3 - Broad Rushes	0.75	14.55	3.5	B	672	1007

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	982	246	0	1681	0.584	983	976	593	0.0	2.0	7.168	A
2 - Station Road (S)	43	11	610	784	0.055	43	50	374	0.0	0.1	5.407	A
3 - Broad Rushes	550	137	43	1096	0.502	550	542	610	0.0	1.3	7.725	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1162	291	0	1709	0.680	1166	1168	709	2.0	2.8	9.458	A
2 - Station Road (S)	57	14	735	717	0.080	57	65	431	0.1	0.1	5.564	A
3 - Broad Rushes	656	164	57	1096	0.599	652	661	735	1.3	1.9	9.814	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1439	360	0	1741	0.827	1450	1440	864	2.8	7.7	18.137	C
2 - Station Road (S)	77	19	906	678	0.113	76	81	544	0.1	0.2	6.693	A
3 - Broad Rushes	787	197	76	1079	0.730	788	802	906	1.9	3.5	14.297	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1424	356	0	1774	0.803	1419	1432	875	7.7	7.9	18.715	C
2 - Station Road (S)	66	17	901	673	0.099	67	77	518	0.2	0.1	6.411	A
3 - Broad Rushes	814	204	67	1089	0.748	808	810	901	3.5	3.5	14.555	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1171	293	0	1691	0.693	1178	1192	719	7.9	2.7	11.847	B
2 - Station Road (S)	55	14	751	708	0.078	55	63	427	0.1	0.1	6.083	A
3 - Broad Rushes	667	167	55	1088	0.613	664	680	751	3.5	2.2	11.382	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	982	246	0	1697	0.579	983	986	601	2.7	2.3	7.804	A
2 - Station Road (S)	48	12	616	818	0.059	47	55	367	0.1	0.1	5.759	A
3 - Broad Rushes	554	139	47	1102	0.503	554	571	616	2.2	1.3	8.105	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	375	1091	0.344	374	363	0.0	0.6	5.184	A
			2	1, 3	607	1091	0.557	610	614	0.0	1.3	8.069	A
		2	1	(1, 3, 2)	982			982	984	0.0	0.0	0.200	A
	Exit	1	1		593			593	592	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	773	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	43	773	0.056	43	50	0.0	0.1	5.407	A
		2	1	(1, 3, 2)	43			43	51	0.0	0.0	0.000	A
	Exit	1	1		374			374	363	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	550	1093	0.503	550	542	0.0	1.2	7.567	A
			2	3, 2	0	1093	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	550			550	547	0.0	0.0	0.154	A
	Exit	1	1		610			610	614	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	433	1091	0.397	431	433	0.6	0.7	5.986	A
			2	1, 3	731	1091	0.670	735	735	1.3	2.0	10.144	B
		2	1	(1, 3, 2)	1162			1164	1171	0.0	0.1	0.895	A
	Exit	1	1		709			709	726	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	731	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	57	731	0.079	57	65	0.1	0.1	5.564	A
		2	1	(1, 3, 2)	57			57	65	0.0	0.0	0.000	A
	Exit	1	1		431			431	433	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	656	1088	0.602	652	661	1.2	1.7	9.131	A
			2	3, 2	0	1088	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	656			656	664	0.0	0.1	0.671	A
	Exit	1	1		735			735	735	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	542	1091	0.497	544	530	0.7	1.1	7.162	A
			2	1, 3	903	1091	0.828	906	910	2.0	3.6	14.229	B
		2	1	(1, 3, 2)	1439			1445	1448	0.1	3.0	6.559	A
	Exit	1	1		864			864	883	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	675	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	77	675	0.113	76	81	0.1	0.2	6.693	A
		2	1	(1, 3, 2)	77			77	81	0.0	0.0	0.000	A
	Exit	1	1		544			544	530	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	784	1081	0.725	788	802	1.7	2.8	12.063	B
			2	3, 2	0	1081	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	787			784	806	0.1	0.7	2.203	A
	Exit	1	1		906			906	910	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	520	1091	0.477	518	524	1.1	1.1	7.205	A
			2	1, 3	897	1091	0.823	901	908	3.6	3.7	14.521	B
		2	1	(1, 3, 2)	1424			1418	1433	3.0	3.1	6.947	A
	Exit	1	1		875			875	888	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	677	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	66	677	0.098	67	77	0.2	0.1	6.411	A
		2	1	(1, 3, 2)	66			66	77	0.0	0.0	0.000	A
	Exit	1	1		518			518	524	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	812	1085	0.749	808	810	2.8	2.7	12.367	B
			2	3, 2	0	1085	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	814			812	810	0.7	0.8	2.176	A
	Exit	1	1		901			901	908	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	426	1091	0.391	427	435	1.1	0.6	6.085	A
			2	1, 3	749	1091	0.687	751	757	3.7	2.0	11.072	B
		2	1	(1, 3, 2)	1171			1176	1183	3.1	0.1	2.719	A
	Exit	1	1		719			719	743	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	726	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	55	726	0.076	55	63	0.1	0.1	6.083	A
		2	1	(1, 3, 2)	55			55	62	0.0	0.0	0.000	A
	Exit	1	1		427			427	435	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	667	1089	0.613	664	680	2.7	2.0	10.232	B
			2	3, 2	0	1089	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	667			667	677	0.8	0.1	1.217	A
	Exit	1	1		751			751	757	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	368	1091	0.337	367	365	0.6	0.6	5.300	A
			2	1, 3	614	1091	0.563	616	621	2.0	1.5	8.499	A
		2	1	(1, 3, 2)	982			982	984	0.1	0.2	0.532	A
	Exit	1	1		601			601	626	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	771	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	48	771	0.062	47	55	0.1	0.1	5.759	A
		2	1	(1, 3, 2)	48			48	55	0.0	0.0	0.000	A
	Exit	1	1		367			367	365	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	554	1092	0.508	554	571	2.0	1.2	7.875	A
			2	3, 2	0	1092	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	554			554	568	0.1	0.0	0.241	A
	Exit	1	1		616			616	621	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	375	94	991	1091	0.344	374	363	0.0	0.6	5.184	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	607	152	991	1091	0.557	610	614	0.0	1.3	8.069	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	375	94	-	-	-	375	365	0.0	0.0	0.172	A
				3	607	152	-	-	-	607	619	0.0	0.0	0.217	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	43	11	974	775	0.056	43	50	0.0	0.1	5.407	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	43	11	-	-	-	43	51	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	550	137	1108	1093	0.503	550	542	0.0	1.2	7.567	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	550	137	-	-	-	550	547	0.0	0.0	0.154	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	433	108	991	1091	0.397	431	433	0.6	0.7	5.986	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	731	183	991	1091	0.670	735	735	1.3	2.0	10.144	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	433	108	-	-	-	433	433	0.0	0.1	0.801	A
				3	729	182	-	-	-	731	738	0.0	0.1	0.953	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	57	14	974	728	0.079	57	65	0.1	0.1	5.564	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	57	14	-	-	-	57	65	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	656	164	1108	1088	0.602	652	661	1.2	1.7	9.131	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	656	164	-	-	-	656	664	0.0	0.1	0.671	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	542	135	991	1091	0.497	544	530	0.7	1.1	7.162	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	903	226	991	1091	0.828	906	910	2.0	3.6	14.229	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	540	135	-	-	-	542	532	0.1	1.1	6.428	A
				3	899	225	-	-	-	903	916	0.1	1.9	6.639	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	77	19	974	676	0.113	76	81	0.1	0.2	6.693	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	77	19	-	-	-	77	81	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	784	196	1108	1082	0.725	788	802	1.7	2.8	12.063	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	787	197	-	-	-	784	806	0.1	0.7	2.203	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	520	130	991	1091	0.477	518	524	1.1	1.1	7.205	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	897	224	991	1091	0.823	901	908	3.6	3.7	14.521	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	519	130	-	-	-	520	524	1.1	0.9	6.693	A
				3	905	226	-	-	-	897	908	1.9	2.2	7.100	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	66	17	974	677	0.098	67	77	0.2	0.1	6.411	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	66	17	-	-	-	66	77	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	812	203	1108	1085	0.749	808	810	2.8	2.7	12.367	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	814	204	-	-	-	812	810	0.7	0.8	2.176	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	426	107	991	1091	0.391	427	435	1.1	0.6	6.085	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	749	187	991	1091	0.687	751	757	3.7	2.0	11.072	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	425	106	-	-	-	426	433	0.9	0.1	2.523	A
				3	746	187	-	-	-	749	750	2.2	0.1	2.838	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	55	14	974	728	0.076	55	63	0.1	0.1	6.083	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	55	14	-	-	-	55	62	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	667	167	1108	1089	0.613	664	680	2.7	2.0	10.232	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	667	167	-	-	-	667	677	0.8	0.1	1.217	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	368	92	991	1091	0.337	367	365	0.6	0.6	5.300	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	614	154	991	1091	0.563	616	621	2.0	1.5	8.499	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	367	92	-	-	-	368	365	0.1	0.0	0.480	A
				3	615	154	-	-	-	614	619	0.1	0.1	0.565	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	48	12	974	769	0.062	47	55	0.1	0.1	5.759	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	48	12	-	-	-	48	55	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	554	139	1108	1091	0.508	554	571	2.0	1.2	7.875	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	554	139	-	-	-	554	568	0.1	0.0	0.241	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	12.29	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.29	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	717	100.000
2 - Station Road (S)		ONE HOUR	✓	95	100.000
3 - Broad Rushes		ONE HOUR	✓	829	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	285	432
	2 - Station Road (S)	95	0	0
	3 - Broad Rushes	786	43	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	6
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	6	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.45	5.90	1.3	A	650	976
2 - Station Road (S)	0.13	5.31	0.3	A	89	133
3 - Broad Rushes	0.82	18.60	4.1	C	757	1135

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	526	132	33	1786	0.295	529	535	650	0.0	0.7	4.809	A
2 - Station Road (S)	67	17	320	894	0.075	67	70	242	0.0	0.1	4.420	A
3 - Broad Rushes	615	154	67	1145	0.537	615	620	320	0.0	1.2	7.406	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	636	159	40	1711	0.372	640	646	806	0.7	0.8	5.136	A
2 - Station Road (S)	88	22	377	855	0.103	89	93	303	0.1	0.1	4.988	A
3 - Broad Rushes	753	188	89	1136	0.662	757	742	377	1.2	2.1	10.185	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	780	195	49	1747	0.446	780	791	969	0.8	1.3	5.903	A
2 - Station Road (S)	108	27	471	828	0.131	107	111	358	0.1	0.3	5.272	A
3 - Broad Rushes	902	226	107	1107	0.815	910	912	471	2.1	4.1	17.558	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	780	195	48	1778	0.439	782	786	972	1.3	1.1	5.750	A
2 - Station Road (S)	106	26	466	822	0.128	105	112	364	0.3	0.2	5.314	A
3 - Broad Rushes	912	228	105	1140	0.799	915	925	466	4.1	4.1	18.595	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	637	159	35	1754	0.363	637	653	786	1.1	1.1	5.214	A
2 - Station Road (S)	91	23	379	841	0.108	91	94	293	0.2	0.1	4.926	A
3 - Broad Rushes	729	182	91	1130	0.645	731	761	379	4.1	2.0	11.685	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	543	136	34	1692	0.321	541	540	663	1.1	1.0	4.806	A
2 - Station Road (S)	71	18	324	875	0.081	71	79	251	0.1	0.1	4.642	A
3 - Broad Rushes	631	158	71	1141	0.553	625	639	324	2.0	1.6	8.003	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	208	1080	0.193	209	216	0.0	0.2	4.347	A
			2	1, 3	318	1080	0.295	320	319	0.0	0.4	5.132	A
		2	1	(1, 3, 2)	526			526	537	0.0	0.0	0.001	A
	Exit	1	1		650			650	657	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	869	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	67	869	0.077	67	70	0.0	0.1	4.420	A
		2	1	(1, 3, 2)	67			67	71	0.0	0.0	0.000	A
	Exit	1	1		242			242	249	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	581	1084	0.536	582	587	0.0	1.1	7.473	A
			2	3, 2	34	1084	0.031	33	33	0.0	0.1	3.636	A
		2	1	(1, 3, 2)	615			615	624	0.0	0.0	0.149	A
	Exit	1	1		320			320	319	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	263	1078	0.244	264	262	0.2	0.3	4.629	A
			2	1, 3	373	1078	0.346	377	383	0.4	0.5	5.482	A
		2	1	(1, 3, 2)	636			636	646	0.0	0.0	0.007	A
	Exit	1	1		806			806	796	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	850	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	88	850	0.104	89	93	0.1	0.1	4.988	A
		2	1	(1, 3, 2)	88			88	93	0.0	0.0	0.000	A
	Exit	1	1		303			303	302	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	714	1077	0.664	717	703	1.1	1.8	9.715	A
			2	3, 2	40	1077	0.037	40	39	0.1	0.1	3.557	A
		2	1	(1, 3, 2)	753			754	745	0.0	0.2	0.792	A
	Exit	1	1		377			377	383	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	309	1075	0.288	309	316	0.3	0.4	4.802	A
			2	1, 3	472	1075	0.439	471	475	0.5	1.0	6.504	A
		2	1	(1, 3, 2)	780			781	793	0.0	0.0	0.091	A
	Exit	1	1		969			969	974	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	819	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	108	819	0.133	107	111	0.1	0.3	5.272	A
		2	1	(1, 3, 2)	108			108	112	0.0	0.0	0.000	A
	Exit	1	1		358			358	364	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	857	1070	0.801	861	863	1.8	3.2	13.886	B
			2	3, 2	49	1070	0.046	49	48	0.1	0.0	3.683	A
		2	1	(1, 3, 2)	902			906	917	0.2	0.8	4.215	A
	Exit	1	1		471			471	475	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	314	1075	0.292	316	312	0.4	0.3	4.818	A
			2	1, 3	467	1075	0.434	466	474	1.0	0.8	6.363	A
		2	1	(1, 3, 2)	780			780	786	0.0	0.0	0.016	A
	Exit	1	1		972			972	989	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	820	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	106	820	0.129	105	112	0.3	0.2	5.312	A
		2	1	(1, 3, 2)	106			106	112	0.0	0.0	0.001	A
	Exit	1	1		364			364	360	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	861	1071	0.804	866	877	3.2	3.0	14.406	B
			2	3, 2	49	1071	0.045	48	48	0.0	0.1	3.634	A
		2	1	(1, 3, 2)	912			910	924	0.8	1.0	4.771	A
	Exit	1	1		466			466	474	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	257	1079	0.238	258	261	0.3	0.3	4.460	A
			2	1, 3	379	1079	0.351	379	392	0.8	0.8	5.726	A
		2	1	(1, 3, 2)	637			636	653	0.0	0.0	0.005	A
	Exit	1	1		786			786	817	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	849	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	91	849	0.107	91	94	0.2	0.1	4.926	A
		2	1	(1, 3, 2)	91			91	94	0.0	0.0	0.000	A
	Exit	1	1		293			293	300	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	694	1076	0.645	695	722	3.0	1.8	10.658	B
			2	3, 2	36	1076	0.033	35	39	0.1	0.0	3.457	A
		2	1	(1, 3, 2)	729			730	756	1.0	0.1	1.487	A
	Exit	1	1		379			379	392	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	215	1080	0.199	217	215	0.3	0.2	4.229	A
			2	1, 3	328	1080	0.304	324	326	0.8	0.7	5.189	A
		2	1	(1, 3, 2)	543			543	540	0.0	0.0	0.008	A
	Exit	1	1		663			663	684	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	867	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	71	867	0.082	71	79	0.1	0.1	4.642	A
		2	1	(1, 3, 2)	71			71	79	0.0	0.0	0.000	A
	Exit	1	1		251			251	249	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	596	1083	0.551	592	605	1.8	1.4	7.955	A
			2	3, 2	34	1083	0.032	34	34	0.0	0.1	3.524	A
		2	1	(1, 3, 2)	631			630	637	0.1	0.1	0.313	A
	Exit	1	1		324			324	326	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	208	52	991	1080	0.192	209	216	0.0	0.2	4.347	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	318	80	991	1080	0.295	320	319	0.0	0.4	5.132	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	208	52	-	-	-	208	216	0.0	0.0	0.000	A
				3	318	80	-	-	-	318	321	0.0	0.0	0.001	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	67	17	974	868	0.077	67	70	0.0	0.1	4.420	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	67	17	-	-	-	67	71	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	581	145	1108	1084	0.536	582	587	0.0	1.1	7.473	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	34	8	1108	1083	0.031	33	33	0.0	0.1	3.636	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	581	145	-	-	-	581	591	0.0	0.0	0.146	A
				2	34	8	-	-	-	34	33	0.0	0.0	0.212	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	263	66	991	1078	0.244	264	262	0.2	0.3	4.629	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	373	93	991	1078	0.346	377	383	0.4	0.5	5.482	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	263	66	-	-	-	263	263	0.0	0.0	0.011	A
				3	373	93	-	-	-	373	384	0.0	0.0	0.005	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	88	22	974	849	0.104	89	93	0.1	0.1	4.988	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	88	22	-	-	-	88	93	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	714	179	1108	1077	0.663	717	703	1.1	1.8	9.715	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	40	10	1108	1077	0.037	40	39	0.1	0.1	3.557	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	713	178	-	-	-	714	706	0.0	0.2	0.807	A
				2	40	10	-	-	-	40	39	0.0	0.0	0.528	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	309	77	991	1075	0.288	309	316	0.3	0.4	4.802	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	472	118	991	1075	0.439	471	475	0.5	1.0	6.504	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	309	77	-	-	-	309	316	0.0	0.0	0.082	A
				3	471	118	-	-	-	472	477	0.0	0.0	0.098	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	108	27	974	818	0.133	107	111	0.1	0.3	5.272	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	108	27	-	-	-	108	112	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	857	214	1108	1070	0.801	861	863	1.8	3.2	13.886	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1108	1069	0.046	49	48	0.1	0.0	3.683	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	854	213	-	-	-	857	869	0.2	0.8	4.250	A
				2	49	12	-	-	-	49	48	0.0	0.0	3.622	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	314	78	991	1075	0.292	316	312	0.4	0.3	4.818	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	467	117	991	1075	0.434	466	474	1.0	0.8	6.363	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	314	78	-	-	-	314	312	0.0	0.0	0.014	A
				3	467	117	-	-	-	467	474	0.0	0.0	0.017	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	106	26	974	820	0.129	105	112	0.3	0.2	5.312	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	106	26	-	-	-	106	112	0.0	0.0	0.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	861	215	1108	1071	0.804	866	877	3.2	3.0	14.406	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1108	1071	0.045	48	48	0.0	0.1	3.634	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	862	216	-	-	-	861	876	0.8	0.9	4.793	A
				2	49	12	-	-	-	49	48	0.0	0.1	4.385	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	257	64	991	1079	0.238	258	261	0.3	0.3	4.460	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	379	95	991	1079	0.351	379	392	0.8	0.8	5.726	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	257	64	-	-	-	257	261	0.0	0.0	0.005	A
				3	379	95	-	-	-	379	392	0.0	0.0	0.005	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	91	23	974	850	0.107	91	94	0.2	0.1	4.926	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	91	23	-	-	-	91	94	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	694	173	1108	1076	0.645	695	722	3.0	1.8	10.658	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	36	9	1108	1076	0.033	35	39	0.1	0.0	3.457	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	694	173	-	-	-	694	717	0.9	0.1	1.497	A
				2	36	9	-	-	-	36	39	0.1	0.0	1.322	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	215	54	991	1080	0.200	217	215	0.3	0.2	4.229	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	328	82	991	1080	0.304	324	326	0.8	0.7	5.189	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	215	54	-	-	-	215	214	0.0	0.0	0.008	A
				3	328	82	-	-	-	328	325	0.0	0.0	0.009	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	71	18	974	867	0.082	71	79	0.1	0.1	4.642	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	71	18	-	-	-	71	79	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	596	149	1108	1083	0.551	592	605	1.8	1.4	7.955	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	34	9	1108	1081	0.032	34	34	0.0	0.1	3.524	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	597	149	-	-	-	596	603	0.1	0.1	0.317	A
				2	34	9	-	-	-	34	34	0.0	0.0	0.235	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	17.66	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	17.66	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1252	100.000
2 - Station Road (S)		ONE HOUR	✓	270	100.000
3 - Broad Rushes		ONE HOUR	✓	732	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	478	774
	2 - Station Road (S)	270	0	0
	3 - Broad Rushes	732	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	5	10
	2 - Station Road (S)	5	0	4
	3 - Broad Rushes	10	7	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.81	14.99	5.8	B	1141	1711
2 - Station Road (S)	0.44	10.50	0.9	B	250	375
3 - Broad Rushes	0.81	24.81	5.4	C	675	1012

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	928	232	0	1702	0.545	931	934	763	0.0	1.8	7.061	A
2 - Station Road (S)	207	52	588	754	0.275	208	202	343	0.0	0.4	6.845	A
3 - Broad Rushes	554	139	208	1041	0.532	555	552	588	0.0	1.3	8.639	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1121	280	0	1731	0.647	1121	1122	892	1.8	2.4	9.067	A
2 - Station Road (S)	245	61	689	754	0.325	243	249	432	0.4	0.5	7.407	A
3 - Broad Rushes	651	163	243	987	0.660	649	659	689	1.3	2.0	11.435	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1370	343	0	1699	0.806	1372	1366	1107	2.4	5.8	14.972	B
2 - Station Road (S)	303	76	858	687	0.442	303	302	514	0.5	0.9	9.664	A
3 - Broad Rushes	810	203	303	1023	0.793	805	798	858	2.0	5.1	19.344	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1364	341	0	1698	0.804	1377	1387	1123	5.8	5.4	14.992	B
2 - Station Road (S)	299	75	852	702	0.427	299	303	525	0.9	0.9	10.503	B
3 - Broad Rushes	816	204	299	1007	0.810	824	821	852	5.1	5.4	24.809	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1114	278	0	1723	0.646	1110	1140	902	5.4	3.1	9.702	A
2 - Station Road (S)	243	61	684	767	0.317	244	251	426	0.9	0.5	8.239	A
3 - Broad Rushes	662	166	244	997	0.664	658	678	684	5.4	2.3	13.497	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	947	237	0	1781	0.532	948	963	753	3.1	2.0	7.336	A
2 - Station Road (S)	201	50	590	771	0.261	201	207	358	0.5	0.4	6.538	A
3 - Broad Rushes	555	139	201	1038	0.534	552	556	590	2.3	1.5	8.811	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	341	1091	0.313	343	352	0.0	0.4	5.245	A
			2	1, 3	588	1091	0.539	588	582	0.0	1.3	7.833	A
		2	1	(1, 3, 2)	928			929	941	0.0	0.0	0.231	A
	Exit	1	1		763			763	754	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	780	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	207	780	0.266	208	202	0.0	0.4	6.820	A
		2	1	(1, 3, 2)	207			207	204	0.0	0.0	0.024	A
	Exit	1	1		343			343	352	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	554	1034	0.536	555	552	0.0	1.2	8.348	A
			2	3, 2	0	1034	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	554			554	557	0.0	0.0	0.287	A
	Exit	1	1		588			588	582	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	432	1091	0.396	432	428	0.4	0.7	5.835	A
			2	1, 3	690	1091	0.632	689	693	1.3	1.7	9.657	A
		2	1	(1, 3, 2)	1121			1122	1124	0.0	0.1	0.909	A
	Exit	1	1		892			892	908	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	747	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	245	747	0.328	243	249	0.4	0.5	7.380	A
		2	1	(1, 3, 2)	245			245	249	0.0	0.0	0.027	A
	Exit	1	1		432			432	428	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	649	1022	0.636	649	659	1.2	1.8	10.477	B
			2	3, 2	0	1022	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	651			649	661	0.0	0.2	0.936	A
	Exit	1	1		689			689	693	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	514	1091	0.471	514	521	0.7	1.0	6.907	A
			2	1, 3	856	1091	0.785	858	845	1.7	3.2	13.171	B
		2	1	(1, 3, 2)	1370			1370	1373	0.1	1.7	4.225	A
	Exit	1	1		1107			1107	1100	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	691	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	303	691	0.439	303	302	0.5	0.9	9.422	A
		2	1	(1, 3, 2)	303			303	303	0.0	0.0	0.235	A
	Exit	1	1		514			514	521	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	809	1000	0.809	805	798	1.8	3.7	14.424	B
			2	3, 2	0	1000	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	810			809	806	0.2	1.4	4.848	A
	Exit	1	1		858			858	845	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	523	1091	0.480	525	531	1.0	1.1	7.073	A
			2	1, 3	848	1091	0.778	852	856	3.2	3.0	13.062	B
		2	1	(1, 3, 2)	1364			1371	1387	1.7	1.4	4.299	A
	Exit	1	1		1123			1123	1124	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	693	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	299	693	0.432	299	303	0.9	0.9	10.187	B
		2	1	(1, 3, 2)	299			299	303	0.0	0.0	0.322	A
	Exit	1	1		525			525	531	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	820	1001	0.819	824	821	3.7	3.7	16.551	C
			2	3, 2	0	1001	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	816			820	821	1.4	1.7	8.246	A
	Exit	1	1		852			852	856	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	428	1091	0.393	426	435	1.1	0.8	6.075	A
			2	1, 3	686	1091	0.629	684	705	3.0	2.1	9.944	A
		2	1	(1, 3, 2)	1114			1114	1135	1.4	0.3	1.311	A
	Exit	1	1		902			902	930	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	748	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	243	748	0.325	244	251	0.9	0.5	8.131	A
		2	1	(1, 3, 2)	243			243	250	0.0	0.0	0.106	A
	Exit	1	1		426			426	435	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	659	1021	0.646	658	678	3.7	2.0	11.485	B
			2	3, 2	0	1021	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	662			659	671	1.7	0.3	2.138	A
	Exit	1	1		684			684	705	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	358	1091	0.328	358	368	0.8	0.6	5.390	A
			2	1, 3	588	1091	0.539	590	595	2.1	1.3	8.032	A
		2	1	(1, 3, 2)	947			946	959	0.3	0.1	0.353	A
	Exit	1	1		753			753	763	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	779	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	201	779	0.258	201	207	0.5	0.4	6.529	A
		2	1	(1, 3, 2)	201			201	206	0.0	0.0	0.012	A
	Exit	1	1		358			358	368	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	554	1036	0.535	552	556	2.0	1.5	8.568	A
			2	3, 2	0	1036	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	555			554	554	0.3	0.0	0.289	A
	Exit	1	1		590			590	595	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	341	85	991	1091	0.313	343	352	0.0	0.4	5.245	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	588	147	991	1091	0.539	588	582	0.0	1.3	7.833	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	341	85	-	-	-	341	354	0.0	0.0	0.186	A
				3	587	147	-	-	-	588	587	0.0	0.0	0.259	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	207	52	974	780	0.266	208	202	0.0	0.4	6.820	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	207	52	-	-	-	207	204	0.0	0.0	0.024	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	554	138	1108	1034	0.536	555	552	0.0	1.2	8.348	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	554	139	-	-	-	554	557	0.0	0.0	0.287	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	432	108	991	1091	0.396	432	428	0.4	0.7	5.835	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	690	172	991	1091	0.632	689	693	1.3	1.7	9.657	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	432	108	-	-	-	432	429	0.0	0.1	0.842	A
				3	689	172	-	-	-	690	695	0.0	0.0	0.953	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	245	61	974	747	0.328	243	249	0.4	0.5	7.380	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	245	61	-	-	-	245	249	0.0	0.0	0.027	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	649	162	1108	1022	0.636	649	659	1.2	1.8	10.477	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	651	163	-	-	-	649	661	0.0	0.2	0.936	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	514	128	991	1091	0.471	514	521	0.7	1.0	6.907	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	856	214	991	1091	0.785	858	845	1.7	3.2	13.171	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	514	129	-	-	-	514	522	0.1	0.6	4.121	A
				3	856	214	-	-	-	856	852	0.0	1.0	4.291	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	303	76	974	691	0.439	303	302	0.5	0.9	9.422	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	303	76	-	-	-	303	303	0.0	0.0	0.235	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	809	202	1108	1000	0.809	805	798	1.8	3.7	14.424	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	810	203	-	-	-	809	806	0.2	1.4	4.848	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	523	131	991	1091	0.480	525	531	1.0	1.1	7.073	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	848	212	991	1091	0.778	852	856	3.2	3.0	13.062	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	520	130	-	-	-	523	531	0.6	0.5	4.176	A
				3	844	211	-	-	-	848	856	1.0	0.9	4.379	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	299	75	974	694	0.432	299	303	0.9	0.9	10.187	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	299	75	-	-	-	299	303	0.0	0.0	0.322	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	820	205	1108	1001	0.819	824	821	3.7	3.7	16.551	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	816	204	-	-	-	820	821	1.4	1.7	8.246	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	428	107	991	1091	0.393	426	435	1.1	0.8	6.075	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	686	172	991	1091	0.629	684	705	3.0	2.1	9.944	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	429	107	-	-	-	428	434	0.5	0.1	1.215	A
				3	685	171	-	-	-	686	701	0.9	0.1	1.373	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	243	61	974	747	0.326	244	251	0.9	0.5	8.131	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	243	61	-	-	-	243	250	0.0	0.0	0.106	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	659	165	1108	1021	0.646	658	678	3.7	2.0	11.485	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	662	166	-	-	-	659	671	1.7	0.3	2.138	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	358	90	991	1091	0.328	358	368	0.8	0.6	5.390	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	588	147	991	1091	0.539	590	595	2.1	1.3	8.032	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	358	90	-	-	-	358	367	0.1	0.0	0.315	A
				3	588	147	-	-	-	588	592	0.1	0.1	0.378	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	201	50	974	780	0.258	201	207	0.5	0.4	6.529	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	201	50	-	-	-	201	206	0.0	0.0	0.012	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	554	139	1108	1037	0.535	552	556	2.0	1.5	8.568	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	555	139	-	-	-	554	554	0.3	0.0	0.289	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	18.92	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.92	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1001	100.000
2 - Station Road (S)		ONE HOUR	✓	213	100.000
3 - Broad Rushes		ONE HOUR	✓	830	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	385	616
	2 - Station Road (S)	213	0	0
	3 - Broad Rushes	830	0	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	5
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	5	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.65	8.25	3.0	A	921	1381
2 - Station Road (S)	0.33	7.25	0.5	A	198	297
3 - Broad Rushes	0.90	34.84	8.6	D	762	1144

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	764	191	0	1741	0.439	766	755	792	0.0	1.0	5.505	A
2 - Station Road (S)	164	41	473	844	0.195	164	165	292	0.0	0.2	5.622	A
3 - Broad Rushes	628	157	164	1050	0.598	627	627	473	0.0	1.6	9.120	A

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	899	225	0	1707	0.527	897	908	938	1.0	1.5	6.346	A
2 - Station Road (S)	188	47	550	801	0.235	189	194	347	0.2	0.3	6.295	A
3 - Broad Rushes	748	187	189	1056	0.709	749	750	550	1.6	3.0	12.967	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1118	280	0	1715	0.652	1119	1107	1170	1.5	3.0	8.252	A
2 - Station Road (S)	245	61	696	744	0.329	245	248	422	0.3	0.5	7.254	A
3 - Broad Rushes	915	229	245	1015	0.901	924	900	696	3.0	8.6	30.866	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1102	275	0	1731	0.636	1099	1107	1151	3.0	2.6	8.074	A
2 - Station Road (S)	237	59	678	742	0.319	239	241	421	0.5	0.4	7.200	A
3 - Broad Rushes	911	228	239	1063	0.857	912	910	678	8.6	8.5	34.838	D

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	899	225	0	1748	0.514	898	914	933	2.6	1.8	6.569	A
2 - Station Road (S)	194	48	549	780	0.248	193	196	349	0.4	0.2	6.365	A
3 - Broad Rushes	745	186	193	1029	0.724	740	775	549	8.5	3.1	17.574	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	744	186	0	1752	0.424	744	764	788	1.8	1.1	5.714	A
2 - Station Road (S)	159	40	459	822	0.193	159	165	285	0.2	0.2	5.519	A
3 - Broad Rushes	627	157	159	1076	0.583	629	639	459	3.1	1.5	9.763	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	291	1091	0.267	292	289	0.0	0.3	4.546	A
			2	1, 3	473	1091	0.433	473	466	0.0	0.7	6.068	A
		2	1	(1, 3, 2)	764			764	759	0.0	0.0	0.029	A
	Exit	1	1		792			792	791	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	818	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	164	818	0.201	164	165	0.0	0.2	5.617	A
		2	1	(1, 3, 2)	164			164	166	0.0	0.0	0.005	A
	Exit	1	1		292			292	289	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	628	1050	0.598	627	627	0.0	1.5	8.768	A
			2	3, 2	0	1050	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	628			628	633	0.0	0.0	0.348	A
	Exit	1	1		473			473	466	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	349	1091	0.320	347	353	0.3	0.6	5.070	A
			2	1, 3	550	1091	0.504	550	555	0.7	1.0	7.002	A
		2	1	(1, 3, 2)	899			899	910	0.0	0.0	0.109	A
	Exit	1	1		938			938	945	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	793	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	188	793	0.237	189	194	0.2	0.3	6.289	A
		2	1	(1, 3, 2)	188			188	194	0.0	0.0	0.006	A
	Exit	1	1		347			347	353	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	748	1041	0.718	749	750	1.5	2.5	11.457	B
			2	3, 2	0	1041	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	748			748	754	0.0	0.4	1.477	A
	Exit	1	1		550			550	555	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	423	1091	0.388	422	423	0.6	0.8	5.540	A
			2	1, 3	697	1091	0.639	696	685	1.0	2.1	9.012	A
		2	1	(1, 3, 2)	1118			1120	1113	0.0	0.1	0.585	A
	Exit	1	1		1170			1170	1147	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	744	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	245	744	0.329	245	248	0.3	0.5	7.211	A
		2	1	(1, 3, 2)	245			245	248	0.0	0.0	0.043	A
	Exit	1	1		422			422	423	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	919	1021	0.900	924	900	2.5	4.5	17.764	C
			2	3, 2	0	1021	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	915			919	907	0.4	4.1	13.012	B
	Exit	1	1		696			696	685	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	419	1091	0.384	421	424	0.8	0.6	5.461	A
			2	1, 3	683	1091	0.626	678	683	2.1	1.9	9.051	A
		2	1	(1, 3, 2)	1102			1102	1105	0.1	0.1	0.423	A
	Exit	1	1		1151			1151	1151	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	750	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	237	750	0.316	239	241	0.5	0.4	7.172	A
		2	1	(1, 3, 2)	237			237	240	0.0	0.0	0.027	A
	Exit	1	1		421			421	424	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	915	1023	0.895	912	910	4.5	4.7	18.134	C
			2	3, 2	0	1023	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	911			915	911	4.1	3.8	16.708	C
	Exit	1	1		678			678	683	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	349	1091	0.320	349	352	0.6	0.5	4.992	A
			2	1, 3	549	1091	0.503	549	562	1.9	1.2	7.279	A
		2	1	(1, 3, 2)	899			899	911	0.1	0.0	0.189	A
	Exit	1	1		933			933	972	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	793	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	194	793	0.244	193	196	0.4	0.2	6.354	A
		2	1	(1, 3, 2)	194			194	196	0.0	0.0	0.011	A
	Exit	1	1		349			349	352	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	743	1039	0.715	740	775	4.7	2.6	13.213	B
			2	3, 2	0	1039	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	745			743	767	3.8	0.5	4.551	A
	Exit	1	1		549			549	562	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	286	1091	0.262	285	295	0.5	0.4	4.748	A
			2	1, 3	458	1091	0.420	459	468	1.2	0.8	6.272	A
		2	1	(1, 3, 2)	744			744	761	0.0	0.0	0.045	A
	Exit	1	1		788			788	804	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	0	823	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	159	823	0.193	159	165	0.2	0.2	5.519	A
		2	1	(1, 3, 2)	159			159	165	0.0	0.0	0.000	A
	Exit	1	1		285			285	295	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	626	1052	0.595	629	639	2.6	1.4	9.145	A
			2	3, 2	0	1052	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 3, 2)	627			626	634	0.5	0.1	0.668	A
	Exit	1	1		459			459	468	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	291	73	991	1091	0.267	292	289	0.0	0.3	4.546	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	473	118	991	1091	0.433	473	466	0.0	0.7	6.068	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	291	73	-	-	-	291	290	0.0	0.0	0.018	A
				3	473	118	-	-	-	473	469	0.0	0.0	0.036	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	164	41	974	818	0.201	164	165	0.0	0.2	5.617	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	164	41	-	-	-	164	166	0.0	0.0	0.005	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	628	157	1108	1050	0.598	627	627	0.0	1.5	8.768	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	628	157	-	-	-	628	633	0.0	0.0	0.348	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	349	87	991	1091	0.320	347	353	0.3	0.6	5.070	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	550	137	991	1091	0.504	550	555	0.7	1.0	7.002	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	349	87	-	-	-	349	354	0.0	0.0	0.078	A
				3	550	137	-	-	-	550	556	0.0	0.0	0.129	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	188	47	974	791	0.238	189	194	0.2	0.3	6.289	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	188	47	-	-	-	188	194	0.0	0.0	0.006	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	748	187	1108	1041	0.718	749	750	1.5	2.5	11.457	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	748	187	-	-	-	748	754	0.0	0.4	1.477	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	423	106	991	1091	0.388	422	423	0.6	0.8	5.540	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	697	174	991	1091	0.639	696	685	1.0	2.1	9.012	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	422	106	-	-	-	423	424	0.0	0.0	0.494	A
				3	696	174	-	-	-	697	689	0.0	0.0	0.643	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	245	61	974	745	0.329	245	248	0.3	0.5	7.211	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	245	61	-	-	-	245	248	0.0	0.0	0.043	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	919	230	1108	1021	0.900	924	900	2.5	4.5	17.764	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	915	229	-	-	-	919	907	0.4	4.1	13.012	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	419	105	991	1091	0.384	421	424	0.8	0.6	5.461	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	683	171	991	1091	0.626	678	683	2.1	1.9	9.051	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	419	105	-	-	-	419	423	0.0	0.0	0.380	A
				3	683	171	-	-	-	683	682	0.0	0.1	0.450	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	237	59	974	751	0.316	239	241	0.5	0.4	7.172	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	237	59	-	-	-	237	240	0.0	0.0	0.027	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	915	229	1108	1023	0.895	912	910	4.5	4.7	18.134	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	911	228	-	-	-	915	911	4.1	3.8	16.708	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	349	87	991	1091	0.320	349	352	0.6	0.5	4.992	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	549	137	991	1091	0.503	549	562	1.9	1.2	7.279	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	349	87	-	-	-	349	351	0.0	0.0	0.155	A
				3	549	137	-	-	-	549	560	0.1	0.0	0.211	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	194	48	974	793	0.244	193	196	0.4	0.2	6.354	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	194	48	-	-	-	194	196	0.0	0.0	0.011	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	743	186	1108	1039	0.715	740	775	4.7	2.6	13.213	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	745	186	-	-	-	743	767	3.8	0.5	4.551	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	286	71	991	1091	0.262	285	295	0.5	0.4	4.748	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	458	115	991	1091	0.420	459	468	1.2	0.8	6.272	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	286	71	-	-	-	286	295	0.0	0.0	0.049	A
				3	458	115	-	-	-	458	467	0.0	0.0	0.043	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	159	40	974	822	0.193	159	165	0.2	0.2	5.519	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	159	40	-	-	-	159	165	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	626	156	1108	1051	0.595	629	639	2.6	1.4	9.145	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	627	157	-	-	-	626	634	0.5	0.1	0.668	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

APPENDIX 61: Junction 16: A453/Kegworth Road Dumbbell Roundabouts Stage 1A/2A Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 220625 Import of J16 A453 Kegworth Road.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\16. A453_Kegworth Road
Report generation date: 23/06/2025 08:25:36

»2022 | | AM
»2022 | | PM
»2028 | WoD | AM
»2028 | WoD | PM
»2028 | WD | AM
»2028 | WD | PM
»2038 | WoD | AM
»2038 | WoD | PM
»2038 | WD | AM
»2038 | WD | PM
»2028 | 2a WD | AM
»2028 | 2a WD | PM
»2038 | 2a WD | AM
»2038 | 2a WD | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022									
Arm 1	D1	0.0	2.41	0.04	A	D2	0.0	2.39	0.04	A
Arm 2		0.0	2.27	0.03	A		0.1	2.38	0.06	A
Arm 3		0.1	2.67	0.05	A		0.0	2.55	0.03	A
	2028 - 2a WD									
Arm 1	D11	0.2	2.68	0.13	A	D12	0.2	2.89	0.18	A
Arm 2		0.2	2.62	0.13	A		0.2	2.81	0.19	A
Arm 3		0.2	3.24	0.13	A		0.0	2.82	0.04	A
	2028 - WD									
Arm 1	D5	0.2	2.69	0.13	A	D6	0.2	2.90	0.18	A
Arm 2		0.1	2.58	0.12	A		0.2	2.81	0.19	A
Arm 3		0.2	3.41	0.17	A		0.1	2.85	0.05	A
	2028 - WoD									
Arm 1	D3	0.2	2.69	0.13	A	D4	0.2	2.94	0.18	A
Arm 2		0.2	2.60	0.13	A		0.2	2.79	0.19	A
Arm 3		0.2	3.30	0.15	A		0.2	3.19	0.16	A
	2038 - 2a WD									
Arm 1	D13	0.3	3.23	0.20	A	D14	0.4	3.09	0.25	A
Arm 2		0.6	3.53	0.35	A		1.3	5.31	0.55	A
Arm 3		0.5	4.49	0.31	A		0.0	3.53	0.03	A
	2038 - WD									
Arm 1	D9	0.3	3.34	0.21	A	D10	0.4	3.12	0.26	A
Arm 2		0.6	3.53	0.35	A		1.7	6.20	0.62	A
Arm 3		0.6	4.89	0.37	A		0.0	3.77	0.04	A
	2038 - WoD									
Arm 1	D7	0.3	3.30	0.20	A	D8	0.4	3.83	0.30	A
Arm 2		0.6	3.50	0.35	A		1.3	5.32	0.55	A
Arm 3		0.6	4.86	0.37	A		0.7	5.89	0.42	A

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	
Location	
Site number	
Date	08/01/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	BWB\Aaiza.Shafiq
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022		AM	ONE HOUR	07:45	09:15	15
D2	2022		PM	ONE HOUR	16:45	18:15	15
D3	2028	WoD	AM	ONE HOUR	07:45	09:15	15
D4	2028	WoD	PM	ONE HOUR	16:45	18:15	15
D5	2028	WD	AM	ONE HOUR	07:45	09:15	15
D6	2028	WD	PM	ONE HOUR	16:45	18:15	15
D7	2038	WoD	AM	ONE HOUR	07:45	09:15	15
D8	2038	WoD	PM	ONE HOUR	16:45	18:15	15
D9	2038	WD	AM	ONE HOUR	07:45	09:15	15
D10	2038	WD	PM	ONE HOUR	16:45	18:15	15
D11	2028	2a WD	AM	ONE HOUR	07:45	09:15	15
D12	2028	2a WD	PM	ONE HOUR	16:45	18:15	15
D13	2038	2a WD	AM	ONE HOUR	07:45	09:15	15
D14	2038	2a WD	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 | | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.47	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.47	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A453 Exit Slip Road		
2	Kegworth Road (E)		
3	Kegworth Road (S)		
4	A453 Entry Slip Road		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.90	6.80	8.6	16.8	60.0	19.7		
2	3.70	7.20	19.8	19.6	60.0	41.8		
3	3.40	6.20	5.8	20.0	60.0	0.0		
4								✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.555	1648
2	0.550	1723
3	0.550	1504
4		

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

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	66	100.000
2		✓	48	100.000
3		✓	67	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	39	27	0
	2	0	0	20	28
	3	0	53	0	14
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	4	0
	2	0	0	0	8
	3	0	2	0	17
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.04	2.41	0.0	A
2	0.03	2.27	0.0	A
3	0.05	2.67	0.1	A
4				

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	50	40	1626	0.031	50	0.0	2.361	A
2	36	20	1712	0.021	36	0.0	2.244	A
3	50	21	1492	0.034	50	0.0	2.616	A
4		40						

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	59	48	1621	0.037	59	0.0	2.382	A
2	43	24	1710	0.025	43	0.0	2.257	A
3	60	25	1490	0.040	60	0.0	2.638	A
4		48						

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	73	58	1615	0.045	73	0.0	2.412	A
2	53	30	1707	0.031	53	0.0	2.274	A
3	74	31	1487	0.050	74	0.1	2.669	A
4		58						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	73	58	1615	0.045	73	0.0	2.412	A
2	53	30	1707	0.031	53	0.0	2.274	A
3	74	31	1487	0.050	74	0.1	2.669	A
4		58						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	59	48	1621	0.037	59	0.0	2.384	A
2	43	24	1710	0.025	43	0.0	2.257	A
3	60	25	1490	0.040	60	0.0	2.639	A
4		48						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	50	40	1626	0.031	50	0.0	2.361	A
2	36	20	1712	0.021	36	0.0	2.244	A
3	50	21	1492	0.034	50	0.0	2.619	A
4		40						

2022 | | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.42	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.42	A

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	54	100.000
2		✓	97	100.000
3		✓	41	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	18	36	0
	2	0	0	23	74
	3	0	35	0	6
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	13	0	0
	2	0	0	10	4
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.04	2.39	0.0	A
2	0.06	2.38	0.1	A
3	0.03	2.55	0.0	A
4				

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	41	26	1633	0.025	41	0.0	2.350	A
2	73	27	1708	0.043	73	0.0	2.319	A
3	31	56	1473	0.021	31	0.0	2.495	A
4		26						

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	49	31	1630	0.030	49	0.0	2.366	A
2	87	32	1705	0.051	87	0.1	2.343	A
3	37	66	1467	0.025	37	0.0	2.516	A
4		31						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	59	39	1626	0.037	59	0.0	2.388	A
2	107	40	1701	0.063	107	0.1	2.378	A
3	45	81	1459	0.031	45	0.0	2.546	A
4		39						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	59	39	1626	0.037	59	0.0	2.388	A
2	107	40	1701	0.063	107	0.1	2.378	A
3	45	81	1459	0.031	45	0.0	2.546	A
4		39						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	49	31	1630	0.030	49	0.0	2.368	A
2	87	32	1705	0.051	87	0.1	2.343	A
3	37	67	1467	0.025	37	0.0	2.516	A
4		31						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	41	26	1633	0.025	41	0.0	2.350	A
2	73	27	1708	0.043	73	0.0	2.319	A
3	31	56	1473	0.021	31	0.0	2.497	A
4		26						

2028 | WoD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.86	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	WoD	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	183	100.000
2		✓	200	100.000
3		✓	188	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	172	11	0
	2	0	0	0	200
	3	0	108	0	80
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	4	0
	2	0	0	0	8
	3	0	2	0	17
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.13	2.69	0.2	A
2	0.13	2.60	0.2	A
3	0.15	3.30	0.2	A
4				

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	138	81	1603	0.086	137	0.1	2.531	A
2	151	8	1719	0.088	150	0.1	2.479	A
3	142	150	1421	0.100	141	0.1	3.034	A
4		81						

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	97	1594	0.103	164	0.1	2.595	A
2	180	10	1718	0.105	180	0.1	2.527	A
3	169	180	1405	0.120	169	0.1	3.142	A
4		97						

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	201	119	1582	0.127	201	0.1	2.687	A
2	220	12	1716	0.128	220	0.2	2.597	A
3	207	220	1382	0.150	207	0.2	3.303	A
4		119						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	201	119	1582	0.127	201	0.2	2.687	A
2	220	12	1716	0.128	220	0.2	2.597	A
3	207	220	1382	0.150	207	0.2	3.303	A
4		119						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	97	1594	0.103	165	0.1	2.595	A
2	180	10	1718	0.105	180	0.1	2.530	A
3	169	180	1405	0.120	169	0.1	3.145	A
4		97						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	138	81	1603	0.086	138	0.1	2.532	A
2	151	8	1719	0.088	151	0.1	2.481	A
3	142	151	1421	0.100	142	0.1	3.038	A
4		81						

2028 | WoD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.95	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.95	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	WoD	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	256	100.000
2		✓	281	100.000
3		✓	188	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	133	123	0
	2	0	0	0	281
	3	0	108	0	80
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	13	0	0
	2	0	0	10	4
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	2.94	0.2	A
2	0.19	2.79	0.2	A
3	0.16	3.19	0.2	A
4				

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	193	81	1603	0.120	192	0.1	2.712	A
2	212	92	1672	0.127	211	0.2	2.560	A
3	142	211	1388	0.102	141	0.1	2.888	A
4		81						

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	230	97	1594	0.144	230	0.2	2.806	A
2	253	111	1662	0.152	252	0.2	2.655	A
3	169	252	1365	0.124	169	0.1	3.010	A
4		97						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	282	119	1582	0.178	282	0.2	2.944	A
2	309	135	1649	0.188	309	0.2	2.794	A
3	207	309	1333	0.155	207	0.2	3.195	A
4		119						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	282	119	1582	0.178	282	0.2	2.944	A
2	309	135	1649	0.188	309	0.2	2.794	A
3	207	309	1333	0.155	207	0.2	3.195	A
4		119						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	230	97	1594	0.144	230	0.2	2.807	A
2	253	111	1662	0.152	253	0.2	2.656	A
3	169	253	1364	0.124	169	0.1	3.011	A
4		97						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	193	81	1603	0.120	193	0.1	2.715	A
2	212	93	1672	0.127	212	0.2	2.563	A
3	142	212	1387	0.102	142	0.1	2.892	A
4		81						

2028 | WD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.92	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	WD	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	188	100.000
2		✓	186	100.000
3		✓	216	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	170	18	0
	2	0	0	0	186
	3	0	105	0	111
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	4	0
	2	0	0	0	8
	3	0	2	0	17
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.13	2.69	0.2	A
2	0.12	2.58	0.1	A
3	0.17	3.41	0.2	A
4				

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	142	79	1604	0.088	141	0.1	2.537	A
2	140	14	1716	0.082	140	0.1	2.467	A
3	163	140	1427	0.114	162	0.1	3.106	A
4		79						

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	169	94	1595	0.106	169	0.1	2.601	A
2	167	16	1714	0.098	167	0.1	2.512	A
3	194	167	1412	0.138	194	0.2	3.228	A
4		94						

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	207	116	1584	0.131	207	0.2	2.695	A
2	205	20	1712	0.120	205	0.1	2.578	A
3	238	205	1391	0.171	238	0.2	3.408	A
4		116						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	207	116	1584	0.131	207	0.2	2.695	A
2	205	20	1712	0.120	205	0.1	2.578	A
3	238	205	1391	0.171	238	0.2	3.408	A
4		116						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	169	94	1595	0.106	169	0.1	2.604	A
2	167	16	1714	0.098	167	0.1	2.513	A
3	194	167	1412	0.138	194	0.2	3.229	A
4		94						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	142	79	1604	0.088	142	0.1	2.539	A
2	140	14	1716	0.082	140	0.1	2.467	A
3	163	140	1426	0.114	163	0.1	3.112	A
4		79						

2028 | WD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	WD	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	266	100.000
2		✓	281	100.000
3		✓	65	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	133	133	0
	2	0	0	0	281
	3	0	65	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	13	0	0
	2	0	0	10	4
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	2.90	0.2	A
2	0.19	2.81	0.2	A
3	0.05	2.85	0.1	A
4				

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	200	49	1621	0.124	200	0.1	2.686	A
2	212	100	1668	0.127	211	0.2	2.567	A
3	49	211	1388	0.035	49	0.0	2.688	A
4		49						

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	239	58	1615	0.148	239	0.2	2.774	A
2	253	119	1657	0.152	252	0.2	2.664	A
3	58	252	1365	0.043	58	0.0	2.755	A
4		58						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	293	72	1608	0.182	293	0.2	2.903	A
2	309	146	1643	0.188	309	0.2	2.807	A
3	72	309	1333	0.054	72	0.1	2.852	A
4		72						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	293	72	1608	0.182	293	0.2	2.903	A
2	309	146	1643	0.188	309	0.2	2.807	A
3	72	309	1333	0.054	72	0.1	2.852	A
4		72						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	239	58	1615	0.148	239	0.2	2.775	A
2	253	120	1657	0.152	253	0.2	2.665	A
3	58	253	1364	0.043	58	0.0	2.758	A
4		58						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	200	49	1621	0.124	200	0.2	2.689	A
2	212	100	1668	0.127	212	0.2	2.570	A
3	49	212	1387	0.035	49	0.0	2.689	A
4		49						

2038 | WoD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.91	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	WoD	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	253	100.000
2		✓	531	100.000
3		✓	397	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	202	51	0
	2	0	0	17	514
	3	0	397	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	4	0
	2	0	0	0	8
	3	0	2	0	17
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.20	3.30	0.3	A
2	0.35	3.50	0.6	A
3	0.37	4.86	0.6	A
4				

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	190	298	1483	0.128	190	0.2	2.872	A
2	400	38	1702	0.235	398	0.3	2.972	A
3	299	386	1291	0.231	298	0.3	3.690	A
4		298						

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	227	356	1450	0.157	227	0.2	3.038	A
2	477	46	1698	0.281	477	0.4	3.176	A
3	357	462	1249	0.286	356	0.4	4.110	A
4		356						

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	279	436	1406	0.198	278	0.3	3.295	A
2	585	56	1692	0.345	584	0.6	3.497	A
3	437	565	1192	0.367	436	0.6	4.853	A
4		436						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	279	437	1405	0.198	279	0.3	3.296	A
2	585	56	1692	0.345	585	0.6	3.500	A
3	437	566	1192	0.367	437	0.6	4.862	A
4		437						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	227	358	1449	0.157	228	0.2	3.043	A
2	477	46	1698	0.281	478	0.4	3.179	A
3	357	463	1249	0.286	358	0.4	4.124	A
4		358						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	190	299	1482	0.129	191	0.2	2.877	A
2	400	38	1702	0.235	400	0.3	2.981	A
3	299	387	1290	0.232	299	0.3	3.705	A
4		299						

2038 | WoD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.10	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	WoD	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	384	100.000
2		✓	792	100.000
3		✓	397	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	144	240	0
	2	0	0	40	752
	3	0	397	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	13	0	0
	2	0	0	10	4
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.30	3.83	0.4	A
2	0.55	5.32	1.3	A
3	0.42	5.89	0.7	A
4				

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	289	298	1483	0.195	288	0.3	3.146	A
2	596	180	1624	0.367	594	0.6	3.637	A
3	299	564	1193	0.250	298	0.3	4.013	A
4		298						

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	345	356	1450	0.238	345	0.3	3.404	A
2	712	216	1605	0.444	711	0.8	4.197	A
3	357	675	1132	0.315	356	0.5	4.638	A
4		356						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	423	436	1406	0.301	422	0.4	3.823	A
2	872	264	1578	0.553	870	1.3	5.290	A
3	437	826	1049	0.417	436	0.7	5.865	A
4		436						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	423	437	1405	0.301	423	0.4	3.828	A
2	872	264	1578	0.553	872	1.3	5.318	A
3	437	828	1048	0.417	437	0.7	5.892	A
4		437						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	345	358	1449	0.238	346	0.3	3.410	A
2	712	216	1604	0.444	714	0.8	4.223	A
3	357	678	1131	0.316	358	0.5	4.666	A
4		358						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	289	299	1482	0.195	289	0.3	3.155	A
2	596	181	1624	0.367	597	0.6	3.662	A
3	299	567	1192	0.251	299	0.3	4.038	A
4		299						

2038 | WD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.95	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.95	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2038	WD	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	262	100.000
2		✓	531	100.000
3		✓	402	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	195	67	0
	2	0	0	18	513
	3	0	402	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	4	0
	2	0	0	0	8
	3	0	2	0	17
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.21	3.34	0.3	A
2	0.35	3.53	0.6	A
3	0.37	4.89	0.6	A
4				

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	197	301	1481	0.133	197	0.2	2.893	A
2	400	50	1695	0.236	398	0.3	2.987	A
3	303	385	1292	0.234	301	0.3	3.702	A
4		301						

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	236	361	1447	0.163	235	0.2	3.066	A
2	477	60	1690	0.282	477	0.4	3.196	A
3	361	461	1250	0.289	361	0.4	4.128	A
4		361						

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	442	1403	0.206	288	0.3	3.335	A
2	585	74	1683	0.347	584	0.6	3.527	A
3	443	564	1193	0.371	442	0.6	4.883	A
4		442						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	443	1402	0.206	288	0.3	3.336	A
2	585	74	1683	0.347	585	0.6	3.530	A
3	443	565	1193	0.371	443	0.6	4.894	A
4		443						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	236	362	1447	0.163	236	0.2	3.071	A
2	477	60	1690	0.282	478	0.4	3.199	A
3	361	462	1249	0.289	362	0.4	4.142	A
4		362						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	197	303	1480	0.133	197	0.2	2.901	A
2	400	50	1695	0.236	400	0.3	2.993	A
3	303	387	1291	0.234	303	0.3	3.720	A
4		303						

2038 | WD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.23	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2038	WD	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	382	100.000
2		✓	884	100.000
3		✓	36	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	143	239	0
	2	0	0	43	841
	3	0	36	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	13	0	0
	2	0	0	10	4
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.26	3.12	0.4	A
2	0.62	6.20	1.7	A
3	0.04	3.77	0.0	A
4				

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	27	1633	0.176	287	0.2	2.793	A
2	666	179	1624	0.410	663	0.7	3.891	A
3	27	630	1157	0.023	27	0.0	3.186	A
4		27						

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	343	32	1630	0.211	343	0.3	2.923	A
2	795	215	1605	0.495	794	1.0	4.619	A
3	32	755	1088	0.030	32	0.0	3.409	A
4		32						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	421	40	1626	0.259	420	0.4	3.120	A
2	973	263	1579	0.617	971	1.6	6.151	A
3	40	924	995	0.040	40	0.0	3.765	A
4		40						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	421	40	1626	0.259	421	0.4	3.120	A
2	973	263	1578	0.617	973	1.7	6.203	A
3	40	926	994	0.040	40	0.0	3.771	A
4		40						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	343	32	1630	0.211	344	0.3	2.927	A
2	795	215	1605	0.495	797	1.0	4.663	A
3	32	758	1086	0.030	32	0.0	3.415	A
4		32						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	27	1633	0.176	288	0.2	2.799	A
2	666	180	1624	0.410	667	0.7	3.927	A
3	27	634	1155	0.023	27	0.0	3.195	A
4		27						

2028 | 2a WD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.82	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.82	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2028	2a WD	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	184	100.000
2		✓	206	100.000
3		✓	167	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	166	18	0
	2	0	0	0	206
	3	0	100	0	67
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	4	0
	2	0	0	0	8
	3	0	2	0	17
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.13	2.68	0.2	A
2	0.13	2.62	0.2	A
3	0.13	3.24	0.2	A
4				

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	139	75	1606	0.086	138	0.1	2.528	A
2	155	14	1716	0.090	155	0.1	2.490	A
3	126	155	1418	0.089	125	0.1	2.993	A
4		75						

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	90	1598	0.104	165	0.1	2.590	A
2	185	16	1714	0.108	185	0.1	2.542	A
3	150	185	1402	0.107	150	0.1	3.092	A
4		90						

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	203	110	1587	0.128	202	0.2	2.680	A
2	227	20	1712	0.132	227	0.2	2.616	A
3	184	227	1379	0.133	184	0.2	3.238	A
4		110						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	203	110	1587	0.128	203	0.2	2.680	A
2	227	20	1712	0.132	227	0.2	2.616	A
3	184	227	1379	0.133	184	0.2	3.238	A
4		110						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	90	1598	0.104	166	0.1	2.590	A
2	185	16	1714	0.108	185	0.1	2.544	A
3	150	185	1402	0.107	150	0.1	3.093	A
4		90						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	139	75	1606	0.086	139	0.1	2.531	A
2	155	14	1716	0.090	155	0.1	2.491	A
3	126	155	1418	0.089	126	0.1	2.997	A
4		75						

2028 | 2a WD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	2.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.85	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2028	2a WD	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	270	100.000
2		✓	282	100.000
3		✓	53	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	133	137	0
	2	0	0	0	282
	3	0	53	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	13	0	0
	2	0	0	10	4
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.18	2.89	0.2	A
2	0.19	2.81	0.2	A
3	0.04	2.82	0.0	A
4				

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	203	40	1626	0.125	203	0.2	2.680	A
2	212	103	1667	0.127	212	0.2	2.571	A
3	40	212	1387	0.029	40	0.0	2.671	A
4		40						

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	243	48	1621	0.150	243	0.2	2.767	A
2	254	123	1655	0.153	253	0.2	2.670	A
3	48	253	1364	0.035	48	0.0	2.733	A
4		48						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	297	58	1615	0.184	297	0.2	2.894	A
2	310	151	1640	0.189	310	0.2	2.814	A
3	58	310	1333	0.044	58	0.0	2.824	A
4		58						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	297	58	1615	0.184	297	0.2	2.894	A
2	310	151	1640	0.189	310	0.2	2.815	A
3	58	310	1333	0.044	58	0.0	2.824	A
4		58						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	243	48	1621	0.150	243	0.2	2.768	A
2	254	123	1655	0.153	254	0.2	2.673	A
3	48	254	1364	0.035	48	0.0	2.734	A
4		48						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	203	40	1626	0.125	203	0.2	2.685	A
2	212	103	1666	0.127	212	0.2	2.574	A
3	40	212	1387	0.029	40	0.0	2.672	A
4		40						

2038 | 2a WD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.75	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2038	2a WD	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	262	100.000
2		✓	531	100.000
3		✓	341	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	194	68	0
	2	0	0	18	513
	3	0	341	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	3	4	0
	2	0	0	0	8
	3	0	2	0	17
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.20	3.23	0.3	A
2	0.35	3.53	0.6	A
3	0.31	4.49	0.5	A
4				

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	197	256	1506	0.131	197	0.2	2.837	A
2	400	51	1695	0.236	398	0.3	2.988	A
3	257	385	1292	0.199	256	0.3	3.541	A
4		256						

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	236	306	1478	0.159	235	0.2	2.991	A
2	477	61	1690	0.283	477	0.4	3.198	A
3	307	461	1250	0.245	306	0.3	3.890	A
4		306						

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	375	1440	0.200	288	0.3	3.228	A
2	585	75	1682	0.348	584	0.6	3.529	A
3	375	564	1193	0.315	375	0.5	4.485	A
4		375						

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	288	375	1439	0.200	288	0.3	3.228	A
2	585	75	1682	0.348	585	0.6	3.532	A
3	375	565	1193	0.315	375	0.5	4.492	A
4		375						

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	236	307	1477	0.159	236	0.2	2.993	A
2	477	61	1689	0.283	478	0.4	3.201	A
3	307	462	1249	0.245	307	0.3	3.899	A
4		307						

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	197	257	1505	0.131	197	0.2	2.842	A
2	400	51	1695	0.236	400	0.3	2.997	A
3	257	387	1291	0.199	257	0.3	3.552	A
4		257						

2038 | 2a WD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.57	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2038	2a WD	PM	ONE HOUR	16:45	18:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	377	100.000
2		✓	794	100.000
3		✓	26	100.000
4				

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	143	234	0
	2	0	0	41	753
	3	0	26	0	0
	4	0	0	0	0

Vehicle Mix

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	13	0	0
	2	0	0	10	4
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.25	3.09	0.4	A
2	0.55	5.31	1.3	A
3	0.03	3.53	0.0	A
4				

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	284	20	1637	0.173	283	0.2	2.779	A
2	598	176	1627	0.368	595	0.6	3.634	A
3	20	565	1193	0.016	20	0.0	3.067	A
4		20						

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	339	23	1635	0.207	339	0.3	2.904	A
2	714	210	1608	0.444	713	0.8	4.192	A
3	23	676	1132	0.021	23	0.0	3.247	A
4		23						

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	415	29	1632	0.254	415	0.4	3.092	A
2	874	257	1582	0.553	872	1.3	5.282	A
3	29	827	1048	0.027	29	0.0	3.529	A
4		29						

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	415	29	1632	0.254	415	0.4	3.092	A
2	874	258	1581	0.553	874	1.3	5.308	A
3	29	829	1047	0.027	29	0.0	3.533	A
4		29						

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	339	23	1635	0.207	339	0.3	2.907	A
2	714	211	1607	0.444	716	0.8	4.218	A
3	23	679	1130	0.021	23	0.0	3.254	A
4		23						

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	284	20	1637	0.173	284	0.2	2.782	A
2	598	176	1626	0.368	599	0.6	3.656	A
3	20	568	1191	0.016	20	0.0	3.072	A
4		20						


Uniper Technologies
N
Remembrance Way
Remembrance Way
River Soar
Loverose Wy
Kegworth Rd
A453/KEGWORTH
ROAD ROUNDABOUT

APPENDIX 62: Junction 17: A453/Trent Lane/West Leake Lane Dumbbell Roundabouts Stage 1A/2A Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: Import of J17 West Leake Lane.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\17. A453_West Leake Lane
Report generation date: 23/06/2025 10:19:56

»2022 | | AM
»2022 | | PM
»2028 | WoD | AM
»2028 | WoD | PM
»2028 | WD | AM
»2028 | WD | PM
»2038 | WoD | AM
»2038 | WoD | PM
»2038 | WD | AM
»2038 | WD | PM
»2028 | 2a WD | AM
»2028 | 2a WD | PM
»2038 | 2a WD | AM
»2038 | 2a WD | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2022									
Junction 1 - Arm 1	D1	0.4	3.74	0.24	A	D2	0.2	3.01	0.16	A
Junction 1 - Arm 2		0.0	2.80	0.04	A		0.0	2.60	0.04	A
Junction 1 - Arm 3		0.5	4.40	0.30	A		0.3	3.70	0.22	A
Junction 2 - Arm 1		0.1	3.55	0.06	A		0.0	2.84	0.02	A
Junction 2 - Arm 3		0.1	3.02	0.06	A		0.1	2.71	0.05	A
Junction 2 - Arm 4		0.2	2.50	0.16	A		0.1	2.10	0.11	A
	2028 - 2a WD									
Junction 1 - Arm 1	D11	1.1	5.57	0.47	A	D12	2.8	9.46	0.74	A
Junction 1 - Arm 2		1.4	7.21	0.59	A		0.1	4.16	0.12	A
Junction 1 - Arm 3		0.8	11.89	0.42	B		0.4	5.51	0.28	A
Junction 2 - Arm 1		1.0	5.44	0.46	A		4.6	14.45	0.82	B
Junction 2 - Arm 3		2.0	7.91	0.61	A		0.1	2.82	0.10	A
Junction 2 - Arm 4		0.2	3.38	0.14	A		0.4	2.69	0.25	A
	2028 - WD									
Junction 1 - Arm 1	D5	0.5	4.03	0.30	A	D6	0.3	3.29	0.23	A
Junction 1 - Arm 2		0.0	2.89	0.04	A		0.0	2.65	0.02	A
Junction 1 - Arm 3		0.7	4.98	0.38	A		0.5	4.34	0.33	A
Junction 2 - Arm 1		0.1	3.68	0.06	A		0.0	3.00	0.02	A
Junction 2 - Arm 3		0.1	3.01	0.06	A		0.1	2.75	0.06	A
Junction 2 - Arm 4		0.3	2.61	0.20	A		0.2	2.25	0.17	A
	2028 - WoD									
Junction 1 - Arm 1	D3	0.5	4.15	0.30	A	D4	0.3	3.29	0.23	A
Junction 1 - Arm 2		0.0	0.00	0.00	A		0.0	2.65	0.02	A
Junction 1 - Arm 3		0.7	6.03	0.39	A		0.5	4.35	0.33	A
Junction 2 - Arm 1		0.1	4.32	0.07	A		0.0	2.99	0.02	A
Junction 2 - Arm 3		0.5	4.05	0.30	A		0.1	2.75	0.06	A
Junction 2 - Arm 4		0.3	3.09	0.22	A		0.2	2.25	0.17	A
	2038 - 2a WD									
Junction 1 - Arm 1	D13	0.2	3.20	0.12	A	D14	0.1	2.84	0.11	A
Junction 1 - Arm 2		0.7	3.99	0.39	A		0.2	2.76	0.13	A
Junction 1 - Arm 3		1.2	6.75	0.51	A		0.8	5.23	0.43	A
Junction 2 - Arm 1		0.1	3.76	0.10	A		0.4	4.02	0.28	A
Junction 2 - Arm 3		0.5	4.08	0.30	A		0.3	3.32	0.22	A
Junction 2 - Arm 4		0.8	4.06	0.41	A		0.3	2.66	0.21	A
	2038 - WD									
Junction 1 - Arm 1	D9	1.1	5.46	0.48	A	D10	0.5	3.69	0.31	A
Junction 1 - Arm 2		0.0	3.20	0.01	A		0.0	2.76	0.01	A
Junction 1 - Arm 3		1.3	6.82	0.55	A		0.9	5.25	0.45	A
Junction 2 - Arm 1		0.1	4.32	0.07	A		0.0	3.14	0.02	A
Junction 2 - Arm 3		0.1	3.08	0.09	A		0.1	2.71	0.05	A
Junction 2 - Arm 4		0.6	3.22	0.34	A		0.3	2.41	0.23	A
	2038 - WoD									
Junction 1 - Arm 1	D7	1.0	5.42	0.48	A	D8	0.5	3.67	0.31	A
Junction 1 - Arm 2		0.0	3.19	0.01	A		0.0	2.75	0.01	A
Junction 1 - Arm 3		1.1	6.22	0.50	A		0.8	5.18	0.44	A
Junction 2 - Arm 1		0.1	4.29	0.07	A		0.0	3.14	0.02	A
Junction 2 - Arm 3		0.1	3.07	0.08	A		0.1	2.72	0.05	A
Junction 2 - Arm 4		0.6	3.19	0.33	A		0.3	2.40	0.22	A

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	
Location	
Site number	
Date	08/01/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	BWB\Aaiza.Shafiq
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022		AM	ONE HOUR	07:45	09:15	15
D2	2022		PM	ONE HOUR	16:45	18:15	15
D3	2028	WoD	AM	ONE HOUR	07:45	09:15	15
D4	2028	WoD	PM	ONE HOUR	16:45	18:15	15
D5	2028	WD	AM	ONE HOUR	07:45	09:15	15
D6	2028	WD	PM	ONE HOUR	16:45	18:15	15
D7	2038	WoD	AM	ONE HOUR	07:45	09:15	15
D8	2038	WoD	PM	ONE HOUR	16:45	18:15	15
D9	2038	WD	AM	ONE HOUR	07:45	09:15	15
D10	2038	WD	PM	ONE HOUR	16:45	18:15	15
D11	2028	2a WD	AM	ONE HOUR	07:45	09:15	15
D12	2028	2a WD	PM	ONE HOUR	16:45	18:15	15
D13	2038	2a WD	AM	ONE HOUR	07:45	09:15	15
D14	2038	2a WD	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2022 | | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.99	A
2	untitled	Standard Roundabout		1, 2, 3, 4	2.76	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.53	A

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	Barton Lane		
	2	A453 (NE)		
	3	West Leake Lane		
	4	A453 (SW)		
2	1	Barton Lane		
	2	A453 (NE)		
	3	Barton Lane (S)		
	4	A453 (SW)		

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	1	3.70	6.94	6.2	24.3	50.0	38.0		
	2	3.50	7.62	10.6	18.8	50.0	25.0	✓	
	3	2.90	6.12	5.8	27.2	50.0	10.7		
	4								✓
2	1	3.90	6.50	5.8	26.7	50.0	30.9		
	2								✓
	3	3.80	6.07	4.2	28.7	50.0	20.7		
	4	4.00	8.45	17.6	38.0	50.0	23.6	✓	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.558	1461
	2	0.601	1640
	3	0.561	1328
	4		
2	1	0.577	1519
	2		
	3	0.578	1468
	4	0.687	2045

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

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2022	AM	ONE HOUR	07:45	09:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	53	100.000
	3		✓	351	100.000
	4				
2	1		✓	66	100.000
	2				
	3	✓			
	4		✓	284	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	273	51
	2	5	0	48	0
	3	80	0	0	271
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	0	66	0
	2	0	0	0	0
	3	12	73	0	0
	4	26	0	258	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	14	19
	2	0	0	7	0
	3	14	0	0	10
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	22	0
	2	0	0	0	0
	3	25	14	0	0
	4	15	0	16	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.24	3.74	0.4	A
	2	0.04	2.80	0.0	A
	3	0.30	4.40	0.5	A
	4				
2	1	0.06	3.55	0.1	A
	2				
	3	0.06	3.02	0.1	A
	4	0.16	2.50	0.2	A

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	243	0	1461	0.167	242	0.2	3.389	A
	2	40	242	1495	0.027	40	0.0	2.629	A
	3	264	42	1304	0.203	263	0.3	3.832	A
	4		64						
2	1	50	248	1376	0.036	50	0.0	3.311	A
	2		243						
	3	64	0	1468	0.043	64	0.1	2.958	A
	4	214	64	2002	0.107	213	0.1	2.333	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	291	0	1461	0.199	291	0.3	3.531	A
	2	48	291	1466	0.033	48	0.0	2.698	A
	3	316	50	1299	0.243	315	0.4	4.055	A
	4		76						
2	1	59	297	1348	0.044	59	0.1	3.408	A
	2		291						
	3	76	0	1468	0.052	76	0.1	2.984	A
	4	255	76	1993	0.128	255	0.2	2.400	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	356	0	1461	0.244	356	0.4	3.740	A
	2	58	356	1426	0.041	58	0.0	2.796	A
	3	386	62	1293	0.299	386	0.5	4.399	A
	4		93						
2	1	73	364	1309	0.056	73	0.1	3.551	A
	2		356						
	3	93	0	1468	0.064	93	0.1	3.022	A
	4	313	93	1981	0.158	313	0.2	2.500	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	357	0	1461	0.244	357	0.4	3.741	A
	2	58	357	1426	0.041	58	0.0	2.797	A
	3	386	62	1293	0.299	386	0.5	4.403	A
	4		94						
2	1	73	364	1309	0.056	73	0.1	3.552	A
	2		357						
	3	94	0	1468	0.064	94	0.1	3.022	A
	4	313	94	1981	0.158	313	0.2	2.500	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	291	0	1461	0.200	292	0.3	3.534	A
	2	48	292	1465	0.033	48	0.0	2.701	A
	3	316	50	1299	0.243	316	0.4	4.063	A
	4		77						
2	1	59	298	1347	0.044	59	0.1	3.409	A
	2		291						
	3	77	0	1468	0.052	77	0.1	2.987	A
	4	255	77	1993	0.128	255	0.2	2.401	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	244	0	1461	0.167	244	0.2	3.398	A
	2	40	244	1494	0.027	40	0.0	2.634	A
	3	264	42	1304	0.203	265	0.3	3.841	A
	4		64						
2	1	50	249	1375	0.036	50	0.0	3.315	A
	2		244						
	3	64	0	1468	0.044	64	0.1	2.958	A
	4	214	64	2001	0.107	214	0.1	2.334	A

2022 | | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.30	A
2	untitled	Standard Roundabout		1, 2, 3, 4	2.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.94	A

Traffic Demand

Demand Set Details

ID	Year	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2022	PM	ONE HOUR	16:45	18:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	58	100.000
	3		✓	260	100.000
	4				
2	1		✓	19	100.000
	2				
	3	✓			
	4		✓	205	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	195	15
	2	4	0	54	0
	3	61	0	0	199
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	1	18	0
	2	0	0	0	0
	3	8	57	0	0
	4	13	0	192	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	4	0
	3	5	0	0	6
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	6	0
	2	0	0	0	0
	3	0	6	0	0
	4	9	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.16	3.01	0.2	A
	2	0.04	2.60	0.0	A
	3	0.22	3.70	0.3	A
	4				
2	1	0.02	2.84	0.0	A
	2				
	3	0.05	2.71	0.1	A
	4	0.11	2.10	0.1	A

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	158	0	1461	0.108	157	0.1	2.838	A
	2	44	157	1546	0.028	44	0.0	2.484	A
	3	196	14	1320	0.148	195	0.2	3.384	A
	4		49						
2	1	14	187	1411	0.010	14	0.0	2.722	A
	2		158						
	3	49	0	1468	0.033	49	0.0	2.667	A
	4	154	49	2012	0.077	154	0.1	2.002	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	189	0	1461	0.129	189	0.2	2.908	A
	2	52	189	1527	0.034	52	0.0	2.530	A
	3	234	17	1318	0.177	234	0.2	3.510	A
	4		58						
2	1	17	224	1390	0.012	17	0.0	2.770	A
	2		189						
	3	58	0	1468	0.040	58	0.0	2.686	A
	4	184	58	2005	0.092	184	0.1	2.043	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	231	0	1461	0.158	231	0.2	3.008	A
	2	64	231	1502	0.043	64	0.0	2.596	A
	3	286	21	1316	0.218	286	0.3	3.697	A
	4		72						
2	1	21	274	1361	0.015	21	0.0	2.837	A
	2		231						
	3	72	0	1468	0.049	71	0.1	2.711	A
	4	226	71	1996	0.113	226	0.1	2.101	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	231	0	1461	0.158	231	0.2	3.008	A
	2	64	231	1501	0.043	64	0.0	2.596	A
	3	286	21	1316	0.218	286	0.3	3.697	A
	4		72						
2	1	21	274	1361	0.015	21	0.0	2.838	A
	2		231						
	3	72	0	1468	0.049	72	0.1	2.711	A
	4	226	72	1996	0.113	226	0.1	2.101	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	189	0	1461	0.129	189	0.2	2.909	A
	2	52	189	1527	0.034	52	0.0	2.533	A
	3	234	17	1318	0.177	234	0.2	3.515	A
	4		58						
2	1	17	224	1390	0.012	17	0.0	2.772	A
	2		189						
	3	58	0	1468	0.040	59	0.0	2.688	A
	4	184	59	2005	0.092	184	0.1	2.045	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	158	0	1461	0.108	158	0.1	2.842	A
	2	44	158	1545	0.028	44	0.0	2.488	A
	3	196	14	1320	0.148	196	0.2	3.388	A
	4		49						
2	1	14	188	1411	0.010	14	0.0	2.723	A
	2		158						
	3	49	0	1468	0.033	49	0.0	2.670	A
	4	154	49	2012	0.077	154	0.1	2.003	A

2028 | WoD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.10	A
2	untitled	Standard Roundabout		1, 2, 3, 4	3.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.37	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	WoD	AM	ONE HOUR	07:45	09:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	0	100.000
	3		✓	402	100.000
	4				
2	1		✓	67	100.000
	2				
	3	✓			
	4		✓	354	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	67	353
	2	0	0	0	0
	3	402	0	0	0
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	0	67	0
	2	0	0	0	0
	3	12	76	0	0
	4	26	0	328	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	14	19
	2	0	0	7	0
	3	14	0	0	10
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	22	0
	2	0	0	0	0
	3	25	14	0	0
	4	15	0	16	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.30	4.15	0.5	A
	2	0.00	0.00	0.0	A
	3	0.39	6.03	0.7	A
	4				
2	1	0.07	4.32	0.1	A
	2				
	3	0.30	4.05	0.5	A
	4	0.22	3.09	0.3	A

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	296	0	1461	0.203	295	0.3	3.647	A
	2	0	295	1463	0.000	0	0.0	0.000	A
	3	303	248	1188	0.255	301	0.4	4.618	A
	4		301						
2	1	50	505	1228	0.041	50	0.1	3.730	A
	2		296						
	3	301	0	1468	0.205	300	0.3	3.552	A
	4	267	300	1839	0.145	266	0.2	2.650	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	355	0	1461	0.243	355	0.4	3.845	A
	2	0	355	1427	0.000	0	0.0	0.000	A
	3	361	298	1160	0.311	361	0.5	5.129	A
	4		361						
2	1	60	606	1169	0.052	60	0.1	3.959	A
	2		355						
	3	361	0	1468	0.246	361	0.4	3.750	A
	4	318	361	1798	0.177	318	0.2	2.820	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	435	0	1461	0.297	434	0.5	4.141	A
	2	0	434	1379	0.000	0	0.0	0.000	A
	3	443	365	1123	0.394	442	0.7	6.017	A
	4		442						
2	1	74	742	1091	0.068	74	0.1	4.317	A
	2		435						
	3	442	0	1468	0.301	441	0.5	4.042	A
	4	390	441	1742	0.224	389	0.3	3.084	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	435	0	1461	0.298	435	0.5	4.146	A
	2	0	435	1379	0.000	0	0.0	0.000	A
	3	443	366	1123	0.394	443	0.7	6.035	A
	4		443						
2	1	74	743	1090	0.068	74	0.1	4.320	A
	2		435						
	3	443	0	1468	0.301	443	0.5	4.049	A
	4	390	443	1741	0.224	390	0.3	3.087	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	355	0	1461	0.243	356	0.4	3.853	A
	2	0	356	1426	0.000	0	0.0	0.000	A
	3	361	299	1160	0.312	362	0.5	5.151	A
	4		362						
2	1	60	608	1168	0.052	60	0.1	3.966	A
	2		355						
	3	362	0	1468	0.247	363	0.4	3.757	A
	4	318	363	1796	0.177	319	0.3	2.826	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	298	0	1461	0.204	298	0.3	3.658	A
	2	0	298	1461	0.000	0	0.0	0.000	A
	3	303	250	1187	0.255	303	0.4	4.645	A
	4		303						
2	1	50	509	1225	0.041	50	0.1	3.737	A
	2		298						
	3	303	0	1468	0.206	303	0.3	3.566	A
	4	267	303	1837	0.145	267	0.2	2.657	A

2028 | WoD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.84	A
2	untitled	Standard Roundabout		1, 2, 3, 4	2.38	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.32	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	WoD	PM	ONE HOUR	16:45	18:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	30	100.000
	3		✓	397	100.000
	4				
2	1		✓	19	100.000
	2				
	3	✓			
	4		✓	301	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	286	20
	2	3	0	27	0
	3	77	0	0	320
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	1	18	0
	2	0	0	0	0
	3	8	71	0	0
	4	14	0	287	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	4	0
	3	5	0	0	6
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	6	0
	2	0	0	0	0
	3	0	6	0	0
	4	9	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.23	3.29	0.3	A
	2	0.02	2.65	0.0	A
	3	0.33	4.35	0.5	A
	4				
2	1	0.02	2.99	0.0	A
	2				
	3	0.06	2.75	0.1	A
	4	0.17	2.25	0.2	A

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	229	0	1461	0.157	228	0.2	3.001	A
	2	23	228	1503	0.015	23	0.0	2.518	A
	3	299	17	1318	0.227	298	0.3	3.728	A
	4		60						
2	1	14	269	1364	0.010	14	0.0	2.818	A
	2		229						
	3	60	0	1468	0.041	60	0.0	2.692	A
	4	227	60	2004	0.113	226	0.1	2.090	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	274	0	1461	0.188	274	0.2	3.117	A
	2	27	274	1476	0.018	27	0.0	2.573	A
	3	357	21	1316	0.271	357	0.4	3.969	A
	4		72						
2	1	17	322	1333	0.013	17	0.0	2.890	A
	2		274						
	3	72	0	1468	0.049	72	0.1	2.715	A
	4	271	72	1996	0.136	270	0.2	2.154	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	336	0	1461	0.230	335	0.3	3.288	A
	2	33	335	1439	0.023	33	0.0	2.652	A
	3	437	25	1313	0.333	437	0.5	4.341	A
	4		88						
2	1	21	395	1291	0.016	21	0.0	2.993	A
	2		336						
	3	88	0	1468	0.060	88	0.1	2.747	A
	4	331	88	1985	0.167	331	0.2	2.247	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	336	0	1461	0.230	336	0.3	3.288	A
	2	33	336	1439	0.023	33	0.0	2.652	A
	3	437	25	1313	0.333	437	0.5	4.346	A
	4		88						
2	1	21	395	1291	0.016	21	0.0	2.994	A
	2		336						
	3	88	0	1468	0.060	88	0.1	2.747	A
	4	331	88	1985	0.167	331	0.2	2.248	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	274	0	1461	0.188	275	0.2	3.122	A
	2	27	275	1475	0.018	27	0.0	2.574	A
	3	357	21	1316	0.271	357	0.4	3.977	A
	4		72						
2	1	17	323	1333	0.013	17	0.0	2.892	A
	2		274						
	3	72	0	1468	0.049	72	0.1	2.718	A
	4	271	72	1996	0.136	271	0.2	2.154	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	230	0	1461	0.157	230	0.2	3.008	A
	2	23	230	1502	0.015	23	0.0	2.519	A
	3	299	17	1318	0.227	299	0.3	3.739	A
	4		60						
2	1	14	270	1363	0.010	14	0.0	2.822	A
	2		230						
	3	60	0	1468	0.041	60	0.0	2.695	A
	4	227	60	2004	0.113	227	0.1	2.093	A

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.44	A
2	untitled	Standard Roundabout		1, 2, 3, 4	2.82	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.86	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028	WD	AM	ONE HOUR	07:45	09:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	50	100.000
	3		✓	447	100.000
	4				
2	1		✓	67	100.000
	2				
	3	✓			
	4		✓	355	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	340	55
	2	4	0	46	0
	3	74	0	0	373
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	0	67	0
	2	0	0	0	0
	3	12	66	0	0
	4	26	0	329	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	14	19
	2	0	0	7	0
	3	14	0	0	10
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	22	0
	2	0	0	0	0
	3	25	14	0	0
	4	15	0	16	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.30	4.03	0.5	A
	2	0.04	2.89	0.0	A
	3	0.38	4.98	0.7	A
	4				
2	1	0.06	3.68	0.1	A
	2				
	3	0.06	3.01	0.1	A
	4	0.20	2.61	0.3	A

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	297	0	1461	0.204	296	0.3	3.541	A
	2	38	296	1462	0.026	38	0.0	2.688	A
	3	337	44	1303	0.258	335	0.4	4.109	A
	4		58						
2	1	50	296	1348	0.037	50	0.0	3.383	A
	2		297						
	3	58	0	1468	0.040	58	0.0	2.950	A
	4	267	58	2005	0.133	267	0.2	2.398	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	356	0	1461	0.244	355	0.4	3.735	A
	2	45	355	1427	0.032	45	0.0	2.771	A
	3	402	53	1298	0.310	401	0.5	4.441	A
	4		70						
2	1	60	355	1314	0.046	60	0.1	3.501	A
	2		356						
	3	70	0	1468	0.048	70	0.1	2.974	A
	4	319	70	1997	0.160	319	0.2	2.486	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	436	0	1461	0.298	435	0.5	4.023	A
	2	55	435	1379	0.040	55	0.0	2.893	A
	3	492	65	1291	0.381	491	0.7	4.977	A
	4		86						
2	1	74	435	1268	0.058	74	0.1	3.675	A
	2		436						
	3	86	0	1468	0.058	86	0.1	3.008	A
	4	391	86	1986	0.197	391	0.3	2.615	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	436	0	1461	0.298	436	0.5	4.028	A
	2	55	436	1378	0.040	55	0.0	2.894	A
	3	492	65	1291	0.381	492	0.7	4.985	A
	4		86						
2	1	74	435	1268	0.058	74	0.1	3.676	A
	2		436						
	3	86	0	1468	0.058	86	0.1	3.008	A
	4	391	86	1986	0.197	391	0.3	2.615	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	356	0	1461	0.244	357	0.4	3.739	A
	2	45	357	1426	0.032	45	0.0	2.773	A
	3	402	53	1298	0.310	403	0.5	4.454	A
	4		70						
2	1	60	355	1314	0.046	60	0.1	3.502	A
	2		356						
	3	70	0	1468	0.048	70	0.1	2.977	A
	4	319	70	1997	0.160	319	0.2	2.489	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	298	0	1461	0.204	299	0.3	3.552	A
	2	38	299	1461	0.026	38	0.0	2.690	A
	3	337	45	1303	0.258	337	0.4	4.126	A
	4		59						
2	1	50	298	1347	0.037	50	0.0	3.388	A
	2		298						
	3	59	0	1468	0.040	59	0.0	2.953	A
	4	267	59	2005	0.133	267	0.2	2.403	A

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	3.84	A
2	untitled	Standard Roundabout		1, 2, 3, 4	2.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.32	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028	WD	PM	ONE HOUR	16:45	18:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	26	100.000
	3		✓	396	100.000
	4				
2	1		✓	19	100.000
	2				
	3	✓			
	4		✓	303	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	288	20
	2	2	0	24	0
	3	79	0	0	317
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	1	18	0
	2	0	0	0	0
	3	8	72	0	0
	4	14	0	289	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	4	0
	3	5	0	0	6
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	6	0
	2	0	0	0	0
	3	0	6	0	0
	4	9	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.23	3.29	0.3	A
	2	0.02	2.65	0.0	A
	3	0.33	4.34	0.5	A
	4				
2	1	0.02	3.00	0.0	A
	2				
	3	0.06	2.75	0.1	A
	4	0.17	2.25	0.2	A

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	231	0	1461	0.158	230	0.2	3.005	A
	2	20	230	1502	0.013	20	0.0	2.516	A
	3	298	16	1318	0.226	297	0.3	3.723	A
	4		61						
2	1	14	272	1362	0.011	14	0.0	2.821	A
	2		231						
	3	61	0	1468	0.041	61	0.0	2.694	A
	4	228	61	2004	0.114	228	0.1	2.093	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	276	0	1461	0.189	276	0.2	3.122	A
	2	23	276	1475	0.016	23	0.0	2.571	A
	3	356	20	1317	0.270	356	0.4	3.963	A
	4		73						
2	1	17	325	1331	0.013	17	0.0	2.893	A
	2		276						
	3	73	0	1468	0.050	73	0.1	2.717	A
	4	272	73	1995	0.137	272	0.2	2.157	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	338	0	1461	0.231	338	0.3	3.294	A
	2	29	338	1437	0.020	29	0.0	2.648	A
	3	436	24	1314	0.332	435	0.5	4.332	A
	4		89						
2	1	21	398	1289	0.016	21	0.0	2.998	A
	2		338						
	3	89	0	1468	0.061	89	0.1	2.749	A
	4	334	89	1984	0.168	333	0.2	2.251	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	338	0	1461	0.231	338	0.3	3.295	A
	2	29	338	1437	0.020	29	0.0	2.649	A
	3	436	24	1314	0.332	436	0.5	4.337	A
	4		89						
2	1	21	398	1289	0.016	21	0.0	2.998	A
	2		338						
	3	89	0	1468	0.061	89	0.1	2.749	A
	4	334	89	1984	0.168	334	0.2	2.251	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	276	0	1461	0.189	276	0.2	3.124	A
	2	23	276	1474	0.016	23	0.0	2.574	A
	3	356	20	1316	0.270	357	0.4	3.969	A
	4		73						
2	1	17	326	1331	0.013	17	0.0	2.894	A
	2		276						
	3	73	0	1468	0.050	73	0.1	2.720	A
	4	272	73	1995	0.137	273	0.2	2.157	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	231	0	1461	0.158	231	0.2	3.012	A
	2	20	231	1501	0.013	20	0.0	2.518	A
	3	298	17	1318	0.226	298	0.3	3.735	A
	4		61						
2	1	14	273	1362	0.011	14	0.0	2.824	A
	2		231						
	3	61	0	1468	0.042	61	0.0	2.695	A
	4	228	61	2003	0.114	228	0.1	2.095	A

2038 | WoD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.77	A
2	untitled	Standard Roundabout		1, 2, 3, 4	3.27	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.81	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	WoD	AM	ONE HOUR	07:45	09:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	16	100.000
	3		✓	588	100.000
	4				
2	1		✓	66	100.000
	2				
	3	✓			
	4		✓	596	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	576	63
	2	1	0	15	0
	3	106	0	0	482
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	0	66	0
	2	0	0	0	0
	3	12	95	0	0
	4	26	0	570	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	14	19
	2	0	0	7	0
	3	14	0	0	10
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	22	0
	2	0	0	0	0
	3	25	14	0	0
	4	15	0	16	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.48	5.42	1.0	A
	2	0.01	3.19	0.0	A
	3	0.50	6.22	1.1	A
	4				
2	1	0.07	4.29	0.1	A
	2				
	3	0.08	3.07	0.1	A
	4	0.33	3.19	0.6	A

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	477	0	1461	0.327	475	0.6	4.172	A
	2	12	475	1355	0.009	12	0.0	2.855	A
	3	443	48	1301	0.340	440	0.6	4.619	A
	4		80						
2	1	50	499	1231	0.040	49	0.1	3.715	A
	2		477						
	3	80	0	1468	0.055	80	0.1	2.985	A
	4	449	80	1990	0.225	447	0.3	2.702	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	571	0	1461	0.391	571	0.7	4.625	A
	2	14	571	1297	0.011	14	0.0	2.988	A
	3	529	57	1295	0.408	528	0.8	5.185	A
	4		96						
2	1	59	597	1174	0.051	59	0.1	3.938	A
	2		571						
	3	96	0	1468	0.065	96	0.1	3.019	A
	4	536	96	1979	0.271	535	0.4	2.891	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	700	0	1461	0.479	698	1.0	5.396	A
	2	18	698	1221	0.014	18	0.0	3.187	A
	3	647	70	1288	0.503	646	1.1	6.190	A
	4		118						
2	1	73	731	1097	0.066	73	0.1	4.286	A
	2		700						
	3	118	0	1468	0.080	117	0.1	3.067	A
	4	656	117	1965	0.334	656	0.6	3.187	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	700	0	1461	0.479	700	1.0	5.418	A
	2	18	700	1219	0.014	18	0.0	3.190	A
	3	647	70	1288	0.503	647	1.1	6.218	A
	4		118						
2	1	73	732	1097	0.066	73	0.1	4.288	A
	2		700						
	3	118	0	1468	0.080	118	0.1	3.068	A
	4	656	118	1964	0.334	656	0.6	3.190	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	572	0	1461	0.392	574	0.7	4.653	A
	2	14	574	1296	0.011	14	0.0	2.993	A
	3	529	57	1295	0.408	530	0.8	5.215	A
	4		96						
2	1	59	599	1174	0.051	59	0.1	3.943	A
	2		572						
	3	96	0	1468	0.066	97	0.1	3.021	A
	4	536	97	1979	0.271	536	0.4	2.894	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	479	0	1461	0.328	480	0.6	4.206	A
	2	12	480	1352	0.009	12	0.0	2.861	A
	3	443	48	1301	0.340	443	0.6	4.653	A
	4		81						
2	1	50	501	1230	0.040	50	0.1	3.720	A
	2		479						
	3	81	0	1468	0.055	81	0.1	2.986	A
	4	449	81	1990	0.225	449	0.3	2.709	A

2038 | WoD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.50	A
2	untitled	Standard Roundabout		1, 2, 3, 4	2.48	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.80	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	WoD	PM	ONE HOUR	16:45	18:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	8	100.000
	3		✓	525	100.000
	4				
2	1		✓	19	100.000
	2				
	3	✓			
	4		✓	406	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	389	22
	2	0	0	8	0
	3	70	0	0	455
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	1	18	0
	2	0	0	0	0
	3	8	61	0	0
	4	13	0	393	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	4	0
	3	5	0	0	6
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	6	0
	2	0	0	0	0
	3	0	6	0	0
	4	9	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.31	3.67	0.5	A
	2	0.01	2.75	0.0	A
	3	0.44	5.18	0.8	A
	4				
2	1	0.02	3.14	0.0	A
	2				
	3	0.05	2.72	0.1	A
	4	0.22	2.40	0.3	A

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	309	0	1461	0.211	308	0.3	3.207	A
	2	6	308	1456	0.004	6	0.0	2.582	A
	3	395	16	1318	0.300	393	0.5	4.113	A
	4		52						
2	1	14	341	1322	0.011	14	0.0	2.908	A
	2		309						
	3	52	0	1468	0.036	52	0.0	2.676	A
	4	306	52	2009	0.152	305	0.2	2.178	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	369	0	1461	0.253	369	0.3	3.391	A
	2	7	369	1419	0.005	7	0.0	2.652	A
	3	472	20	1316	0.359	471	0.6	4.507	A
	4		63						
2	1	17	409	1283	0.013	17	0.0	3.003	A
	2		369						
	3	63	0	1468	0.043	63	0.0	2.695	A
	4	365	63	2002	0.182	365	0.2	2.268	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	452	0	1461	0.310	452	0.5	3.666	A
	2	9	452	1369	0.006	9	0.0	2.752	A
	3	578	24	1314	0.440	577	0.8	5.165	A
	4		77						
2	1	21	500	1230	0.017	21	0.0	3.144	A
	2		452						
	3	77	0	1468	0.052	77	0.1	2.723	A
	4	447	77	1993	0.224	447	0.3	2.403	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	453	0	1461	0.310	453	0.5	3.670	A
	2	9	453	1368	0.006	9	0.0	2.753	A
	3	578	24	1314	0.440	578	0.8	5.178	A
	4		77						
2	1	21	501	1230	0.017	21	0.0	3.145	A
	2		453						
	3	77	0	1468	0.052	77	0.1	2.723	A
	4	447	77	1992	0.224	447	0.3	2.403	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	370	0	1461	0.253	370	0.4	3.395	A
	2	7	370	1418	0.005	7	0.0	2.655	A
	3	472	20	1316	0.359	473	0.6	4.524	A
	4		63						
2	1	17	409	1283	0.013	17	0.0	3.004	A
	2		370						
	3	63	0	1468	0.043	63	0.0	2.696	A
	4	365	63	2002	0.182	365	0.2	2.271	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	310	0	1461	0.212	310	0.3	3.219	A
	2	6	310	1454	0.004	6	0.0	2.587	A
	3	395	17	1318	0.300	396	0.5	4.133	A
	4		53						
2	1	14	343	1321	0.011	14	0.0	2.912	A
	2		310						
	3	53	0	1468	0.036	53	0.0	2.676	A
	4	306	53	2009	0.152	306	0.2	2.180	A

2038 | WD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	6.10	A
2	untitled	Standard Roundabout		1, 2, 3, 4	3.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.04	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2038	WD	AM	ONE HOUR	07:45	09:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	15	100.000
	3		✓	638	100.000
	4				
2	1		✓	66	100.000
	2				
	3	✓			
	4		✓	601	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	576	65
	2	1	0	14	0
	3	113	0	0	525
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	0	66	0
	2	0	0	0	0
	3	12	102	0	0
	4	26	0	575	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	14	19
	2	0	0	7	0
	3	14	0	0	10
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	22	0
	2	0	0	0	0
	3	25	14	0	0
	4	15	0	16	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.48	5.46	1.1	A
	2	0.01	3.20	0.0	A
	3	0.55	6.82	1.3	A
	4				
2	1	0.07	4.32	0.1	A
	2				
	3	0.09	3.08	0.1	A
	4	0.34	3.22	0.6	A

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	481	0	1461	0.329	479	0.6	4.188	A
	2	11	479	1353	0.008	11	0.0	2.858	A
	3	480	49	1300	0.370	478	0.6	4.833	A
	4		85						
2	1	50	508	1226	0.041	49	0.1	3.732	A
	2		481						
	3	85	0	1468	0.058	85	0.1	2.994	A
	4	452	85	1987	0.228	451	0.3	2.715	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	576	0	1461	0.394	575	0.7	4.649	A
	2	13	575	1295	0.010	13	0.0	2.992	A
	3	574	59	1294	0.443	573	0.9	5.514	A
	4		102						
2	1	59	608	1168	0.051	59	0.1	3.960	A
	2		576						
	3	102	0	1468	0.070	102	0.1	3.031	A
	4	540	102	1975	0.274	540	0.4	2.908	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	705	0	1461	0.483	704	1.1	5.436	A
	2	17	704	1217	0.014	17	0.0	3.192	A
	3	702	72	1287	0.546	701	1.3	6.777	A
	4		125						
2	1	73	744	1090	0.067	73	0.1	4.318	A
	2		705						
	3	125	0	1468	0.085	125	0.1	3.083	A
	4	662	125	1959	0.338	661	0.6	3.213	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	706	0	1461	0.483	706	1.1	5.458	A
	2	17	706	1216	0.014	17	0.0	3.195	A
	3	702	73	1287	0.546	702	1.3	6.818	A
	4		126						
2	1	73	745	1089	0.067	73	0.1	4.320	A
	2		706						
	3	126	0	1468	0.085	126	0.1	3.084	A
	4	662	126	1959	0.338	662	0.6	3.216	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	577	0	1461	0.395	578	0.8	4.675	A
	2	13	578	1293	0.010	13	0.0	2.998	A
	3	574	60	1294	0.443	575	0.9	5.555	A
	4		103						
2	1	59	610	1167	0.051	59	0.1	3.965	A
	2		577						
	3	103	0	1468	0.070	103	0.1	3.035	A
	4	540	103	1975	0.274	541	0.4	2.914	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	483	0	1461	0.331	484	0.6	4.223	A
	2	11	484	1350	0.008	11	0.0	2.864	A
	3	480	50	1300	0.370	481	0.7	4.874	A
	4		86						
2	1	50	510	1225	0.041	50	0.1	3.740	A
	2		483						
	3	86	0	1468	0.059	86	0.1	2.998	A
	4	452	86	1986	0.228	453	0.3	2.724	A

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.55	A
2	untitled	Standard Roundabout		1, 2, 3, 4	2.47	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.84	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2038	WD	PM	ONE HOUR	16:45	18:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	8	100.000
	3		✓	534	100.000
	4				
2	1		✓	19	100.000
	2				
	3	✓			
	4		✓	411	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	394	22
	2	0	0	8	0
	3	65	0	0	469
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	1	18	0
	2	0	0	0	0
	3	8	57	0	0
	4	13	0	398	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	4	0
	3	5	0	0	6
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	6	0
	2	0	0	0	0
	3	0	6	0	0
	4	9	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.31	3.69	0.5	A
	2	0.01	2.76	0.0	A
	3	0.45	5.25	0.9	A
	4				
2	1	0.02	3.14	0.0	A
	2				
	3	0.05	2.71	0.1	A
	4	0.23	2.41	0.3	A

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	312	0	1461	0.214	311	0.3	3.218	A
	2	6	311	1453	0.004	6	0.0	2.586	A
	3	402	16	1318	0.305	400	0.5	4.143	A
	4		49						
2	1	14	342	1322	0.011	14	0.0	2.908	A
	2		312						
	3	49	0	1468	0.033	49	0.0	2.667	A
	4	309	49	2012	0.154	309	0.2	2.179	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	374	0	1461	0.256	373	0.4	3.405	A
	2	7	373	1416	0.005	7	0.0	2.657	A
	3	480	20	1316	0.365	479	0.6	4.551	A
	4		58						
2	1	17	409	1283	0.013	17	0.0	3.003	A
	2		374						
	3	58	0	1468	0.040	58	0.0	2.686	A
	4	369	58	2005	0.184	369	0.2	2.270	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	458	0	1461	0.313	457	0.5	3.687	A
	2	9	457	1365	0.006	9	0.0	2.759	A
	3	588	24	1314	0.447	587	0.8	5.234	A
	4		71						
2	1	21	501	1230	0.017	21	0.0	3.144	A
	2		458						
	3	71	0	1468	0.049	71	0.1	2.711	A
	4	453	71	1996	0.227	452	0.3	2.405	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	458	0	1461	0.314	458	0.5	3.691	A
	2	9	458	1365	0.006	9	0.0	2.760	A
	3	588	24	1314	0.447	588	0.9	5.249	A
	4		72						
2	1	21	501	1230	0.017	21	0.0	3.145	A
	2		458						
	3	72	0	1468	0.049	72	0.1	2.711	A
	4	453	72	1996	0.227	453	0.3	2.405	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	374	0	1461	0.256	375	0.4	3.412	A
	2	7	375	1415	0.005	7	0.0	2.658	A
	3	480	20	1316	0.365	481	0.6	4.569	A
	4		59						
2	1	17	409	1283	0.013	17	0.0	3.007	A
	2		374						
	3	59	0	1468	0.040	59	0.0	2.686	A
	4	369	59	2005	0.184	370	0.2	2.273	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	313	0	1461	0.215	314	0.3	3.230	A
	2	6	314	1452	0.004	6	0.0	2.591	A
	3	402	17	1318	0.305	403	0.5	4.165	A
	4		49						
2	1	14	343	1321	0.011	14	0.0	2.912	A
	2		313						
	3	49	0	1468	0.033	49	0.0	2.670	A
	4	309	49	2012	0.154	310	0.2	2.182	A

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	7.23	A
2	untitled	Standard Roundabout		1, 2, 3, 4	6.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.82	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2028	2a WD	AM	ONE HOUR	07:45	09:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	655	100.000
	3		✓	226	100.000
	4				
2	1		✓	627	100.000
	2				
	3	✓			
	4		✓	184	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	25	417
	2	594	0	61	0
	3	225	0	0	1
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	0	627	0
	2	0	0	0	0
	3	946	36	0	0
	4	181	0	3	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	14	19
	2	0	0	7	0
	3	14	0	0	10
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	22	0
	2	0	0	0	0
	3	25	14	0	0
	4	15	0	16	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.47	5.57	1.1	A
	2	0.59	7.21	1.4	A
	3	0.42	11.89	0.8	B
	4				
2	1	0.46	5.44	1.0	A
	2				
	3	0.61	7.91	2.0	A
	4	0.14	3.38	0.2	A

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	472	0	1461	0.323	470	0.6	4.303	A
	2	493	470	1358	0.363	491	0.6	4.166	A
	3	170	888	829	0.205	169	0.3	6.205	A
	4		613						
2	1	472	25	1505	0.314	470	0.6	4.235	A
	2		472						
	3	613	0	1468	0.418	610	0.9	5.203	A
	4	139	610	1626	0.085	138	0.1	2.782	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	566	0	1461	0.387	565	0.7	4.766	A
	2	589	565	1301	0.453	588	0.8	5.073	A
	3	203	1066	730	0.278	203	0.4	7.778	A
	4		735						
2	1	564	30	1502	0.375	563	0.7	4.674	A
	2		566						
	3	735	0	1468	0.500	733	1.2	6.091	A
	4	165	733	1542	0.107	165	0.1	3.008	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	692	0	1461	0.474	691	1.1	5.543	A
	2	721	691	1225	0.589	719	1.4	7.125	A
	3	249	1304	596	0.417	247	0.8	11.718	B
	4		898						
2	1	690	36	1498	0.461	689	1.0	5.420	A
	2		692						
	3	898	0	1468	0.612	895	1.9	7.789	A
	4	203	895	1430	0.142	202	0.2	3.371	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	694	0	1461	0.475	694	1.1	5.569	A
	2	721	694	1223	0.589	721	1.4	7.208	A
	3	249	1308	594	0.419	249	0.8	11.894	B
	4		902						
2	1	690	36	1498	0.461	690	1.0	5.436	A
	2		694						
	3	902	0	1468	0.614	901	2.0	7.906	A
	4	203	901	1426	0.142	203	0.2	3.383	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	568	0	1461	0.389	569	0.8	4.797	A
	2	589	569	1298	0.454	591	0.8	5.139	A
	3	203	1073	726	0.280	205	0.4	7.894	A
	4		740						
2	1	564	30	1502	0.375	565	0.7	4.694	A
	2		568						
	3	740	0	1468	0.504	743	1.3	6.203	A
	4	165	743	1535	0.108	166	0.1	3.022	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	475	0	1461	0.325	476	0.6	4.343	A
	2	493	476	1354	0.364	494	0.6	4.217	A
	3	170	897	824	0.206	171	0.3	6.282	A
	4		618						
2	1	472	25	1505	0.314	473	0.6	4.260	A
	2		475						
	3	618	0	1468	0.421	620	0.9	5.294	A
	4	139	620	1620	0.086	139	0.1	2.797	A

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Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	8.31	A
2	untitled	Standard Roundabout		1, 2, 3, 4	10.29	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.40	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2028	2a WD	PM	ONE HOUR	16:45	18:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	108	100.000
	3		✓	244	100.000
	4				
2	1		✓	1068	100.000
	2				
	3	✓			
	4		✓	448	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	461	526
	2	76	0	32	0
	3	64	0	0	180
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	153	915	0
	2	0	0	0	0
	3	69	67	0	0
	4	385	0	63	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	4	0
	3	5	0	0	6
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	6	0
	2	0	0	0	0
	3	0	6	0	0
	4	9	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.74	9.46	2.8	A
	2	0.12	4.16	0.1	A
	3	0.28	5.51	0.4	A
	4				
2	1	0.82	14.45	4.6	B
	2				
	3	0.10	2.82	0.1	A
	4	0.25	2.69	0.4	A

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	732	0	1461	0.501	728	1.0	4.953	A
	2	81	728	1203	0.068	81	0.1	3.246	A
	3	184	445	1078	0.170	183	0.2	4.249	A
	4		105						
2	1	804	99	1462	0.550	799	1.3	5.664	A
	2		732						
	3	105	0	1468	0.071	105	0.1	2.715	A
	4	337	105	1973	0.171	336	0.2	2.376	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	877	0	1461	0.600	875	1.5	6.205	A
	2	97	875	1114	0.087	97	0.1	3.578	A
	3	219	534	1028	0.213	219	0.3	4.706	A
	4		126						
2	1	960	119	1451	0.662	957	2.0	7.618	A
	2		877						
	3	126	0	1468	0.086	126	0.1	2.757	A
	4	403	126	1959	0.206	403	0.3	2.500	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	1069	0	1461	0.731	1064	2.7	9.086	A
	2	119	1064	1001	0.119	119	0.1	4.129	A
	3	269	651	963	0.279	268	0.4	5.477	A
	4		154						
2	1	1176	145	1435	0.819	1166	4.4	13.592	B
	2		1069						
	3	154	0	1468	0.105	154	0.1	2.816	A
	4	493	154	1940	0.254	493	0.4	2.690	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	1076	0	1461	0.737	1076	2.8	9.461	A
	2	119	1076	994	0.120	119	0.1	4.163	A
	3	269	657	959	0.280	269	0.4	5.513	A
	4		154						
2	1	1176	145	1435	0.819	1175	4.6	14.453	B
	2		1076						
	3	154	0	1468	0.105	154	0.1	2.817	A
	4	493	154	1939	0.254	493	0.4	2.690	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	888	0	1461	0.608	892	1.6	6.472	A
	2	97	892	1104	0.088	97	0.1	3.620	A
	3	219	544	1022	0.215	220	0.3	4.747	A
	4		126						
2	1	960	119	1451	0.662	970	2.1	8.028	A
	2		888						
	3	126	0	1468	0.086	126	0.1	2.758	A
	4	403	126	1959	0.206	403	0.3	2.502	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	739	0	1461	0.506	741	1.0	5.089	A
	2	81	741	1195	0.068	81	0.1	3.272	A
	3	184	452	1074	0.171	184	0.2	4.280	A
	4		106						
2	1	804	99	1462	0.550	807	1.3	5.811	A
	2		739						
	3	106	0	1468	0.072	106	0.1	2.717	A
	4	337	106	1973	0.171	338	0.2	2.381	A

2038 | 2a WD | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	5.13	A
2	untitled	Standard Roundabout		1, 2, 3, 4	4.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.60	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D13	2038	2a WD	AM	ONE HOUR	07:45	09:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	538	100.000
	3		✓	564	100.000
	4				
2	1		✓	122	100.000
	2				
	3	✓			
	4		✓	655	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	480	83
	2	157	0	381	0
	3	244	0	0	320
	4	0	0	0	0

Demand (PCU/hr)

Junction 2

		To			
		1	2	3	4
From	1	0	0	122	0
	2	0	0	0	0
	3	48	159	0	0
	4	621	0	34	0

Vehicle Mix

Heavy Vehicle %

Junction 1

		To			
		1	2	3	4
From	1	0	0	14	19
	2	0	0	7	0
	3	14	0	0	10
	4	0	0	0	0

Heavy Vehicle %

Junction 2

		To			
		1	2	3	4
From	1	0	0	22	0
	2	0	0	0	0
	3	25	14	0	0
	4	15	0	16	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.12	3.20	0.2	A
	2	0.39	3.99	0.7	A
	3	0.51	6.75	1.2	A
	4				
2	1	0.10	3.76	0.1	A
	2				
	3	0.30	4.08	0.5	A
	4	0.41	4.06	0.8	A

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	117	0	1461	0.080	117	0.1	3.072	A
	2	405	117	1570	0.258	404	0.4	3.231	A
	3	425	135	1252	0.339	422	0.6	4.835	A
	4		300						
2	1	92	255	1372	0.067	91	0.1	3.430	A
	2		117						
	3	300	0	1468	0.205	299	0.3	3.581	A
	4	493	299	1840	0.268	491	0.4	3.067	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	140	0	1461	0.096	140	0.1	3.126	A
	2	484	140	1556	0.311	483	0.5	3.515	A
	3	507	162	1237	0.410	506	0.8	5.498	A
	4		360						
2	1	110	307	1342	0.082	110	0.1	3.562	A
	2		140						
	3	360	0	1468	0.245	360	0.4	3.779	A
	4	589	360	1798	0.327	588	0.6	3.421	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	172	0	1461	0.117	171	0.2	3.202	A
	2	592	171	1537	0.385	592	0.7	3.991	A
	3	621	198	1217	0.510	619	1.1	6.716	A
	4		441						
2	1	134	375	1302	0.103	134	0.1	3.758	A
	2		172						
	3	441	0	1468	0.300	440	0.5	4.073	A
	4	721	440	1743	0.414	720	0.8	4.045	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	172	0	1461	0.118	172	0.2	3.202	A
	2	592	172	1537	0.385	592	0.7	3.995	A
	3	621	198	1216	0.511	621	1.2	6.752	A
	4		441						
2	1	134	377	1302	0.103	134	0.1	3.760	A
	2		172						
	3	441	0	1468	0.301	441	0.5	4.079	A
	4	721	441	1742	0.414	721	0.8	4.056	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	140	0	1461	0.096	141	0.1	3.129	A
	2	484	141	1556	0.311	484	0.5	3.526	A
	3	507	162	1237	0.410	509	0.8	5.533	A
	4		361						
2	1	110	309	1341	0.082	110	0.1	3.566	A
	2		140						
	3	361	0	1468	0.246	362	0.4	3.786	A
	4	589	362	1797	0.328	590	0.6	3.436	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	118	0	1461	0.080	118	0.1	3.076	A
	2	405	118	1570	0.258	405	0.4	3.242	A
	3	425	136	1251	0.339	425	0.6	4.874	A
	4		302						
2	1	92	258	1370	0.067	92	0.1	3.435	A
	2		118						
	3	302	0	1468	0.206	303	0.3	3.594	A
	4	493	303	1837	0.268	494	0.4	3.082	A

2038 | 2a WD | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	4.26	A
2	untitled	Standard Roundabout		1, 2, 3, 4	3.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.76	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D14	2038	2a WD	PM	ONE HOUR	16:45	18:15	15

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	1	2	3	Queue limited	Normal	0	100.00	27.00
2	3	1	1	Queue limited	Normal	0	100.00	27.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1	✓			
	2		✓	186	100.000
	3		✓	503	100.000
	4				
2	1		✓	315	100.000
	2				
	3	✓			
	4		✓	348	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	0	464	51
	2	63	0	123	0
	3	228	0	0	275
	4	0	0	0	0

Junction 2

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	315	0	0
	2	0	0	0	0
	3	0	28	0	0
	4	203	0	145	0

Vehicle Mix

Junction 1

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	3	0
	2	0	0	4	0
	3	5	0	0	6
	4	0	0	0	0

Junction 2

Heavy Vehicle %

		To			
		1	2	3	4
From	1	0	0	6	0
	2	0	0	0	0
	3	0	6	0	0
	4	9	0	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1	0.11	2.84	0.1	A
	2	0.13	2.76	0.2	A
	3	0.43	5.23	0.8	A
	4				
2	1	0.28	4.02	0.4	A
	2				
	3	0.22	3.32	0.3	A
	4	0.21	2.66	0.3	A

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	109	0	1461	0.075	109	0.1	2.734	A
	2	140	109	1575	0.089	140	0.1	2.573	A
	3	379	58	1295	0.292	377	0.4	4.131	A
	4		218						
2	1	237	326	1331	0.178	236	0.2	3.284	A
	2		109						
	3	218	0	1468	0.149	217	0.2	3.049	A
	4	262	217	1896	0.138	261	0.2	2.342	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	130	0	1461	0.089	130	0.1	2.778	A
	2	167	130	1562	0.107	167	0.1	2.647	A
	3	452	69	1289	0.351	452	0.6	4.537	A
	4		261						
2	1	283	391	1293	0.219	283	0.3	3.563	A
	2		130						
	3	261	0	1468	0.178	261	0.2	3.160	A
	4	313	261	1866	0.168	313	0.2	2.466	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	160	0	1461	0.109	159	0.1	2.840	A
	2	205	159	1545	0.133	205	0.2	2.756	A
	3	554	85	1280	0.433	553	0.8	5.220	A
	4		320						
2	1	347	479	1243	0.279	346	0.4	4.015	A
	2		160						
	3	320	0	1468	0.218	320	0.3	3.322	A
	4	383	320	1826	0.210	383	0.3	2.655	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	160	0	1461	0.109	160	0.1	2.840	A
	2	205	160	1544	0.133	205	0.2	2.756	A
	3	554	85	1280	0.433	554	0.8	5.233	A
	4		320						
2	1	347	480	1242	0.279	347	0.4	4.020	A
	2		160						
	3	320	0	1468	0.218	320	0.3	3.323	A
	4	383	320	1825	0.210	383	0.3	2.656	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	130	0	1461	0.089	131	0.1	2.781	A
	2	167	131	1562	0.107	167	0.1	2.648	A
	3	452	70	1289	0.351	453	0.6	4.554	A
	4		262						
2	1	283	393	1292	0.219	284	0.3	3.571	A
	2		130						
	3	262	0	1468	0.178	262	0.2	3.166	A
	4	313	262	1865	0.168	313	0.2	2.468	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	109	0	1461	0.075	109	0.1	2.737	A
	2	140	109	1575	0.089	140	0.1	2.574	A
	3	379	58	1295	0.292	379	0.4	4.153	A
	4		219						
2	1	237	329	1329	0.178	237	0.2	3.299	A
	2		109						
	3	219	0	1468	0.149	220	0.2	3.055	A
	4	262	220	1895	0.138	262	0.2	2.346	A

APPENDIX 63: Junction 8: A453/The Green Priority Junction Stage 1B/2B Modelling Results

Junctions 11

PICADY 11 - Priority Intersection Module

Version: 11.0.0.2177
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Filename: 250624_A453_The Green_Stage 1b+2b.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\8. A453_The Green Junction
Report generation date: 25/06/2025 10:05:54

»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2b WD Flows | AM
»2028 | 2b WD Flows | PM
»2038 | 2b WD Flows | AM
»2038 | 2b WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 - 2b WD Flows															
Stream B-AC	D9	15.7	113.15	1.00	F	37.15	E	-14 % [Stream B-AC]	D10	1.3	20.72	0.57	C	4.75	A	14 % [Stream B-AC]
Stream C-AB		0.5	4.51	0.19	A					0.9	7.60	0.37	A			
	2028 - WD Flows															
Stream B-AC	D3	78.5	529.37	1.28	F	193.35	F	-29 % [Stream B-AC]	D4	1.2	18.04	0.55	C	4.56	A	19 % [Stream B-AC]
Stream C-AB		0.5	4.35	0.19	A					0.9	7.21	0.36	A			
	2028 - WoD Flows															
Stream B-AC	D1	2.8	26.93	0.75	D	7.77	A	6 % [Stream B-AC]	D2	1.0	14.03	0.49	B	4.02	A	33 % [Stream B-AC]
Stream C-AB		0.4	4.69	0.17	A					0.7	6.23	0.31	A			
	2038 - 2b WD Flows															
Stream B-AC	D11	262.9	1728.78	1.70	F	797.71	F	-43 % [Stream B-AC]	D12	7.7	88.41	0.93	F	18.84	C	-11 % [Stream B-AC]
Stream C-AB		0.0	5.01	0.02	A					1.1	9.16	0.42	A			
	2038 - WD Flows															
Stream B-AC	D7	384.1	2451.51	1.89	F	1226.57	F	-49 % [Stream B-AC]	D8	7.6	82.63	0.92	F	18.99	C	-11 % [Stream B-AC]
Stream C-AB		0.1	4.65	0.04	A					0.8	8.51	0.36	A			
	2038 - WoD Flows															
Stream B-AC	D5	68.0	440.14	1.24	F	166.74	F	-27 % [Stream B-AC]	D6	3.4	37.63	0.79	E	9.46	A	-1 % [Stream B-AC]
Stream C-AB		0.0	5.28	0.02	A					0.7	6.79	0.30	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	East Midlands Gateway Phase 2
Location	A453/The Green T-Junction
Site number	
Date	06/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
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	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D2	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D3	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15
D4	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15
D5	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15
D6	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15
D7	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15
D8	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15
D9	2028	2b WD Flows	AM	ONE HOUR	08:00	09:30	15
D10	2028	2b WD Flows	PM	ONE HOUR	17:00	18:30	15
D11	2038	2b WD Flows	AM	ONE HOUR	08:00	09:30	15
D12	2038	2b WD Flows	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		7.77	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	6	Stream B-AC	7.77	A

Arms

Arms

Arm	Name	Description	Arm type
A	A453 (E)		Major
B	The Green		Minor
C	A453 (W)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.00			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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.60	119	135

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	621	0.108	0.273	0.172	0.390
B-C	752	0.110	0.279	-	-
C-B	719	0.266	0.266	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	385	100.000
B		✓	360	100.000
C		✓	586	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	27	358
	B	112	0	248
	C	521	65	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	4	12
	B	1	0	0
	C	7	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.75	26.93	2.8	D
C-AB	0.17	4.69	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	271	0.00	588	0.461	268	0.8	11.162	B
C-AB	87	0.00	894	0.098	86	0.2	4.668	A
C-A	354	0.00			354			
A-B	20	0.00			20			
A-C	270	0.00			270			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	324	0.00	564	0.574	322	1.3	14.814	B
C-AB	118	0.00	932	0.127	118	0.3	4.639	A
C-A	409	0.00			409			
A-B	24	0.00			24			
A-C	322	0.00			322			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	396	0.00	529	0.750	391	2.7	25.182	D
C-AB	172	0.00	987	0.174	171	0.4	4.648	A
C-A	473	0.00			473			
A-B	30	0.00			30			
A-C	394	0.00			394			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	396	0.00	529	0.750	396	2.8	26.932	D
C-AB	172	0.00	987	0.174	172	0.4	4.662	A
C-A	473	0.00			473			
A-B	30	0.00			30			
A-C	394	0.00			394			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	324	0.00	563	0.574	329	1.4	15.784	C
C-AB	118	0.00	933	0.127	119	0.3	4.665	A
C-A	409	0.00			409			
A-B	24	0.00			24			
A-C	322	0.00			322			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	271	0.00	588	0.461	273	0.9	11.549	B
C-AB	88	0.00	894	0.098	88	0.2	4.690	A
C-A	354	0.00			354			
A-B	20	0.00			20			
A-C	270	0.00			270			

2028 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		4.02	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	33	Stream B-AC	4.02	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	422	100.000
B		✓	226	100.000
C		✓	482	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	390
	B	82	0	144
	C	351	131	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.49	14.03	1.0	B
C-AB	0.31	6.23	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	170	0.00	570	0.299	168	0.4	8.929	A
C-AB	147	0.00	805	0.182	146	0.3	5.523	A
C-A	216	0.00			216			
A-B	24	0.00			24			
A-C	294	0.00			294			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	0.00	543	0.374	203	0.6	10.543	B
C-AB	191	0.00	825	0.232	191	0.4	5.756	A
C-A	242	0.00			242			
A-B	29	0.00			29			
A-C	351	0.00			351			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	249	0.00	505	0.492	247	0.9	13.878	B
C-AB	264	0.00	854	0.310	264	0.7	6.202	A
C-A	266	0.00			266			
A-B	35	0.00			35			
A-C	429	0.00			429			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	249	0.00	505	0.493	249	1.0	14.033	B
C-AB	265	0.00	855	0.310	265	0.7	6.234	A
C-A	266	0.00			266			
A-B	35	0.00			35			
A-C	429	0.00			429			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	203	0.00	543	0.374	205	0.6	10.681	B
C-AB	192	0.00	826	0.232	193	0.5	5.802	A
C-A	242	0.00			242			
A-B	29	0.00			29			
A-C	351	0.00			351			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	170	0.00	570	0.299	171	0.4	9.044	A
C-AB	147	0.00	806	0.183	148	0.3	5.563	A
C-A	216	0.00			216			
A-B	24	0.00			24			
A-C	294	0.00			294			

2028 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		193.35	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-29	Stream B-AC	193.35	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	290	100.000
B		✓	567	100.000
C		✓	699	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	254
	B	296	0	271
	C	633	66	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	13
	B	0	0	0
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.28	529.37	78.5	F
C-AB	0.19	4.35	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	427	0.00	552	0.774	415	3.0	24.490	C
C-AB	98	0.00	962	0.102	98	0.2	4.329	A
C-A	428	0.00			428			
A-B	27	0.00			27			
A-C	191	0.00			191			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	510	0.00	526	0.970	484	9.5	63.158	F
C-AB	136	0.00	1013	0.134	136	0.3	4.271	A
C-A	492	0.00			492			
A-B	32	0.00			32			
A-C	228	0.00			228			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	624	0.00	488	1.278	485	44.3	217.781	F
C-AB	204	0.00	1086	0.188	203	0.5	4.259	A
C-A	565	0.00			565			
A-B	40	0.00			40			
A-C	280	0.00			280			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	624	0.00	488	1.279	488	78.5	455.880	F
C-AB	205	0.00	1086	0.188	205	0.5	4.269	A
C-A	565	0.00			565			
A-B	40	0.00			40			
A-C	280	0.00			280			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	510	0.00	525	0.970	519	76.2	529.369	F
C-AB	136	0.00	1014	0.135	137	0.3	4.290	A
C-A	492	0.00			492			
A-B	32	0.00			32			
A-C	228	0.00			228			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	427	0.00	552	0.774	544	46.8	409.285	F
C-AB	99	0.00	963	0.103	99	0.2	4.346	A
C-A	427	0.00			427			
A-B	27	0.00			27			
A-C	191	0.00			191			

2028 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		4.56	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	19	Stream B-AC	4.56	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	553	100.000
B		✓	217	100.000
C		✓	468	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	80	473
	B	107	0	110
	C	322	146	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.55	18.04	1.2	C
C-AB	0.36	7.21	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	0.00	519	0.315	162	0.5	10.015	B
C-AB	161	0.00	768	0.209	159	0.4	5.993	A
C-A	192	0.00			192			
A-B	60	0.00			60			
A-C	356	0.00			356			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	195	0.00	486	0.402	194	0.7	12.312	B
C-AB	209	0.00	782	0.267	208	0.5	6.387	A
C-A	212	0.00			212			
A-B	72	0.00			72			
A-C	425	0.00			425			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	239	0.00	438	0.545	237	1.1	17.691	C
C-AB	289	0.00	802	0.361	288	0.8	7.151	A
C-A	226	0.00			226			
A-B	88	0.00			88			
A-C	521	0.00			521			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	239	0.00	438	0.545	239	1.2	18.037	C
C-AB	290	0.00	803	0.361	290	0.9	7.205	A
C-A	225	0.00			225			
A-B	88	0.00			88			
A-C	521	0.00			521			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	195	0.00	485	0.402	197	0.7	12.567	B
C-AB	210	0.00	783	0.268	211	0.5	6.457	A
C-A	211	0.00			211			
A-B	72	0.00			72			
A-C	425	0.00			425			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	163	0.00	519	0.315	164	0.5	10.178	B
C-AB	161	0.00	769	0.210	162	0.4	6.049	A
C-A	191	0.00			191			
A-B	60	0.00			60			
A-C	356	0.00			356			

2038 | WoD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		166.74	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-27	Stream B-AC	166.74	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	450	100.000
B		✓	559	100.000
C		✓	467	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	444
	B	238	0	321
	C	460	7	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	20	9
	B	0	0	0
	C	6	40	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.24	440.14	68.0	F
C-AB	0.02	5.28	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	421	0.00	561	0.751	410	2.7	22.534	C
C-AB	9	0.00	854	0.010	9	0.0	5.277	A
C-A	343	0.00			343			
A-B	5	0.00			5			
A-C	334	0.00			334			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	503	0.00	535	0.940	482	7.8	54.136	F
C-AB	12	0.00	884	0.013	12	0.0	5.060	A
C-A	408	0.00			408			
A-B	5	0.00			5			
A-C	399	0.00			399			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	615	0.00	498	1.236	493	38.4	187.556	F
C-AB	17	0.00	928	0.018	17	0.0	4.747	A
C-A	497	0.00			497			
A-B	7	0.00			7			
A-C	489	0.00			489			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	615	0.00	498	1.236	497	68.0	391.745	F
C-AB	17	0.00	928	0.018	17	0.0	4.705	A
C-A	497	0.00			497			
A-B	7	0.00			7			
A-C	489	0.00			489			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	503	0.00	535	0.940	527	62.0	440.138	F
C-AB	12	0.00	884	0.013	12	0.0	4.959	A
C-A	408	0.00			408			
A-B	5	0.00			5			
A-C	399	0.00			399			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	421	0.00	561	0.751	552	29.3	301.984	F
C-AB	9	0.00	854	0.010	9	0.0	5.223	A
C-A	343	0.00			343			
A-B	5	0.00			5			
A-C	334	0.00			334			

2038 | WoD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		9.46	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-1	Stream B-AC	9.46	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	633	100.000
B		✓	309	100.000
C		✓	423	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	70	563
	B	139	0	170
	C	307	116	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.79	37.63	3.4	E
C-AB	0.30	6.79	0.7	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	233	0.00	517	0.450	229	0.8	12.388	B
C-AB	126	0.00	747	0.169	125	0.3	5.874	A
C-A	192	0.00			192			
A-B	53	0.00			53			
A-C	424	0.00			424			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	278	0.00	482	0.576	276	1.3	17.260	C
C-AB	165	0.00	756	0.218	164	0.4	6.181	A
C-A	216	0.00			216			
A-B	63	0.00			63			
A-C	506	0.00			506			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	340	0.00	433	0.786	333	3.1	33.713	D
C-AB	228	0.00	771	0.296	227	0.6	6.754	A
C-A	237	0.00			237			
A-B	77	0.00			77			
A-C	620	0.00			620			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	340	0.00	433	0.786	339	3.4	37.628	E
C-AB	229	0.00	772	0.296	229	0.7	6.792	A
C-A	237	0.00			237			
A-B	77	0.00			77			
A-C	620	0.00			620			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	278	0.00	482	0.576	286	1.4	18.990	C
C-AB	165	0.00	757	0.218	166	0.4	6.236	A
C-A	215	0.00			215			
A-B	63	0.00			63			
A-C	506	0.00			506			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	233	0.00	517	0.450	235	0.8	12.883	B
C-AB	127	0.00	747	0.170	127	0.3	5.918	A
C-A	192	0.00			192			
A-B	53	0.00			53			
A-C	424	0.00			424			

2038 | WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		1226.57	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-49	Stream B-AC	1226.57	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	355	100.000
B		✓	845	100.000
C		✓	489	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	22	333
	B	495	0	350
	C	473	16	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	5	10
	B	0	0	0
	C	6	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.89	2451.51	384.1	F
C-AB	0.04	4.65	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	636	0.00	550	1.157	530	26.5	105.805	F
C-AB	20	0.00	876	0.023	20	0.0	4.655	A
C-A	348	0.00			348			
A-B	17	0.00			17			
A-C	251	0.00			251			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	760	0.00	526	1.444	525	85.1	405.415	F
C-AB	27	0.00	909	0.030	27	0.0	4.501	A
C-A	413	0.00			413			
A-B	20	0.00			20			
A-C	299	0.00			299			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	930	0.00	492	1.889	492	194.6	1027.476	F
C-AB	39	0.00	958	0.040	39	0.1	4.299	A
C-A	500	0.00			500			
A-B	24	0.00			24			
A-C	367	0.00			367			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	930	0.00	492	1.889	492	304.1	1831.854	F
C-AB	39	0.00	958	0.040	39	0.1	4.289	A
C-A	500	0.00			500			
A-B	24	0.00			24			
A-C	367	0.00			367			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	760	0.00	526	1.444	526	362.5	2228.918	F
C-AB	27	0.00	909	0.030	27	0.0	4.480	A
C-A	412	0.00			412			
A-B	20	0.00			20			
A-C	299	0.00			299			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	636	0.00	550	1.157	550	384.1	2451.508	F
C-AB	20	0.00	876	0.023	20	0.0	4.643	A
C-A	348	0.00			348			
A-B	17	0.00			17			
A-C	251	0.00			251			

2038 | WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		18.99	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-11	Stream B-AC	18.99	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	788	100.000
B		✓	323	100.000
C		✓	388	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	139	649
	B	162	0	161
	C	253	135	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	6
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.92	82.63	7.6	F
C-AB	0.36	8.51	0.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	243	0.00	483	0.503	239	1.0	14.524	B
C-AB	140	0.00	692	0.203	139	0.3	6.669	A
C-A	152	0.00			152			
A-B	105	0.00			105			
A-C	489	0.00			489			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	290	0.00	443	0.655	287	1.8	22.614	C
C-AB	181	0.00	691	0.263	181	0.5	7.264	A
C-A	167	0.00			167			
A-B	125	0.00			125			
A-C	583	0.00			583			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	356	0.00	386	0.921	338	6.2	60.125	F
C-AB	250	0.00	691	0.362	249	0.8	8.421	A
C-A	177	0.00			177			
A-B	153	0.00			153			
A-C	715	0.00			715			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	356	0.00	386	0.922	350	7.6	82.631	F
C-AB	251	0.00	692	0.362	250	0.8	8.508	A
C-A	177	0.00			177			
A-B	153	0.00			153			
A-C	715	0.00			715			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	290	0.00	443	0.656	312	2.1	31.412	D
C-AB	182	0.00	691	0.263	183	0.5	7.381	A
C-A	167	0.00			167			
A-B	125	0.00			125			
A-C	583	0.00			583			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	243	0.00	483	0.504	247	1.0	15.520	C
C-AB	141	0.00	692	0.203	141	0.4	6.744	A
C-A	151	0.00			151			
A-B	105	0.00			105			
A-C	489	0.00			489			

2028 | 2b WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		37.15	E

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-14	Stream B-AC	37.15	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2028	2b WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	313	100.000
B		✓	462	100.000
C		✓	651	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	280
	B	201	0	261
	C	582	69	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	3	13
	B	1	0	0
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.00	113.15	15.7	F
C-AB	0.19	4.51	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	348	0.00	570	0.610	342	1.5	15.476	C
C-AB	98	0.00	934	0.105	97	0.2	4.487	A
C-A	392	0.00			392			
A-B	25	0.00			25			
A-C	211	0.00			211			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	415	0.00	545	0.762	410	2.9	25.702	D
C-AB	134	0.00	980	0.136	133	0.3	4.445	A
C-A	452	0.00			452			
A-B	30	0.00			30			
A-C	252	0.00			252			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	509	0.00	509	0.998	475	11.2	71.486	F
C-AB	198	0.00	1045	0.189	197	0.5	4.450	A
C-A	519	0.00			519			
A-B	36	0.00			36			
A-C	308	0.00			308			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	509	0.00	509	0.999	491	15.7	113.150	F
C-AB	198	0.00	1045	0.189	198	0.5	4.464	A
C-A	519	0.00			519			
A-B	36	0.00			36			
A-C	308	0.00			308			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	415	0.00	545	0.762	463	3.7	56.228	F
C-AB	134	0.00	981	0.137	135	0.3	4.469	A
C-A	451	0.00			451			
A-B	30	0.00			30			
A-C	252	0.00			252			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	348	0.00	570	0.611	356	1.6	17.536	C
C-AB	98	0.00	935	0.105	99	0.2	4.506	A
C-A	392	0.00			392			
A-B	25	0.00			25			
A-C	211	0.00			211			

2028 | 2b WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		4.75	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	14	Stream B-AC	4.75	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2028	2b WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	637	100.000
B		✓	212	100.000
C		✓	456	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	116	521
	B	117	0	95
	C	311	145	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	5
	B	0	0	0
	C	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.57	20.72	1.3	C
C-AB	0.37	7.60	0.9	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	0.00	495	0.322	158	0.5	10.605	B
C-AB	159	0.00	748	0.212	157	0.4	6.177	A
C-A	184	0.00			184			
A-B	87	0.00			87			
A-C	392	0.00			392			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	191	0.00	459	0.415	190	0.7	13.333	B
C-AB	207	0.00	758	0.273	207	0.5	6.639	A
C-A	203	0.00			203			
A-B	104	0.00			104			
A-C	468	0.00			468			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	233	0.00	407	0.574	231	1.3	20.193	C
C-AB	288	0.00	774	0.372	286	0.9	7.542	A
C-A	214	0.00			214			
A-B	128	0.00			128			
A-C	574	0.00			574			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	233	0.00	407	0.574	233	1.3	20.721	C
C-AB	288	0.00	774	0.372	288	0.9	7.603	A
C-A	214	0.00			214			
A-B	128	0.00			128			
A-C	574	0.00			574			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	191	0.00	458	0.416	193	0.7	13.681	B
C-AB	208	0.00	759	0.274	209	0.6	6.719	A
C-A	202	0.00			202			
A-B	104	0.00			104			
A-C	468	0.00			468			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	160	0.00	495	0.323	161	0.5	10.800	B
C-AB	160	0.00	749	0.213	160	0.4	6.237	A
C-A	184	0.00			184			
A-B	87	0.00			87			
A-C	392	0.00			392			

2038 | 2b WD Flows | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		797.71	F

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-43	Stream B-AC	797.71	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2038	2b WD Flows	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	400	100.000
B		✓	747	100.000
C		✓	472	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	391
	B	419	0	328
	C	463	9	0

Vehicle Mix

Heavy Vehicle %

		To		
		A	B	C
From	A	0	13	10
	B	0	0	0
	C	6	29	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.70	1728.78	262.9	F
C-AB	0.02	5.01	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	562	0.00	546	1.031	508	13.6	65.840	F
C-AB	11	0.00	863	0.013	11	0.0	5.010	A
C-A	344	0.00			344			
A-B	7	0.00			7			
A-C	294	0.00			294			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	672	0.00	520	1.291	518	51.9	248.639	F
C-AB	15	0.00	895	0.017	15	0.0	4.817	A
C-A	409	0.00			409			
A-B	8	0.00			8			
A-C	352	0.00			352			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	822	0.00	485	1.697	485	136.4	711.045	F
C-AB	22	0.00	941	0.023	22	0.0	4.547	A
C-A	498	0.00			498			
A-B	10	0.00			10			
A-C	430	0.00			430			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	822	0.00	485	1.697	485	220.9	1336.641	F
C-AB	22	0.00	941	0.023	22	0.0	4.519	A
C-A	498	0.00			498			
A-B	10	0.00			10			
A-C	430	0.00			430			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	672	0.00	520	1.291	520	258.7	1632.099	F
C-AB	15	0.00	895	0.017	15	0.0	4.749	A
C-A	409	0.00			409			
A-B	8	0.00			8			
A-C	352	0.00			352			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	562	0.00	546	1.031	545	262.9	1728.780	F
C-AB	11	0.00	863	0.013	11	0.0	4.976	A
C-A	344	0.00			344			
A-B	7	0.00			7			
A-C	294	0.00			294			

2038 | 2b WD Flows | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	A453/The Green T-Junction	T-Junction	Two-way	Two-way	Two-way		18.84	C

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	-11	Stream B-AC	18.84	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2038	2b WD Flows	PM	ONE HOUR	17:00	18:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	823	100.000
B		✓	306	100.000
C		✓	425	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	162	661
	B	162	0	144
	C	273	152	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.93	88.41	7.7	F
C-AB	0.42	9.16	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	0.00	468	0.492	227	0.9	14.706	B
C-AB	162	0.00	696	0.233	161	0.4	6.812	A
C-A	158	0.00			158			
A-B	122	0.00			122			
A-C	498	0.00			498			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	275	0.00	425	0.647	272	1.7	23.070	C
C-AB	212	0.00	696	0.304	211	0.6	7.539	A
C-A	170	0.00			170			
A-B	146	0.00			146			
A-C	594	0.00			594			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	337	0.00	364	0.926	319	6.2	63.623	F
C-AB	295	0.00	699	0.422	293	1.1	9.055	A
C-A	173	0.00			173			
A-B	178	0.00			178			
A-C	728	0.00			728			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	337	0.00	363	0.927	331	7.7	88.415	F
C-AB	296	0.00	700	0.423	296	1.1	9.158	A
C-A	172	0.00			172			
A-B	178	0.00			178			
A-C	728	0.00			728			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	275	0.00	424	0.648	298	2.0	32.697	D
C-AB	213	0.00	697	0.305	214	0.6	7.654	A
C-A	170	0.00			170			
A-B	146	0.00			146			
A-C	594	0.00			594			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	230	0.00	467	0.493	234	1.0	15.702	C
C-AB	163	0.00	697	0.234	164	0.4	6.890	A
C-A	157	0.00			157			
A-B	122	0.00			122			
A-C	498	0.00			498			

APPENDIX 64: Junction 9: A453/East Midlands Airport Roundabout Stage 1B/2B Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 250624 A453_EMA Roundabout ARCADY Model (Lane Sim)_Stage 1b+2b.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\9. A453_EMA Roundabout
Report generation date: 25/06/2025 10:21:59

»2022 | Base Flows | AM
»2022 | Base Flows | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2b WD Flows | AM
»2028 | 2b WD Flows | PM
»2038 | 2b WD Flows | AM
»2038 | 2b WD Flows | PM

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
[Lane Simulation] - 2022 - Base Flows																
Arm 1	D1	0.2	4.19	0.13	A	7.30	A	%	D2	0.4	4.78	0.25	A	5.52	A	%
Arm 2		1.2	4.91	0.35	A					0.9	4.84	0.33	A			
Arm 3		1.9	10.73	0.58	B			[ ]		0.8	7.09	0.33	A			[ ]
[Lane Simulation] - 2028 - 2b WD Flows																
Arm 1	D11	0.2	5.40	0.12	A	14.64	B	%	D12	0.6	4.74	0.33	A	6.34	A	%
Arm 2		1.0	5.10	0.32	A					1.3	5.62	0.37	A			
Arm 3		5.7	22.54	0.83	C			[ ]		1.3	8.89	0.46	A			[ ]
[Lane Simulation] - 2028 - WD Flows																
Arm 1	D5	0.3	4.80	0.11	A	20.91	C	%	D6	0.7	4.75	0.33	A	6.59	A	%
Arm 2		0.8	5.14	0.31	A					1.1	5.53	0.35	A			
Arm 3		8.9	33.07	0.87	D			[ ]		1.9	9.69	0.51	A			[ ]
[Lane Simulation] - 2028 - WoD Flows																
Arm 1	D3	0.2	4.66	0.11	A	11.46	B	%	D4	0.9	4.76	0.33	A	6.44	A	%
Arm 2		1.2	5.38	0.35	A					1.0	5.38	0.32	A			
Arm 3		4.4	17.74	0.78	C			[ ]		1.5	9.06	0.52	A			[ ]
[Lane Simulation] - 2038 - 2b WD Flows																
Arm 1	D13	0.2	4.30	0.11	A	9.45	A	%	D14	0.9	4.82	0.37	A	6.96	A	%
Arm 2		1.3	5.75	0.41	A					1.8	7.29	0.51	A			
Arm 3		3.1	14.85	0.69	B			[ ]		1.3	8.71	0.44	A			[ ]
[Lane Simulation] - 2038 - WD Flows																
Arm 1	D9	0.3	4.15	0.12	A	9.76	A	%	D10	0.8	5.01	0.37	A	6.78	A	%
Arm 2		1.4	5.77	0.39	A					2.0	7.23	0.50	A			
Arm 3		3.2	15.15	0.73	C			[ ]		1.0	8.12	0.40	A			[ ]
[Lane Simulation] - 2038 - WoD Flows																
Arm 1	D7	0.2	4.23	0.11	A	8.65	A	%	D8	0.9	4.83	0.35	A	6.61	A	%
Arm 2		1.8	6.19	0.43	A					1.6	6.63	0.46	A			
Arm 3		3.0	12.75	0.66	B			[ ]		1.3	8.49	0.46	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. Arm and junction delays are averages for all movements, including movements with zero delay. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	East Midlands Gateway Phase 2
Location	A453/EMA Roundabout
Site number	
Date	24/01/2023
Version	
Status	(new file)
Identifier	
Client	SEGRO
Jobnumber	220500
Enumerator	BWB\matt.corner
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75					✓	Delay	0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			734701419	101

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓
D2	2022	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D11	2028	2b WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D12	2028	2b WD Flows	PM	ONE HOUR	17:00	18:30	15	✓
D13	2038	2b WD Flows	AM	ONE HOUR	08:00	09:30	15	✓
D14	2038	2b WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2022 | Base Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	7.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.30	A

Arms

Arms

Arm	Name	Description	No give-way line
1	EMA Access		
2	A453 (E)		
3	A453 (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	6.13	8.46	8.0	20.5	50.0	21.0		
2	3.77	8.05	49.0	13.3	50.0	35.0		
3	3.89	6.48	6.5	24.5	50.0	27.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.730	2295
2	0.666	2065
3	0.586	1553

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	50.00
3	Evenly split	50.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2	✓	3.00			0	99999	
			2	1, 3	✓	3.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					
2	Entry	1	1	3	✓	11.00			0	99999	
			2	1, 2, (3)	✓	11.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					
3	Entry	1	1	1, 2	✓	14.00			0	99999	
			2	(2), 3	✓	14.00			0	99999	
		2	1	(1, 2, 3)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.365	1147
			2	0.365	1147
2	Entry	1	1	0.333	1033
			2	0.333	1033
3	Entry	1	1	0.293	777
			2	0.293	777

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm		
			1	2	3
1	1	1		✓	
		2	✓		✓
	2	1	✓	✓	✓
2	1	1			✓
		2	✓	✓	
	2	1	✓	✓	✓
3	1	1	✓	✓	
		2			✓
	2	1	✓	✓	✓

Summary of Entry Lane allowed secondary movements

Arm	Lane Level	Lane	Destination arm		
			1	2	3
1	1	1			
		2			
	2	1			
2	1	1			
		2			✓
	2	1			
3	1	1			
		2		✓	
	2	1			

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	Base Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	153	100.000
2		ONE HOUR	✓	631	100.000
3		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	114	39
	2	241	0	390
	3	129	460	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.13	4.19	0.2	A	140	210
2	0.35	4.91	1.2	A	587	880
3	0.58	10.73	1.9	B	538	807

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	119	30	353	1314	0.091	119	118	286	0.0	0.1	3.860	A
2	487	122	31	2053	0.237	485	481	441	0.0	0.6	4.292	A
3	454	114	184	1207	0.376	455	451	333	0.0	1.0	7.449	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	137	34	412	1291	0.106	138	146	334	0.1	0.1	3.875	A
2	576	144	38	2003	0.287	576	575	512	0.6	0.8	4.535	A
3	526	132	220	1183	0.445	526	535	394	1.0	1.1	8.293	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	167	42	508	1281	0.130	168	173	405	0.1	0.2	4.186	A
2	697	174	42	1986	0.351	698	705	633	0.8	0.9	4.780	A
3	649	162	267	1110	0.585	646	656	473	1.1	1.9	10.517	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	166	42	493	1252	0.133	165	177	406	0.2	0.2	4.130	A
2	701	175	43	2036	0.344	700	704	616	0.9	1.2	4.906	A
3	633	158	264	1151	0.550	635	656	479	1.9	1.6	10.728	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	133	33	411	1340	0.099	132	144	333	0.2	0.2	4.108	A
2	572	143	33	2006	0.285	572	572	510	1.2	0.7	4.486	A
3	524	131	220	1199	0.437	524	538	385	1.6	1.2	8.626	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	117	29	348	1354	0.087	118	121	275	0.2	0.1	3.916	A
2	486	122	28	1987	0.245	487	488	438	0.7	0.5	4.312	A
3	441	110	184	1201	0.367	439	447	331	1.2	1.0	7.620	A

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	88	1019	0.086	88	87	0.0	0.1	3.879	A
			2	1, 3	31	1019	0.031	31	31	0.0	0.0	3.802	A
		2	1	(1, 2, 3)	119			119	118	0.0	0.0	0.001	A
	Exit	1	1		286			286	283	0.0	0.0	0.000	A
2	Entry	1	1	3	229	1022	0.224	227	225	0.0	0.3	4.282	A
			2	1, 2, (3)	258	1022	0.253	258	256	0.0	0.3	4.301	A
		2	1	(1, 2, 3)	487			487	484	0.0	0.0	0.000	A
	Exit	1	1		441			441	439	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	340	723	0.470	341	335	0.0	0.8	8.157	A
			2	(2), 3	115	723	0.158	113	116	0.0	0.2	5.398	A
		2	1	(1, 2, 3)	454			454	455	0.0	0.0	0.000	A
	Exit	1	1		333			333	329	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	100	997	0.100	100	108	0.1	0.1	3.926	A
			2	1, 3	37	997	0.037	38	38	0.0	0.0	3.727	A
		2	1	(1, 2, 3)	137			137	146	0.0	0.0	0.001	A
	Exit	1	1		334			334	337	0.0	0.0	0.000	A
2	Entry	1	1	3	268	1020	0.262	267	268	0.3	0.4	4.444	A
			2	1, 2, (3)	308	1020	0.302	309	307	0.3	0.3	4.615	A
		2	1	(1, 2, 3)	576			576	576	0.0	0.0	0.000	A
	Exit	1	1		512			512	525	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	384	712	0.539	384	389	0.8	0.9	9.302	A
			2	(2), 3	142	712	0.200	143	146	0.2	0.2	5.603	A
		2	1	(1, 2, 3)	526			526	535	0.0	0.0	0.000	A
	Exit	1	1		394			394	394	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	124	962	0.129	125	129	0.1	0.1	4.229	A
			2	1, 3	43	962	0.044	42	44	0.0	0.1	4.040	A
		2	1	(1, 2, 3)	167			167	174	0.0	0.0	0.006	A
	Exit	1	1		405			405	410	0.0	0.0	0.000	A
2	Entry	1	1	3	319	1019	0.314	320	333	0.4	0.4	4.690	A
			2	1, 2, (3)	378	1019	0.371	378	372	0.3	0.6	4.861	A
		2	1	(1, 2, 3)	697			697	706	0.0	0.0	0.000	A
	Exit	1	1		633			633	641	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	463	698	0.663	460	465	0.9	1.6	12.216	B
			2	(2), 3	187	698	0.267	186	191	0.2	0.3	6.382	A
		2	1	(1, 2, 3)	649			649	659	0.0	0.0	0.000	A
	Exit	1	1		473			473	484	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	123	967	0.127	122	132	0.1	0.1	4.135	A
			2	1, 3	43	967	0.045	43	45	0.1	0.0	4.088	A
		2	1	(1, 2, 3)	166			166	177	0.0	0.0	0.007	A
	Exit	1	1		406			406	411	0.0	0.0	0.000	A
2	Entry	1	1	3	331	1018	0.325	332	334	0.4	0.5	4.914	A
			2	1, 2, (3)	370	1018	0.363	368	370	0.6	0.7	4.899	A
		2	1	(1, 2, 3)	701			701	705	0.0	0.0	0.000	A
	Exit	1	1		616			616	643	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	449	699	0.641	449	462	1.6	1.3	12.465	B
			2	(2), 3	184	699	0.264	186	194	0.3	0.3	6.574	A
		2	1	(1, 2, 3)	633			633	655	0.0	0.0	0.005	A
	Exit	1	1		479			479	484	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	100	997	0.100	98	108	0.1	0.2	4.182	A
			2	1, 3	33	997	0.033	33	36	0.0	0.0	3.860	A
		2	1	(1, 2, 3)	133			133	144	0.0	0.0	0.008	A
	Exit	1	1		333			333	341	0.0	0.0	0.000	A
2	Entry	1	1	3	266	1022	0.260	266	264	0.5	0.3	4.422	A
			2	1, 2, (3)	306	1022	0.300	306	308	0.7	0.3	4.541	A
		2	1	(1, 2, 3)	572			572	570	0.0	0.0	0.000	A
	Exit	1	1		510			510	526	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	384	712	0.540	385	393	1.3	1.0	9.631	A
			2	(2), 3	140	712	0.197	139	145	0.3	0.3	5.915	A
		2	1	(1, 2, 3)	524			524	536	0.0	0.0	0.000	A
	Exit	1	1		385			385	387	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	90	1020	0.088	90	90	0.2	0.1	3.961	A
			2	1, 3	27	1020	0.027	28	30	0.0	0.0	3.783	A
		2	1	(1, 2, 3)	117			117	120	0.0	0.0	0.000	A
	Exit	1	1		275			275	282	0.0	0.0	0.000	A
2	Entry	1	1	3	231	1023	0.226	232	231	0.3	0.2	4.133	A
			2	1, 2, (3)	255	1023	0.249	255	257	0.3	0.4	4.473	A
		2	1	(1, 2, 3)	486			486	488	0.0	0.0	0.000	A
	Exit	1	1		438			438	440	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	330	723	0.456	326	331	1.0	0.9	8.366	A
			2	(2), 3	111	723	0.154	113	116	0.3	0.1	5.495	A
		2	1	(1, 2, 3)	441			441	446	0.0	0.0	0.000	A
	Exit	1	1		331			331	334	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	1147	1020	0.086	88	87	0.0	0.1	3.879	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	1147	1018	0.031	31	31	0.0	0.0	3.802	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	-	-	-	88	87	0.0	0.0	0.001	A
				3	31	8	-	-	-	31	31	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	229	57	1033	1022	0.224	227	225	0.0	0.3	4.282	A
			2	1	184	46	1033	1022	0.180	184	183	0.0	0.3	4.516	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	19	1033	1022	0.072	74	73	0.0	0.1	3.761	A
		2	1	1	184	46	-	-	-	184	184	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	303	76	-	-	-	303	299	0.0	0.0	0.000	A
3	Entry	1	1	1	103	26	777	722	0.142	102	100	0.0	0.3	8.761	A
				2	237	59	777	723	0.328	239	236	0.0	0.5	7.900	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	115	29	777	722	0.159	113	116	0.0	0.2	5.398	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	103	26	-	-	-	103	101	0.0	0.0	0.000	A
				2	351	88	-	-	-	351	354	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	1147	998	0.100	100	108	0.1	0.1	3.926	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	37	9	1147	998	0.037	38	38	0.0	0.0	3.727	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	-	-	-	100	108	0.0	0.0	0.002	A
				3	37	9	-	-	-	37	38	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	268	67	1033	1020	0.262	267	268	0.3	0.4	4.444	A
			2	1	219	55	1033	1020	0.215	220	219	0.3	0.2	4.942	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1033	1020	0.087	89	88	0.1	0.1	3.802	A
		2	1	1	219	55	-	-	-	219	219	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	356	89	-	-	-	356	357	0.0	0.0	0.000	A
3	Entry	1	1	1	115	29	777	712	0.162	115	118	0.3	0.3	9.838	A
				2	269	67	777	712	0.378	269	271	0.5	0.7	9.069	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	142	36	777	711	0.200	143	146	0.2	0.2	5.603	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	115	29	-	-	-	115	118	0.0	0.0	0.000	A
				2	411	103	-	-	-	411	418	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	1147	962	0.129	125	129	0.1	0.1	4.229	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	43	11	1147	960	0.045	42	44	0.0	0.1	4.040	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	-	-	-	124	129	0.0	0.0	0.007	A
				3	43	11	-	-	-	43	45	0.0	0.0	0.004	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	319	80	1033	1018	0.314	320	333	0.4	0.4	4.690	A
			2	1	267	67	1033	1019	0.262	267	265	0.2	0.5	5.208	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	111	28	1033	1019	0.109	111	107	0.1	0.1	4.001	A
		2	1	1	267	67	-	-	-	267	266	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	430	108	-	-	-	430	440	0.0	0.0	0.000	A
3	Entry	1	1	1	139	35	777	698	0.199	138	145	0.3	0.5	12.919	B
				2	324	81	777	698	0.463	322	320	0.7	1.1	11.897	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	777	698	0.267	186	191	0.2	0.3	6.382	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	139	35	-	-	-	139	146	0.0	0.0	0.000	A
				2	510	128	-	-	-	510	514	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	1147	966	0.127	122	132	0.1	0.1	4.135	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	43	11	1147	964	0.045	43	45	0.1	0.0	4.088	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	-	-	-	123	132	0.0	0.0	0.009	A
				3	43	11	-	-	-	43	45	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	331	83	1033	1018	0.325	332	334	0.4	0.5	4.914	A
			2	1	265	66	1033	1019	0.260	264	266	0.5	0.6	5.177	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	1019	0.103	104	105	0.1	0.2	4.196	A
		2	1	1	265	66	-	-	-	265	266	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	436	109	-	-	-	436	439	0.0	0.0	0.000	A
3	Entry	1	1	1	141	35	777	700	0.202	142	145	0.5	0.4	13.502	B
				2	307	77	777	699	0.440	308	317	1.1	0.9	11.992	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	184	46	777	700	0.264	186	194	0.3	0.3	6.574	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	141	35	-	-	-	141	145	0.0	0.0	0.009	A
				2	492	123	-	-	-	492	510	0.0	0.0	0.003	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	1147	996	0.100	98	108	0.1	0.2	4.182	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	33	8	1147	997	0.033	33	36	0.0	0.0	3.860	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	-	-	-	100	108	0.0	0.0	0.008	A
				3	33	8	-	-	-	33	36	0.0	0.0	0.005	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	266	66	1033	1022	0.260	266	264	0.5	0.3	4.422	A
			2	1	221	55	1033	1022	0.216	220	221	0.6	0.3	4.787	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	86	21	1033	1022	0.084	86	86	0.2	0.1	3.914	A
		2	1	1	221	55	-	-	-	221	220	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	351	88	-	-	-	351	349	0.0	0.0	0.000	A
3	Entry	1	1	1	114	28	777	712	0.160	113	120	0.4	0.4	10.372	B
				2	271	68	777	712	0.380	272	273	0.9	0.6	9.306	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	140	35	777	712	0.196	139	145	0.3	0.3	5.915	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	114	28	-	-	-	114	119	0.0	0.0	0.000	A
				2	410	103	-	-	-	410	417	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	90	22	1147	1020	0.088	90	90	0.2	0.1	3.961	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	1147	1020	0.027	28	30	0.0	0.0	3.783	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	90	22	-	-	-	90	90	0.0	0.0	0.000	A
				3	27	7	-	-	-	27	30	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	231	58	1033	1023	0.226	232	231	0.3	0.2	4.133	A
			2	1	184	46	1033	1023	0.180	184	185	0.3	0.3	4.736	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	1033	1023	0.069	71	72	0.1	0.1	3.801	A
		2	1	1	184	46	-	-	-	184	185	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	302	76	-	-	-	302	303	0.0	0.0	0.000	A
3	Entry	1	1	1	91	23	777	723	0.126	91	98	0.4	0.2	9.024	A
				2	238	60	777	723	0.330	235	233	0.6	0.7	8.093	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	111	28	777	723	0.153	113	116	0.3	0.1	5.495	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	91	23	-	-	-	91	97	0.0	0.0	0.000	A
				2	349	87	-	-	-	349	349	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2022 | Base Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	5.52	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.52	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	Base Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	289	100.000
2		ONE HOUR	✓	576	100.000
3		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	224	65
	2	133	0	443
	3	41	347	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.25	4.78	0.4	A	268	402
2	0.33	4.84	0.9	A	534	801
3	0.33	7.09	0.8	A	357	536

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	209	52	257	1325	0.157	206	213	126	0.0	0.4	4.113	A
2	424	106	44	1983	0.214	423	438	419	0.0	0.6	4.378	A
3	291	73	93	1278	0.228	291	291	374	0.0	0.5	6.095	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	263	66	310	1297	0.203	266	267	152	0.4	0.2	4.147	A
2	508	127	64	1950	0.260	507	521	511	0.6	0.5	4.307	A
3	344	86	119	1294	0.266	343	355	453	0.5	0.7	6.413	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	323	81	375	1284	0.252	325	329	192	0.2	0.4	4.781	A
2	647	162	77	1959	0.330	644	636	623	0.5	0.9	4.673	A
3	430	108	136	1297	0.332	431	433	584	0.7	0.8	7.089	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	331	83	380	1310	0.252	330	318	188	0.4	0.3	4.592	A
2	654	164	74	1996	0.328	657	653	637	0.9	0.8	4.836	A
3	425	106	147	1295	0.328	422	429	585	0.8	0.8	6.616	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	261	65	308	1316	0.198	261	265	169	0.3	0.3	4.019	A
2	533	133	66	2005	0.266	536	530	503	0.8	0.4	4.371	A
3	351	88	129	1318	0.266	348	358	473	0.8	0.6	6.207	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	220	55	271	1336	0.165	220	226	138	0.3	0.3	4.079	A
2	439	110	49	1992	0.220	436	443	442	0.4	0.5	4.229	A
3	303	76	104	1320	0.230	305	295	382	0.6	0.5	5.642	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	164	1053	0.156	162	165	0.0	0.3	4.186	A
			2	1, 3	44	1053	0.042	44	47	0.0	0.1	3.758	A
		2	1	(1, 2, 3)	209			209	214	0.0	0.0	0.021	A
	Exit	1	1		126			126	130	0.0	0.0	0.000	A
2	Entry	1	1	3	243	1018	0.238	243	250	0.0	0.3	4.534	A
			2	1, 2, (3)	182	1018	0.179	181	188	0.0	0.3	4.171	A
		2	1	(1, 2, 3)	424			424	440	0.0	0.0	0.000	A
	Exit	1	1		419			419	426	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	213	749	0.284	213	212	0.0	0.4	6.427	A
			2	(2), 3	78	749	0.104	77	79	0.0	0.1	5.200	A
		2	1	(1, 2, 3)	291			291	293	0.0	0.0	0.000	A
	Exit	1	1		374			374	386	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	199	1034	0.192	201	208	0.3	0.1	4.256	A
			2	1, 3	64	1034	0.062	64	59	0.1	0.1	3.654	A
		2	1	(1, 2, 3)	263			263	266	0.0	0.0	0.025	A
	Exit	1	1		152			152	158	0.0	0.0	0.000	A
2	Entry	1	1	3	286	1011	0.283	286	294	0.3	0.3	4.526	A
			2	1, 2, (3)	221	1011	0.219	221	227	0.3	0.3	4.025	A
		2	1	(1, 2, 3)	508			508	521	0.0	0.0	0.000	A
	Exit	1	1		511			511	525	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	247	742	0.333	247	257	0.4	0.5	6.933	A
			2	(2), 3	97	742	0.130	96	98	0.1	0.1	5.041	A
		2	1	(1, 2, 3)	344			344	356	0.0	0.0	0.000	A
	Exit	1	1		453			453	460	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	246	1010	0.243	248	257	0.1	0.3	4.954	A
			2	1, 3	77	1010	0.076	77	73	0.1	0.1	3.835	A
		2	1	(1, 2, 3)	323			323	330	0.0	0.0	0.074	A
	Exit	1	1		192			192	196	0.0	0.0	0.000	A
2	Entry	1	1	3	366	1007	0.363	364	357	0.3	0.5	4.781	A
			2	1, 2, (3)	281	1007	0.279	280	280	0.3	0.5	4.536	A
		2	1	(1, 2, 3)	647			647	638	0.0	0.0	0.000	A
	Exit	1	1		623			623	639	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	310	737	0.421	312	312	0.5	0.7	7.790	A
			2	(2), 3	120	737	0.163	119	121	0.1	0.2	5.291	A
		2	1	(1, 2, 3)	430			430	434	0.0	0.0	0.000	A
	Exit	1	1		584			584	564	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	256	1009	0.254	256	242	0.3	0.2	4.792	A
			2	1, 3	74	1009	0.074	74	77	0.1	0.1	3.739	A
		2	1	(1, 2, 3)	331			331	318	0.0	0.0	0.053	A
	Exit	1	1		188			188	193	0.0	0.0	0.000	A
2	Entry	1	1	3	369	1008	0.366	370	365	0.5	0.6	5.086	A
			2	1, 2, (3)	285	1008	0.283	287	287	0.5	0.3	4.516	A
		2	1	(1, 2, 3)	654			654	652	0.0	0.0	0.000	A
	Exit	1	1		637			637	626	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	296	734	0.403	293	306	0.7	0.6	7.145	A
			2	(2), 3	129	734	0.176	129	123	0.2	0.1	5.295	A
		2	1	(1, 2, 3)	425			425	429	0.0	0.0	0.000	A
	Exit	1	1		585			585	582	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	195	1035	0.188	195	205	0.2	0.3	4.174	A
			2	1, 3	66	1035	0.064	66	61	0.1	0.0	3.478	A
		2	1	(1, 2, 3)	261			261	265	0.0	0.0	0.003	A
	Exit	1	1		169			169	162	0.0	0.0	0.000	A
2	Entry	1	1	3	301	1011	0.298	304	298	0.6	0.2	4.588	A
			2	1, 2, (3)	232	1011	0.230	233	232	0.3	0.2	4.094	A
		2	1	(1, 2, 3)	533			533	528	0.0	0.0	0.000	A
	Exit	1	1		503			503	521	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	263	739	0.356	262	265	0.6	0.4	6.567	A
			2	(2), 3	88	739	0.119	86	94	0.1	0.2	5.193	A
		2	1	(1, 2, 3)	351			351	358	0.0	0.0	0.000	A
	Exit	1	1		473			473	470	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	171	1049	0.163	171	176	0.3	0.3	4.231	A
			2	1, 3	49	1049	0.047	49	50	0.0	0.1	3.442	A
		2	1	(1, 2, 3)	220			220	226	0.0	0.0	0.023	A
	Exit	1	1		138			138	131	0.0	0.0	0.000	A
2	Entry	1	1	3	247	1016	0.243	246	252	0.2	0.3	4.220	A
			2	1, 2, (3)	191	1016	0.188	191	191	0.2	0.2	4.242	A
		2	1	(1, 2, 3)	439			439	443	0.0	0.0	0.000	A
	Exit	1	1		442			442	440	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	222	746	0.298	225	217	0.4	0.3	5.901	A
			2	(2), 3	81	746	0.108	81	78	0.2	0.1	4.922	A
		2	1	(1, 2, 3)	303			303	295	0.0	0.0	0.000	A
	Exit	1	1		382			382	393	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	164	41	1147	1052	0.156	162	165	0.0	0.3	4.186	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	44	11	1147	1051	0.042	44	47	0.0	0.1	3.758	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	164	41	-	-	-	164	167	0.0	0.0	0.028	A
				3	44	11	-	-	-	44	48	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	243	61	1033	1018	0.238	243	250	0.0	0.3	4.534	A
			2	1	93	23	1033	1018	0.092	93	99	0.0	0.2	4.520	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	88	22	1033	1017	0.087	88	89	0.0	0.1	3.784	A
		2	1	1	93	23	-	-	-	93	100	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	331	83	-	-	-	331	341	0.0	0.0	0.000	A
3	Entry	1	1	1	33	8	777	749	0.044	33	31	0.0	0.0	7.342	A
				2	180	45	777	749	0.240	180	181	0.0	0.4	6.272	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	777	748	0.104	77	79	0.0	0.1	5.200	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	33	8	-	-	-	33	31	0.0	0.0	0.000	A
				2	258	65	-	-	-	258	262	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	199	50	1147	1034	0.192	201	208	0.3	0.1	4.256	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	64	16	1147	1033	0.062	64	59	0.1	0.1	3.654	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	199	50	-	-	-	199	207	0.0	0.0	0.029	A
				3	64	16	-	-	-	64	59	0.0	0.0	0.011	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	286	72	1033	1011	0.283	286	294	0.3	0.3	4.526	A
			2	1	119	30	1033	1011	0.118	119	120	0.2	0.2	4.296	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1033	1011	0.101	103	108	0.1	0.1	3.723	A
		2	1	1	119	30	-	-	-	119	120	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	389	97	-	-	-	389	401	0.0	0.0	0.000	A
3	Entry	1	1	1	34	8	777	742	0.045	33	39	0.0	0.0	6.886	A
				2	213	53	777	742	0.287	213	219	0.4	0.5	6.942	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	777	741	0.131	96	98	0.1	0.1	5.041	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	34	8	-	-	-	34	39	0.0	0.0	0.000	A
				2	310	77	-	-	-	310	317	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	246	61	1147	1010	0.243	248	257	0.1	0.3	4.954	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	77	19	1147	1012	0.076	77	73	0.1	0.1	3.835	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	246	61	-	-	-	246	257	0.0	0.0	0.093	A
				3	77	19	-	-	-	77	73	0.0	0.0	0.007	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	366	92	1033	1007	0.363	364	357	0.3	0.5	4.781	A
			2	1	136	34	1033	1008	0.135	136	145	0.2	0.2	4.922	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	145	36	1033	1007	0.144	144	135	0.1	0.3	4.121	A
		2	1	1	136	34	-	-	-	136	145	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	511	128	-	-	-	511	493	0.0	0.0	0.000	A
3	Entry	1	1	1	56	14	777	737	0.076	56	51	0.0	0.1	8.207	A
				2	254	64	777	737	0.345	256	261	0.5	0.6	7.709	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	120	30	777	738	0.163	119	121	0.1	0.2	5.291	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	56	14	-	-	-	56	51	0.0	0.0	0.000	A
				2	374	94	-	-	-	374	383	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	256	64	1147	1009	0.254	256	242	0.3	0.2	4.792	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	19	1147	1008	0.074	74	77	0.1	0.1	3.739	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	256	64	-	-	-	256	241	0.0	0.0	0.065	A
				3	74	19	-	-	-	74	77	0.0	0.0	0.015	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	369	92	1033	1008	0.366	370	365	0.5	0.6	5.086	A
			2	1	146	36	1033	1008	0.145	147	148	0.2	0.2	4.879	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	139	35	1033	1008	0.138	140	139	0.3	0.1	4.131	A
		2	1	1	146	36	-	-	-	146	148	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	508	127	-	-	-	508	505	0.0	0.0	0.000	A
3	Entry	1	1	1	42	10	777	734	0.057	42	45	0.1	0.1	7.970	A
				2	254	64	777	733	0.346	251	261	0.6	0.6	7.002	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	129	32	777	734	0.176	129	123	0.2	0.1	5.295	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	42	10	-	-	-	42	45	0.0	0.0	0.000	A
				2	383	96	-	-	-	383	384	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	195	49	1147	1035	0.188	195	205	0.2	0.3	4.174	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	66	16	1147	1038	0.063	66	61	0.1	0.0	3.478	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	195	49	-	-	-	195	205	0.0	0.0	0.004	A
				3	66	16	-	-	-	66	60	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	301	75	1033	1011	0.298	304	298	0.6	0.2	4.588	A
			2	1	129	32	1033	1011	0.128	129	121	0.2	0.1	4.414	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	103	26	1033	1011	0.102	103	111	0.1	0.1	3.748	A
		2	1	1	129	32	-	-	-	129	121	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	404	101	-	-	-	404	408	0.0	0.0	0.000	A
3	Entry	1	1	1	40	10	777	743	0.054	40	42	0.1	0.0	7.102	A
				2	223	56	777	738	0.302	222	223	0.6	0.3	6.467	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	777	739	0.119	86	94	0.1	0.2	5.193	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	40	10	-	-	-	40	41	0.0	0.0	0.000	A
				2	311	78	-	-	-	311	316	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	171	43	1147	1048	0.163	171	176	0.3	0.3	4.231	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	1147	1046	0.047	49	50	0.0	0.1	3.442	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	171	43	-	-	-	171	176	0.0	0.0	0.029	A
				3	49	12	-	-	-	49	50	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	247	62	1033	1016	0.243	246	252	0.2	0.3	4.220	A
			2	1	103	26	1033	1016	0.102	104	100	0.1	0.1	4.605	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	88	22	1033	1016	0.087	87	91	0.1	0.1	3.842	A
		2	1	1	103	26	-	-	-	103	100	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	335	84	-	-	-	335	343	0.0	0.0	0.000	A
3	Entry	1	1	1	35	9	777	747	0.046	35	31	0.0	0.1	5.671	A
				2	188	47	777	747	0.251	190	186	0.3	0.2	5.939	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	777	747	0.108	81	78	0.2	0.1	4.922	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	35	9	-	-	-	35	31	0.0	0.0	0.000	A
				2	268	67	-	-	-	268	263	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	11.46	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.46	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	134	100.000
2		ONE HOUR	✓	604	100.000
3		ONE HOUR	✓	743	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	58	76
	2	269	0	335
	3	215	528	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	1	10
	2	0	0	10
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.11	4.66	0.2	A	124	185
2	0.35	5.38	1.2	A	561	841
3	0.78	17.74	4.4	C	677	1015

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	396	1515	0.066	100	101	355	0.0	0.2	3.993	A
2	459	115	56	1960	0.234	457	454	440	0.0	0.7	4.688	A
3	541	135	205	1139	0.475	545	548	308	0.0	1.2	8.897	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	123	31	469	1443	0.085	124	130	433	0.2	0.1	4.230	A
2	544	136	66	1927	0.282	543	552	527	0.7	0.8	4.855	A
3	655	164	243	1032	0.635	659	660	366	1.2	1.8	10.929	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	143	36	583	1427	0.100	143	149	539	0.1	0.2	4.531	A
2	669	167	78	1905	0.351	670	672	647	0.8	1.0	5.384	A
3	828	207	298	1068	0.776	824	812	450	1.8	4.4	17.431	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	582	1436	0.106	152	154	527	0.2	0.2	4.663	A
2	669	167	89	1910	0.350	664	676	645	1.0	1.2	5.336	A
3	817	204	298	1064	0.768	811	814	454	4.4	4.3	17.743	C

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	116	29	481	1390	0.083	115	123	435	0.2	0.2	4.270	A
2	545	136	66	1925	0.283	545	555	530	1.2	0.8	5.014	A
3	669	167	245	1079	0.620	671	679	366	4.3	1.9	12.425	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	108	27	389	1496	0.072	108	113	374	0.2	0.1	4.137	A
2	480	120	62	1950	0.246	479	470	435	0.8	0.5	4.720	A
3	550	137	208	1103	0.498	555	565	332	1.9	1.2	9.427	A

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	44	1003	0.044	45	44	0.0	0.0	3.697	A
			2	1, 3	57	1003	0.056	56	57	0.0	0.1	4.205	A
		2	1	(1, 2, 3)	100			100	102	0.0	0.0	0.020	A
	Exit	1	1		355			355	359	0.0	0.0	0.000	A
2	Entry	1	1	3	192	1014	0.189	192	192	0.0	0.3	4.686	A
			2	1, 2, (3)	267	1014	0.263	265	262	0.0	0.4	4.689	A
		2	1	(1, 2, 3)	459			459	456	0.0	0.0	0.000	A
	Exit	1	1		440			440	437	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	398	716	0.555	402	406	0.0	0.9	10.018	B
			2	(2), 3	143	716	0.200	144	142	0.0	0.2	5.677	A
		2	1	(1, 2, 3)	541			541	553	0.0	0.0	0.000	A
	Exit	1	1		308			308	307	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	57	976	0.059	57	58	0.0	0.1	3.966	A
			2	1, 3	66	976	0.067	66	72	0.1	0.0	4.405	A
		2	1	(1, 2, 3)	123			123	129	0.0	0.0	0.030	A
	Exit	1	1		433			433	430	0.0	0.0	0.000	A
2	Entry	1	1	3	232	1011	0.230	231	237	0.3	0.4	4.844	A
			2	1, 2, (3)	312	1011	0.308	312	315	0.4	0.4	4.863	A
		2	1	(1, 2, 3)	544			544	552	0.0	0.0	0.000	A
	Exit	1	1		527			527	530	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	474	705	0.673	479	478	0.9	1.5	12.688	B
			2	(2), 3	181	705	0.256	180	182	0.2	0.3	6.310	A
		2	1	(1, 2, 3)	655			655	663	0.0	0.0	0.000	A
	Exit	1	1		366			366	381	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	63	935	0.068	64	65	0.1	0.1	4.259	A
			2	1, 3	79	935	0.085	78	84	0.0	0.2	4.739	A
		2	1	(1, 2, 3)	143			143	149	0.0	0.0	0.011	A
	Exit	1	1		539			539	538	0.0	0.0	0.000	A
2	Entry	1	1	3	288	1007	0.286	287	286	0.4	0.5	5.169	A
			2	1, 2, (3)	380	1007	0.378	383	386	0.4	0.5	5.532	A
		2	1	(1, 2, 3)	669			669	673	0.0	0.0	0.000	A
	Exit	1	1		647			647	641	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	575	689	0.834	575	568	1.5	3.6	21.077	C
			2	(2), 3	252	689	0.365	250	244	0.3	0.6	7.543	A
		2	1	(1, 2, 3)	828			827	821	0.0	0.1	0.369	A
	Exit	1	1		450			450	453	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	63	935	0.067	63	66	0.1	0.1	4.415	A
			2	1, 3	89	935	0.095	89	88	0.2	0.1	4.787	A
		2	1	(1, 2, 3)	152			152	154	0.0	0.0	0.044	A
	Exit	1	1		527			527	535	0.0	0.0	0.000	A
2	Entry	1	1	3	284	1003	0.283	282	291	0.5	0.5	5.295	A
			2	1, 2, (3)	385	1003	0.384	382	385	0.5	0.6	5.364	A
		2	1	(1, 2, 3)	669			669	677	0.0	0.0	0.000	A
	Exit	1	1		645			645	644	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	567	689	0.823	563	569	3.6	3.5	21.594	C
			2	(2), 3	248	689	0.360	248	246	0.6	0.6	7.722	A
		2	1	(1, 2, 3)	817			815	814	0.1	0.2	0.327	A
	Exit	1	1		454			454	465	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	972	0.051	49	54	0.1	0.1	3.855	A
			2	1, 3	67	972	0.069	66	69	0.1	0.1	4.603	A
		2	1	(1, 2, 3)	116			116	123	0.0	0.0	0.007	A
	Exit	1	1		435			435	439	0.0	0.0	0.000	A
2	Entry	1	1	3	231	1011	0.228	230	236	0.5	0.4	5.053	A
			2	1, 2, (3)	314	1011	0.311	314	319	0.6	0.4	4.987	A
		2	1	(1, 2, 3)	545			545	553	0.0	0.0	0.000	A
	Exit	1	1		530			530	540	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	483	705	0.686	485	490	3.5	1.6	14.701	B
			2	(2), 3	186	705	0.264	187	189	0.6	0.3	6.556	A
		2	1	(1, 2, 3)	669			669	670	0.2	0.0	0.049	A
	Exit	1	1		366			366	377	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	46	1005	0.046	46	49	0.1	0.1	3.816	A
			2	1, 3	62	1005	0.062	62	64	0.1	0.1	4.336	A
		2	1	(1, 2, 3)	108			108	112	0.0	0.0	0.037	A
	Exit	1	1		374			374	378	0.0	0.0	0.000	A
2	Entry	1	1	3	209	1012	0.207	210	201	0.4	0.2	4.768	A
			2	1, 2, (3)	271	1012	0.268	269	269	0.4	0.3	4.686	A
		2	1	(1, 2, 3)	480			480	469	0.0	0.0	0.000	A
	Exit	1	1		435			435	447	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	409	716	0.571	414	421	1.6	1.0	10.655	B
			2	(2), 3	141	716	0.197	141	144	0.3	0.2	5.859	A
		2	1	(1, 2, 3)	550			550	562	0.0	0.0	0.000	A
	Exit	1	1		332			332	323	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	1147	1002	0.044	45	44	0.0	0.0	3.697	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	57	14	1147	1002	0.056	56	57	0.0	0.1	4.205	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	44	0.0	0.0	0.000	A
				3	57	14	-	-	-	57	57	0.0	0.0	0.037	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1033	1014	0.189	192	192	0.0	0.3	4.686	A
			2	1	206	52	1033	1014	0.203	205	204	0.0	0.3	4.798	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	60	15	1033	1014	0.060	60	59	0.0	0.1	4.273	A
		2	1	1	206	52	-	-	-	206	205	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	253	63	-	-	-	253	252	0.0	0.0	0.000	A
3	Entry	1	1	1	147	37	777	717	0.205	150	156	0.0	0.3	10.265	B
				2	251	63	777	717	0.350	252	251	0.0	0.6	9.864	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	143	36	777	717	0.199	144	142	0.0	0.2	5.677	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	147	37	-	-	-	147	157	0.0	0.0	0.000	A
				2	394	98	-	-	-	394	396	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1147	978	0.059	57	58	0.0	0.1	3.966	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	66	16	1147	974	0.067	66	72	0.1	0.0	4.405	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	-	-	-	57	58	0.0	0.0	0.023	A
				3	66	16	-	-	-	66	71	0.0	0.0	0.036	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	1033	1011	0.229	231	237	0.3	0.4	4.844	A
			2	1	243	61	1033	1010	0.240	243	242	0.3	0.3	5.072	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1033	1011	0.068	69	72	0.1	0.1	4.096	A
		2	1	1	243	61	-	-	-	243	242	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	301	75	-	-	-	301	310	0.0	0.0	0.000	A
3	Entry	1	1	1	186	46	777	705	0.263	190	188	0.3	0.6	13.565	B
				2	289	72	777	705	0.409	289	290	0.6	0.9	12.120	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	777	705	0.257	180	182	0.2	0.3	6.310	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	186	46	-	-	-	186	189	0.0	0.0	0.000	A
				2	469	117	-	-	-	469	474	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	63	16	1147	939	0.067	64	65	0.1	0.1	4.259	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	79	20	1147	935	0.085	78	84	0.0	0.2	4.739	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	63	16	-	-	-	63	65	0.0	0.0	0.004	A
				3	79	20	-	-	-	79	84	0.0	0.0	0.017	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	288	72	1033	1007	0.286	287	286	0.4	0.5	5.169	A
			2	1	296	74	1033	1007	0.294	298	302	0.3	0.4	5.774	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	85	21	1033	1008	0.084	85	84	0.1	0.1	4.578	A
		2	1	1	296	74	-	-	-	296	302	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	373	93	-	-	-	373	370	0.0	0.0	0.000	A
3	Entry	1	1	1	241	60	777	689	0.350	241	236	0.6	1.6	22.493	C
				2	334	83	777	689	0.484	333	332	0.9	2.1	20.070	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	252	63	777	689	0.366	250	244	0.3	0.6	7.543	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	242	60	-	-	-	241	240	0.0	0.1	0.313	A
				2	586	147	-	-	-	586	582	0.0	0.1	0.392	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	63	16	1147	933	0.067	63	66	0.1	0.1	4.415	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1147	934	0.095	89	88	0.2	0.1	4.787	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	63	16	-	-	-	63	66	0.0	0.0	0.024	A
				3	89	22	-	-	-	89	88	0.0	0.0	0.060	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	284	71	1033	1003	0.283	282	291	0.5	0.5	5.295	A
			2	1	302	75	1033	1003	0.301	298	299	0.4	0.6	5.604	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1033	1003	0.083	84	87	0.1	0.0	4.440	A
		2	1	1	302	75	-	-	-	302	300	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	367	92	-	-	-	367	377	0.0	0.0	0.000	A
3	Entry	1	1	1	231	58	777	689	0.335	229	236	1.6	1.6	23.171	C
				2	336	84	777	689	0.488	334	332	2.1	1.9	20.470	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	248	62	777	689	0.360	248	246	0.6	0.6	7.722	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	231	58	-	-	-	231	236	0.1	0.1	0.390	A
				2	586	146	-	-	-	585	577	0.1	0.1	0.301	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	973	0.051	49	54	0.1	0.1	3.855	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	67	17	1147	972	0.069	66	69	0.1	0.1	4.603	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	54	0.0	0.0	0.009	A
				3	67	17	-	-	-	67	69	0.0	0.0	0.006	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	231	58	1033	1011	0.228	230	236	0.5	0.4	5.053	A
			2	1	245	61	1033	1010	0.243	245	247	0.6	0.4	5.147	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1033	1010	0.068	70	72	0.0	0.0	4.384	A
		2	1	1	245	61	-	-	-	245	246	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	-	-	-	300	307	0.0	0.0	0.000	A
3	Entry	1	1	1	188	47	777	705	0.267	190	192	1.6	0.7	16.049	C
				2	295	74	777	705	0.418	295	297	1.9	0.9	13.833	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	186	46	777	705	0.264	187	189	0.6	0.3	6.556	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	188	47	-	-	-	188	189	0.1	0.0	0.076	A
				2	481	120	-	-	-	481	481	0.1	0.0	0.038	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	12	1147	1002	0.046	46	49	0.1	0.1	3.816	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	16	1147	1004	0.062	62	64	0.1	0.1	4.336	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	12	-	-	-	46	49	0.0	0.0	0.041	A
				3	62	16	-	-	-	62	64	0.0	0.0	0.034	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	1033	1012	0.207	210	201	0.4	0.2	4.768	A
			2	1	209	52	1033	1012	0.207	208	211	0.4	0.2	4.856	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	62	15	1033	1014	0.061	61	58	0.0	0.1	4.018	A
		2	1	1	209	52	-	-	-	209	210	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	-	-	-	271	259	0.0	0.0	0.000	A
3	Entry	1	1	1	164	41	777	715	0.230	166	167	0.7	0.5	11.348	B
				2	244	61	777	715	0.341	248	254	0.9	0.5	10.201	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	141	35	777	716	0.197	141	144	0.3	0.2	5.859	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	164	41	-	-	-	164	166	0.0	0.0	0.000	A
				2	385	96	-	-	-	385	396	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.44	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	433	100.000
2		ONE HOUR	✓	527	100.000
3		ONE HOUR	✓	487	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	177	256
	2	113	0	414
	3	181	306	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	1	0
	2	4	0	6
	3	3	4	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.33	4.76	0.9	A	400	600
2	0.32	5.38	1.0	A	486	730
3	0.52	9.06	1.5	A	453	680

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	321	80	239	1546	0.208	320	330	227	0.0	0.5	3.996	A
2	411	103	191	1912	0.215	411	407	367	0.0	0.7	4.590	A
3	377	94	88	1064	0.354	378	368	514	0.0	0.9	7.243	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	100	280	1571	0.256	404	401	269	0.5	0.4	4.283	A
2	470	118	235	1856	0.253	470	482	449	0.7	0.9	4.968	A
3	447	112	103	1135	0.393	446	450	601	0.9	1.0	8.355	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	485	121	346	1452	0.334	479	491	319	0.4	0.9	4.555	A
2	577	144	281	1806	0.320	580	592	545	0.9	0.9	5.337	A
3	545	136	119	1050	0.519	547	544	741	1.0	1.4	9.057	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	480	120	336	1489	0.322	477	478	316	0.9	0.6	4.758	A
2	579	145	291	1856	0.312	577	579	522	0.9	1.0	5.382	A
3	538	134	116	1077	0.499	535	535	752	1.4	1.5	8.983	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	385	96	277	1488	0.259	388	402	265	0.6	0.4	4.209	A
2	495	124	234	1905	0.260	493	482	431	1.0	0.9	5.083	A
3	438	109	103	1090	0.401	438	439	624	1.5	1.0	7.775	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	327	82	229	1562	0.210	327	329	242	0.4	0.4	3.979	A
2	386	97	190	1866	0.207	387	401	367	0.9	0.3	4.751	A
3	375	94	94	1112	0.337	377	372	482	1.0	0.4	7.413	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	129	1060	0.122	129	137	0.0	0.2	3.711	A
			2	1, 3	192	1060	0.181	191	193	0.0	0.3	4.164	A
		2	1	(1, 2, 3)	321			321	331	0.0	0.0	0.020	A
	Exit	1	1		227			227	225	0.0	0.0	0.000	A
2	Entry	1	1	3	239	969	0.247	239	234	0.0	0.4	4.843	A
			2	1, 2, (3)	172	969	0.177	172	173	0.0	0.3	4.253	A
		2	1	(1, 2, 3)	411			411	410	0.0	0.0	0.000	A
	Exit	1	1		367			367	369	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	295	751	0.393	294	288	0.0	0.9	7.798	A
			2	(2), 3	82	751	0.109	84	80	0.0	0.0	5.211	A
		2	1	(1, 2, 3)	377			377	372	0.0	0.0	0.000	A
	Exit	1	1		514			514	510	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	170	1045	0.162	169	164	0.2	0.2	4.314	A
			2	1, 3	232	1045	0.222	235	237	0.3	0.2	4.187	A
		2	1	(1, 2, 3)	402			402	400	0.0	0.0	0.045	A
	Exit	1	1		269			269	275	0.0	0.0	0.000	A
2	Entry	1	1	3	271	955	0.284	270	275	0.4	0.5	5.085	A
			2	1, 2, (3)	199	955	0.209	200	207	0.3	0.4	4.813	A
		2	1	(1, 2, 3)	470			470	482	0.0	0.0	0.000	A
	Exit	1	1		449			449	446	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	344	746	0.461	343	352	0.9	0.9	9.249	A
			2	(2), 3	103	746	0.137	103	97	0.0	0.1	5.112	A
		2	1	(1, 2, 3)	447			447	450	0.0	0.0	0.000	A
	Exit	1	1		601			601	612	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	200	1021	0.196	198	205	0.2	0.3	4.276	A
			2	1, 3	285	1021	0.280	281	287	0.2	0.6	4.649	A
		2	1	(1, 2, 3)	485			485	493	0.0	0.0	0.061	A
	Exit	1	1		319			319	325	0.0	0.0	0.000	A
2	Entry	1	1	3	333	939	0.354	334	340	0.5	0.5	5.739	A
			2	1, 2, (3)	244	939	0.260	246	252	0.4	0.4	4.801	A
		2	1	(1, 2, 3)	577			577	592	0.0	0.0	0.000	A
	Exit	1	1		545			545	549	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	423	742	0.571	425	420	0.9	1.1	9.979	A
			2	(2), 3	121	742	0.163	122	123	0.1	0.2	5.918	A
		2	1	(1, 2, 3)	545			545	545	0.0	0.0	0.000	A
	Exit	1	1		741			741	753	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	187	1025	0.182	186	189	0.3	0.2	4.089	A
			2	1, 3	293	1025	0.286	291	288	0.6	0.5	5.013	A
		2	1	(1, 2, 3)	480			480	477	0.0	0.0	0.110	A
	Exit	1	1		316			316	324	0.0	0.0	0.000	A
2	Entry	1	1	3	329	936	0.351	328	330	0.5	0.6	5.679	A
			2	1, 2, (3)	250	936	0.267	250	249	0.4	0.5	4.990	A
		2	1	(1, 2, 3)	579			579	579	0.0	0.0	0.000	A
	Exit	1	1		522			522	523	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	416	742	0.560	416	413	1.1	1.1	9.995	A
			2	(2), 3	122	742	0.164	119	122	0.2	0.4	5.558	A
		2	1	(1, 2, 3)	538			538	535	0.0	0.0	0.000	A
	Exit	1	1		752			752	744	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	155	1046	0.148	155	163	0.2	0.3	3.894	A
			2	1, 3	231	1046	0.221	234	239	0.5	0.2	4.345	A
		2	1	(1, 2, 3)	385			386	402	0.0	0.0	0.046	A
	Exit	1	1		265			265	262	0.0	0.0	0.000	A
2	Entry	1	1	3	280	955	0.294	279	276	0.6	0.6	5.409	A
			2	1, 2, (3)	215	955	0.225	214	206	0.5	0.3	4.653	A
		2	1	(1, 2, 3)	495			495	481	0.0	0.0	0.000	A
	Exit	1	1		431			431	439	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	347	746	0.465	347	346	1.1	0.9	8.346	A
			2	(2), 3	90	746	0.120	91	93	0.4	0.1	5.657	A
		2	1	(1, 2, 3)	438			438	437	0.0	0.0	0.000	A
	Exit	1	1		624			624	622	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	137	1064	0.129	137	133	0.3	0.1	3.727	A
			2	1, 3	190	1064	0.179	190	195	0.2	0.3	4.135	A
		2	1	(1, 2, 3)	327			327	329	0.0	0.0	0.009	A
	Exit	1	1		242			242	228	0.0	0.0	0.000	A
2	Entry	1	1	3	213	970	0.220	214	228	0.6	0.2	4.993	A
			2	1, 2, (3)	173	970	0.179	172	174	0.3	0.1	4.441	A
		2	1	(1, 2, 3)	386			386	399	0.0	0.0	0.000	A
	Exit	1	1		367			367	365	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	302	749	0.403	303	296	0.9	0.4	7.916	A
			2	(2), 3	73	749	0.097	75	76	0.1	0.0	5.418	A
		2	1	(1, 2, 3)	375			375	370	0.0	0.0	0.000	A
	Exit	1	1		482			482	509	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	129	32	1147	1061	0.122	129	137	0.0	0.2	3.711	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1147	1062	0.181	191	193	0.0	0.3	4.164	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	129	32	-	-	-	129	138	0.0	0.0	0.016	A
				3	192	48	-	-	-	192	194	0.0	0.0	0.023	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	239	60	1033	969	0.247	239	234	0.0	0.4	4.843	A
			2	1	87	22	1033	970	0.090	88	89	0.0	0.2	4.425	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	85	21	1033	970	0.087	84	84	0.0	0.2	4.065	A
		2	1	1	87	22	-	-	-	87	90	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	324	81	-	-	-	324	320	0.0	0.0	0.000	A
3	Entry	1	1	1	139	35	777	752	0.184	139	136	0.0	0.3	8.396	A
				2	156	39	777	751	0.208	155	152	0.0	0.5	7.268	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	20	777	752	0.109	84	80	0.0	0.0	5.211	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	139	35	-	-	-	139	137	0.0	0.0	0.000	A
				2	238	60	-	-	-	238	235	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	42	1147	1047	0.162	169	164	0.2	0.2	4.314	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	1147	1046	0.222	235	237	0.3	0.2	4.187	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	170	42	-	-	-	170	164	0.0	0.0	0.044	A
				3	232	58	-	-	-	232	237	0.0	0.0	0.045	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	1033	955	0.284	270	275	0.4	0.5	5.085	A
			2	1	103	26	1033	957	0.107	103	107	0.2	0.3	5.510	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	97	24	1033	954	0.102	97	100	0.2	0.1	4.052	A
		2	1	1	103	26	-	-	-	103	108	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	368	92	-	-	-	368	375	0.0	0.0	0.000	A
3	Entry	1	1	1	168	42	777	746	0.225	166	168	0.3	0.5	9.398	A
				2	176	44	777	746	0.237	178	184	0.5	0.5	9.112	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	103	26	777	745	0.138	103	97	0.0	0.1	5.112	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	168	42	-	-	-	168	168	0.0	0.0	0.000	A
				2	279	70	-	-	-	279	282	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	1147	1020	0.196	198	205	0.2	0.3	4.276	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	285	71	1147	1022	0.279	281	287	0.2	0.6	4.649	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	-	-	-	200	205	0.0	0.0	0.050	A
				3	285	71	-	-	-	285	288	0.0	0.0	0.068	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	333	83	1033	941	0.354	334	340	0.5	0.5	5.739	A
			2	1	119	30	1033	941	0.127	119	126	0.3	0.2	5.176	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	125	31	1033	942	0.133	127	126	0.1	0.2	4.423	A
		2	1	1	119	30	-	-	-	119	125	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	458	115	-	-	-	458	467	0.0	0.0	0.000	A
3	Entry	1	1	1	198	49	777	741	0.267	200	199	0.5	0.5	10.701	B
				2	225	56	777	741	0.304	225	221	0.5	0.6	9.324	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	121	30	777	742	0.163	122	123	0.1	0.2	5.918	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	198	49	-	-	-	198	199	0.0	0.0	0.000	A
				2	347	87	-	-	-	347	346	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	1147	1025	0.182	186	189	0.3	0.2	4.089	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	293	73	1147	1024	0.286	291	288	0.6	0.5	5.013	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	-	-	-	187	189	0.0	0.0	0.106	A
				3	293	73	-	-	-	293	288	0.0	0.0	0.113	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	329	82	1033	936	0.351	328	330	0.5	0.6	5.679	A
			2	1	116	29	1033	938	0.124	116	123	0.2	0.2	5.258	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	134	34	1033	936	0.143	133	126	0.2	0.2	4.725	A
		2	1	1	116	29	-	-	-	116	123	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	463	116	-	-	-	463	456	0.0	0.0	0.000	A
3	Entry	1	1	1	200	50	777	742	0.270	200	201	0.5	0.5	10.240	B
				2	216	54	777	743	0.290	216	212	0.6	0.6	9.762	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	122	30	777	741	0.164	119	122	0.2	0.4	5.558	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	200	50	-	-	-	200	201	0.0	0.0	0.000	A
				2	337	84	-	-	-	337	334	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	155	39	1147	1047	0.148	155	163	0.2	0.3	3.894	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	231	58	1147	1046	0.221	234	239	0.5	0.2	4.345	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	154	38	-	-	-	155	164	0.0	0.0	0.019	A
				3	231	58	-	-	-	231	238	0.0	0.0	0.065	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	280	70	1033	955	0.294	279	276	0.6	0.6	5.409	A
			2	1	104	26	1033	956	0.108	103	98	0.2	0.2	4.859	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	111	28	1033	956	0.116	111	108	0.2	0.1	4.464	A
		2	1	1	104	26	-	-	-	104	98	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	391	98	-	-	-	391	383	0.0	0.0	0.000	A
3	Entry	1	1	1	160	40	777	747	0.215	162	163	0.5	0.4	8.726	A
				2	187	47	777	746	0.251	186	182	0.6	0.5	8.005	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	90	22	777	747	0.120	91	93	0.4	0.1	5.657	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	160	40	-	-	-	160	163	0.0	0.0	0.000	A
				2	277	69	-	-	-	277	274	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	1147	1064	0.129	137	133	0.3	0.1	3.727	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	190	47	1147	1066	0.178	190	195	0.2	0.3	4.135	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	137	34	-	-	-	137	133	0.0	0.0	0.010	A
				3	190	47	-	-	-	190	196	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	213	53	1033	970	0.220	214	228	0.6	0.2	4.993	A
			2	1	94	23	1033	970	0.097	94	88	0.2	0.0	4.706	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	80	20	1033	970	0.082	79	86	0.1	0.1	4.175	A
		2	1	1	94	23	-	-	-	94	87	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	293	73	-	-	-	293	312	0.0	0.0	0.000	A
3	Entry	1	1	1	148	37	777	749	0.197	148	141	0.4	0.2	8.112	A
				2	154	39	777	749	0.206	155	155	0.5	0.1	7.735	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	777	749	0.097	75	76	0.1	0.0	5.418	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	148	37	-	-	-	148	140	0.0	0.0	0.000	A
				2	227	57	-	-	-	227	229	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	20.91	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	20.91	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	135	100.000
2		ONE HOUR	✓	525	100.000
3		ONE HOUR	✓	856	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	64	71
	2	251	0	274
	3	223	633	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	1	8
	2	0	0	13
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.11	4.80	0.3	A	123	185
2	0.31	5.14	0.8	A	480	721
3	0.87	33.07	8.9	D	786	1179

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	100	25	475	1468	0.068	99	104	357	0.0	0.1	3.966	A
2	390	97	52	1866	0.209	389	398	522	0.0	0.5	4.561	A
3	639	160	191	1081	0.591	641	639	250	0.0	2.1	10.960	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	127	32	567	1381	0.092	126	128	438	0.1	0.2	4.251	A
2	471	118	65	1886	0.250	470	477	628	0.5	0.8	4.828	A
3	781	195	227	1158	0.674	777	771	308	2.1	2.8	13.641	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	146	37	710	1368	0.107	145	157	520	0.2	0.3	4.619	A
2	573	143	76	1881	0.305	576	576	779	0.8	0.7	4.989	A
3	949	237	277	1126	0.843	953	937	374	2.8	6.5	23.882	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	145	36	691	1411	0.103	144	153	526	0.3	0.2	4.797	A
2	588	147	78	1881	0.312	591	583	757	0.7	0.8	5.136	A
3	932	233	282	1078	0.865	935	943	388	6.5	8.9	33.072	D

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	114	29	563	1456	0.078	114	125	419	0.2	0.2	4.357	A
2	466	116	58	1930	0.241	463	476	619	0.8	0.8	4.805	A
3	769	192	215	1111	0.693	767	797	306	8.9	3.3	16.541	C

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	107	27	473	1466	0.073	105	110	352	0.2	0.2	4.294	A
2	395	99	55	1908	0.207	394	400	523	0.8	0.6	4.775	A
3	645	161	185	1116	0.578	640	658	264	3.3	2.1	11.071	B

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	47	974	0.049	47	49	0.0	0.0	3.677	A
			2	1, 3	53	974	0.055	52	55	0.0	0.1	4.225	A
		2	1	(1, 2, 3)	100			100	104	0.0	0.0	0.008	A
	Exit	1	1		357			357	356	0.0	0.0	0.000	A
2	Entry	1	1	3	148	1015	0.146	149	159	0.0	0.2	4.517	A
			2	1, 2, (3)	242	1015	0.238	241	239	0.0	0.3	4.587	A
		2	1	(1, 2, 3)	390			390	400	0.0	0.0	0.000	A
	Exit	1	1		522			522	524	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	466	721	0.646	467	463	0.0	1.7	12.729	B
			2	(2), 3	173	721	0.240	174	177	0.0	0.4	6.295	A
		2	1	(1, 2, 3)	639			639	648	0.0	0.0	0.000	A
	Exit	1	1		250			250	261	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	61	941	0.065	61	60	0.0	0.1	4.146	A
			2	1, 3	66	941	0.070	65	69	0.1	0.1	4.348	A
		2	1	(1, 2, 3)	127			127	128	0.0	0.0	0.000	A
	Exit	1	1		438			438	440	0.0	0.0	0.000	A
2	Entry	1	1	3	189	1011	0.187	189	189	0.2	0.3	4.642	A
			2	1, 2, (3)	282	1011	0.279	281	288	0.3	0.5	4.937	A
		2	1	(1, 2, 3)	471			471	479	0.0	0.0	0.000	A
	Exit	1	1		628			628	623	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	553	710	0.778	550	543	1.7	2.4	16.505	C
			2	(2), 3	228	710	0.321	228	228	0.4	0.4	6.695	A
		2	1	(1, 2, 3)	781			780	773	0.0	0.0	0.023	A
	Exit	1	1		308			308	313	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	70	888	0.079	69	75	0.1	0.1	4.373	A
			2	1, 3	76	888	0.086	76	82	0.1	0.1	4.844	A
		2	1	(1, 2, 3)	146			146	157	0.0	0.0	0.007	A
	Exit	1	1		520			520	520	0.0	0.0	0.000	A
2	Entry	1	1	3	234	1008	0.232	236	231	0.3	0.2	4.750	A
			2	1, 2, (3)	340	1008	0.337	340	345	0.5	0.5	5.135	A
		2	1	(1, 2, 3)	573			573	576	0.0	0.0	0.000	A
	Exit	1	1		779			779	771	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	632	695	0.909	634	631	2.4	5.3	28.424	D
			2	(2), 3	320	695	0.460	319	307	0.4	0.8	9.012	A
		2	1	(1, 2, 3)	949			952	950	0.0	0.5	1.682	A
	Exit	1	1		374			374	380	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	66	895	0.074	66	71	0.1	0.1	4.515	A
			2	1, 3	79	895	0.089	78	82	0.1	0.1	5.046	A
		2	1	(1, 2, 3)	145			145	153	0.0	0.0	0.007	A
	Exit	1	1		526			526	527	0.0	0.0	0.000	A
2	Entry	1	1	3	240	1007	0.238	244	238	0.2	0.3	4.930	A
			2	1, 2, (3)	347	1007	0.345	348	345	0.5	0.5	5.263	A
		2	1	(1, 2, 3)	588			588	583	0.0	0.0	0.000	A
	Exit	1	1		757			757	767	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	627	694	0.904	627	628	5.3	6.3	36.337	E
			2	(2), 3	306	694	0.440	308	315	0.8	0.7	10.286	B
		2	1	(1, 2, 3)	932			933	947	0.5	2.0	5.277	A
	Exit	1	1		388			388	385	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	56	942	0.060	56	60	0.1	0.1	4.268	A
			2	1, 3	58	942	0.062	58	65	0.1	0.1	4.436	A
		2	1	(1, 2, 3)	114			114	125	0.0	0.0	0.005	A
	Exit	1	1		419			419	435	0.0	0.0	0.000	A
2	Entry	1	1	3	192	1013	0.190	191	194	0.3	0.3	4.748	A
			2	1, 2, (3)	273	1013	0.270	271	282	0.5	0.5	4.841	A
		2	1	(1, 2, 3)	466			466	476	0.0	0.0	0.000	A
	Exit	1	1		619			619	647	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	545	714	0.764	543	560	6.3	2.8	19.386	C
			2	(2), 3	224	714	0.314	224	237	0.7	0.5	7.694	A
		2	1	(1, 2, 3)	769			769	782	2.0	0.0	1.015	A
	Exit	1	1		306			306	316	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	50	975	0.052	50	53	0.1	0.1	4.159	A
			2	1, 3	56	975	0.058	55	57	0.1	0.1	4.418	A
		2	1	(1, 2, 3)	107			107	110	0.0	0.0	0.004	A
	Exit	1	1		352			352	361	0.0	0.0	0.000	A
2	Entry	1	1	3	163	1014	0.161	162	160	0.3	0.3	4.685	A
			2	1, 2, (3)	232	1014	0.228	232	240	0.5	0.3	4.829	A
		2	1	(1, 2, 3)	395			395	399	0.0	0.0	0.000	A
	Exit	1	1		523			523	541	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	468	722	0.648	464	474	2.8	1.7	12.956	B
			2	(2), 3	177	722	0.246	176	184	0.5	0.3	6.257	A
		2	1	(1, 2, 3)	645			645	653	0.0	0.0	0.001	A
	Exit	1	1		264			264	267	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1147	976	0.048	47	49	0.0	0.0	3.677	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	53	13	1147	977	0.054	52	55	0.0	0.1	4.225	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	-	-	-	47	49	0.0	0.0	0.001	A
				3	53	13	-	-	-	53	55	0.0	0.0	0.016	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	148	37	1033	1015	0.146	149	159	0.0	0.2	4.517	A
			2	1	192	48	1033	1015	0.189	191	191	0.0	0.2	4.691	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	12	1033	1016	0.049	50	48	0.0	0.0	4.111	A
		2	1	1	192	48	-	-	-	192	192	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	198	49	-	-	-	198	208	0.0	0.0	0.000	A
3	Entry	1	1	1	167	42	777	721	0.232	166	165	0.0	0.8	13.824	B
				2	299	75	777	721	0.415	301	298	0.0	1.0	12.120	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	173	43	777	721	0.240	174	177	0.0	0.4	6.295	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	167	42	-	-	-	167	168	0.0	0.0	0.000	A
				2	472	118	-	-	-	472	480	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	1147	940	0.065	61	60	0.0	0.1	4.146	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	66	17	1147	939	0.070	65	69	0.1	0.1	4.348	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	-	-	-	61	60	0.0	0.0	0.000	A
				3	66	17	-	-	-	66	69	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	189	47	1033	1011	0.187	189	189	0.2	0.3	4.642	A
			2	1	228	57	1033	1011	0.226	227	233	0.2	0.5	5.110	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	54	13	1033	1011	0.053	54	56	0.0	0.1	4.128	A
		2	1	1	228	57	-	-	-	228	234	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	243	61	-	-	-	243	245	0.0	0.0	0.000	A
3	Entry	1	1	1	213	53	777	710	0.299	211	208	0.8	1.0	17.657	C
				2	340	85	777	710	0.479	339	335	1.0	1.4	15.792	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	228	57	777	710	0.321	228	228	0.4	0.4	6.695	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	213	53	-	-	-	213	209	0.0	0.0	0.025	A
				2	568	142	-	-	-	568	565	0.0	0.0	0.023	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	18	1147	891	0.079	69	75	0.1	0.1	4.373	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	76	19	1147	892	0.086	76	82	0.1	0.1	4.844	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	18	-	-	-	70	75	0.0	0.0	0.000	A
				3	76	19	-	-	-	76	82	0.0	0.0	0.014	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	234	58	1033	1007	0.232	236	231	0.3	0.2	4.750	A
			2	1	277	69	1033	1008	0.274	277	278	0.5	0.4	5.302	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	1033	1007	0.063	63	67	0.1	0.1	4.362	A
		2	1	1	277	69	-	-	-	277	278	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	297	74	-	-	-	297	298	0.0	0.0	0.000	A
3	Entry	1	1	1	243	61	777	696	0.349	243	242	1.0	2.2	29.815	D
				2	389	97	777	695	0.560	391	389	1.4	3.1	27.558	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	320	80	777	696	0.459	319	307	0.4	0.8	9.012	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	243	61	-	-	-	243	247	0.0	0.2	1.724	A
				2	706	176	-	-	-	709	704	0.0	0.3	1.668	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	66	17	1147	896	0.074	66	71	0.1	0.1	4.515	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	79	20	1147	895	0.089	78	82	0.1	0.1	5.046	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	66	17	-	-	-	66	71	0.0	0.0	0.004	A
				3	79	20	-	-	-	79	82	0.0	0.0	0.009	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	240	60	1033	1006	0.239	244	238	0.2	0.3	4.930	A
			2	1	282	70	1033	1007	0.280	282	280	0.4	0.5	5.440	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	65	16	1033	1007	0.065	66	65	0.1	0.0	4.417	A
		2	1	1	282	70	-	-	-	282	280	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	305	76	-	-	-	305	303	0.0	0.0	0.000	A
3	Entry	1	1	1	247	62	777	694	0.356	244	248	2.2	2.7	37.875	E
				2	380	95	777	694	0.548	383	381	3.1	3.6	35.334	E
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	306	76	777	694	0.440	308	315	0.8	0.7	10.286	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	249	62	-	-	-	247	250	0.2	0.6	5.401	A
				2	683	171	-	-	-	686	697	0.3	1.4	5.232	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	1147	939	0.060	56	60	0.1	0.1	4.268	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	58	15	1147	944	0.061	58	65	0.1	0.1	4.436	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	60	0.0	0.0	0.003	A
				3	58	15	-	-	-	58	65	0.0	0.0	0.006	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1033	1013	0.190	191	194	0.3	0.3	4.748	A
			2	1	216	54	1033	1013	0.213	215	225	0.5	0.4	4.904	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	57	14	1033	1014	0.056	57	57	0.0	0.1	4.558	A
		2	1	1	216	54	-	-	-	216	225	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	249	62	-	-	-	249	251	0.0	0.0	0.000	A
3	Entry	1	1	1	203	51	777	714	0.285	204	210	2.7	1.0	20.946	C
				2	342	86	777	714	0.479	339	350	3.6	1.8	18.463	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	224	56	777	714	0.314	224	237	0.7	0.5	7.694	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	203	51	-	-	-	203	203	0.6	0.0	1.166	A
				2	566	142	-	-	-	566	579	1.4	0.0	0.962	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	13	1147	973	0.052	50	53	0.1	0.1	4.159	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	1147	975	0.058	55	57	0.1	0.1	4.418	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	13	-	-	-	50	53	0.0	0.0	0.000	A
				3	56	14	-	-	-	56	57	0.0	0.0	0.009	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	163	41	1033	1014	0.161	162	160	0.3	0.3	4.685	A
			2	1	185	46	1033	1015	0.182	185	190	0.4	0.3	4.930	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	47	12	1033	1014	0.046	47	50	0.1	0.1	4.385	A
		2	1	1	185	46	-	-	-	185	190	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	210	53	-	-	-	210	209	0.0	0.0	0.000	A
3	Entry	1	1	1	170	42	777	722	0.235	168	171	1.0	0.6	14.002	B
				2	298	75	777	723	0.413	296	304	1.8	1.1	12.368	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	177	44	777	722	0.246	176	184	0.5	0.3	6.257	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	170	42	-	-	-	170	169	0.0	0.0	0.000	A
				2	476	119	-	-	-	476	484	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.59	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.59	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	441	100.000
2		ONE HOUR	✓	577	100.000
3		ONE HOUR	✓	467	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	176	265
	2	119	0	458
	3	175	292	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	1	0
	2	4	0	4
	3	3	4	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.33	4.75	0.7	A	407	611
2	0.35	5.53	1.1	A	526	789
3	0.51	9.69	1.9	A	423	634

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	334	84	215	1588	0.211	335	334	218	0.0	0.3	4.034	A
2	433	108	202	1894	0.229	436	430	347	0.0	0.5	4.699	A
3	347	87	85	1098	0.316	348	349	553	0.0	0.6	6.824	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	393	98	264	1546	0.254	394	404	260	0.3	0.4	4.282	A
2	516	129	235	1878	0.275	513	519	424	0.5	0.8	4.898	A
3	412	103	110	1066	0.386	414	423	638	0.6	0.9	7.657	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	494	123	325	1492	0.331	494	496	307	0.4	0.7	4.689	A
2	622	156	303	1829	0.340	619	631	516	0.8	1.1	5.269	A
3	521	130	120	1026	0.508	511	514	802	0.9	1.9	8.857	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	491	123	315	1521	0.323	493	494	320	0.7	0.5	4.753	A
2	638	160	292	1834	0.348	640	632	515	1.1	1.1	5.528	A
3	501	125	134	1088	0.460	501	521	799	1.9	1.5	9.695	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	392	98	268	1607	0.244	393	403	266	0.5	0.5	4.404	A
2	514	129	243	1861	0.276	511	526	417	1.1	0.7	5.092	A
3	422	106	111	1079	0.391	423	429	644	1.5	0.9	7.553	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	337	84	214	1530	0.220	338	342	212	0.5	0.3	4.109	A
2	431	108	199	1954	0.220	431	446	353	0.7	0.6	4.631	A
3	334	83	88	1088	0.307	338	349	542	0.9	0.6	7.396	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	132	1069	0.124	132	133	0.0	0.1	3.864	A
			2	1, 3	202	1069	0.189	202	201	0.0	0.2	4.080	A
		2	1	(1, 2, 3)	334			334	335	0.0	0.0	0.040	A
	Exit	1	1		218			218	220	0.0	0.0	0.000	A
2	Entry	1	1	3	251	965	0.260	252	247	0.0	0.3	4.902	A
			2	1, 2, (3)	182	965	0.189	184	183	0.0	0.2	4.424	A
		2	1	(1, 2, 3)	433			433	432	0.0	0.0	0.000	A
	Exit	1	1		347			347	352	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	280	752	0.372	280	281	0.0	0.5	7.204	A
			2	(2), 3	67	752	0.090	67	68	0.0	0.1	5.235	A
		2	1	(1, 2, 3)	347			347	352	0.0	0.0	0.000	A
	Exit	1	1		553			553	541	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	159	1051	0.152	160	163	0.1	0.1	3.945	A
			2	1, 3	234	1051	0.222	235	240	0.2	0.3	4.421	A
		2	1	(1, 2, 3)	393			393	404	0.0	0.0	0.052	A
	Exit	1	1		260			260	272	0.0	0.0	0.000	A
2	Entry	1	1	3	295	955	0.309	292	297	0.3	0.5	5.161	A
			2	1, 2, (3)	221	955	0.232	221	221	0.2	0.3	4.545	A
		2	1	(1, 2, 3)	516			516	520	0.0	0.0	0.000	A
	Exit	1	1		424			424	425	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	323	744	0.434	325	333	0.5	0.8	8.317	A
			2	(2), 3	89	744	0.119	90	90	0.1	0.1	5.215	A
		2	1	(1, 2, 3)	412			412	424	0.0	0.0	0.000	A
	Exit	1	1		638			638	649	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	191	1029	0.186	191	195	0.1	0.2	4.337	A
			2	1, 3	303	1029	0.295	303	301	0.3	0.4	4.719	A
		2	1	(1, 2, 3)	494			494	497	0.0	0.0	0.119	A
	Exit	1	1		307			307	320	0.0	0.0	0.000	A
2	Entry	1	1	3	357	932	0.383	356	363	0.5	0.6	5.523	A
			2	1, 2, (3)	265	932	0.285	263	268	0.3	0.5	4.926	A
		2	1	(1, 2, 3)	622			622	632	0.0	0.0	0.000	A
	Exit	1	1		516			516	515	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	407	741	0.549	398	402	0.8	1.7	9.734	A
			2	(2), 3	115	741	0.155	114	112	0.1	0.2	5.681	A
		2	1	(1, 2, 3)	521			521	518	0.0	0.0	0.000	A
	Exit	1	1		802			802	805	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	200	1033	0.194	200	200	0.2	0.2	4.258	A
			2	1, 3	291	1033	0.282	292	294	0.4	0.3	4.921	A
		2	1	(1, 2, 3)	491			491	493	0.0	0.0	0.098	A
	Exit	1	1		320			320	328	0.0	0.0	0.000	A
2	Entry	1	1	3	361	935	0.386	363	359	0.6	0.5	5.745	A
			2	1, 2, (3)	277	935	0.296	277	274	0.5	0.5	5.241	A
		2	1	(1, 2, 3)	638			638	632	0.0	0.0	0.000	A
	Exit	1	1		515			515	526	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	387	737	0.524	389	400	1.7	1.2	10.778	B
			2	(2), 3	114	737	0.155	112	121	0.2	0.4	6.125	A
		2	1	(1, 2, 3)	501			501	520	0.0	0.0	0.000	A
	Exit	1	1		799			799	794	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	149	1050	0.142	149	161	0.2	0.2	4.208	A
			2	1, 3	243	1050	0.232	243	242	0.3	0.3	4.432	A
		2	1	(1, 2, 3)	392			392	403	0.0	0.0	0.057	A
	Exit	1	1		266			266	268	0.0	0.0	0.000	A
2	Entry	1	1	3	292	952	0.307	291	302	0.5	0.4	5.376	A
			2	1, 2, (3)	223	952	0.235	221	224	0.5	0.4	4.709	A
		2	1	(1, 2, 3)	514			514	525	0.0	0.0	0.000	A
	Exit	1	1		417			417	433	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	329	744	0.443	330	334	1.2	0.7	8.098	A
			2	(2), 3	93	744	0.125	93	95	0.4	0.2	5.608	A
		2	1	(1, 2, 3)	422			422	426	0.0	0.0	0.000	A
	Exit	1	1		644			644	656	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	139	1069	0.130	139	140	0.2	0.2	3.999	A
			2	1, 3	199	1069	0.186	199	202	0.3	0.2	4.134	A
		2	1	(1, 2, 3)	337			337	341	0.0	0.0	0.035	A
	Exit	1	1		212			212	222	0.0	0.0	0.000	A
2	Entry	1	1	3	254	966	0.263	254	258	0.4	0.3	4.771	A
			2	1, 2, (3)	177	966	0.183	177	188	0.4	0.3	4.439	A
		2	1	(1, 2, 3)	431			431	445	0.0	0.0	0.000	A
	Exit	1	1		353			353	359	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	262	751	0.349	265	277	0.7	0.5	7.944	A
			2	(2), 3	72	751	0.095	72	73	0.2	0.1	5.313	A
		2	1	(1, 2, 3)	334			334	348	0.0	0.0	0.000	A
	Exit	1	1		542			542	556	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	132	33	1147	1069	0.124	132	133	0.0	0.1	3.864	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	202	51	1147	1069	0.189	202	201	0.0	0.2	4.080	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	132	33	-	-	-	132	134	0.0	0.0	0.046	A
				3	202	51	-	-	-	202	202	0.0	0.0	0.035	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	251	63	1033	965	0.260	252	247	0.0	0.3	4.902	A
			2	1	85	21	1033	965	0.088	85	89	0.0	0.1	4.795	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	97	24	1033	966	0.101	98	93	0.0	0.1	4.068	A
		2	1	1	85	21	-	-	-	85	90	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	349	87	-	-	-	349	342	0.0	0.0	0.000	A
3	Entry	1	1	1	135	34	777	751	0.180	133	131	0.0	0.4	7.546	A
				2	145	36	777	751	0.193	148	150	0.0	0.1	6.904	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	67	17	777	752	0.089	67	68	0.0	0.1	5.235	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	135	34	-	-	-	135	132	0.0	0.0	0.000	A
				2	212	53	-	-	-	212	219	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	1147	1051	0.152	160	163	0.1	0.1	3.945	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	234	58	1147	1051	0.222	235	240	0.2	0.3	4.421	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	159	40	-	-	-	159	164	0.0	0.0	0.032	A
				3	234	58	-	-	-	234	241	0.0	0.0	0.065	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	1033	955	0.309	292	297	0.3	0.5	5.161	A
			2	1	110	28	1033	954	0.115	110	111	0.1	0.2	4.873	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	111	28	1033	954	0.116	111	111	0.1	0.1	4.219	A
		2	1	1	110	28	-	-	-	110	111	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	406	101	-	-	-	406	409	0.0	0.0	0.000	A
3	Entry	1	1	1	149	37	777	745	0.200	150	161	0.4	0.3	8.593	A
				2	174	43	777	744	0.233	175	172	0.1	0.4	8.058	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	89	22	777	745	0.119	90	90	0.1	0.1	5.215	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	149	37	-	-	-	149	161	0.0	0.0	0.000	A
				2	263	66	-	-	-	263	263	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	1147	1029	0.186	191	195	0.1	0.2	4.337	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	303	76	1147	1028	0.295	303	301	0.3	0.4	4.719	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	-	-	-	191	196	0.0	0.0	0.088	A
				3	303	76	-	-	-	303	302	0.0	0.0	0.139	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	1033	931	0.384	356	363	0.5	0.6	5.523	A
			2	1	121	30	1033	933	0.130	120	127	0.2	0.2	5.306	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	144	36	1033	930	0.154	142	141	0.1	0.3	4.583	A
		2	1	1	121	30	-	-	-	121	127	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	501	125	-	-	-	501	505	0.0	0.0	0.000	A
3	Entry	1	1	1	191	48	777	741	0.258	187	194	0.3	0.8	10.240	B
				2	215	54	777	741	0.290	211	208	0.4	0.8	9.255	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	115	29	777	741	0.155	114	112	0.1	0.2	5.681	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	191	48	-	-	-	191	196	0.0	0.0	0.000	A
				2	330	83	-	-	-	330	322	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	1147	1032	0.194	200	200	0.2	0.2	4.258	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	291	73	1147	1032	0.282	292	294	0.4	0.3	4.921	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	200	50	-	-	-	200	199	0.0	0.0	0.065	A
				3	291	73	-	-	-	291	294	0.0	0.0	0.121	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	361	90	1033	936	0.386	363	359	0.6	0.5	5.745	A
			2	1	133	33	1033	935	0.142	134	133	0.2	0.3	5.684	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	144	36	1033	935	0.154	143	141	0.3	0.3	4.821	A
		2	1	1	133	33	-	-	-	133	133	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	505	126	-	-	-	505	499	0.0	0.0	0.000	A
3	Entry	1	1	1	184	46	777	738	0.250	186	195	0.8	0.6	11.538	B
				2	202	51	777	737	0.274	202	206	0.8	0.5	10.046	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	114	29	777	737	0.155	112	121	0.2	0.4	6.125	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	184	46	-	-	-	184	194	0.0	0.0	0.000	A
				2	316	79	-	-	-	316	326	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	1147	1050	0.142	149	161	0.2	0.2	4.208	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	243	61	1147	1049	0.232	243	242	0.3	0.3	4.432	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	149	37	-	-	-	149	161	0.0	0.0	0.063	A
				3	244	61	-	-	-	243	242	0.0	0.0	0.053	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	292	73	1033	951	0.307	291	302	0.5	0.4	5.376	A
			2	1	112	28	1033	953	0.117	111	112	0.3	0.2	5.125	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	112	28	1033	952	0.117	110	113	0.3	0.2	4.296	A
		2	1	1	112	28	-	-	-	112	111	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	402	101	-	-	-	402	413	0.0	0.0	0.000	A
3	Entry	1	1	1	153	38	777	744	0.206	155	157	0.6	0.3	8.713	A
				2	176	44	777	744	0.237	175	177	0.5	0.5	7.554	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	93	23	777	744	0.125	93	95	0.4	0.2	5.608	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	153	38	-	-	-	153	155	0.0	0.0	0.000	A
				2	269	67	-	-	-	269	271	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	139	35	1147	1068	0.130	139	140	0.2	0.2	3.999	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	199	50	1147	1068	0.186	199	202	0.3	0.2	4.134	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	139	35	-	-	-	139	140	0.0	0.0	0.029	A
				3	199	50	-	-	-	199	201	0.0	0.0	0.039	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	254	64	1033	967	0.263	254	258	0.4	0.3	4.771	A
			2	1	88	22	1033	966	0.091	88	91	0.2	0.1	4.824	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	1033	967	0.092	89	97	0.2	0.2	4.071	A
		2	1	1	88	22	-	-	-	88	91	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	343	86	-	-	-	343	354	0.0	0.0	0.000	A
3	Entry	1	1	1	122	31	777	749	0.163	123	131	0.3	0.3	8.465	A
				2	140	35	777	750	0.187	142	146	0.5	0.2	7.467	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	72	18	777	750	0.096	72	73	0.2	0.1	5.313	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	122	31	-	-	-	122	131	0.0	0.0	0.000	A
				2	212	53	-	-	-	212	217	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	8.65	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.65	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038	WoD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	764	100.000
3		ONE HOUR	✓	612	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	53	92
	2	283	0	481
	3	199	413	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	8
	2	0	0	10
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.11	4.23	0.2	A	134	201
2	0.43	6.19	1.8	A	700	1050
3	0.66	12.75	3.0	B	563	844

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	115	29	312	1477	0.078	116	114	349	0.0	0.1	3.860	A
2	571	143	75	1970	0.290	571	570	353	0.0	0.9	4.784	A
3	456	114	204	1079	0.422	458	460	442	0.0	1.0	7.983	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	126	32	373	1440	0.088	126	133	434	0.1	0.2	3.931	A
2	688	172	84	1985	0.347	690	692	416	0.9	1.1	5.364	A
3	550	138	256	1076	0.511	551	557	518	1.0	1.6	10.151	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	459	1401	0.112	158	165	528	0.2	0.1	4.229	A
2	849	212	106	1954	0.435	843	859	511	1.1	1.8	6.193	A
3	675	169	313	1085	0.622	674	675	637	1.6	2.3	12.305	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	157	39	460	1404	0.112	159	170	526	0.1	0.2	4.161	A
2	836	209	100	1970	0.424	842	866	520	1.8	1.3	5.960	A
3	687	172	307	1041	0.660	679	676	635	2.3	3.0	12.747	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	136	34	367	1467	0.093	136	131	432	0.2	0.1	3.962	A
2	683	171	83	1939	0.352	687	692	420	1.3	0.8	5.105	A
3	539	135	261	1019	0.529	538	552	509	3.0	1.5	9.943	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	114	28	327	1481	0.077	113	114	360	0.1	0.1	4.019	A
2	572	143	74	1960	0.292	568	567	366	0.8	1.0	5.098	A
3	470	117	216	1085	0.433	471	481	426	1.5	1.0	8.371	A

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	41	1033	0.040	41	40	0.0	0.0	3.788	A
			2	1, 3	74	1033	0.072	75	74	0.0	0.1	3.875	A
		2	1	(1, 2, 3)	115			115	114	0.0	0.0	0.017	A
	Exit	1	1		349			349	357	0.0	0.0	0.000	A
2	Entry	1	1	3	275	1008	0.273	274	272	0.0	0.4	4.932	A
			2	1, 2, (3)	297	1008	0.294	297	298	0.0	0.5	4.658	A
		2	1	(1, 2, 3)	571			571	574	0.0	0.0	0.000	A
	Exit	1	1		353			353	352	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	350	717	0.488	353	351	0.0	0.8	8.724	A
			2	(2), 3	106	717	0.147	105	109	0.0	0.2	5.583	A
		2	1	(1, 2, 3)	456			456	464	0.0	0.0	0.000	A
	Exit	1	1		442			442	436	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	42	1011	0.042	42	47	0.0	0.0	3.686	A
			2	1, 3	84	1011	0.083	84	86	0.1	0.1	4.072	A
		2	1	(1, 2, 3)	126			126	133	0.0	0.0	0.000	A
	Exit	1	1		434			434	436	0.0	0.0	0.000	A
2	Entry	1	1	3	335	1005	0.333	336	333	0.4	0.6	5.482	A
			2	1, 2, (3)	354	1005	0.352	354	359	0.5	0.5	5.261	A
		2	1	(1, 2, 3)	688			688	693	0.0	0.0	0.000	A
	Exit	1	1		416			416	423	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	408	701	0.582	411	415	0.8	1.4	11.573	B
			2	(2), 3	142	701	0.202	140	142	0.2	0.3	6.003	A
		2	1	(1, 2, 3)	550			550	560	0.0	0.0	0.000	A
	Exit	1	1		518			518	523	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	52	980	0.053	52	58	0.0	0.0	4.014	A
			2	1, 3	106	980	0.108	106	107	0.1	0.1	4.341	A
		2	1	(1, 2, 3)	157			157	165	0.0	0.0	0.009	A
	Exit	1	1		528			528	537	0.0	0.0	0.000	A
2	Entry	1	1	3	398	997	0.399	396	408	0.6	0.8	6.284	A
			2	1, 2, (3)	451	997	0.452	448	451	0.5	0.9	6.116	A
		2	1	(1, 2, 3)	849			849	862	0.0	0.0	0.000	A
	Exit	1	1		511			511	519	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	494	685	0.721	493	491	1.4	1.8	14.424	B
			2	(2), 3	181	685	0.265	181	184	0.3	0.4	6.631	A
		2	1	(1, 2, 3)	675			675	677	0.0	0.0	0.000	A
	Exit	1	1		637			637	644	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	58	979	0.059	59	64	0.0	0.0	3.771	A
			2	1, 3	99	979	0.101	100	106	0.1	0.1	4.398	A
		2	1	(1, 2, 3)	157			157	170	0.0	0.0	0.011	A
	Exit	1	1		526			526	532	0.0	0.0	0.000	A
2	Entry	1	1	3	404	999	0.404	406	416	0.8	0.6	6.002	A
			2	1, 2, (3)	432	999	0.432	436	450	0.9	0.6	5.924	A
		2	1	(1, 2, 3)	836			836	864	0.0	0.0	0.000	A
	Exit	1	1		520			520	523	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	500	687	0.728	492	492	1.8	2.6	14.971	B
			2	(2), 3	187	687	0.273	187	184	0.4	0.4	6.722	A
		2	1	(1, 2, 3)	687			687	679	0.0	0.0	0.013	A
	Exit	1	1		635			635	657	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	53	1013	0.052	53	49	0.0	0.0	3.744	A
			2	1, 3	83	1013	0.082	83	82	0.1	0.1	4.101	A
		2	1	(1, 2, 3)	136			136	131	0.0	0.0	0.000	A
	Exit	1	1		432			432	445	0.0	0.0	0.000	A
2	Entry	1	1	3	321	1005	0.320	322	326	0.6	0.4	4.978	A
			2	1, 2, (3)	362	1005	0.360	365	367	0.6	0.4	5.211	A
		2	1	(1, 2, 3)	683			683	691	0.0	0.0	0.000	A
	Exit	1	1		420			420	421	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	407	700	0.582	406	416	2.6	1.3	11.176	B
			2	(2), 3	131	700	0.188	133	136	0.4	0.2	6.188	A
		2	1	(1, 2, 3)	539			539	546	0.0	0.0	0.002	A
	Exit	1	1		509			509	510	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	40	1028	0.039	39	41	0.0	0.1	3.691	A
			2	1, 3	74	1028	0.072	74	72	0.1	0.1	4.175	A
		2	1	(1, 2, 3)	114			114	114	0.0	0.0	0.028	A
	Exit	1	1		360			360	365	0.0	0.0	0.000	A
2	Entry	1	1	3	271	1008	0.269	271	268	0.4	0.3	5.182	A
			2	1, 2, (3)	300	1008	0.298	297	299	0.4	0.6	5.029	A
		2	1	(1, 2, 3)	572			572	568	0.0	0.0	0.000	A
	Exit	1	1		366			366	370	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	354	713	0.496	355	364	1.3	0.9	9.269	A
			2	(2), 3	116	713	0.162	116	117	0.2	0.1	5.579	A
		2	1	(1, 2, 3)	470			470	479	0.0	0.0	0.000	A
	Exit	1	1		426			426	428	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	1147	1029	0.040	41	40	0.0	0.0	3.788	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	19	1147	1034	0.072	75	74	0.0	0.1	3.875	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	-	-	-	41	40	0.0	0.0	0.000	A
				3	74	19	-	-	-	74	74	0.0	0.0	0.027	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	275	69	1033	1008	0.273	274	272	0.0	0.4	4.932	A
			2	1	203	51	1033	1007	0.201	204	208	0.0	0.4	4.882	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	94	24	1033	1008	0.093	94	90	0.0	0.1	4.094	A
		2	1	1	203	51	-	-	-	203	210	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	368	92	-	-	-	368	364	0.0	0.0	0.000	A
3	Entry	1	1	1	145	36	777	717	0.203	146	149	0.0	0.5	9.241	A
				2	205	51	777	717	0.285	207	203	0.0	0.3	8.344	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	106	26	777	718	0.147	105	109	0.0	0.2	5.583	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	145	36	-	-	-	145	150	0.0	0.0	0.000	A
				2	310	78	-	-	-	310	314	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	11	1147	1009	0.042	42	47	0.0	0.0	3.686	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	1147	1009	0.083	84	86	0.1	0.1	4.072	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	11	-	-	-	42	47	0.0	0.0	0.000	A
				3	84	21	-	-	-	84	86	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	335	84	1033	1005	0.333	336	333	0.4	0.6	5.482	A
			2	1	255	64	1033	1005	0.254	256	255	0.4	0.3	5.495	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	99	25	1033	1005	0.098	98	104	0.1	0.1	4.630	A
		2	1	1	255	64	-	-	-	255	255	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	433	108	-	-	-	433	438	0.0	0.0	0.000	A
3	Entry	1	1	1	176	44	777	702	0.251	178	181	0.5	0.6	12.297	B
				2	232	58	777	702	0.330	233	233	0.3	0.7	11.013	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	142	36	777	703	0.202	140	142	0.2	0.3	6.003	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	176	44	-	-	-	176	182	0.0	0.0	0.000	A
				2	374	94	-	-	-	374	378	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1147	980	0.053	52	58	0.0	0.0	4.014	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	106	26	1147	978	0.108	106	107	0.1	0.1	4.341	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	-	-	-	52	58	0.0	0.0	0.000	A
				3	105	26	-	-	-	106	107	0.0	0.0	0.015	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	398	100	1033	998	0.399	396	408	0.6	0.8	6.284	A
			2	1	315	79	1033	998	0.315	313	322	0.3	0.6	6.488	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	136	34	1033	998	0.137	135	129	0.1	0.3	5.092	A
		2	1	1	315	79	-	-	-	315	323	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	535	134	-	-	-	535	538	0.0	0.0	0.000	A
3	Entry	1	1	1	214	54	777	684	0.313	215	214	0.6	0.8	15.166	C
				2	280	70	777	684	0.409	278	277	0.7	1.0	13.850	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	777	684	0.265	181	184	0.3	0.4	6.631	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	214	54	-	-	-	214	215	0.0	0.0	0.000	A
				2	461	115	-	-	-	461	462	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	15	1147	983	0.059	59	64	0.0	0.0	3.771	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	99	25	1147	980	0.101	100	106	0.1	0.1	4.398	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	15	-	-	-	58	64	0.0	0.0	0.000	A
				3	99	25	-	-	-	99	106	0.0	0.0	0.018	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	404	101	1033	999	0.404	406	416	0.8	0.6	6.002	A
			2	1	304	76	1033	1000	0.304	307	315	0.6	0.5	6.308	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	128	32	1033	998	0.128	129	135	0.3	0.1	4.924	A
		2	1	1	304	76	-	-	-	304	315	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	532	133	-	-	-	532	549	0.0	0.0	0.000	A
3	Entry	1	1	1	222	56	777	686	0.324	219	217	0.8	1.2	15.744	C
				2	278	69	777	686	0.404	274	275	1.0	1.4	14.360	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	777	686	0.273	187	184	0.4	0.4	6.722	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	222	56	-	-	-	222	219	0.0	0.0	0.019	A
				2	465	116	-	-	-	465	460	0.0	0.0	0.010	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	53	13	1147	1017	0.052	53	49	0.0	0.0	3.744	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1147	1017	0.081	83	82	0.1	0.1	4.101	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	53	13	-	-	-	53	49	0.0	0.0	0.000	A
				3	83	21	-	-	-	83	82	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	321	80	1033	1005	0.320	322	326	0.6	0.4	4.978	A
			2	1	258	65	1033	1005	0.257	261	265	0.5	0.3	5.467	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	104	26	1033	1004	0.104	104	102	0.1	0.1	4.468	A
		2	1	1	258	65	-	-	-	258	264	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	426	106	-	-	-	426	427	0.0	0.0	0.000	A
3	Entry	1	1	1	170	43	777	701	0.243	171	180	1.2	0.6	12.006	B
				2	237	59	777	699	0.339	235	236	1.4	0.7	10.545	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	131	33	777	701	0.187	133	136	0.4	0.2	6.188	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	170	43	-	-	-	170	177	0.0	0.0	0.003	A
				2	368	92	-	-	-	368	369	0.0	0.0	0.001	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	40	10	1147	1029	0.039	39	41	0.0	0.1	3.691	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	74	18	1147	1027	0.072	74	72	0.1	0.1	4.175	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	40	10	-	-	-	40	42	0.0	0.0	0.000	A
				3	74	18	-	-	-	74	72	0.0	0.0	0.045	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	1033	1008	0.269	271	268	0.4	0.3	5.182	A
			2	1	218	55	1033	1008	0.216	216	212	0.3	0.5	5.297	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	21	1033	1008	0.082	81	87	0.1	0.1	4.323	A
		2	1	1	218	55	-	-	-	218	213	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	354	88	-	-	-	354	355	0.0	0.0	0.000	A
3	Entry	1	1	1	143	36	777	714	0.201	144	153	0.6	0.4	9.779	A
				2	211	53	777	714	0.295	211	212	0.7	0.5	8.902	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	116	29	777	714	0.162	116	117	0.2	0.1	5.579	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	143	36	-	-	-	143	152	0.0	0.0	0.000	A
				2	326	82	-	-	-	326	327	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.61	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.61	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038	WoD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	462	100.000
2		ONE HOUR	✓	726	100.000
3		ONE HOUR	✓	425	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	166	296
	2	136	0	590
	3	169	256	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	1	0
	2	3	0	4
	3	2	3	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.35	4.83	0.9	A	425	638
2	0.46	6.63	1.6	A	670	1006
3	0.46	8.49	1.3	A	392	588

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	349	87	184	1478	0.236	350	349	233	0.0	0.4	4.120	A
2	527	132	229	1843	0.286	527	538	304	0.0	0.7	5.180	A
3	318	80	99	1078	0.295	318	324	657	0.0	0.6	6.689	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	418	105	230	1523	0.275	417	423	277	0.4	0.6	4.454	A
2	648	162	269	1841	0.352	646	659	378	0.7	1.0	5.604	A
3	383	96	123	1080	0.354	384	390	792	0.6	0.7	7.588	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	519	130	283	1466	0.354	515	521	349	0.6	0.9	4.763	A
2	819	205	329	1792	0.457	815	813	468	1.0	1.6	6.165	A
3	475	119	156	1057	0.450	476	476	989	0.7	0.9	8.491	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	504	126	293	1541	0.327	505	518	333	0.9	0.5	4.834	A
2	825	206	323	1794	0.460	829	812	475	1.6	1.4	6.629	A
3	474	118	150	1040	0.455	476	471	1002	0.9	1.3	8.313	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	417	104	242	1534	0.272	419	426	269	0.5	0.4	4.511	A
2	647	162	268	1793	0.361	643	659	393	1.4	1.3	5.690	A
3	390	97	119	1093	0.357	392	391	792	1.3	0.7	7.966	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	345	86	186	1591	0.217	343	354	231	0.4	0.5	4.130	A
2	557	139	220	1896	0.294	559	563	309	1.3	0.7	5.178	A
3	312	78	104	1084	0.288	312	324	674	0.7	0.6	6.640	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	121	1080	0.112	120	123	0.0	0.3	3.783	A
			2	1, 3	228	1080	0.211	229	226	0.0	0.1	4.223	A
		2	1	(1, 2, 3)	349			349	351	0.0	0.0	0.052	A
	Exit	1	1		233			233	234	0.0	0.0	0.000	A
2	Entry	1	1	3	310	956	0.324	309	318	0.0	0.5	5.472	A
			2	1, 2, (3)	217	956	0.227	218	220	0.0	0.2	4.760	A
		2	1	(1, 2, 3)	527			527	541	0.0	0.0	0.000	A
	Exit	1	1		304			304	315	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	257	748	0.343	256	263	0.0	0.5	6.981	A
			2	(2), 3	62	748	0.083	62	61	0.0	0.1	5.418	A
		2	1	(1, 2, 3)	318			318	326	0.0	0.0	0.000	A
	Exit	1	1		657			657	662	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	150	1063	0.141	148	154	0.3	0.3	4.077	A
			2	1, 3	268	1063	0.252	269	268	0.1	0.3	4.576	A
		2	1	(1, 2, 3)	418			418	424	0.0	0.0	0.059	A
	Exit	1	1		277			277	277	0.0	0.0	0.000	A
2	Entry	1	1	3	375	943	0.398	376	387	0.5	0.6	5.978	A
			2	1, 2, (3)	273	943	0.289	271	272	0.2	0.4	5.077	A
		2	1	(1, 2, 3)	648			648	661	0.0	0.0	0.000	A
	Exit	1	1		378			378	389	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	310	740	0.418	311	313	0.5	0.6	8.157	A
			2	(2), 3	73	740	0.098	73	77	0.1	0.1	5.249	A
		2	1	(1, 2, 3)	383			383	390	0.0	0.0	0.000	A
	Exit	1	1		792			792	806	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	187	1044	0.179	185	191	0.3	0.3	4.353	A
			2	1, 3	331	1044	0.317	329	330	0.3	0.6	4.799	A
		2	1	(1, 2, 3)	519			518	523	0.0	0.0	0.127	A
	Exit	1	1		349			349	339	0.0	0.0	0.000	A
2	Entry	1	1	3	464	923	0.503	460	468	0.6	1.1	6.617	A
			2	1, 2, (3)	355	923	0.384	355	345	0.4	0.5	5.557	A
		2	1	(1, 2, 3)	819			819	816	0.0	0.0	0.000	A
	Exit	1	1		468			468	478	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	375	731	0.514	376	373	0.6	0.8	9.390	A
			2	(2), 3	100	731	0.136	100	103	0.1	0.2	5.217	A
		2	1	(1, 2, 3)	475			475	477	0.0	0.0	0.000	A
	Exit	1	1		989			989	993	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	182	1040	0.175	182	189	0.3	0.2	4.233	A
			2	1, 3	322	1040	0.309	323	329	0.6	0.3	4.937	A
		2	1	(1, 2, 3)	504			504	517	0.0	0.0	0.151	A
	Exit	1	1		333			333	338	0.0	0.0	0.000	A
2	Entry	1	1	3	476	925	0.514	481	470	1.1	0.8	7.260	A
			2	1, 2, (3)	349	925	0.378	348	343	0.5	0.6	5.761	A
		2	1	(1, 2, 3)	825			825	812	0.0	0.0	0.002	A
	Exit	1	1		475			475	471	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	372	733	0.508	374	373	0.8	1.1	9.059	A
			2	(2), 3	102	733	0.139	102	98	0.2	0.1	5.455	A
		2	1	(1, 2, 3)	474			474	473	0.0	0.0	0.000	A
	Exit	1	1		1002			1002	993	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	151	1059	0.142	151	155	0.2	0.1	3.904	A
			2	1, 3	266	1059	0.251	268	271	0.3	0.3	4.655	A
		2	1	(1, 2, 3)	417			417	426	0.0	0.0	0.126	A
	Exit	1	1		269			269	276	0.0	0.0	0.000	A
2	Entry	1	1	3	380	943	0.403	379	385	0.8	0.8	6.077	A
			2	1, 2, (3)	267	943	0.283	263	274	0.6	0.5	5.151	A
		2	1	(1, 2, 3)	647			647	659	0.0	0.0	0.000	A
	Exit	1	1		393			393	392	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	314	742	0.424	316	314	1.1	0.6	8.560	A
			2	(2), 3	75	742	0.101	76	78	0.1	0.1	5.565	A
		2	1	(1, 2, 3)	390			390	389	0.0	0.0	0.000	A
	Exit	1	1		792			792	809	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	124	1080	0.115	123	126	0.1	0.2	3.801	A
			2	1, 3	221	1080	0.205	220	228	0.3	0.3	4.250	A
		2	1	(1, 2, 3)	345			345	355	0.0	0.0	0.039	A
	Exit	1	1		231			231	234	0.0	0.0	0.000	A
2	Entry	1	1	3	331	959	0.345	332	332	0.8	0.5	5.618	A
			2	1, 2, (3)	226	959	0.236	227	230	0.5	0.3	4.546	A
		2	1	(1, 2, 3)	557			557	561	0.0	0.0	0.000	A
	Exit	1	1		309			309	320	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	254	746	0.341	254	261	0.6	0.6	6.974	A
			2	(2), 3	58	746	0.078	59	63	0.1	0.0	5.257	A
		2	1	(1, 2, 3)	312			312	323	0.0	0.0	0.000	A
	Exit	1	1		674			674	686	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	121	30	1147	1078	0.112	120	123	0.0	0.3	3.783	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	228	57	1147	1080	0.211	229	226	0.0	0.1	4.223	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	121	30	-	-	-	121	124	0.0	0.0	0.024	A
				3	228	57	-	-	-	228	227	0.0	0.0	0.066	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	310	77	1033	956	0.324	309	318	0.0	0.5	5.472	A
			2	1	98	25	1033	957	0.102	99	102	0.0	0.1	4.986	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	119	30	1033	956	0.125	119	118	0.0	0.1	4.563	A
		2	1	1	98	25	-	-	-	98	102	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	429	107	-	-	-	429	438	0.0	0.0	0.000	A
3	Entry	1	1	1	134	33	777	748	0.179	134	132	0.0	0.3	7.267	A
				2	123	31	777	748	0.165	122	131	0.0	0.3	6.690	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	62	15	777	747	0.083	62	61	0.0	0.1	5.418	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	134	33	-	-	-	134	133	0.0	0.0	0.000	A
				2	185	46	-	-	-	185	194	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	38	1147	1064	0.141	148	154	0.3	0.3	4.077	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	268	67	1147	1064	0.252	269	268	0.1	0.3	4.576	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	38	-	-	-	150	154	0.0	0.0	0.023	A
				3	268	67	-	-	-	268	269	0.0	0.0	0.080	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	375	94	1033	944	0.398	376	387	0.5	0.6	5.978	A
			2	1	124	31	1033	944	0.132	123	122	0.1	0.2	5.582	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	148	37	1033	944	0.157	148	150	0.1	0.2	4.659	A
		2	1	1	124	31	-	-	-	124	123	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	524	131	-	-	-	524	538	0.0	0.0	0.000	A
3	Entry	1	1	1	153	38	777	741	0.207	154	155	0.3	0.3	8.506	A
				2	156	39	777	742	0.211	157	158	0.3	0.3	7.813	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	73	18	777	741	0.098	73	77	0.1	0.1	5.249	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	153	38	-	-	-	153	155	0.0	0.0	0.000	A
				2	230	57	-	-	-	230	235	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	1147	1045	0.179	185	191	0.3	0.3	4.353	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	331	83	1147	1044	0.317	329	330	0.3	0.6	4.799	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	-	-	-	187	191	0.0	0.0	0.102	A
				3	332	83	-	-	-	331	331	0.0	0.0	0.141	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	464	116	1033	923	0.502	460	468	0.6	1.1	6.617	A
			2	1	154	39	1033	920	0.167	156	150	0.2	0.2	6.159	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	200	50	1033	922	0.217	199	195	0.2	0.3	5.090	A
		2	1	1	154	39	-	-	-	154	150	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	664	166	-	-	-	664	665	0.0	0.0	0.000	A
3	Entry	1	1	1	194	48	777	731	0.265	193	189	0.3	0.5	9.807	A
				2	182	45	777	731	0.249	183	184	0.3	0.3	8.956	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	100	25	777	731	0.136	100	103	0.1	0.2	5.217	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	194	48	-	-	-	194	190	0.0	0.0	0.000	A
				2	282	70	-	-	-	282	287	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	1147	1041	0.175	182	189	0.3	0.2	4.233	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	322	80	1147	1041	0.309	323	329	0.6	0.3	4.937	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	46	-	-	-	182	189	0.0	0.0	0.108	A
				3	322	81	-	-	-	322	328	0.0	0.0	0.176	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	476	119	1033	925	0.514	481	470	1.1	0.8	7.260	A
			2	1	149	37	1033	925	0.161	150	149	0.2	0.3	6.277	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	199	50	1033	925	0.215	198	194	0.3	0.4	5.362	A
		2	1	1	149	37	-	-	-	149	149	0.0	0.0	0.003	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	675	169	-	-	-	675	663	0.0	0.0	0.002	A
3	Entry	1	1	1	185	46	777	733	0.252	183	190	0.5	0.6	9.488	A
				2	187	47	777	733	0.255	191	183	0.3	0.5	8.610	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	102	26	777	733	0.139	102	98	0.2	0.1	5.455	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	185	46	-	-	-	185	190	0.0	0.0	0.000	A
				2	289	72	-	-	-	289	282	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	151	38	1147	1058	0.143	151	155	0.2	0.1	3.904	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	266	67	1147	1059	0.251	268	271	0.3	0.3	4.655	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	151	38	-	-	-	151	154	0.0	0.0	0.081	A
				3	266	66	-	-	-	266	271	0.0	0.0	0.152	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	380	95	1033	943	0.403	379	385	0.8	0.8	6.077	A
			2	1	121	30	1033	942	0.129	119	122	0.3	0.3	5.604	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	146	37	1033	942	0.155	145	152	0.4	0.2	4.781	A
		2	1	1	121	30	-	-	-	121	122	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	526	131	-	-	-	526	537	0.0	0.0	0.000	A
3	Entry	1	1	1	149	37	777	742	0.201	150	154	0.6	0.3	8.879	A
				2	166	41	777	742	0.224	166	160	0.5	0.3	8.249	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	75	19	777	741	0.101	76	78	0.1	0.1	5.565	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	149	37	-	-	-	149	153	0.0	0.0	0.000	A
				2	241	60	-	-	-	241	236	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	1147	1078	0.115	123	126	0.1	0.2	3.801	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	221	55	1147	1079	0.205	220	228	0.3	0.3	4.250	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	124	31	-	-	-	124	126	0.0	0.0	0.022	A
				3	221	55	-	-	-	221	228	0.0	0.0	0.049	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	331	83	1033	960	0.344	332	332	0.8	0.5	5.618	A
			2	1	105	26	1033	958	0.110	104	105	0.3	0.2	4.815	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	121	30	1033	959	0.126	122	126	0.2	0.0	4.318	A
		2	1	1	105	26	-	-	-	105	105	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	452	113	-	-	-	452	456	0.0	0.0	0.000	A
3	Entry	1	1	1	128	32	777	746	0.171	127	129	0.3	0.3	7.243	A
				2	126	32	777	746	0.169	127	131	0.3	0.2	6.707	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	58	15	777	746	0.078	59	63	0.1	0.0	5.257	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	128	32	-	-	-	128	129	0.0	0.0	0.000	A
				2	184	46	-	-	-	184	194	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	9.76	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.76	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2038	WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	681	100.000
3		ONE HOUR	✓	649	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	55	90
	2	277	0	404
	3	215	434	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	0	6
	2	0	0	11
	3	0	0	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.12	4.15	0.3	A	135	202
2	0.39	5.77	1.4	A	623	935
3	0.73	15.15	3.2	C	602	904

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	117	29	343	1510	0.077	117	117	370	0.0	0.2	4.134	A
2	498	125	73	1969	0.253	498	515	387	0.0	0.9	4.880	A
3	508	127	200	1127	0.451	512	495	371	0.0	0.9	8.207	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	125	31	394	1442	0.087	125	133	438	0.2	0.1	4.060	A
2	618	155	74	1988	0.311	615	624	444	0.9	1.1	5.229	A
3	587	147	248	1058	0.555	585	580	443	0.9	1.9	9.749	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	165	41	486	1411	0.117	163	165	535	0.1	0.3	4.135	A
2	762	191	105	1975	0.386	758	760	545	1.1	1.4	5.688	A
3	727	182	302	997	0.729	720	707	561	1.9	3.2	15.015	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	169	42	483	1416	0.119	170	170	547	0.3	0.2	4.149	A
2	751	188	105	1969	0.381	748	741	548	1.4	1.3	5.772	A
3	720	180	310	1005	0.716	720	729	542	3.2	3.1	15.146	C

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	127	32	395	1439	0.088	128	132	440	0.2	0.1	4.020	A
2	601	150	79	1989	0.302	603	623	445	1.3	0.9	5.028	A
3	588	147	245	1040	0.566	591	591	438	3.1	1.7	11.289	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	106	27	333	1488	0.071	105	118	357	0.1	0.2	3.846	A
2	510	128	66	1955	0.261	509	519	372	0.9	0.8	4.717	A
3	484	121	202	1062	0.456	488	482	373	1.7	1.1	8.230	A

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	44	1022	0.043	44	44	0.0	0.0	3.779	A
			2	1, 3	73	1022	0.071	73	73	0.0	0.1	4.356	A
		2	1	(1, 2, 3)	117			117	118	0.0	0.0	0.005	A
	Exit	1	1		370			370	371	0.0	0.0	0.000	A
2	Entry	1	1	3	229	1008	0.227	227	232	0.0	0.5	4.991	A
			2	1, 2, (3)	269	1008	0.267	271	283	0.0	0.4	4.795	A
		2	1	(1, 2, 3)	498			498	518	0.0	0.0	0.000	A
	Exit	1	1		387			387	377	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	392	718	0.546	396	380	0.0	0.8	9.061	A
			2	(2), 3	116	718	0.162	116	115	0.0	0.2	5.371	A
		2	1	(1, 2, 3)	508			508	499	0.0	0.0	0.000	A
	Exit	1	1		371			371	379	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	50	1004	0.050	50	50	0.0	0.0	3.946	A
			2	1, 3	75	1004	0.074	74	83	0.1	0.1	4.107	A
		2	1	(1, 2, 3)	125			125	133	0.0	0.0	0.016	A
	Exit	1	1		438			438	440	0.0	0.0	0.000	A
2	Entry	1	1	3	283	1008	0.281	281	282	0.5	0.7	5.335	A
			2	1, 2, (3)	335	1008	0.333	335	341	0.4	0.4	5.148	A
		2	1	(1, 2, 3)	618			618	625	0.0	0.0	0.000	A
	Exit	1	1		444			444	441	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	441	704	0.626	439	436	0.8	1.6	11.035	B
			2	(2), 3	147	704	0.208	145	144	0.2	0.3	5.830	A
		2	1	(1, 2, 3)	587			587	583	0.0	0.0	0.000	A
	Exit	1	1		443			443	455	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	60	970	0.061	59	63	0.0	0.1	3.662	A
			2	1, 3	105	970	0.108	105	102	0.1	0.2	4.414	A
		2	1	(1, 2, 3)	165			165	166	0.0	0.0	0.023	A
	Exit	1	1		535			535	540	0.0	0.0	0.000	A
2	Entry	1	1	3	352	998	0.353	350	346	0.7	0.7	5.652	A
			2	1, 2, (3)	410	998	0.411	408	414	0.4	0.7	5.716	A
		2	1	(1, 2, 3)	762			762	761	0.0	0.0	0.000	A
	Exit	1	1		545			545	536	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	525	688	0.764	518	515	1.6	2.9	17.940	C
			2	(2), 3	203	688	0.294	202	192	0.3	0.3	6.519	A
		2	1	(1, 2, 3)	727			728	713	0.0	0.0	0.158	A
	Exit	1	1		561			561	557	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	64	971	0.066	65	65	0.1	0.0	4.193	A
			2	1, 3	105	971	0.108	105	105	0.2	0.1	4.095	A
		2	1	(1, 2, 3)	169			169	170	0.0	0.0	0.016	A
	Exit	1	1		547			547	549	0.0	0.0	0.000	A
2	Entry	1	1	3	339	998	0.339	338	335	0.7	0.6	5.739	A
			2	1, 2, (3)	413	998	0.413	410	405	0.7	0.7	5.797	A
		2	1	(1, 2, 3)	751			751	740	0.0	0.0	0.000	A
	Exit	1	1		548			548	550	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	526	686	0.767	529	531	2.9	2.6	18.261	C
			2	(2), 3	193	686	0.281	191	198	0.3	0.3	6.568	A
		2	1	(1, 2, 3)	720			718	728	0.0	0.1	0.023	A
	Exit	1	1		542			542	540	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	1003	0.049	50	50	0.0	0.0	3.771	A
			2	1, 3	78	1003	0.078	79	82	0.1	0.0	4.140	A
		2	1	(1, 2, 3)	127			127	132	0.0	0.0	0.024	A
	Exit	1	1		440			440	449	0.0	0.0	0.000	A
2	Entry	1	1	3	273	1006	0.271	276	286	0.6	0.4	5.141	A
			2	1, 2, (3)	327	1006	0.325	328	337	0.7	0.5	4.939	A
		2	1	(1, 2, 3)	601			601	621	0.0	0.0	0.000	A
	Exit	1	1		445			445	444	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	439	705	0.622	443	442	2.6	1.4	13.078	B
			2	(2), 3	150	705	0.212	149	150	0.3	0.3	6.151	A
		2	1	(1, 2, 3)	588			588	586	0.1	0.0	0.023	A
	Exit	1	1		438			438	453	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	39	1026	0.038	39	47	0.0	0.0	3.651	A
			2	1, 3	67	1026	0.066	66	71	0.0	0.1	3.982	A
		2	1	(1, 2, 3)	106			106	119	0.0	0.0	0.000	A
	Exit	1	1		357			357	365	0.0	0.0	0.000	A
2	Entry	1	1	3	238	1011	0.235	236	236	0.4	0.5	4.972	A
			2	1, 2, (3)	273	1011	0.270	274	284	0.5	0.3	4.521	A
		2	1	(1, 2, 3)	510			510	519	0.0	0.0	0.000	A
	Exit	1	1		372			372	373	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	374	717	0.522	377	368	1.4	1.0	9.075	A
			2	(2), 3	110	717	0.153	111	114	0.3	0.1	5.514	A
		2	1	(1, 2, 3)	484			484	480	0.0	0.0	0.000	A
	Exit	1	1		373			373	381	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	1147	1024	0.043	44	44	0.0	0.0	3.779	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	73	18	1147	1027	0.071	73	73	0.0	0.1	4.356	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	-	-	-	44	45	0.0	0.0	0.000	A
				3	73	18	-	-	-	73	74	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	229	57	1033	1008	0.227	227	232	0.0	0.5	4.991	A
			2	1	199	50	1033	1009	0.197	200	209	0.0	0.3	4.953	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	1033	1008	0.070	71	74	0.0	0.1	4.299	A
		2	1	1	199	50	-	-	-	199	210	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	299	75	-	-	-	299	308	0.0	0.0	0.000	A
3	Entry	1	1	1	167	42	777	717	0.233	170	162	0.0	0.4	9.660	A
				2	225	56	777	718	0.313	226	218	0.0	0.4	8.613	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	116	29	777	716	0.162	116	115	0.0	0.2	5.371	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	167	42	-	-	-	167	164	0.0	0.0	0.000	A
				2	341	85	-	-	-	341	335	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	12	1147	1002	0.050	50	50	0.0	0.0	3.946	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	75	19	1147	1007	0.074	74	83	0.1	0.1	4.107	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	12	-	-	-	50	50	0.0	0.0	0.000	A
				3	75	19	-	-	-	75	82	0.0	0.0	0.027	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	283	71	1033	1008	0.281	281	282	0.5	0.7	5.335	A
			2	1	247	62	1033	1008	0.245	248	251	0.3	0.2	5.387	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	88	22	1033	1007	0.088	87	90	0.1	0.2	4.412	A
		2	1	1	247	62	-	-	-	247	251	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	372	93	-	-	-	372	374	0.0	0.0	0.000	A
3	Entry	1	1	1	189	47	777	704	0.268	191	189	0.4	0.6	11.671	B
				2	252	63	777	704	0.358	249	247	0.4	1.0	10.552	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	147	37	777	704	0.208	145	144	0.2	0.3	5.830	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	189	47	-	-	-	189	190	0.0	0.0	0.000	A
				2	399	100	-	-	-	399	394	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	1147	971	0.061	59	63	0.0	0.1	3.662	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1147	972	0.108	105	102	0.1	0.2	4.414	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	60	15	-	-	-	60	64	0.0	0.0	0.006	A
				3	105	26	-	-	-	105	102	0.0	0.0	0.035	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	352	88	1033	998	0.353	350	346	0.7	0.7	5.652	A
			2	1	303	76	1033	998	0.304	302	305	0.2	0.6	6.078	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	108	27	1033	999	0.108	106	109	0.2	0.2	4.585	A
		2	1	1	303	76	-	-	-	303	306	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	459	115	-	-	-	459	455	0.0	0.0	0.000	A
3	Entry	1	1	1	235	59	777	689	0.341	233	235	0.6	1.3	18.984	C
				2	291	73	777	687	0.423	284	280	1.0	1.6	17.060	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	203	51	777	688	0.294	202	192	0.3	0.3	6.519	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	234	59	-	-	-	235	238	0.0	0.0	0.184	A
				2	492	123	-	-	-	493	475	0.0	0.0	0.145	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	1147	972	0.066	65	65	0.1	0.0	4.193	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1147	971	0.108	105	105	0.2	0.1	4.095	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	-	-	-	64	65	0.0	0.0	0.022	A
				3	105	26	-	-	-	105	105	0.0	0.0	0.012	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	339	85	1033	998	0.339	338	335	0.7	0.6	5.739	A
			2	1	313	78	1033	998	0.313	310	305	0.6	0.6	6.033	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	100	25	1033	998	0.100	100	100	0.2	0.1	5.004	A
		2	1	1	313	78	-	-	-	313	306	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	439	110	-	-	-	439	435	0.0	0.0	0.000	A
3	Entry	1	1	1	237	59	777	685	0.345	237	244	1.3	1.3	19.153	C
				2	289	72	777	685	0.422	292	287	1.6	1.3	17.501	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	193	48	777	685	0.281	191	198	0.3	0.3	6.568	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	237	59	-	-	-	237	244	0.0	0.0	0.026	A
				2	483	121	-	-	-	482	484	0.0	0.1	0.022	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	1005	0.049	50	50	0.0	0.0	3.771	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	78	19	1147	1004	0.078	79	82	0.1	0.0	4.140	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	50	0.0	0.0	0.022	A
				3	78	19	-	-	-	78	82	0.0	0.0	0.026	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	273	68	1033	1007	0.271	276	286	0.6	0.4	5.141	A
			2	1	244	61	1033	1007	0.242	245	252	0.6	0.4	5.132	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1033	1006	0.083	84	85	0.1	0.1	4.309	A
		2	1	1	244	61	-	-	-	244	251	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	358	89	-	-	-	358	370	0.0	0.0	0.000	A
3	Entry	1	1	1	192	48	777	705	0.272	196	197	1.3	0.5	13.817	B
				2	247	62	777	705	0.350	247	245	1.3	0.9	12.489	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	37	777	705	0.212	149	150	0.3	0.3	6.151	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	192	48	-	-	-	192	194	0.0	0.0	0.003	A
				2	397	99	-	-	-	397	392	0.1	0.0	0.033	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1147	1029	0.038	39	47	0.0	0.0	3.651	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	67	17	1147	1027	0.066	66	71	0.0	0.1	3.982	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	-	-	-	39	47	0.0	0.0	0.000	A
				3	67	17	-	-	-	67	72	0.0	0.0	0.000	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	238	59	1033	1011	0.235	236	236	0.4	0.5	4.972	A
			2	1	201	50	1033	1011	0.199	202	209	0.4	0.2	4.692	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	72	18	1033	1011	0.071	72	75	0.1	0.1	3.994	A
		2	1	1	201	50	-	-	-	201	208	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	310	77	-	-	-	310	311	0.0	0.0	0.000	A
3	Entry	1	1	1	154	39	777	718	0.215	155	156	0.5	0.5	9.447	A
				2	220	55	777	717	0.307	222	212	0.9	0.5	8.799	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	110	27	777	717	0.153	111	114	0.3	0.1	5.514	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	154	39	-	-	-	154	156	0.0	0.0	0.000	A
				2	330	83	-	-	-	330	324	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.78	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2038	WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	488	100.000
2		ONE HOUR	✓	801	100.000
3		ONE HOUR	✓	375	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	167	321
	2	144	0	657
	3	154	221	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	5	0
	2	6	0	6
	3	2	6	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.37	5.01	0.8	A	449	673
2	0.50	7.23	2.0	A	740	1110
3	0.40	8.12	1.0	A	344	515

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	364	91	170	1542	0.236	363	367	231	0.0	0.5	4.194	A
2	613	153	244	1820	0.337	611	602	289	0.0	1.0	5.351	A
3	285	71	117	1078	0.264	284	276	737	0.0	0.5	6.617	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	448	112	195	1506	0.297	449	450	264	0.5	0.5	4.534	A
2	725	181	296	1851	0.392	722	721	348	1.0	1.5	6.021	A
3	332	83	127	1022	0.325	332	343	890	0.5	0.6	7.049	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	545	136	245	1488	0.366	543	542	339	0.5	0.8	4.932	A
2	885	221	362	1760	0.503	882	887	426	1.5	1.9	7.056	A
3	423	106	162	1049	0.403	422	424	1082	0.6	1.0	8.120	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	538	135	237	1454	0.370	538	538	332	0.8	0.7	5.009	A
2	892	223	356	1771	0.503	888	888	418	1.9	2.0	7.234	A
3	408	102	159	1038	0.393	410	421	1085	1.0	0.9	8.056	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	435	109	198	1524	0.285	434	444	262	0.7	0.5	4.521	A
2	734	184	285	1841	0.399	737	744	348	2.0	1.1	6.176	A
3	334	84	126	1035	0.323	334	342	896	0.9	0.8	7.044	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	363	91	164	1518	0.239	362	374	220	0.5	0.4	4.197	A
2	592	148	240	1906	0.310	592	607	286	1.1	0.8	5.312	A
3	279	70	105	1066	0.261	279	288	727	0.8	0.4	6.674	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	119	1085	0.110	119	124	0.0	0.1	3.882	A
			2	1, 3	245	1085	0.226	244	244	0.0	0.3	4.274	A
		2	1	(1, 2, 3)	364			364	369	0.0	0.0	0.048	A
	Exit	1	1		231			231	219	0.0	0.0	0.000	A
2	Entry	1	1	3	357	952	0.375	357	353	0.0	0.6	5.693	A
			2	1, 2, (3)	256	952	0.269	253	249	0.0	0.5	4.868	A
		2	1	(1, 2, 3)	613			613	606	0.0	0.0	0.000	A
	Exit	1	1		289			289	289	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	232	742	0.313	231	225	0.0	0.5	6.901	A
			2	(2), 3	53	742	0.071	53	50	0.0	0.1	5.324	A
		2	1	(1, 2, 3)	285			285	278	0.0	0.0	0.000	A
	Exit	1	1		737			737	737	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	153	1076	0.142	153	151	0.1	0.2	4.092	A
			2	1, 3	295	1076	0.274	296	298	0.3	0.3	4.585	A
		2	1	(1, 2, 3)	448			448	450	0.0	0.0	0.111	A
	Exit	1	1		264			264	271	0.0	0.0	0.000	A
2	Entry	1	1	3	432	934	0.462	427	422	0.6	1.1	6.383	A
			2	1, 2, (3)	294	934	0.314	295	299	0.5	0.4	5.509	A
		2	1	(1, 2, 3)	725			725	723	0.0	0.0	0.000	A
	Exit	1	1		348			348	353	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	269	739	0.364	268	278	0.5	0.5	7.461	A
			2	(2), 3	64	739	0.086	64	66	0.1	0.0	5.262	A
		2	1	(1, 2, 3)	332			332	344	0.0	0.0	0.000	A
	Exit	1	1		890			890	890	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	182	1058	0.172	181	181	0.2	0.2	4.374	A
			2	1, 3	363	1058	0.343	362	361	0.3	0.5	4.943	A
		2	1	(1, 2, 3)	545			545	543	0.0	0.0	0.174	A
	Exit	1	1		339			339	331	0.0	0.0	0.000	A
2	Entry	1	1	3	509	912	0.558	505	512	1.1	1.2	7.838	A
			2	1, 2, (3)	377	912	0.413	376	376	0.4	0.6	5.975	A
		2	1	(1, 2, 3)	885			885	889	0.0	0.0	0.006	A
	Exit	1	1		426			426	431	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	337	729	0.463	338	340	0.5	0.8	8.769	A
			2	(2), 3	86	729	0.117	85	84	0.0	0.2	5.459	A
		2	1	(1, 2, 3)	423			423	425	0.0	0.0	0.000	A
	Exit	1	1		1082			1082	1090	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	181	1061	0.171	182	185	0.2	0.2	4.387	A
			2	1, 3	357	1061	0.337	356	354	0.5	0.5	5.010	A
		2	1	(1, 2, 3)	538			538	538	0.0	0.0	0.206	A
	Exit	1	1		332			332	332	0.0	0.0	0.000	A
2	Entry	1	1	3	513	914	0.562	510	510	1.2	1.4	7.998	A
			2	1, 2, (3)	378	914	0.414	379	378	0.6	0.6	6.203	A
		2	1	(1, 2, 3)	892			892	889	0.0	0.0	0.000	A
	Exit	1	1		418			418	431	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	327	730	0.448	328	336	0.8	0.8	8.726	A
			2	(2), 3	81	730	0.112	82	85	0.2	0.1	5.381	A
		2	1	(1, 2, 3)	408			408	420	0.0	0.0	0.000	A
	Exit	1	1		1085			1085	1085	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	150	1075	0.139	150	151	0.2	0.2	4.103	A
			2	1, 3	286	1075	0.266	285	294	0.5	0.3	4.526	A
		2	1	(1, 2, 3)	435			435	444	0.0	0.0	0.134	A
	Exit	1	1		262			262	267	0.0	0.0	0.000	A
2	Entry	1	1	3	434	938	0.463	435	438	1.4	0.7	6.635	A
			2	1, 2, (3)	301	938	0.321	302	306	0.6	0.4	5.523	A
		2	1	(1, 2, 3)	734			734	741	0.0	0.0	0.000	A
	Exit	1	1		348			348	353	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	266	740	0.360	265	274	0.8	0.7	7.444	A
			2	(2), 3	68	740	0.093	68	68	0.1	0.1	5.403	A
		2	1	(1, 2, 3)	334			334	341	0.0	0.0	0.000	A
	Exit	1	1		896			896	910	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	123	1088	0.113	122	129	0.2	0.2	3.875	A
			2	1, 3	240	1088	0.220	240	245	0.3	0.2	4.271	A
		2	1	(1, 2, 3)	363			362	373	0.0	0.0	0.059	A
	Exit	1	1		220			220	230	0.0	0.0	0.000	A
2	Entry	1	1	3	351	953	0.368	352	359	0.7	0.4	5.642	A
			2	1, 2, (3)	240	953	0.252	241	248	0.4	0.3	4.840	A
		2	1	(1, 2, 3)	592			592	606	0.0	0.0	0.000	A
	Exit	1	1		286			286	296	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	226	746	0.302	227	236	0.7	0.4	7.021	A
			2	(2), 3	53	746	0.071	52	52	0.1	0.1	5.086	A
		2	1	(1, 2, 3)	279			279	287	0.0	0.0	0.000	A
	Exit	1	1		727			727	742	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	1147	1086	0.110	119	124	0.0	0.1	3.882	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	245	61	1147	1086	0.226	244	244	0.0	0.3	4.274	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	119	30	-	-	-	119	124	0.0	0.0	0.041	A
				3	245	61	-	-	-	245	245	0.0	0.0	0.051	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	1033	952	0.375	357	353	0.0	0.6	5.693	A
			2	1	118	29	1033	951	0.124	117	108	0.0	0.2	5.284	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	138	35	1033	952	0.145	136	140	0.0	0.3	4.546	A
		2	1	1	118	29	-	-	-	118	109	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	495	124	-	-	-	495	497	0.0	0.0	0.000	A
3	Entry	1	1	1	115	29	777	742	0.155	114	110	0.0	0.3	7.118	A
				2	117	29	777	742	0.158	117	115	0.0	0.2	6.685	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	53	13	777	742	0.071	53	50	0.0	0.1	5.324	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	115	29	-	-	-	115	111	0.0	0.0	0.000	A
				2	170	42	-	-	-	170	166	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	1147	1076	0.142	153	151	0.1	0.2	4.092	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	1147	1076	0.274	296	298	0.3	0.3	4.585	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	153	38	-	-	-	153	152	0.0	0.0	0.092	A
				3	295	74	-	-	-	295	298	0.0	0.0	0.120	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	432	108	1033	934	0.462	427	422	0.6	1.1	6.383	A
			2	1	125	31	1033	936	0.134	127	129	0.2	0.1	6.065	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	168	42	1033	934	0.180	168	170	0.3	0.3	5.085	A
		2	1	1	125	31	-	-	-	125	129	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	600	150	-	-	-	600	594	0.0	0.0	0.000	A
3	Entry	1	1	1	138	35	777	738	0.187	137	141	0.3	0.3	7.682	A
				2	131	33	777	739	0.177	131	136	0.2	0.2	7.224	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	64	16	777	739	0.086	64	66	0.1	0.0	5.262	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	138	35	-	-	-	138	142	0.0	0.0	0.000	A
				2	194	48	-	-	-	194	202	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	45	1147	1058	0.172	181	181	0.2	0.2	4.374	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	363	91	1147	1058	0.343	362	361	0.3	0.5	4.943	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	182	45	-	-	-	182	181	0.0	0.0	0.164	A
				3	363	91	-	-	-	363	362	0.0	0.0	0.178	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	509	127	1033	912	0.558	505	512	1.1	1.2	7.838	A
			2	1	161	40	1033	913	0.176	162	158	0.1	0.2	6.642	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	215	54	1033	912	0.236	214	218	0.3	0.4	5.494	A
		2	1	1	161	40	-	-	-	161	158	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	724	181	-	-	-	724	730	0.0	0.0	0.007	A
3	Entry	1	1	1	178	44	777	730	0.243	177	174	0.3	0.5	9.051	A
				2	160	40	777	729	0.219	160	166	0.2	0.3	8.464	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	86	21	777	730	0.117	85	84	0.0	0.2	5.459	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	178	44	-	-	-	178	174	0.0	0.0	0.000	A
				2	245	61	-	-	-	245	251	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	1147	1060	0.171	182	185	0.2	0.2	4.387	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	357	89	1147	1061	0.337	356	354	0.5	0.5	5.010	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	181	45	-	-	-	181	184	0.0	0.0	0.204	A
				3	357	89	-	-	-	357	354	0.0	0.0	0.207	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	513	128	1033	914	0.561	510	510	1.2	1.4	7.998	A
			2	1	158	39	1033	914	0.173	159	157	0.2	0.2	6.851	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	220	55	1033	914	0.241	220	221	0.4	0.4	5.745	A
		2	1	1	158	39	-	-	-	158	157	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	734	183	-	-	-	734	732	0.0	0.0	0.000	A
3	Entry	1	1	1	174	44	777	730	0.239	173	175	0.5	0.5	8.997	A
				2	152	38	777	730	0.209	154	161	0.3	0.3	8.422	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	777	730	0.112	82	85	0.2	0.1	5.381	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	174	44	-	-	-	174	175	0.0	0.0	0.000	A
				2	234	58	-	-	-	234	246	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	37	1147	1076	0.139	150	151	0.2	0.2	4.103	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	286	71	1147	1075	0.266	285	294	0.5	0.3	4.526	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	150	37	-	-	-	150	151	0.0	0.0	0.100	A
				3	285	71	-	-	-	286	293	0.0	0.0	0.151	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	434	108	1033	938	0.462	435	438	1.4	0.7	6.635	A
			2	1	125	31	1033	937	0.133	126	128	0.2	0.2	6.020	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	176	44	1033	939	0.187	176	178	0.4	0.2	5.163	A
		2	1	1	125	31	-	-	-	125	128	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	609	152	-	-	-	609	613	0.0	0.0	0.000	A
3	Entry	1	1	1	136	34	777	739	0.184	136	139	0.5	0.4	7.550	A
				2	130	32	777	740	0.175	130	135	0.3	0.3	7.332	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	68	17	777	740	0.092	68	68	0.1	0.1	5.403	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	136	34	-	-	-	136	139	0.0	0.0	0.000	A
				2	198	50	-	-	-	198	203	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	1147	1087	0.113	122	129	0.2	0.2	3.875	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	240	60	1147	1087	0.221	240	245	0.3	0.2	4.271	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	-	-	-	123	129	0.0	0.0	0.054	A
				3	240	60	-	-	-	240	244	0.0	0.0	0.062	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	351	88	1033	953	0.368	352	359	0.7	0.4	5.642	A
			2	1	105	26	1033	953	0.110	105	109	0.2	0.2	5.154	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	135	34	1033	954	0.142	135	139	0.2	0.1	4.591	A
		2	1	1	105	26	-	-	-	105	109	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	487	122	-	-	-	487	496	0.0	0.0	0.000	A
3	Entry	1	1	1	114	28	777	745	0.152	115	121	0.4	0.1	7.090	A
				2	112	28	777	745	0.150	112	115	0.3	0.2	6.946	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	53	13	777	745	0.071	52	52	0.1	0.1	5.086	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	114	28	-	-	-	114	120	0.0	0.0	0.000	A
				2	165	41	-	-	-	165	167	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2b WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	14.64	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.64	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028	2b WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	135	100.000
2		ONE HOUR	✓	540	100.000
3		ONE HOUR	✓	809	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	62	73
	2	255	0	285
	3	221	588	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	1	50
2	0	0	7
3	0	0	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.12	5.40	0.2	A	127	190
2	0.32	5.10	1.0	A	494	741
3	0.83	22.54	5.7	C	744	1116

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	105	26	446	1382	0.076	106	105	356	0.0	0.2	4.618	A
2	408	102	57	1901	0.215	407	402	495	0.0	0.5	4.432	A
3	607	152	193	1087	0.558	609	604	270	0.0	1.7	9.925	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	124	31	530	1361	0.091	125	132	422	0.2	0.1	4.961	A
2	481	120	69	1898	0.254	481	489	585	0.5	0.6	4.693	A
3	728	182	227	1119	0.651	725	723	324	1.7	2.8	12.604	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	152	38	663	1340	0.114	154	158	527	0.1	0.2	5.258	A
2	598	150	85	1889	0.317	599	603	732	0.6	1.0	5.028	A
3	904	226	279	1095	0.826	911	890	404	2.8	5.0	19.505	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	156	39	653	1316	0.119	157	152	521	0.2	0.2	5.403	A
2	587	147	86	1916	0.306	588	597	723	1.0	0.8	5.098	A
3	899	225	279	1097	0.819	895	891	395	5.0	5.7	22.543	C

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	125	31	527	1381	0.090	125	131	427	0.2	0.1	4.997	A
2	494	124	69	1926	0.257	496	498	582	0.8	0.6	4.597	A
3	719	180	232	1120	0.642	722	742	334	5.7	2.3	13.354	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	98	24	444	1431	0.068	98	109	355	0.1	0.1	4.827	A
2	395	99	50	1883	0.210	396	405	492	0.6	0.5	4.463	A
3	607	152	188	1081	0.561	611	618	258	2.3	1.6	10.045	B

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	49	985	0.050	49	49	0.0	0.1	3.840	A
			2	1, 3	56	985	0.057	57	56	0.0	0.1	5.600	A
		2	1	(1, 2, 3)	105			105	106	0.0	0.0	0.003	A
	Exit	1	1		356			356	354	0.0	0.0	0.000	A
2	Entry	1	1	3	166	1014	0.163	164	159	0.0	0.2	4.356	A
			2	1, 2, (3)	242	1014	0.239	242	243	0.0	0.3	4.480	A
		2	1	(1, 2, 3)	408			408	404	0.0	0.0	0.000	A
	Exit	1	1		495			495	490	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	445	720	0.619	446	440	0.0	1.4	11.344	B
			2	(2), 3	161	720	0.224	163	163	0.0	0.3	6.076	A
		2	1	(1, 2, 3)	607			607	610	0.0	0.0	0.000	A
	Exit	1	1		270			270	267	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	55	954	0.057	55	61	0.1	0.0	3.894	A
			2	1, 3	69	954	0.072	69	71	0.1	0.1	6.324	A
		2	1	(1, 2, 3)	124			124	131	0.0	0.0	0.004	A
	Exit	1	1		422			422	428	0.0	0.0	0.000	A
2	Entry	1	1	3	199	1010	0.197	198	200	0.2	0.3	4.418	A
			2	1, 2, (3)	283	1010	0.280	283	289	0.3	0.4	4.872	A
		2	1	(1, 2, 3)	481			481	490	0.0	0.0	0.000	A
	Exit	1	1		585			585	587	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	518	710	0.730	514	518	1.4	2.3	14.926	B
			2	(2), 3	210	710	0.296	210	205	0.3	0.4	6.603	A
		2	1	(1, 2, 3)	728			728	728	0.0	0.0	0.035	A
	Exit	1	1		324			324	329	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	69	905	0.077	69	71	0.0	0.1	4.328	A
			2	1, 3	83	905	0.091	85	87	0.1	0.1	6.357	A
		2	1	(1, 2, 3)	152			152	159	0.0	0.0	0.014	A
	Exit	1	1		527			527	526	0.0	0.0	0.000	A
2	Entry	1	1	3	247	1004	0.246	248	245	0.3	0.4	4.740	A
			2	1, 2, (3)	351	1004	0.349	351	358	0.4	0.6	5.214	A
		2	1	(1, 2, 3)	598			598	604	0.0	0.0	0.000	A
	Exit	1	1		732			732	721	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	618	695	0.889	623	610	2.3	4.1	23.629	C
			2	(2), 3	286	695	0.412	288	280	0.4	0.7	8.420	A
		2	1	(1, 2, 3)	904			904	898	0.0	0.2	0.608	A
	Exit	1	1		404			404	404	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	70	909	0.077	70	70	0.1	0.1	4.346	A
			2	1, 3	86	909	0.095	86	82	0.1	0.1	6.697	A
		2	1	(1, 2, 3)	156			156	152	0.0	0.0	0.017	A
	Exit	1	1		521			521	521	0.0	0.0	0.000	A
2	Entry	1	1	3	240	1004	0.239	240	249	0.4	0.3	4.699	A
			2	1, 2, (3)	347	1004	0.346	347	347	0.6	0.5	5.369	A
		2	1	(1, 2, 3)	587			587	596	0.0	0.0	0.000	A
	Exit	1	1		723			723	717	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	611	695	0.879	609	609	4.1	4.7	27.168	D
			2	(2), 3	288	695	0.415	286	282	0.7	0.8	8.773	A
		2	1	(1, 2, 3)	899			899	894	0.2	0.2	1.182	A
	Exit	1	1		395			395	401	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	56	955	0.059	55	59	0.1	0.1	4.137	A
			2	1, 3	69	955	0.072	69	72	0.1	0.1	6.000	A
		2	1	(1, 2, 3)	125			125	131	0.0	0.0	0.021	A
	Exit	1	1		427			427	437	0.0	0.0	0.000	A
2	Entry	1	1	3	202	1010	0.200	203	204	0.3	0.2	4.485	A
			2	1, 2, (3)	293	1010	0.290	293	294	0.5	0.4	4.670	A
		2	1	(1, 2, 3)	494			494	497	0.0	0.0	0.000	A
	Exit	1	1		582			582	597	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	514	709	0.725	516	526	4.7	2.0	15.761	C
			2	(2), 3	205	709	0.290	206	216	0.8	0.4	6.944	A
		2	1	(1, 2, 3)	719			719	729	0.2	0.0	0.229	A
	Exit	1	1		334			334	336	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	48	985	0.049	48	50	0.1	0.0	4.003	A
			2	1, 3	50	985	0.050	50	58	0.1	0.1	5.849	A
		2	1	(1, 2, 3)	98			98	108	0.0	0.0	0.011	A
	Exit	1	1		355			355	361	0.0	0.0	0.000	A
2	Entry	1	1	3	157	1016	0.154	157	164	0.2	0.2	4.395	A
			2	1, 2, (3)	238	1016	0.235	239	241	0.4	0.3	4.507	A
		2	1	(1, 2, 3)	395			395	404	0.0	0.0	0.000	A
	Exit	1	1		492			492	497	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	443	722	0.614	446	452	2.0	1.3	11.547	B
			2	(2), 3	164	722	0.227	165	166	0.4	0.3	5.976	A
		2	1	(1, 2, 3)	607			607	615	0.0	0.0	0.000	A
	Exit	1	1		258			258	272	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1147	984	0.050	49	49	0.0	0.1	3.840	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	1147	986	0.057	57	56	0.0	0.1	5.600	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	-	-	-	49	49	0.0	0.0	0.000	A
				3	56	14	-	-	-	56	57	0.0	0.0	0.008	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	166	41	1033	1014	0.163	164	159	0.0	0.2	4.356	A
			2	1	193	48	1033	1014	0.190	193	192	0.0	0.2	4.601	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	49	12	1033	1013	0.049	49	51	0.0	0.1	3.991	A
		2	1	1	193	48	-	-	-	193	193	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	215	54	-	-	-	215	211	0.0	0.0	0.000	A
3	Entry	1	1	1	163	41	777	719	0.227	163	162	0.0	0.7	12.334	B
				2	283	71	777	720	0.393	283	278	0.0	0.8	10.763	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	161	40	777	719	0.224	163	163	0.0	0.3	6.076	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	163	41	-	-	-	163	165	0.0	0.0	0.000	A
				2	444	111	-	-	-	444	445	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	1147	957	0.057	55	61	0.1	0.0	3.894	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1147	958	0.072	69	71	0.1	0.1	6.324	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	60	0.0	0.0	0.000	A
				3	69	17	-	-	-	69	71	0.0	0.0	0.010	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	199	50	1033	1010	0.197	198	200	0.2	0.3	4.418	A
			2	1	226	57	1033	1009	0.224	227	231	0.2	0.3	5.005	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	56	14	1033	1010	0.056	56	58	0.1	0.1	4.308	A
		2	1	1	226	57	-	-	-	226	231	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	255	64	-	-	-	255	258	0.0	0.0	0.000	A
3	Entry	1	1	1	195	49	777	710	0.275	194	197	0.7	0.9	16.024	C
				2	323	81	777	710	0.455	320	321	0.8	1.5	14.255	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	210	53	777	710	0.296	210	205	0.3	0.4	6.603	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	195	49	-	-	-	195	198	0.0	0.0	0.048	A
				2	533	133	-	-	-	533	530	0.0	0.0	0.031	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	1147	906	0.077	69	71	0.0	0.1	4.328	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1147	905	0.091	85	87	0.1	0.1	6.357	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	-	-	-	69	71	0.0	0.0	0.001	A
				3	83	21	-	-	-	83	87	0.0	0.0	0.030	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	247	62	1033	1005	0.246	248	245	0.3	0.4	4.740	A
			2	1	280	70	1033	1005	0.278	279	286	0.3	0.5	5.434	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	1033	1004	0.071	71	72	0.1	0.1	4.275	A
		2	1	1	280	70	-	-	-	280	287	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	318	80	-	-	-	318	317	0.0	0.0	0.000	A
3	Entry	1	1	1	245	61	777	694	0.352	248	240	0.9	1.6	24.681	C
				2	373	93	777	695	0.537	375	370	1.5	2.4	22.943	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	286	72	777	695	0.412	288	280	0.4	0.7	8.420	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	245	61	-	-	-	245	243	0.0	0.1	0.584	A
				2	659	165	-	-	-	659	655	0.0	0.1	0.616	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	18	1147	908	0.077	70	70	0.1	0.1	4.346	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	86	22	1147	910	0.095	86	82	0.1	0.1	6.697	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	18	-	-	-	70	70	0.0	0.0	0.001	A
				3	86	22	-	-	-	86	82	0.0	0.0	0.036	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	240	60	1033	1004	0.239	240	249	0.4	0.3	4.699	A
			2	1	279	70	1033	1004	0.278	279	277	0.5	0.4	5.544	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	68	17	1033	1004	0.068	68	70	0.1	0.1	4.628	A
		2	1	1	279	70	-	-	-	279	277	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	308	77	-	-	-	308	319	0.0	0.0	0.000	A
3	Entry	1	1	1	245	61	777	694	0.353	242	244	1.6	2.2	28.737	D
				2	366	92	777	695	0.527	367	365	2.4	2.6	26.111	D
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	288	72	777	694	0.415	286	282	0.7	0.8	8.773	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	245	61	-	-	-	245	246	0.1	0.1	1.188	A
				2	654	164	-	-	-	654	648	0.1	0.1	1.180	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	1147	956	0.059	55	59	0.1	0.1	4.137	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	69	17	1147	955	0.072	69	72	0.1	0.1	6.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	59	0.0	0.0	0.003	A
				3	69	17	-	-	-	69	72	0.0	0.0	0.044	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	202	50	1033	1009	0.200	203	204	0.3	0.2	4.485	A
			2	1	232	58	1033	1009	0.229	232	234	0.4	0.4	4.787	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	61	15	1033	1010	0.060	61	60	0.1	0.1	4.179	A
		2	1	1	232	58	-	-	-	232	234	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	263	66	-	-	-	263	263	0.0	0.0	0.000	A
3	Entry	1	1	1	195	49	777	709	0.274	195	203	2.2	0.8	16.841	C
				2	319	80	777	709	0.450	320	323	2.6	1.1	15.087	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	205	51	777	709	0.290	206	216	0.8	0.4	6.944	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	195	49	-	-	-	195	198	0.1	0.0	0.259	A
				2	524	131	-	-	-	524	531	0.1	0.0	0.218	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1147	985	0.049	48	50	0.1	0.0	4.003	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	50	12	1147	986	0.050	50	58	0.1	0.1	5.849	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	-	-	-	48	50	0.0	0.0	0.000	A
				3	50	12	-	-	-	50	58	0.0	0.0	0.026	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	157	39	1033	1016	0.154	157	164	0.2	0.2	4.395	A
			2	1	187	47	1033	1016	0.184	188	191	0.4	0.2	4.667	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	51	13	1033	1015	0.051	51	50	0.1	0.1	3.860	A
		2	1	1	187	47	-	-	-	187	190	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	208	52	-	-	-	208	214	0.0	0.0	0.000	A
3	Entry	1	1	1	166	41	777	721	0.230	167	170	0.8	0.5	12.219	B
				2	277	69	777	722	0.384	279	281	1.1	0.8	11.142	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	164	41	777	722	0.227	165	166	0.4	0.3	5.976	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	166	41	-	-	-	166	169	0.0	0.0	0.000	A
				2	441	110	-	-	-	441	445	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2b WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.34	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.34	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028	2b WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	441	100.000
2		ONE HOUR	✓	610	100.000
3		ONE HOUR	✓	453	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	173	268
	2	123	0	487
	3	170	283	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1	2	3
From	1	0	1	0
	2	4	0	4
	3	3	4	0

Cyclist %

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	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)
1	0.33	4.74	0.6	A	405	608
2	0.37	5.62	1.3	A	559	839
3	0.46	8.89	1.3	A	411	616

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	326	82	217	1588	0.205	325	330	219	0.0	0.4	4.029	A
2	466	117	193	1960	0.238	469	465	349	0.0	0.4	4.573	A
3	341	85	95	1060	0.322	341	342	567	0.0	0.7	6.833	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	393	98	255	1551	0.253	396	403	260	0.4	0.3	4.253	A
2	526	131	239	1883	0.279	527	545	412	0.4	0.8	5.098	A
3	399	100	111	1096	0.364	404	415	656	0.7	0.6	7.622	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	487	122	314	1512	0.322	484	492	319	0.3	0.6	4.739	A
2	669	167	293	1829	0.366	666	679	505	0.8	1.3	5.580	A
3	499	125	134	1088	0.459	499	503	825	0.6	1.2	8.788	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	498	124	305	1526	0.326	497	494	320	0.6	0.5	4.688	A
2	676	169	304	1835	0.368	678	683	498	1.3	1.1	5.622	A
3	485	121	140	1147	0.423	484	502	842	1.2	1.3	8.886	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	399	100	253	1554	0.257	396	401	262	0.5	0.5	4.503	A
2	551	138	238	1858	0.296	549	554	411	1.1	0.8	5.008	A
3	407	102	106	1080	0.377	409	420	682	1.3	0.8	7.846	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	330	82	209	1595	0.207	328	338	220	0.5	0.4	4.054	A
2	468	117	199	1849	0.253	468	471	338	0.8	0.6	4.732	A
3	332	83	98	1099	0.302	331	346	570	0.8	0.6	6.879	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	132	1068	0.123	132	129	0.0	0.1	3.789	A
			2	1, 3	195	1068	0.182	193	201	0.0	0.3	4.153	A
		2	1	(1, 2, 3)	326			326	332	0.0	0.0	0.017	A
	Exit	1	1		219			219	225	0.0	0.0	0.000	A
2	Entry	1	1	3	261	968	0.269	262	264	0.0	0.3	4.742	A
			2	1, 2, (3)	206	968	0.212	206	201	0.0	0.2	4.351	A
		2	1	(1, 2, 3)	466			466	467	0.0	0.0	0.000	A
	Exit	1	1		349			349	343	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	272	749	0.363	272	271	0.0	0.5	7.230	A
			2	(2), 3	70	749	0.093	69	71	0.0	0.2	5.323	A
		2	1	(1, 2, 3)	341			341	345	0.0	0.0	0.000	A
	Exit	1	1		567			567	569	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	155	1054	0.147	157	159	0.1	0.1	4.039	A
			2	1, 3	238	1054	0.226	239	244	0.3	0.2	4.341	A
		2	1	(1, 2, 3)	393			393	403	0.0	0.0	0.031	A
	Exit	1	1		260			260	266	0.0	0.0	0.000	A
2	Entry	1	1	3	310	953	0.326	311	318	0.3	0.5	5.287	A
			2	1, 2, (3)	216	953	0.226	216	227	0.2	0.3	4.835	A
		2	1	(1, 2, 3)	526			526	546	0.0	0.0	0.000	A
	Exit	1	1		412			412	421	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	314	744	0.422	318	327	0.5	0.5	8.157	A
			2	(2), 3	84	744	0.113	86	88	0.2	0.1	5.604	A
		2	1	(1, 2, 3)	399			399	414	0.0	0.0	0.000	A
	Exit	1	1		656			656	675	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	192	1033	0.186	191	195	0.1	0.2	4.397	A
			2	1, 3	295	1033	0.286	293	298	0.2	0.5	4.800	A
		2	1	(1, 2, 3)	487			487	494	0.0	0.0	0.097	A
	Exit	1	1		319			319	321	0.0	0.0	0.000	A
2	Entry	1	1	3	384	935	0.411	383	394	0.5	0.7	5.823	A
			2	1, 2, (3)	285	935	0.305	282	284	0.3	0.6	5.241	A
		2	1	(1, 2, 3)	669			669	681	0.0	0.0	0.000	A
	Exit	1	1		505			505	510	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	396	737	0.538	396	393	0.5	1.0	9.713	A
			2	(2), 3	103	737	0.140	103	110	0.1	0.2	5.479	A
		2	1	(1, 2, 3)	499			499	506	0.0	0.0	0.000	A
	Exit	1	1		825			825	843	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	194	1036	0.187	193	194	0.2	0.2	4.415	A
			2	1, 3	304	1036	0.294	304	300	0.5	0.3	4.611	A
		2	1	(1, 2, 3)	498			498	493	0.0	0.0	0.153	A
	Exit	1	1		320			320	328	0.0	0.0	0.000	A
2	Entry	1	1	3	382	931	0.410	384	388	0.7	0.7	6.041	A
			2	1, 2, (3)	295	931	0.316	295	295	0.6	0.4	5.072	A
		2	1	(1, 2, 3)	676			676	683	0.0	0.0	0.000	A
	Exit	1	1		498			498	506	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	377	735	0.512	378	390	1.0	1.0	9.845	A
			2	(2), 3	108	735	0.147	106	112	0.2	0.2	5.559	A
		2	1	(1, 2, 3)	485			485	502	0.0	0.0	0.000	A
	Exit	1	1		842			842	845	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	158	1055	0.149	158	158	0.2	0.1	4.095	A
			2	1, 3	242	1055	0.229	238	243	0.3	0.4	4.620	A
		2	1	(1, 2, 3)	399			399	401	0.0	0.0	0.089	A
	Exit	1	1		262			262	266	0.0	0.0	0.000	A
2	Entry	1	1	3	320	953	0.335	319	323	0.7	0.6	5.342	A
			2	1, 2, (3)	231	953	0.242	230	231	0.4	0.3	4.540	A
		2	1	(1, 2, 3)	551			551	553	0.0	0.0	0.000	A
	Exit	1	1		411			411	422	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	327	746	0.438	329	333	1.0	0.7	8.483	A
			2	(2), 3	80	746	0.107	80	87	0.2	0.1	5.402	A
		2	1	(1, 2, 3)	407			407	418	0.0	0.0	0.000	A
	Exit	1	1		682			682	688	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	130	1071	0.122	129	132	0.1	0.2	3.888	A
			2	1, 3	199	1071	0.186	199	206	0.4	0.2	4.130	A
		2	1	(1, 2, 3)	330			330	338	0.0	0.0	0.018	A
	Exit	1	1		220			220	218	0.0	0.0	0.000	A
2	Entry	1	1	3	271	966	0.281	271	276	0.6	0.4	4.905	A
			2	1, 2, (3)	196	966	0.203	197	195	0.3	0.3	4.485	A
		2	1	(1, 2, 3)	468			468	470	0.0	0.0	0.000	A
	Exit	1	1		338			338	351	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	265	748	0.355	265	277	0.7	0.5	7.356	A
			2	(2), 3	66	748	0.089	66	69	0.1	0.1	4.982	A
		2	1	(1, 2, 3)	332			332	345	0.0	0.0	0.000	A
	Exit	1	1		570			570	585	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	132	33	1147	1069	0.123	132	129	0.0	0.1	3.789	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	195	49	1147	1069	0.182	193	201	0.0	0.3	4.153	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	132	33	-	-	-	132	129	0.0	0.0	0.009	A
				3	195	49	-	-	-	195	203	0.0	0.0	0.022	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	261	65	1033	970	0.269	262	264	0.0	0.3	4.742	A
			2	1	95	24	1033	969	0.098	95	98	0.0	0.1	4.593	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	111	28	1033	969	0.114	111	103	0.0	0.1	4.124	A
		2	1	1	95	24	-	-	-	95	98	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	371	93	-	-	-	371	369	0.0	0.0	0.000	A
3	Entry	1	1	1	124	31	777	749	0.166	124	127	0.0	0.3	7.439	A
				2	148	37	777	749	0.197	148	144	0.0	0.2	7.044	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	70	17	777	749	0.093	69	71	0.0	0.2	5.323	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	124	31	-	-	-	124	128	0.0	0.0	0.000	A
				2	218	54	-	-	-	218	216	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	155	39	1147	1054	0.147	157	159	0.1	0.1	4.039	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	238	59	1147	1054	0.226	239	244	0.3	0.2	4.341	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	155	39	-	-	-	155	159	0.0	0.0	0.023	A
				3	238	59	-	-	-	238	244	0.0	0.0	0.036	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	310	78	1033	954	0.325	311	318	0.3	0.5	5.287	A
			2	1	111	28	1033	953	0.116	111	114	0.1	0.2	5.293	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	105	26	1033	953	0.110	105	113	0.1	0.1	4.368	A
		2	1	1	111	28	-	-	-	111	115	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	415	104	-	-	-	415	432	0.0	0.0	0.000	A
3	Entry	1	1	1	148	37	777	744	0.199	150	152	0.3	0.2	8.691	A
				2	166	42	777	744	0.224	169	175	0.2	0.3	7.687	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	84	21	777	744	0.113	86	88	0.2	0.1	5.604	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	148	37	-	-	-	148	152	0.0	0.0	0.000	A
				2	250	63	-	-	-	250	263	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	192	48	1147	1032	0.186	191	195	0.1	0.2	4.397	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	295	74	1147	1033	0.286	293	298	0.2	0.5	4.800	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	192	48	-	-	-	192	195	0.0	0.0	0.076	A
				3	295	74	-	-	-	295	299	0.0	0.0	0.111	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	384	96	1033	935	0.411	383	394	0.5	0.7	5.823	A
			2	1	135	34	1033	935	0.144	134	133	0.2	0.3	5.794	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	151	38	1033	935	0.161	149	151	0.1	0.3	4.759	A
		2	1	1	135	34	-	-	-	135	133	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	535	134	-	-	-	535	547	0.0	0.0	0.000	A
3	Entry	1	1	1	188	47	777	738	0.255	185	188	0.2	0.6	10.220	B
				2	208	52	777	737	0.283	210	205	0.3	0.4	9.240	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	103	26	777	737	0.140	103	110	0.1	0.2	5.479	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	188	47	-	-	-	188	190	0.0	0.0	0.000	A
				2	311	78	-	-	-	311	316	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	194	48	1147	1038	0.187	193	194	0.2	0.2	4.415	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	304	76	1147	1036	0.294	304	300	0.5	0.3	4.611	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	194	48	-	-	-	194	194	0.0	0.0	0.153	A
				3	304	76	-	-	-	304	299	0.0	0.0	0.154	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	382	95	1033	931	0.410	384	388	0.7	0.7	6.041	A
			2	1	141	35	1033	933	0.152	140	138	0.3	0.3	5.478	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	153	38	1033	932	0.165	155	158	0.3	0.1	4.714	A
		2	1	1	141	35	-	-	-	141	138	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	535	134	-	-	-	535	545	0.0	0.0	0.000	A
3	Entry	1	1	1	180	45	777	736	0.245	180	190	0.6	0.5	10.474	B
				2	197	49	777	736	0.267	198	200	0.4	0.5	9.239	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	108	27	777	736	0.147	106	112	0.2	0.2	5.559	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	180	45	-	-	-	180	190	0.0	0.0	0.000	A
				2	305	76	-	-	-	305	312	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	158	39	1147	1054	0.150	158	158	0.2	0.1	4.095	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	242	60	1147	1056	0.229	238	243	0.3	0.4	4.620	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	157	39	-	-	-	158	158	0.0	0.0	0.051	A
				3	242	60	-	-	-	242	243	0.0	0.0	0.113	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	320	80	1033	953	0.335	319	323	0.7	0.6	5.342	A
			2	1	106	26	1033	953	0.111	106	109	0.3	0.1	4.952	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	125	31	1033	954	0.131	124	122	0.1	0.2	4.172	A
		2	1	1	106	26	-	-	-	106	109	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	445	111	-	-	-	445	444	0.0	0.0	0.000	A
3	Entry	1	1	1	156	39	777	746	0.210	156	156	0.5	0.5	8.836	A
				2	170	43	777	745	0.229	172	176	0.5	0.2	8.163	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	777	745	0.108	80	87	0.2	0.1	5.402	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	156	39	-	-	-	156	156	0.0	0.0	0.000	A
				2	251	63	-	-	-	251	262	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	130	33	1147	1071	0.122	129	132	0.1	0.2	3.888	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	199	50	1147	1070	0.186	199	206	0.4	0.2	4.130	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	130	33	-	-	-	130	132	0.0	0.0	0.010	A
				3	199	50	-	-	-	199	205	0.0	0.0	0.023	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	1033	967	0.281	271	276	0.6	0.4	4.905	A
			2	1	97	24	1033	967	0.100	98	92	0.1	0.2	4.955	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	99	25	1033	968	0.102	99	103	0.2	0.1	4.068	A
		2	1	1	97	24	-	-	-	97	92	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	370	93	-	-	-	370	378	0.0	0.0	0.000	A
3	Entry	1	1	1	122	30	777	748	0.162	122	126	0.5	0.2	7.848	A
				2	144	36	777	748	0.192	143	150	0.2	0.3	6.938	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	66	17	777	749	0.089	66	69	0.1	0.1	4.982	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	122	30	-	-	-	122	125	0.0	0.0	0.000	A
				2	210	53	-	-	-	210	220	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2b WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	9.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.45	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2038	2b WD Flows	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	145	100.000
2		ONE HOUR	✓	717	100.000
3		ONE HOUR	✓	634	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	52	93
	2	282	0	435
	3	215	419	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	0	7
2	0	0	10
3	0	0	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.11	4.30	0.2	A	133	199
2	0.41	5.75	1.3	A	661	991
3	0.69	14.85	3.1	B	580	870

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	110	27	315	1461	0.075	109	111	377	0.0	0.2	3.929	A
2	551	138	71	1952	0.282	551	544	353	0.0	0.8	4.825	A
3	475	119	217	1110	0.428	475	473	405	0.0	1.1	8.407	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	382	1453	0.089	129	137	450	0.2	0.2	3.997	A
2	642	161	83	1916	0.335	641	646	428	0.8	1.0	5.134	A
3	574	144	255	1040	0.552	577	579	470	1.1	1.4	10.211	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	158	40	458	1398	0.113	158	166	546	0.2	0.2	4.299	A
2	791	198	102	1938	0.408	791	798	514	1.0	1.3	5.740	A
3	688	172	315	1034	0.665	688	694	578	1.4	3.1	14.355	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	162	40	460	1411	0.115	162	166	548	0.2	0.2	4.284	A
2	790	198	104	1970	0.401	794	795	518	1.3	1.1	5.751	A
3	696	174	312	1002	0.694	696	707	586	3.1	2.7	14.846	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	129	32	378	1501	0.086	129	136	452	0.2	0.1	4.051	A
2	651	163	83	1915	0.340	650	657	424	1.1	1.1	5.217	A
3	575	144	256	1067	0.538	574	583	477	2.7	1.6	10.713	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	109	27	318	1460	0.074	108	115	371	0.1	0.1	3.980	A
2	538	135	71	1956	0.275	539	548	355	1.1	0.7	4.833	A
3	473	118	214	1094	0.433	474	484	396	1.6	1.0	8.495	A

Lane Results

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

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	39	1033	0.038	39	40	0.0	0.1	3.588	A
			2	1, 3	71	1033	0.069	71	71	0.0	0.1	4.101	A
		2	1	(1, 2, 3)	110			110	111	0.0	0.0	0.020	A
	Exit	1	1		377			377	373	0.0	0.0	0.000	A
2	Entry	1	1	3	254	1009	0.251	253	251	0.0	0.4	4.827	A
			2	1, 2, (3)	297	1009	0.295	298	293	0.0	0.4	4.823	A
		2	1	(1, 2, 3)	551			551	547	0.0	0.0	0.000	A
	Exit	1	1		353			353	354	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	365	713	0.512	364	364	0.0	0.9	9.260	A
			2	(2), 3	111	713	0.155	110	110	0.0	0.2	5.563	A
		2	1	(1, 2, 3)	475			475	478	0.0	0.0	0.000	A
	Exit	1	1		405			405	402	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	46	1008	0.046	46	48	0.1	0.1	3.730	A
			2	1, 3	83	1008	0.082	83	89	0.1	0.1	4.128	A
		2	1	(1, 2, 3)	129			129	137	0.0	0.0	0.014	A
	Exit	1	1		450			450	448	0.0	0.0	0.000	A
2	Entry	1	1	3	297	1005	0.295	296	299	0.4	0.5	5.182	A
			2	1, 2, (3)	345	1005	0.344	345	347	0.4	0.5	5.096	A
		2	1	(1, 2, 3)	642			642	647	0.0	0.0	0.000	A
	Exit	1	1		428			428	433	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	432	702	0.616	434	437	0.9	1.2	11.555	B
			2	(2), 3	142	702	0.203	143	142	0.2	0.2	6.071	A
		2	1	(1, 2, 3)	574			574	580	0.0	0.0	0.000	A
	Exit	1	1		470			470	481	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	56	980	0.057	56	59	0.1	0.1	3.979	A
			2	1, 3	102	980	0.104	102	107	0.1	0.1	4.462	A
		2	1	(1, 2, 3)	158			158	166	0.0	0.0	0.017	A
	Exit	1	1		546			546	551	0.0	0.0	0.000	A
2	Entry	1	1	3	362	999	0.363	363	367	0.5	0.5	5.636	A
			2	1, 2, (3)	428	999	0.429	427	430	0.5	0.8	5.824	A
		2	1	(1, 2, 3)	791			791	799	0.0	0.0	0.000	A
	Exit	1	1		514			514	518	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	508	684	0.743	508	508	1.2	2.6	16.787	C
			2	(2), 3	180	684	0.263	181	186	0.2	0.4	6.777	A
		2	1	(1, 2, 3)	688			689	700	0.0	0.1	0.224	A
	Exit	1	1		578			578	588	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	57	979	0.058	58	59	0.1	0.1	3.969	A
			2	1, 3	104	979	0.107	104	106	0.1	0.2	4.453	A
		2	1	(1, 2, 3)	162			162	166	0.0	0.0	0.012	A
	Exit	1	1		548			548	552	0.0	0.0	0.000	A
2	Entry	1	1	3	367	998	0.368	369	369	0.5	0.5	5.678	A
			2	1, 2, (3)	424	998	0.424	425	426	0.8	0.6	5.810	A
		2	1	(1, 2, 3)	790			790	795	0.0	0.0	0.000	A
	Exit	1	1		518			518	529	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	511	685	0.746	512	518	2.6	2.4	17.539	C
			2	(2), 3	184	685	0.268	184	190	0.4	0.3	7.052	A
		2	1	(1, 2, 3)	696			695	706	0.1	0.0	0.116	A
	Exit	1	1		586			586	588	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	46	1009	0.046	47	48	0.1	0.0	3.837	A
			2	1, 3	83	1009	0.082	83	88	0.2	0.1	4.150	A
		2	1	(1, 2, 3)	129			129	136	0.0	0.0	0.016	A
	Exit	1	1		452			452	456	0.0	0.0	0.000	A
2	Entry	1	1	3	300	1005	0.298	300	304	0.5	0.5	5.203	A
			2	1, 2, (3)	351	1005	0.349	350	353	0.6	0.6	5.228	A
		2	1	(1, 2, 3)	651			651	657	0.0	0.0	0.000	A
	Exit	1	1		424			424	433	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	434	702	0.618	432	438	2.4	1.4	12.243	B
			2	(2), 3	141	702	0.201	142	145	0.3	0.2	6.078	A
		2	1	(1, 2, 3)	575			575	579	0.0	0.0	0.029	A
	Exit	1	1		477			477	487	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	37	1031	0.036	37	40	0.0	0.0	3.762	A
			2	1, 3	71	1031	0.069	71	75	0.1	0.1	4.091	A
		2	1	(1, 2, 3)	109			109	115	0.0	0.0	0.009	A
	Exit	1	1		371			371	379	0.0	0.0	0.000	A
2	Entry	1	1	3	245	1009	0.243	246	251	0.5	0.3	4.826	A
			2	1, 2, (3)	293	1009	0.291	293	297	0.6	0.4	4.838	A
		2	1	(1, 2, 3)	538			538	547	0.0	0.0	0.000	A
	Exit	1	1		355			355	362	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	361	714	0.506	362	370	1.4	0.8	9.416	A
			2	(2), 3	112	714	0.158	113	114	0.2	0.2	5.523	A
		2	1	(1, 2, 3)	473			473	481	0.0	0.0	0.001	A
	Exit	1	1		396			396	405	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	1147	1032	0.038	39	40	0.0	0.1	3.588	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	1147	1033	0.069	71	71	0.0	0.1	4.101	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	-	-	-	39	40	0.0	0.0	0.024	A
				3	71	18	-	-	-	71	71	0.0	0.0	0.018	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	254	63	1033	1009	0.251	253	251	0.0	0.4	4.827	A
			2	1	216	54	1033	1009	0.214	217	214	0.0	0.3	4.996	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	81	20	1033	1009	0.080	81	79	0.0	0.1	4.306	A
		2	1	1	216	54	-	-	-	216	215	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	335	84	-	-	-	335	332	0.0	0.0	0.000	A
3	Entry	1	1	1	159	40	777	713	0.224	160	160	0.0	0.4	9.797	A
				2	205	51	777	713	0.288	204	204	0.0	0.5	8.841	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	111	28	777	713	0.155	110	110	0.0	0.2	5.563	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	159	40	-	-	-	159	161	0.0	0.0	0.000	A
				2	316	79	-	-	-	316	317	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	1147	1006	0.046	46	48	0.1	0.1	3.730	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1147	1007	0.083	83	89	0.1	0.1	4.128	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	11	-	-	-	46	48	0.0	0.0	0.002	A
				3	83	21	-	-	-	83	89	0.0	0.0	0.022	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	297	74	1033	1005	0.295	296	299	0.4	0.5	5.182	A
			2	1	255	64	1033	1005	0.254	255	253	0.3	0.4	5.299	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	90	23	1033	1005	0.090	90	93	0.1	0.1	4.490	A
		2	1	1	255	64	-	-	-	255	254	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	387	97	-	-	-	387	393	0.0	0.0	0.000	A
3	Entry	1	1	1	194	49	777	702	0.277	195	195	0.4	0.6	12.272	B
				2	238	59	777	702	0.339	239	242	0.5	0.6	10.977	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	142	36	777	702	0.203	143	142	0.2	0.2	6.071	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	194	49	-	-	-	194	195	0.0	0.0	0.000	A
				2	380	95	-	-	-	380	385	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	1147	981	0.057	56	59	0.1	0.1	3.979	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	102	25	1147	981	0.104	102	107	0.1	0.1	4.462	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	59	0.0	0.0	0.010	A
				3	102	25	-	-	-	102	107	0.0	0.0	0.021	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	362	91	1033	999	0.363	363	367	0.5	0.5	5.636	A
			2	1	315	79	1033	999	0.316	315	316	0.4	0.6	6.166	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	113	28	1033	999	0.113	113	114	0.1	0.2	4.773	A
		2	1	1	315	79	-	-	-	315	317	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	475	119	-	-	-	475	481	0.0	0.0	0.000	A
3	Entry	1	1	1	232	58	777	684	0.339	231	235	0.6	1.3	17.784	C
				2	276	69	777	684	0.404	277	273	0.6	1.3	15.929	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	180	45	777	684	0.264	181	186	0.2	0.4	6.777	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	232	58	-	-	-	232	238	0.0	0.0	0.251	A
				2	456	114	-	-	-	456	463	0.0	0.0	0.210	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	1147	979	0.059	58	59	0.1	0.1	3.969	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	104	26	1147	979	0.107	104	106	0.1	0.2	4.453	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	57	14	-	-	-	57	59	0.0	0.0	0.006	A
				3	104	26	-	-	-	104	106	0.0	0.0	0.016	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	367	92	1033	998	0.368	369	369	0.5	0.5	5.678	A
			2	1	311	78	1033	998	0.311	312	314	0.6	0.4	6.115	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	113	28	1033	998	0.113	113	113	0.2	0.2	4.879	A
		2	1	1	311	78	-	-	-	311	313	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	480	120	-	-	-	480	482	0.0	0.0	0.000	A
3	Entry	1	1	1	235	59	777	685	0.343	236	238	1.3	1.1	18.519	C
				2	276	69	777	685	0.403	276	280	1.3	1.2	16.708	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	184	46	777	685	0.268	184	190	0.4	0.3	7.052	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	235	59	-	-	-	235	237	0.0	0.0	0.122	A
				2	461	115	-	-	-	460	469	0.0	0.0	0.113	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	12	1147	1009	0.046	47	48	0.1	0.0	3.837	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	1147	1010	0.082	83	88	0.2	0.1	4.150	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	46	12	-	-	-	46	48	0.0	0.0	0.003	A
				3	83	21	-	-	-	83	88	0.0	0.0	0.023	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	300	75	1033	1005	0.298	300	304	0.5	0.5	5.203	A
			2	1	257	64	1033	1005	0.255	256	258	0.4	0.4	5.433	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	95	24	1033	1005	0.094	94	95	0.2	0.2	4.615	A
		2	1	1	257	64	-	-	-	257	258	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	395	99	-	-	-	395	399	0.0	0.0	0.000	A
3	Entry	1	1	1	196	49	777	702	0.280	196	198	1.1	0.6	13.051	B
				2	237	59	777	702	0.338	236	240	1.2	0.8	11.581	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	141	35	777	701	0.201	142	145	0.3	0.2	6.078	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	196	49	-	-	-	196	196	0.0	0.0	0.025	A
				2	379	95	-	-	-	379	383	0.0	0.0	0.031	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:15 - 09:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	37	9	1147	1032	0.036	37	40	0.0	0.0	3.762	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	71	18	1147	1031	0.069	71	75	0.1	0.1	4.091	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	37	9	-	-	-	37	40	0.0	0.0	0.000	A
				3	71	18	-	-	-	71	75	0.0	0.0	0.013	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	245	61	1033	1009	0.243	246	251	0.5	0.3	4.826	A
			2	1	215	54	1033	1009	0.213	214	218	0.4	0.3	5.019	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	79	20	1033	1009	0.078	79	80	0.2	0.1	4.296	A
		2	1	1	215	54	-	-	-	215	217	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	324	81	-	-	-	324	329	0.0	0.0	0.000	A
3	Entry	1	1	1	157	39	777	714	0.219	157	162	0.6	0.4	9.890	A
				2	204	51	777	714	0.286	205	208	0.8	0.4	9.047	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	112	28	777	714	0.158	113	114	0.2	0.2	5.523	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	157	39	-	-	-	157	161	0.0	0.0	0.001	A
				2	317	79	-	-	-	317	320	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2b WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A453/EMA Roundabout	Standard Roundabout		1, 2, 3	6.96	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.96	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2038	2b WD Flows	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	479	100.000
2		ONE HOUR	✓	798	100.000
3		ONE HOUR	✓	418	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	169	310
	2	141	0	657
	3	161	257	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From \ To	1	2	3
1	0	1	0
2	3	0	3
3	2	3	0

Cyclist %

From \ To	1	2	3
1	0	0	0
2	0	0	0
3	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)
1	0.37	4.82	0.9	A	432	648
2	0.51	7.29	1.8	A	736	1104
3	0.44	8.71	1.3	A	383	575

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	352	88	181	1520	0.232	357	354	224	0.0	0.4	3.894	A
2	584	146	234	1909	0.306	582	584	304	0.0	1.0	5.030	A
3	306	76	99	1129	0.271	306	311	716	0.0	0.5	6.415	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	402	101	236	1506	0.267	395	421	281	0.4	0.9	4.335	A
2	717	179	263	1881	0.381	714	728	368	1.0	1.5	5.559	A
3	385	96	130	1068	0.361	387	383	847	0.5	0.7	7.280	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	518	129	276	1531	0.338	519	538	333	0.9	0.5	4.798	A
2	896	224	350	1765	0.508	899	900	446	1.5	1.8	7.292	A
3	464	116	151	1051	0.442	459	468	1098	0.7	1.3	8.680	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	530	133	285	1430	0.371	529	531	330	0.5	0.5	4.825	A
2	910	228	339	1795	0.507	909	889	476	1.8	1.5	6.541	A
3	451	113	156	1078	0.418	458	467	1091	1.3	1.1	8.708	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	429	107	215	1505	0.285	427	433	283	0.5	0.6	4.453	A
2	684	171	275	1811	0.378	686	722	367	1.5	0.8	5.871	A

3	367	92	131	1126	0.326	367	369	831	1.1	0.8	6.689	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	359	90	205	1556	0.231	361	373	231	0.6	0.3	4.121	A
2	625	156	243	1865	0.335	624	621	323	0.8	1.1	5.274	A
3	327	82	110	1050	0.312	326	320	757	0.8	0.6	6.788	A

Lane Results

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

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	123	1081	0.114	123	120	0.0	0.1	3.740	A
			2	1, 3	230	1081	0.213	234	234	0.0	0.2	3.951	A
		2	1	(1, 2, 3)	352			353	355	0.0	0.0	0.014	A
	Exit	1	1		224			224	216	0.0	0.0	0.000	A
2	Entry	1	1	3	344	955	0.360	342	350	0.0	0.8	5.403	A
			2	1, 2, (3)	240	955	0.251	240	234	0.0	0.3	4.469	A
		2	1	(1, 2, 3)	584			584	588	0.0	0.0	0.000	A
	Exit	1	1		304			304	315	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	245	748	0.327	246	250	0.0	0.4	6.723	A
			2	(2), 3	61	748	0.082	60	61	0.0	0.1	5.142	A
		2	1	(1, 2, 3)	306			306	313	0.0	0.0	0.000	A
	Exit	1	1		716			716	719	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	135	1061	0.127	132	146	0.1	0.3	3.969	A
			2	1, 3	268	1061	0.252	263	275	0.2	0.6	4.466	A
		2	1	(1, 2, 3)	402			402	423	0.0	0.0	0.041	A
	Exit	1	1		281			281	273	0.0	0.0	0.000	A
2	Entry	1	1	3	420	945	0.445	416	420	0.8	1.0	5.841	A
			2	1, 2, (3)	296	945	0.314	297	308	0.3	0.5	5.175	A
		2	1	(1, 2, 3)	717			717	730	0.0	0.0	0.000	A
	Exit	1	1		368			368	386	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	309	739	0.418	311	304	0.4	0.6	7.879	A
			2	(2), 3	77	739	0.104	77	79	0.1	0.1	4.961	A
		2	1	(1, 2, 3)	385			385	384	0.0	0.0	0.000	A
	Exit	1	1		847			847	873	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	171	1047	0.163	169	181	0.3	0.2	4.321	A
			2	1, 3	347	1047	0.332	350	357	0.6	0.2	4.834	A
		2	1	(1, 2, 3)	518			518	536	0.0	0.0	0.136	A
	Exit	1	1		333			333	331	0.0	0.0	0.000	A
2	Entry	1	1	3	510	916	0.556	513	519	1.0	1.2	8.157	A
			2	1, 2, (3)	387	916	0.422	387	381	0.5	0.6	6.109	A
		2	1	(1, 2, 3)	896			896	901	0.0	0.0	0.000	A
	Exit	1	1		446			446	471	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	359	732	0.490	354	366	0.6	1.2	9.626	A
			2	(2), 3	105	732	0.143	104	102	0.1	0.2	5.249	A
		2	1	(1, 2, 3)	464			464	471	0.0	0.0	0.000	A
	Exit	1	1		1098			1098	1104	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	191	1043	0.183	191	188	0.2	0.1	4.171	A
			2	1, 3	339	1043	0.325	339	343	0.2	0.4	4.815	A
		2	1	(1, 2, 3)	530			530	531	0.0	0.0	0.236	A
	Exit	1	1		330			330	328	0.0	0.0	0.000	A
2	Entry	1	1	3	516	920	0.561	518	517	1.2	0.9	7.095	A
			2	1, 2, (3)	394	920	0.428	391	371	0.6	0.6	5.773	A
		2	1	(1, 2, 3)	910			910	887	0.0	0.0	0.000	A
	Exit	1	1		476			476	479	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	358	731	0.490	363	366	1.2	0.9	9.628	A
			2	(2), 3	92	731	0.127	95	101	0.2	0.1	5.347	A
		2	1	(1, 2, 3)	451			451	466	0.0	0.0	0.000	A
	Exit	1	1		1091			1091	1080	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	151	1069	0.142	152	152	0.1	0.1	4.064	A
			2	1, 3	278	1069	0.260	275	281	0.4	0.5	4.556	A
		2	1	(1, 2, 3)	429			429	433	0.0	0.0	0.068	A
	Exit	1	1		283			283	278	0.0	0.0	0.000	A
2	Entry	1	1	3	398	941	0.423	400	419	0.9	0.4	6.258	A
			2	1, 2, (3)	286	941	0.304	286	302	0.6	0.4	5.339	A
		2	1	(1, 2, 3)	684			684	719	0.0	0.0	0.000	A
	Exit	1	1		367			367	376	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	298	738	0.404	299	295	0.9	0.6	7.010	A
			2	(2), 3	69	738	0.093	68	75	0.1	0.2	5.427	A
		2	1	(1, 2, 3)	367			367	368	0.0	0.0	0.000	A
	Exit	1	1		831			831	870	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2	116	1073	0.109	118	130	0.1	0.1	3.945	A
			2	1, 3	243	1073	0.226	243	243	0.5	0.2	4.098	A
		2	1	(1, 2, 3)	359			359	372	0.0	0.0	0.076	A
	Exit	1	1		231			231	226	0.0	0.0	0.000	A
2	Entry	1	1	3	364	952	0.382	363	366	0.4	0.8	5.654	A
			2	1, 2, (3)	262	952	0.275	261	255	0.4	0.3	4.725	A
		2	1	(1, 2, 3)	625			625	622	0.0	0.0	0.000	A
	Exit	1	1		323			323	330	0.0	0.0	0.000	A
3	Entry	1	1	1, 2	262	744	0.353	262	258	0.6	0.5	7.214	A
			2	(2), 3	65	744	0.087	64	62	0.2	0.1	4.994	A
		2	1	(1, 2, 3)	327			327	319	0.0	0.0	0.000	A
	Exit	1	1		757			757	757	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	1147	1082	0.114	123	120	0.0	0.1	3.740	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	230	57	1147	1082	0.213	234	234	0.0	0.2	3.951	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	123	31	-	-	-	123	121	0.0	0.0	0.017	A
				3	230	57	-	-	-	230	234	0.0	0.0	0.012	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	344	86	1033	954	0.361	342	350	0.0	0.8	5.403	A
			2	1	101	25	1033	954	0.105	99	99	0.0	0.2	4.696	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	139	35	1033	955	0.146	141	135	0.0	0.1	4.300	A
		2	1	1	101	25	-	-	-	101	100	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	484	121	-	-	-	484	489	0.0	0.0	0.000	A
3	Entry	1	1	1	126	32	777	749	0.169	125	117	0.0	0.2	6.820	A
				2	118	30	777	749	0.158	120	134	0.0	0.1	6.637	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	61	15	777	748	0.082	60	61	0.0	0.1	5.142	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	126	32	-	-	-	126	118	0.0	0.0	0.000	A
				2	179	45	-	-	-	179	195	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	135	34	1147	1061	0.127	132	146	0.1	0.3	3.969	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	268	67	1147	1062	0.252	263	275	0.2	0.6	4.466	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	135	34	-	-	-	135	146	0.0	0.0	0.039	A
				3	268	67	-	-	-	268	276	0.0	0.0	0.041	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	420	105	1033	945	0.445	416	420	0.8	1.0	5.841	A
			2	1	129	32	1033	946	0.136	130	130	0.2	0.2	5.866	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	168	42	1033	944	0.178	168	178	0.1	0.3	4.666	A
		2	1	1	129	32	-	-	-	129	131	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	588	147	-	-	-	588	599	0.0	0.0	0.000	A
3	Entry	1	1	1	151	38	777	738	0.204	151	143	0.2	0.3	8.198	A
				2	157	39	777	739	0.213	159	161	0.1	0.2	7.594	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	77	19	777	738	0.104	77	79	0.1	0.1	4.961	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	151	38	-	-	-	151	143	0.0	0.0	0.000	A
				2	235	59	-	-	-	235	241	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	171	43	1147	1047	0.163	169	181	0.3	0.2	4.321	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	347	87	1147	1046	0.332	350	357	0.6	0.2	4.834	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	171	43	-	-	-	171	180	0.0	0.0	0.101	A
				3	347	87	-	-	-	347	355	0.0	0.0	0.153	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	510	127	1033	917	0.556	513	519	1.0	1.2	8.157	A
			2	1	149	37	1033	915	0.163	151	153	0.2	0.2	6.609	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	238	59	1033	917	0.259	235	228	0.3	0.4	5.772	A
		2	1	1	149	37	-	-	-	149	153	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	747	187	-	-	-	747	749	0.0	0.0	0.000	A
3	Entry	1	1	1	185	46	777	731	0.253	182	178	0.3	0.6	10.168	B
				2	174	43	777	733	0.237	172	188	0.2	0.5	9.108	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	105	26	777	733	0.143	104	102	0.1	0.2	5.249	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	185	46	-	-	-	185	179	0.0	0.0	0.000	A
				2	279	70	-	-	-	279	292	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	1147	1043	0.183	191	188	0.2	0.1	4.171	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	339	85	1147	1043	0.325	339	343	0.2	0.4	4.815	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	-	-	-	191	187	0.0	0.0	0.177	A
				3	339	85	-	-	-	339	343	0.0	0.0	0.268	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	516	129	1033	920	0.561	518	517	1.2	0.9	7.095	A
			2	1	157	39	1033	920	0.170	156	152	0.2	0.2	6.305	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	237	59	1033	921	0.257	235	220	0.4	0.4	5.405	A
		2	1	1	157	39	-	-	-	157	152	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	753	188	-	-	-	753	736	0.0	0.0	0.000	A
3	Entry	1	1	1	170	42	777	730	0.232	173	176	0.6	0.4	10.007	B
				2	189	47	777	731	0.258	191	190	0.5	0.5	9.271	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	777	731	0.127	95	101	0.2	0.1	5.347	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	170	42	-	-	-	170	176	0.0	0.0	0.000	A
				2	281	70	-	-	-	281	290	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	151	38	1147	1067	0.142	152	152	0.1	0.1	4.064	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	278	69	1147	1068	0.260	275	281	0.4	0.5	4.556	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	151	38	-	-	-	151	152	0.0	0.0	0.034	A
				3	278	69	-	-	-	278	282	0.0	0.0	0.086	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	398	99	1033	941	0.423	400	419	0.9	0.4	6.258	A
			2	1	131	33	1033	941	0.140	131	133	0.2	0.2	5.816	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	155	39	1033	940	0.165	155	169	0.4	0.2	4.962	A
		2	1	1	131	33	-	-	-	131	133	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	553	138	-	-	-	553	585	0.0	0.0	0.000	A
3	Entry	1	1	1	150	37	777	737	0.203	152	145	0.4	0.2	7.312	A
				2	149	37	777	737	0.202	147	150	0.5	0.4	6.716	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	69	17	777	738	0.093	68	75	0.1	0.2	5.427	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	150	37	-	-	-	150	144	0.0	0.0	0.000	A
				2	218	54	-	-	-	218	224	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:15 - 18:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	116	29	1147	1071	0.109	118	130	0.1	0.1	3.945	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	243	61	1147	1073	0.226	243	243	0.5	0.2	4.098	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	116	29	-	-	-	116	130	0.0	0.0	0.072	A
				3	243	61	-	-	-	243	242	0.0	0.0	0.078	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	364	91	1033	952	0.382	363	366	0.4	0.8	5.654	A
			2	1	111	28	1033	950	0.116	110	107	0.2	0.1	5.244	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	151	38	1033	951	0.159	151	148	0.2	0.2	4.354	A
		2	1	1	111	28	-	-	-	111	106	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	515	129	-	-	-	515	515	0.0	0.0	0.000	A
3	Entry	1	1	1	122	30	777	744	0.164	121	119	0.2	0.3	7.746	A
				2	140	35	777	744	0.189	141	138	0.4	0.2	6.746	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	65	16	777	744	0.087	64	62	0.2	0.1	4.994	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	122	30	-	-	-	122	120	0.0	0.0	0.000	A
				2	205	51	-	-	-	205	199	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

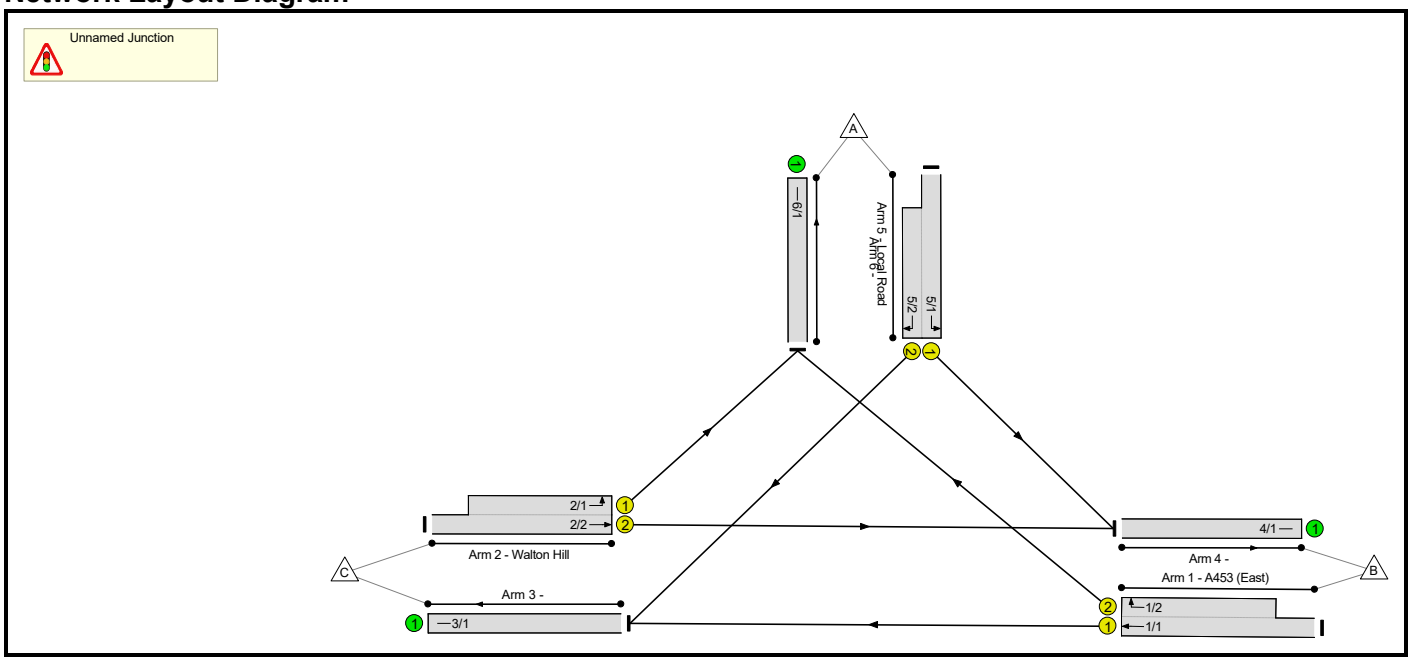
APPENDIX 65: Junction 10: A453/Walton Hill Signal Junction Stage 1B/2B Modelling Results

Full Input Data And Results

User and Project Details

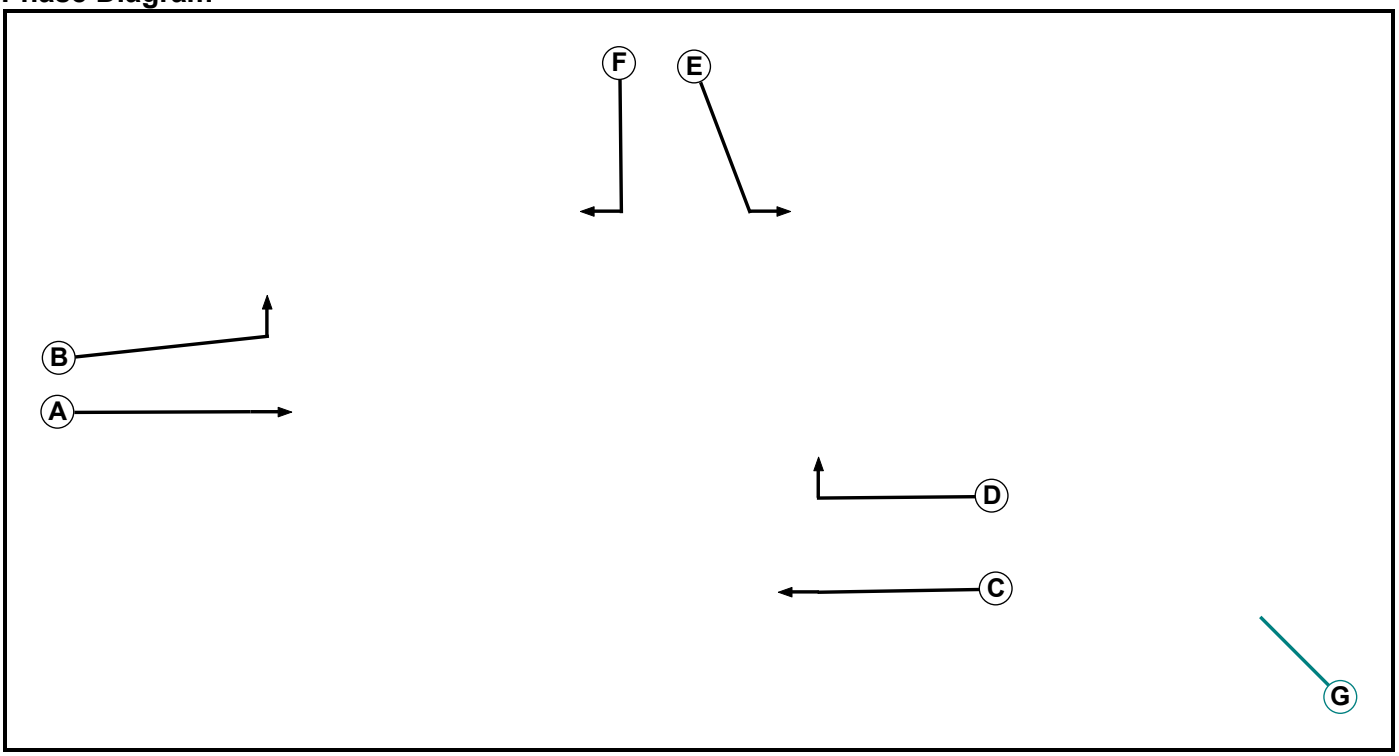
Project:	**East Midlands Gateway Phase 2**
Title:	**A453 Walton Hill Junction**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 10
Date Completed:	27/03/24
Checked By:	Vibeeshan Devaharan
Additional detail:	Phase B added to run in stage 3 as per on site observations
File name:	250624 A453_Local Road Signal Junction_Stage 1b+2b.lsg3x
Author:	Charlie Cresswell
Company:	BWB
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Dummy		4	4

Full Input Data And Results

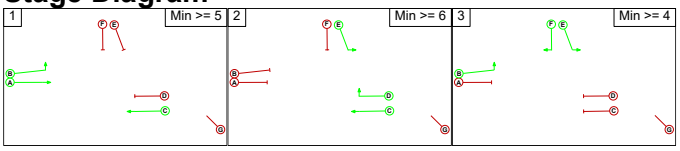
Phase Intergreens Matrix

Terminating Phase	Starting Phase							
		A	B	C	D	E	F	G
	A		-	-	6	7	6	3
	B	-		-	5	-	-	3
	C	-	-		-	-	5	3
	D	6	8	-		-	5	3
	E	3	-	-	-		-	3
	F	6	-	6	6	-		3
	G	2	2	2	2	2	2	

Phases in Stage

Stage No.	Phases in Stage
1	A B C
2	C D E
3	B E F

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	E	Losing	2	2

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	7
	2	8		8
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A453 (East))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Ahead	Inf
1/2 (A453 (East))	U	D	2	3	19.1	Geom	-	3.50	0.00	Y	Arm 6 Right	20.00
2/1 (Walton Hill)	U	B	2	3	13.9	Geom	-	3.50	0.00	Y	Arm 6 Left	20.00
2/2 (Walton Hill)	U	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Ahead	Inf
3/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Local Road)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	15.00
5/2 (Local Road)	U	F	2	3	13.0	Geom	-	3.50	0.00	Y	Arm 3 Right	20.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Observed (AM) (Current Scenario)'	07:45	08:45	01:00	
2: '2022 Observed (PM)'	17:00	18:00	01:00	
3: '2028 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
4: '2028 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
5: '2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
6: '2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
7: '2038 Forecast Year Without Development (AM)'	07:45	08:45	01:00	
8: '2038 Forecast Year Without Development (PM)'	17:00	18:00	01:00	
9: '2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
10: '2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	
11: '2b 2028 Forecast Year With Development (AM)'	07:45	08:45	01:00	
12: '2b 2028 Forecast Year With Development (PM)'	17:00	18:00	01:00	
13: '2b 2038 Forecast Year With Development (AM)'	07:45	08:45	01:00	
14: '2b 2038 Forecast Year With Development (PM)'	17:00	18:00	01:00	

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM) (Current Scenario)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	520	287	807
	B	215	0	189	404
	C	314	406	0	720
	Tot.	529	926	476	1931

Traffic Lane Flows

Lane	Scenario 1: 2022 Observed (AM)
Junction: Unnamed Junction	
1/1 (with short)	404(In) 189(Out)
1/2 (short)	215
2/1 (short)	314
2/2 (with short)	720(In) 406(Out)
3/1	476
4/1	926
5/1 (with short)	807(In) 520(Out)
5/2 (short)	287
6/1	529

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	228	289	517
	B	343	0	288	631
	C	227	187	0	414
	Tot.	570	415	577	1562

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 Observed (PM)
Junction: Unnamed Junction	
1/1 (with short)	631(In) 288(Out)
1/2 (short)	343
2/1 (short)	227
2/2 (with short)	414(In) 187(Out)
3/1	577
4/1	415
5/1 (with short)	517(In) 228(Out)
5/2 (short)	289
6/1	570

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2028 Forecast Year Without Development (AM)' (FG3: '2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	599	386	985
	B	347	0	252	599
	C	314	294	0	608
	Tot.	661	893	638	2192

Traffic Lane Flows

Lane	Scenario 3: 2028 Forecast Year Without Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	599(In) 252(Out)
1/2 (short)	347
2/1 (short)	314
2/2 (with short)	608(In) 294(Out)
3/1	638
4/1	893
5/1 (with short)	985(In) 599(Out)
5/2 (short)	386
6/1	661

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2028 Forecast Year Without Development (PM)' (FG4: '2028 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	365	426	791
	B	413	0	305	718
	C	187	146	0	333
	Tot.	600	511	731	1842

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2028 Forecast Year Without Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	718(In) 305(Out)
1/2 (short)	413
2/1 (short)	187
2/2 (with short)	333(In) 146(Out)
3/1	731
4/1	511
5/1 (with short)	791(In) 365(Out)
5/2 (short)	426
6/1	600

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2028 Forecast Year With Development (AM)' (FG5: '2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	691	378	1069
	B	318	0	212	530
	C	316	318	0	634
	Tot.	634	1009	590	2233

Traffic Lane Flows

Lane	Scenario 5: 2028 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	530(In) 212(Out)
1/2 (short)	318
2/1 (short)	316
2/2 (with short)	634(In) 318(Out)
3/1	590
4/1	1009
5/1 (with short)	1069(In) 691(Out)
5/2 (short)	378
6/1	634

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2028 Forecast Year With Development (PM)' (FG6: '2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	348	434	782
	B	432	0	337	769
	C	180	142	0	322
	Tot.	612	490	771	1873

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	769(In) 337(Out)
1/2 (short)	432
2/1 (short)	180
2/2 (with short)	322(In) 142(Out)
3/1	771
4/1	490
5/1 (with short)	782(In) 348(Out)
5/2 (short)	434
6/1	612

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2038 Forecast Year Without Development (AM)' (FG7: '2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	510	417	927
	B	408	0	350	758
	C	304	271	0	575
	Tot.	712	781	767	2260

Traffic Lane Flows

Lane	Scenario 7: 2038 Forecast Year Without Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	758(In) 350(Out)
1/2 (short)	408
2/1 (short)	304
2/2 (with short)	575(In) 271(Out)
3/1	767
4/1	781
5/1 (with short)	927(In) 510(Out)
5/2 (short)	417
6/1	712

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2038 Forecast Year Without Development (PM)' (FG8: '2038 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	319	475	794
	B	461	0	470	931
	C	164	139	0	303
	Tot.	625	458	945	2028

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 Forecast Year Without Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	931(In) 470(Out)
1/2 (short)	461
2/1 (short)	164
2/2 (with short)	303(In) 139(Out)
3/1	945
4/1	458
5/1 (with short)	794(In) 319(Out)
5/2 (short)	475
6/1	625

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 9: '2038 Forecast Year With Development (AM)' (FG9: '2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	539	403	942
	B	387	0	293	680
	C	326	284	0	610
	Tot.	713	823	696	2232

Traffic Lane Flows

Lane	Scenario 9: 2038 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	680(In) 293(Out)
1/2 (short)	387
2/1 (short)	326
2/2 (with short)	610(In) 284(Out)
3/1	696
4/1	823
5/1 (with short)	942(In) 539(Out)
5/2 (short)	403
6/1	713

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2038 Forecast Year With Development (PM)' (FG10: '2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	275	488	763
	B	470	0	553	1023
	C	166	138	0	304
	Tot.	636	413	1041	2090

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	1023(In) 553(Out)
1/2 (short)	470
2/1 (short)	166
2/2 (with short)	304(In) 138(Out)
3/1	1041
4/1	413
5/1 (with short)	763(In) 275(Out)
5/2 (short)	488
6/1	636

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 11: '2b 2028 Forecast Year With Development (AM)' (FG11: '2b 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	630	379	1009
	B	312	0	234	546
	C	321	331	0	652
	Tot.	633	961	613	2207

Traffic Lane Flows

Lane	Scenario 11: 2b 2028 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	546(In) 234(Out)
1/2 (short)	312
2/1 (short)	321
2/2 (with short)	652(In) 331(Out)
3/1	613
4/1	961
5/1 (with short)	1009(In) 630(Out)
5/2 (short)	379
6/1	633

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2b 2028 Forecast Year With Development (PM)' (FG12: '2b 2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	333	438	771
	B	432	0	370	802
	C	174	141	0	315
	Tot.	606	474	808	1888

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2b 2028 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	802(In) 370(Out)
1/2 (short)	432
2/1 (short)	174
2/2 (with short)	315(In) 141(Out)
3/1	808
4/1	474
5/1 (with short)	771(In) 333(Out)
5/2 (short)	438
6/1	606

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 13: '2b 2038 Forecast Year With Development (AM)' (FG13: '2b 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	511	402	913
	B	384	0	332	716
	C	324	294	0	618
	Tot.	708	805	734	2247

Traffic Lane Flows

Lane	Scenario 13: 2b 2038 Forecast Year With Development (AM)
Junction: Unnamed Junction	
1/1 (with short)	716(In) 332(Out)
1/2 (short)	384
2/1 (short)	324
2/2 (with short)	618(In) 294(Out)
3/1	734
4/1	805
5/1 (with short)	913(In) 511(Out)
5/2 (short)	402
6/1	708

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2b 2038 Forecast Year With Development (PM)' (FG14: '2b 2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	311	482	793
	B	471	0	540	1011
	C	154	141	0	295
	Tot.	625	452	1022	2099

Full Input Data And Results

Traffic Lane Flows

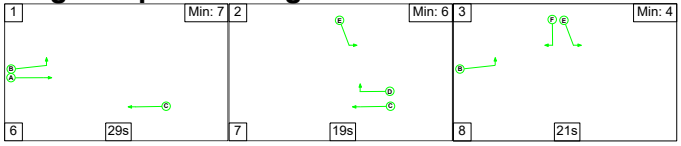
Lane	Scenario 14: 2b 2038 Forecast Year With Development (PM)
Junction: Unnamed Junction	
1/1 (with short)	1011(In) 540(Out)
1/2 (short)	471
2/1 (short)	154
2/2 (with short)	295(In) 141(Out)
3/1	1022
4/1	452
5/1 (with short)	793(In) 311(Out)
5/2 (short)	482
6/1	625

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A453 (East))	3.50	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1965	1965
1/2 (A453 (East))	3.50	0.00	Y	Arm 6 Right	20.00	100.0 %	1828	1828
2/1 (Walton Hill)	3.50	0.00	Y	Arm 6 Left	20.00	100.0 %	1828	1828
2/2 (Walton Hill)	3.50	0.00	N	Arm 4 Ahead	Inf	100.0 %	2105	2105
3/1	Infinite Saturation Flow						Inf	Inf
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Local Road)	3.50	0.00	Y	Arm 4 Left	15.00	100.0 %	1786	1786
5/2 (Local Road)	3.50	0.00	Y	Arm 3 Right	20.00	100.0 %	1828	1828
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 Observed (AM)' (FG1: '2022 Observed (AM) (Current Scenario)', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

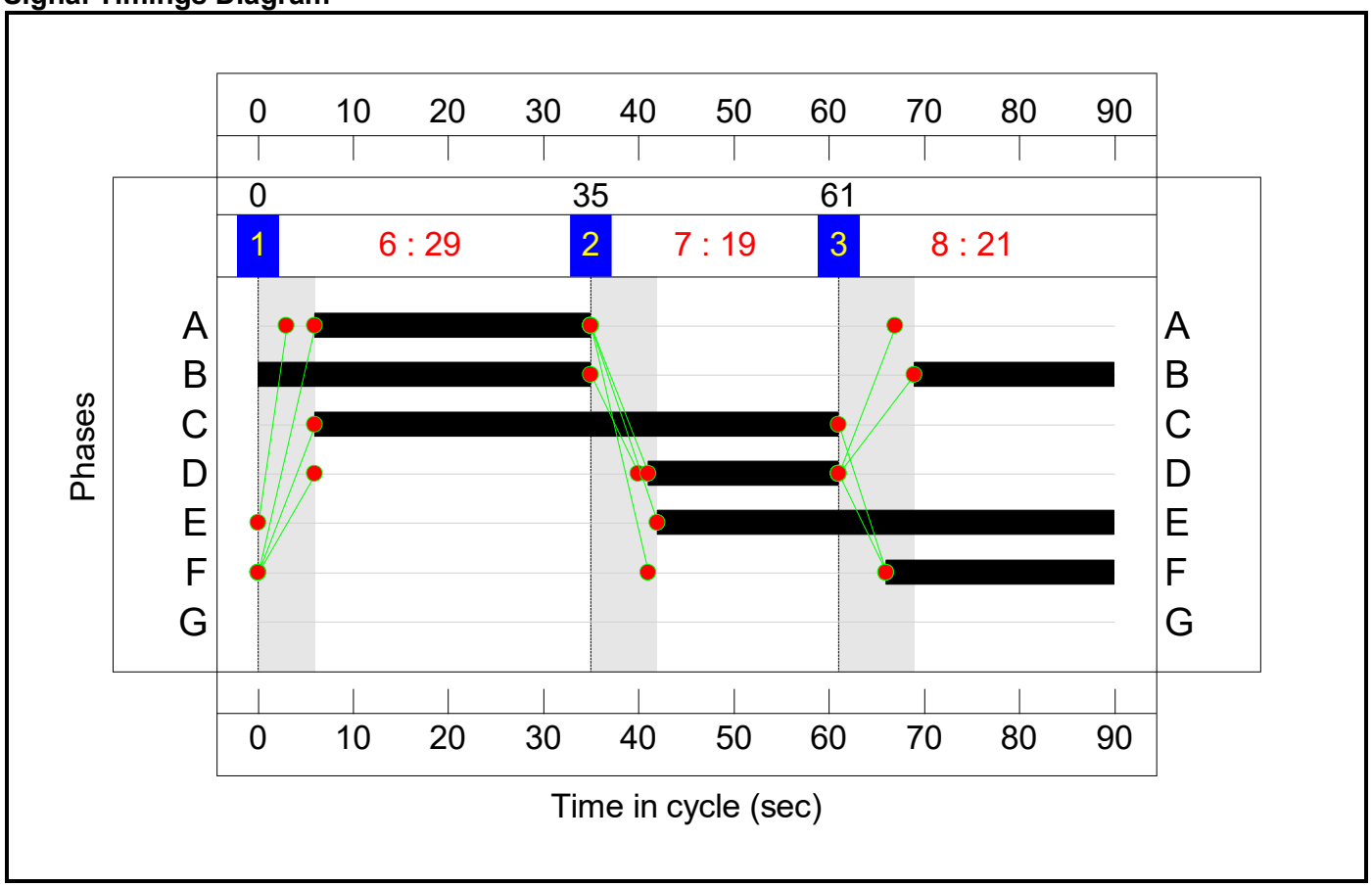


Full Input Data And Results

Stage Timings

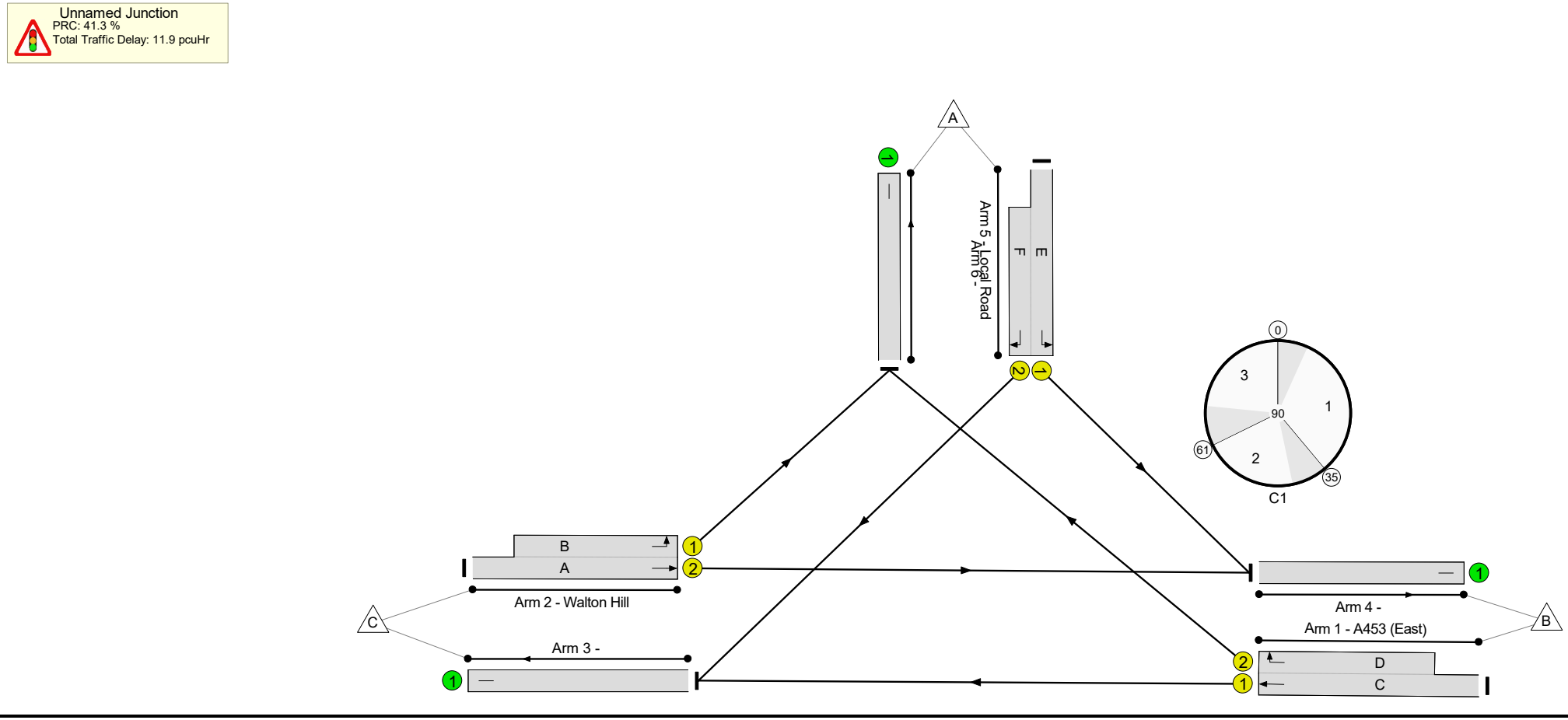
Stage	1	2	3
Duration	29	19	21
Change Point	0	35	61

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	55:20	-	404	1965:1828	375+427	50.4 : 50.4%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	29:56	-	720	2105:1828	645+499	63.0 : 63.0%
3/1		U	N/A	N/A	-		-	-	-	476	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	926	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	48:24	-	807	1786:1828	817+451	63.7 : 63.7%
6/1		U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%

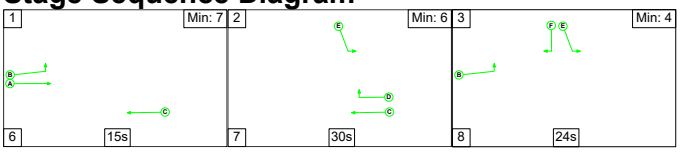
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**9.7**	**2.2**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**9.7**	**2.2**	**0.0**	**11.9**	**-**	**-**	**-**	**-**
1/1+1/2	404	404	-	-	-	2.2	0.5	-	2.7	23.8	4.7	0.5	5.2
2/2+2/1	720	720	-	-	-	3.4	0.8	-	4.3	21.4	8.3	0.8	9.2
3/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	926	926	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	807	807	-	-	-	4.1	0.9	-	5.0	22.3	8.2	0.9	9.1
6/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 41.3 Total Delay for Signalled Lanes (pcuHr): 11.95 Cycle Time (s): 90
PRC Over All Lanes (%): 41.3 Total Delay Over All Lanes(pcuHr): 11.95

Full Input Data And Results

Scenario 2: '2022 Observed (PM)' (FG2: '2022 Observed (PM)', Plan 1: 'Network Control Plan 1')

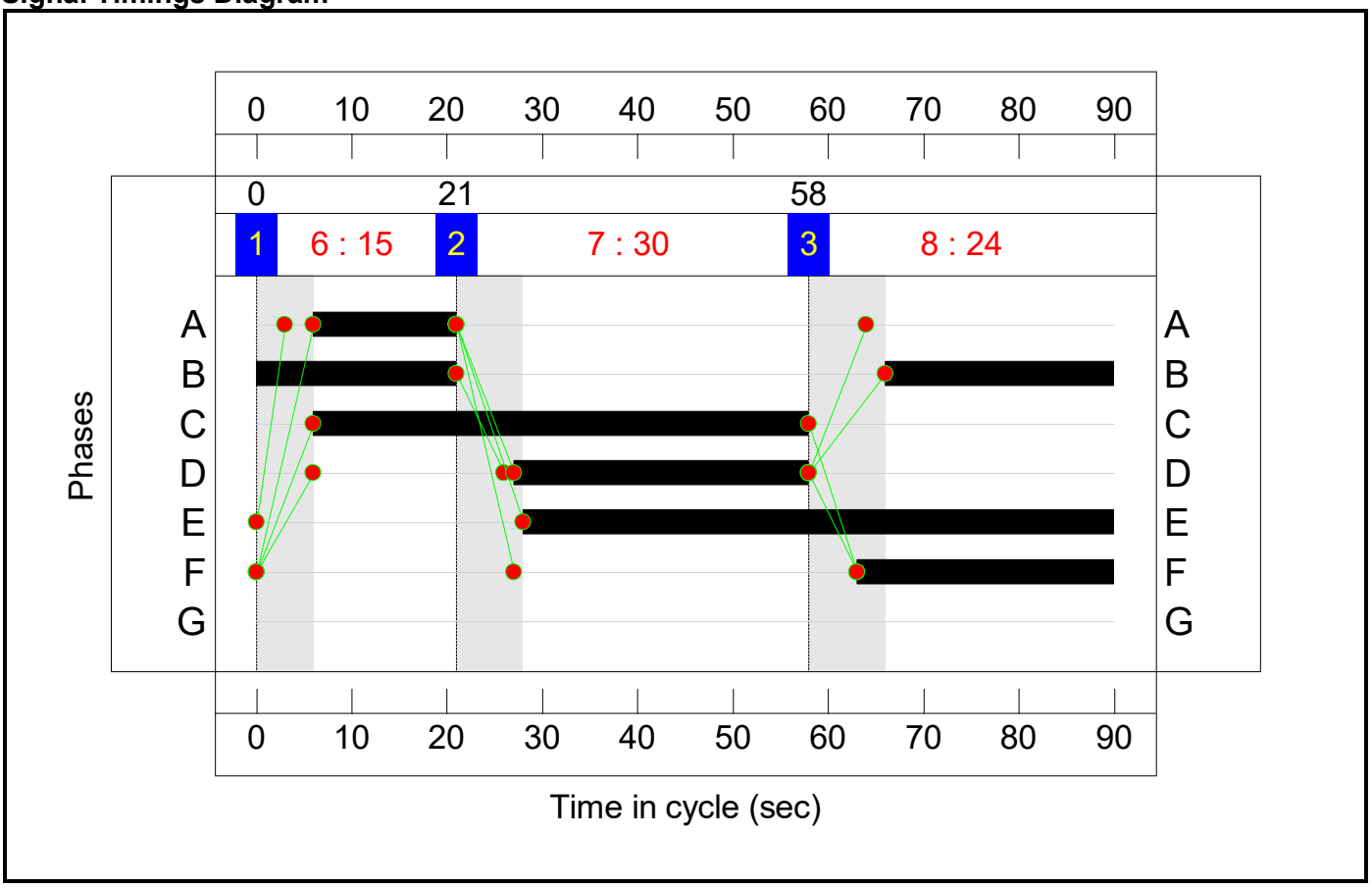
Stage Sequence Diagram



Stage Timings

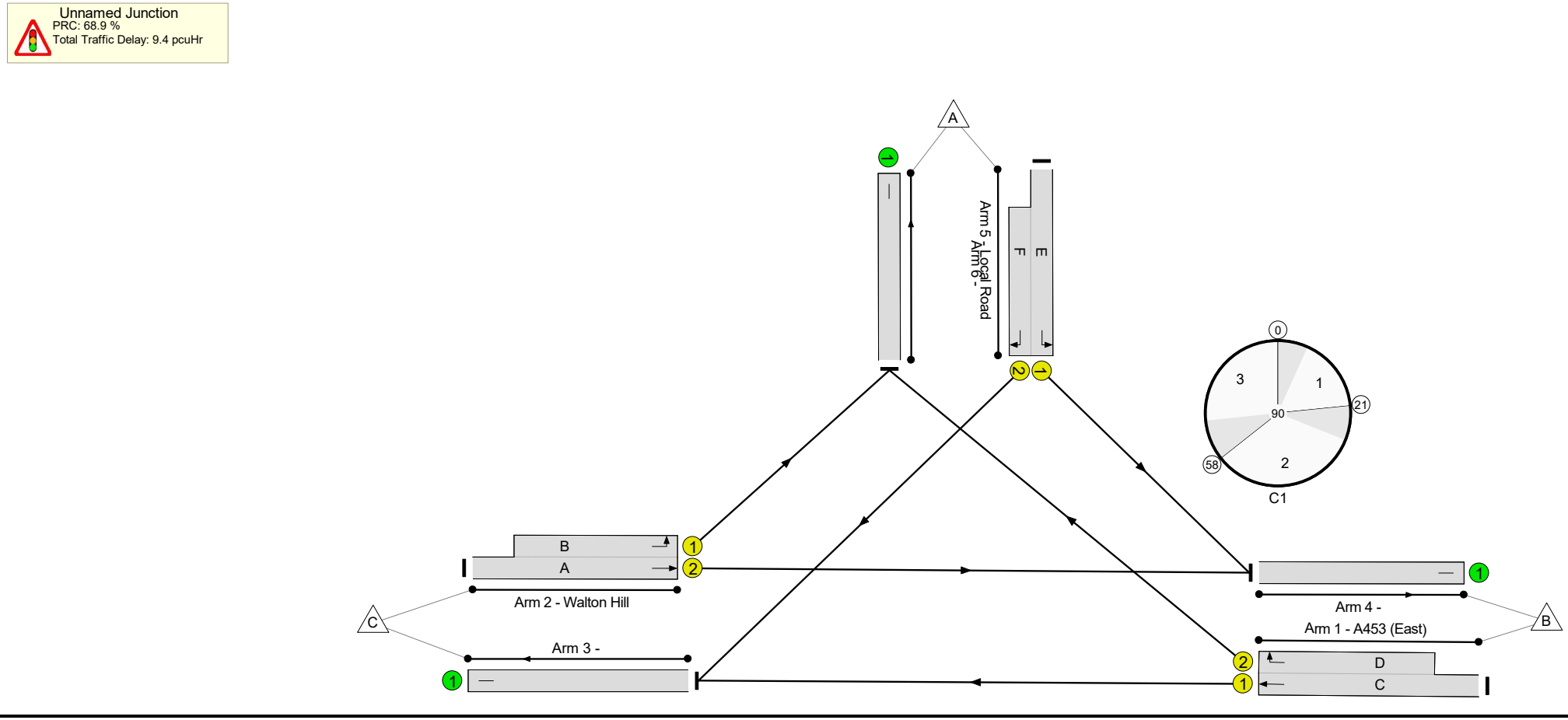
Stage	1	2	3
Duration	15	30	24
Change Point	0	21	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.3%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	52:31	-	631	1965:1828	546+650	52.8 : 52.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:45	-	414	2105:1828	374+454	50.0 : 50.0%
3/1		U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:27	-	517	1786:1828	428+542	53.3 : 53.3%
6/1		U	N/A	N/A	-		-	-	-	570	Inf	Inf	0.0%

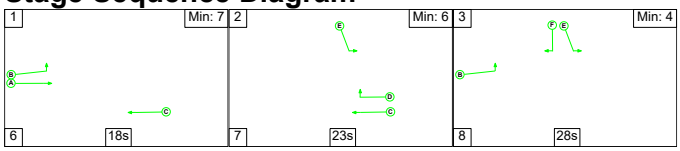
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**7.7**	**1.6**	**0.0**	**9.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**7.7**	**1.6**	**0.0**	**9.4**	**-**	**-**	**-**	**-**
1/1+1/2	631	631	-	-	-	2.9	0.6	-	3.5	19.8	6.8	0.6	7.3
2/2+2/1	414	414	-	-	-	2.5	0.5	-	3.0	26.2	4.2	0.5	4.7
3/1	577	577	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	517	517	-	-	-	2.3	0.6	-	2.9	20.2	5.9	0.6	6.4
6/1	570	570	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 68.9 Total Delay for Signalled Lanes (pcuHr): 9.37 Cycle Time (s): 90
PRC Over All Lanes (%): 68.9 Total Delay Over All Lanes(pcuHr): 9.37

Full Input Data And Results

Scenario 3: '2028 Forecast Year Without Development (AM)' (FG3: '2028 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

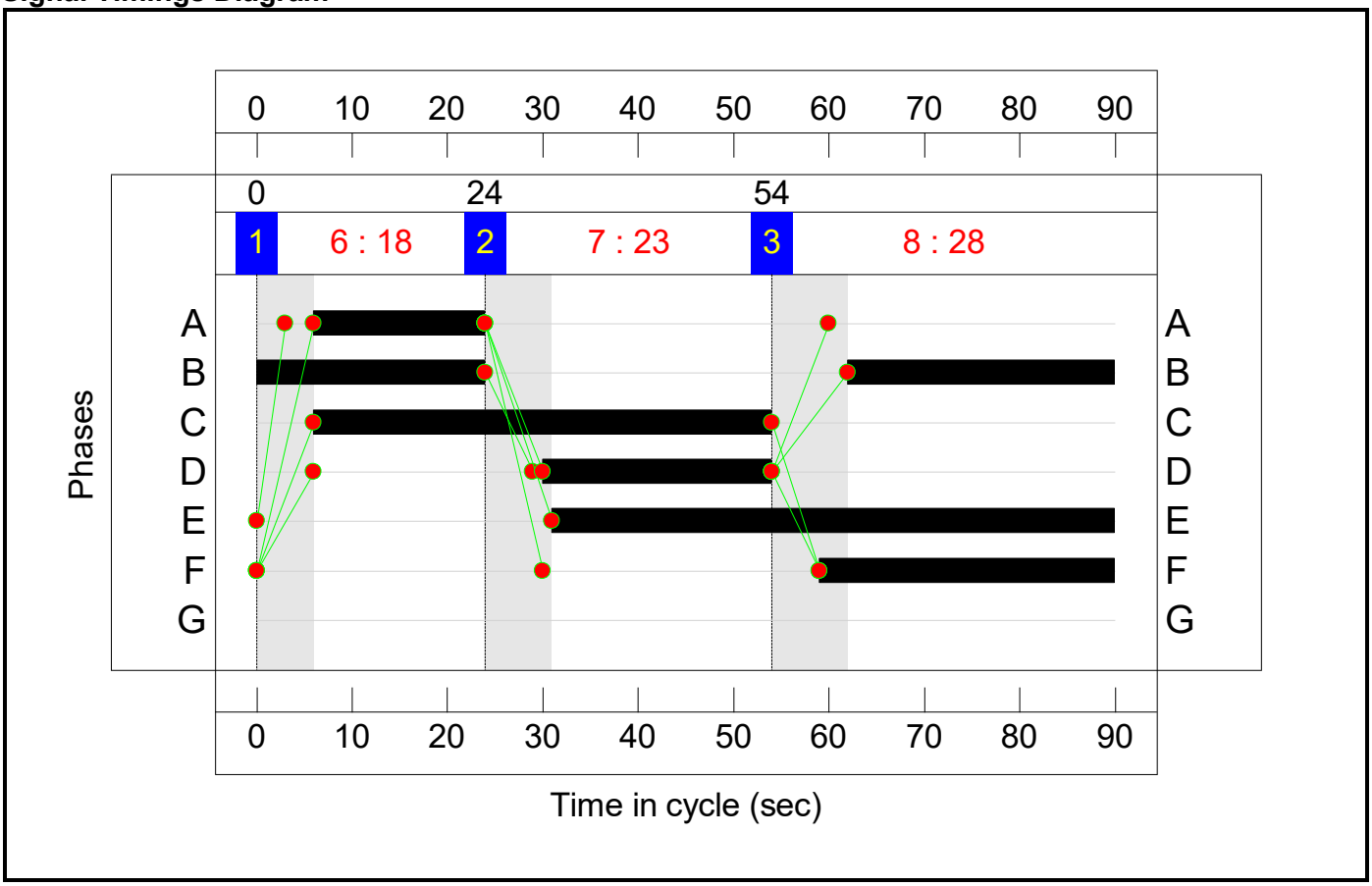
Stage Sequence Diagram



Stage Timings

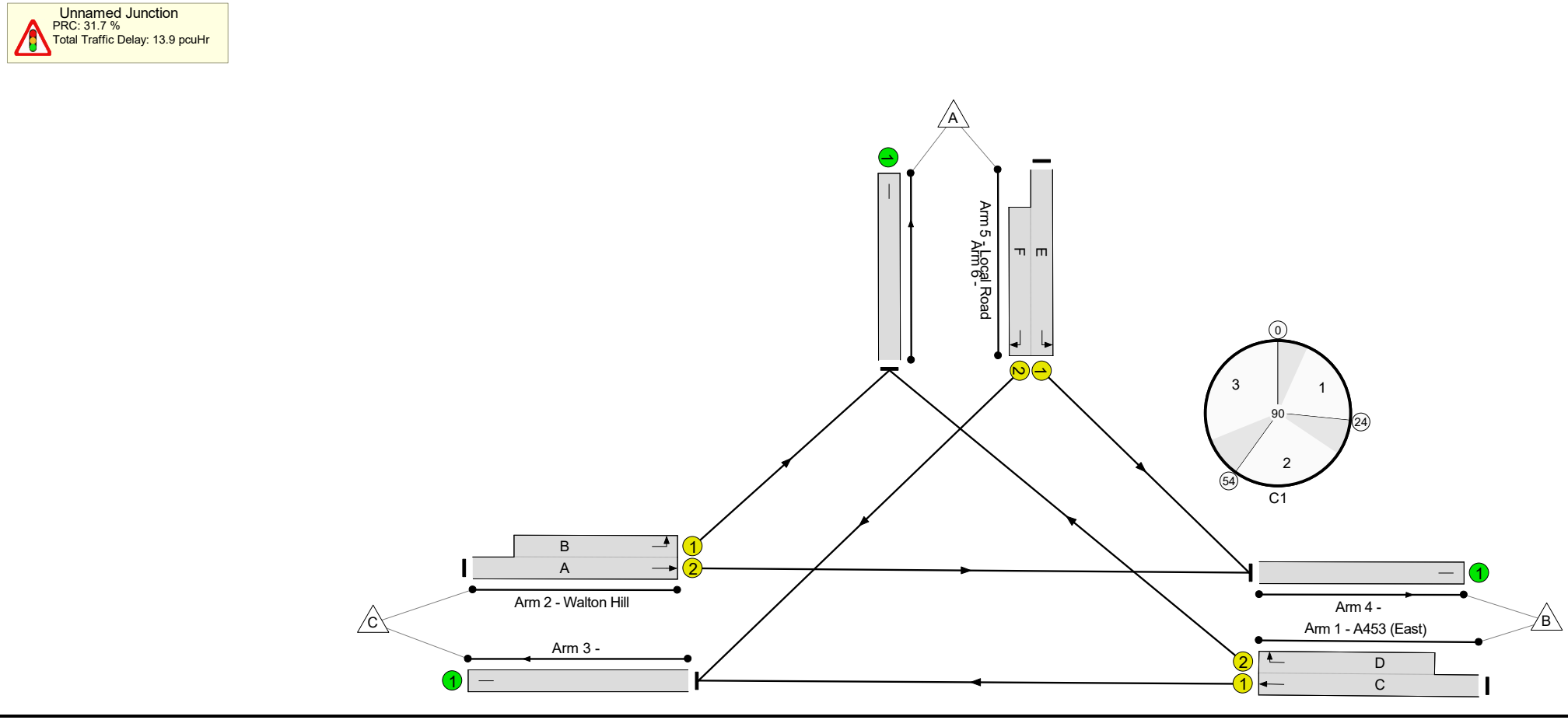
Stage	1	2	3
Duration	18	23	28
Change Point	0	24	54

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	48:24	-	599	1965:1828	369+508	68.3 : 68.3%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	18:52	-	608	2105:1828	444+475	66.2 : 66.2%
3/1		U	N/A	N/A	-		-	-	-	638	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	893	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	59:31	-	985	1786:1828	880+567	68.1 : 68.1%
6/1		U	N/A	N/A	-		-	-	-	661	Inf	Inf	0.0%

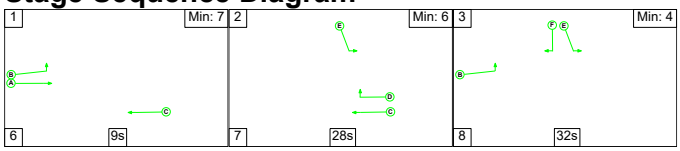
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**10.8**	**3.1**	**0.0**	**13.9**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**10.8**	**3.1**	**0.0**	**13.9**	-	-	-	-
1/1+1/2	599	599	-	-	-	3.5	1.1	-	4.6	27.7	7.7	1.1	8.8
2/2+2/1	608	608	-	-	-	3.5	1.0	-	4.4	26.2	6.7	1.0	7.7
3/1	638	638	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	893	893	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	985	985	-	-	-	3.8	1.1	-	4.9	17.7	7.8	1.1	8.9
6/1	661	661	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 31.7 Total Delay for Signalled Lanes (pcuHr): 13.90 Cycle Time (s): 90
PRC Over All Lanes (%): 31.7 Total Delay Over All Lanes(pcuHr): 13.90

Full Input Data And Results

Scenario 4: '2028 Forecast Year Without Development (PM)' (FG4: '2028 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

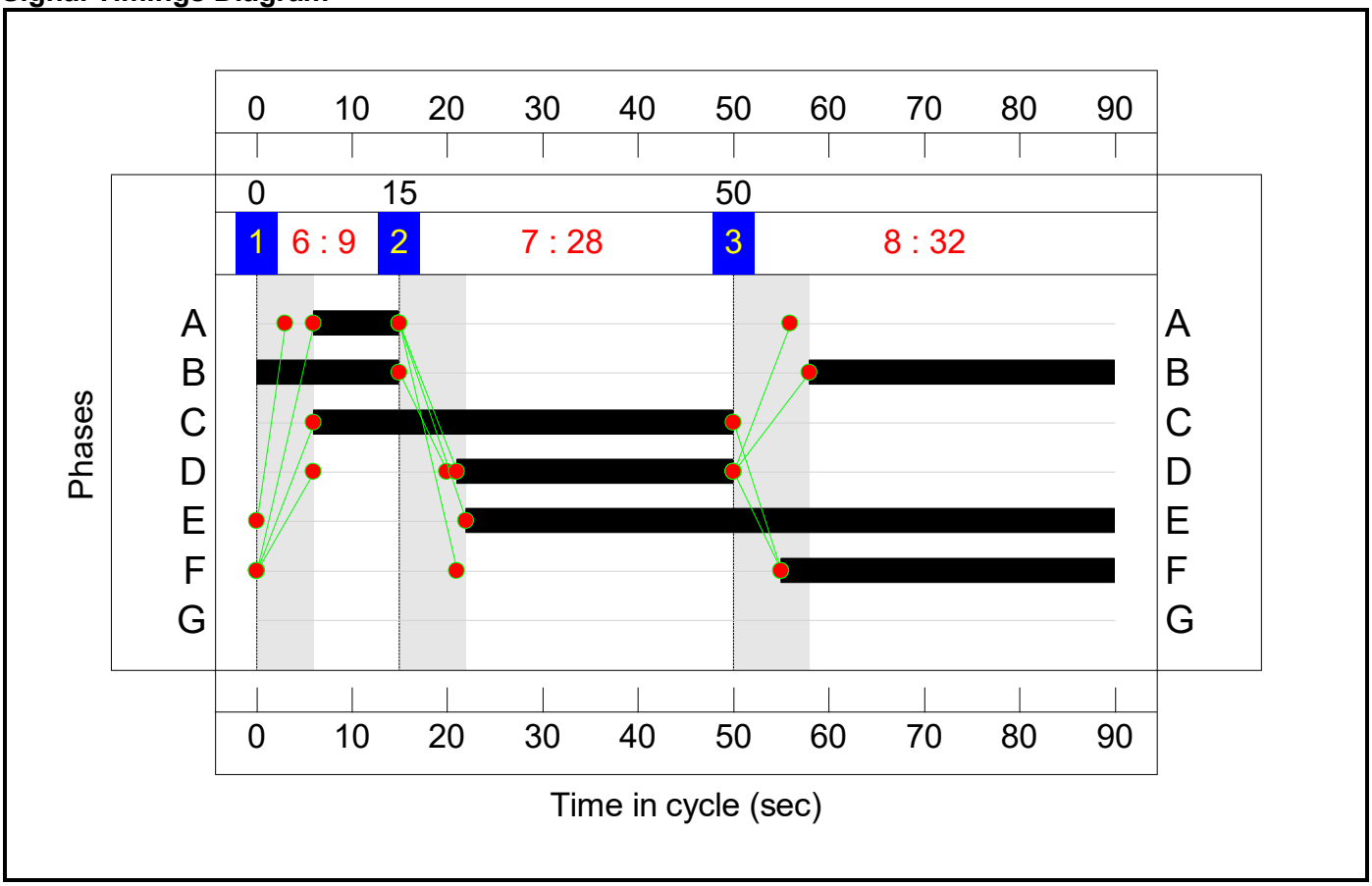
Stage Sequence Diagram



Stage Timings

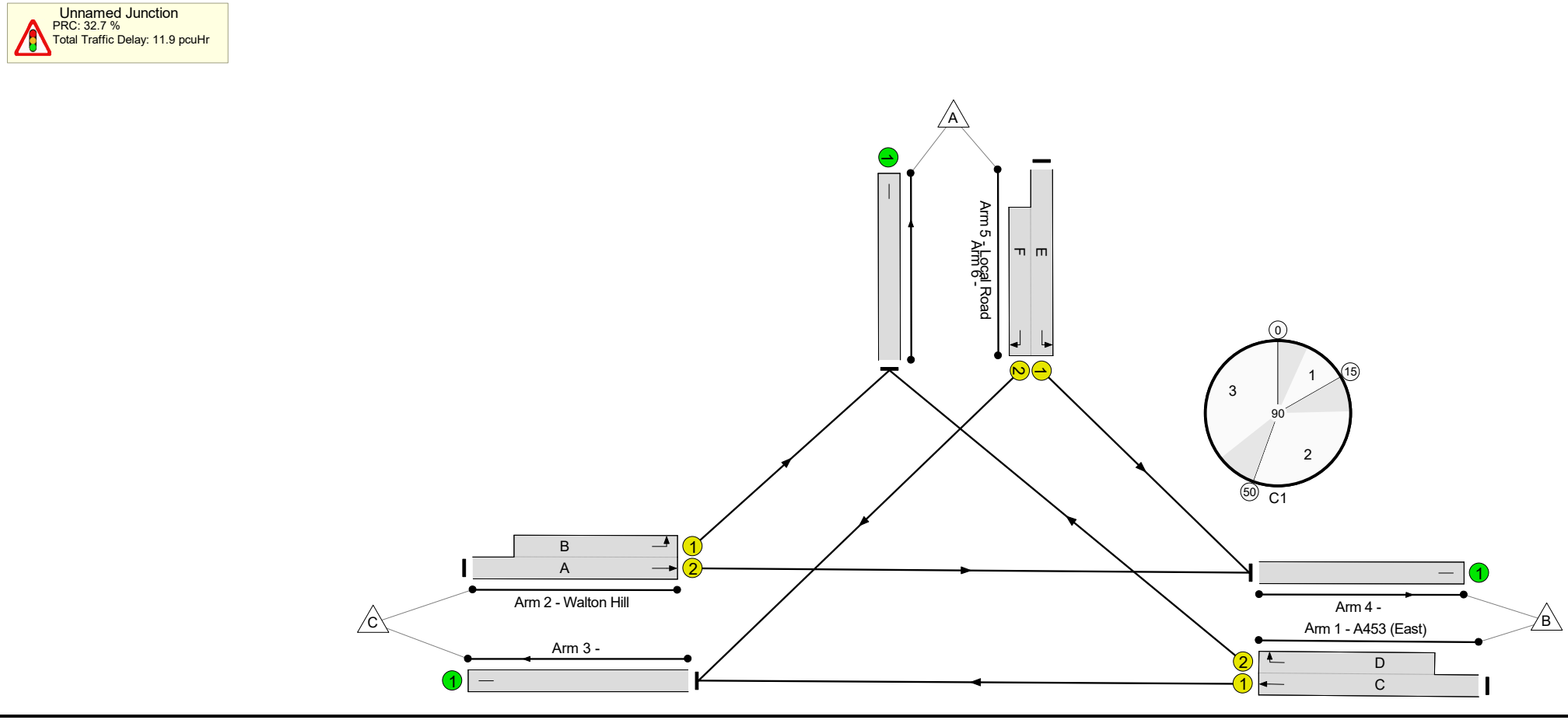
Stage	1	2	3
Duration	9	28	32
Change Point	0	15	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.8%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	44:29	-	718	1965:1828	450+609	67.8 : 67.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	9:47	-	333	2105:1828	234+300	62.4 : 62.4%
3/1		U	N/A	N/A	-		-	-	-	731	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	68:35	-	791	1786:1828	538+628	67.8 : 67.8%
6/1		U	N/A	N/A	-		-	-	-	600	Inf	Inf	0.0%

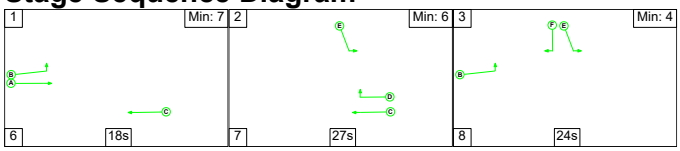
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.0**	**2.9**	**0.0**	**11.9**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.0**	**2.9**	**0.0**	**11.9**	-	-	-	-
1/1+1/2	718	718	-	-	-	4.1	1.0	-	5.1	25.8	8.8	1.0	9.9
2/2+2/1	333	333	-	-	-	2.1	0.8	-	2.9	31.8	3.4	0.8	4.3
3/1	731	731	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	791	791	-	-	-	2.8	1.0	-	3.9	17.6	8.3	1.0	9.3
6/1	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 32.7 Total Delay for Signalled Lanes (pcuHr): 11.94 Cycle Time (s): 90
PRC Over All Lanes (%): 32.7 Total Delay Over All Lanes(pcuHr): 11.94

Full Input Data And Results

Scenario 5: '2028 Forecast Year With Development (AM)' (FG5: '2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

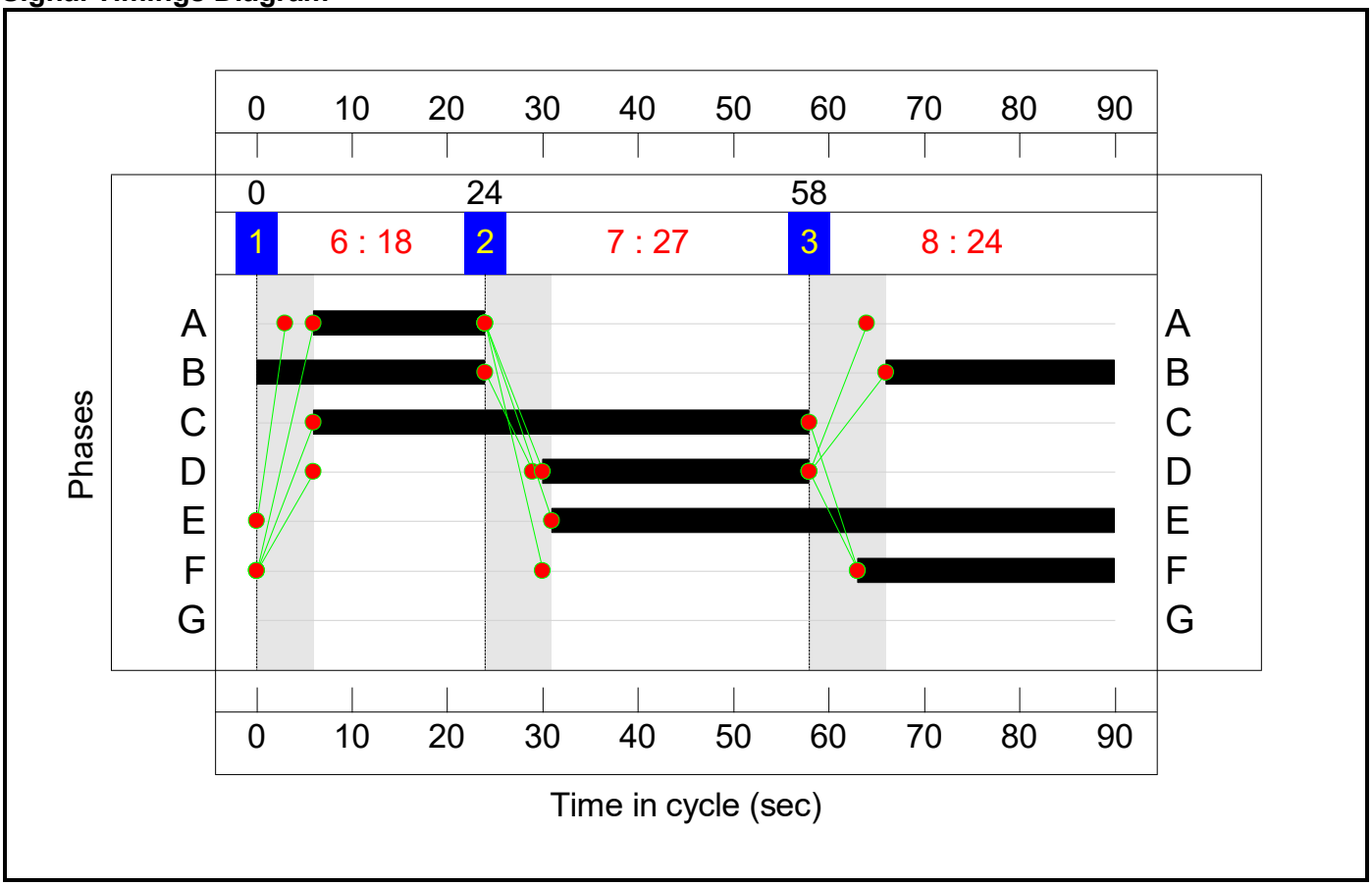
Stage Sequence Diagram



Stage Timings

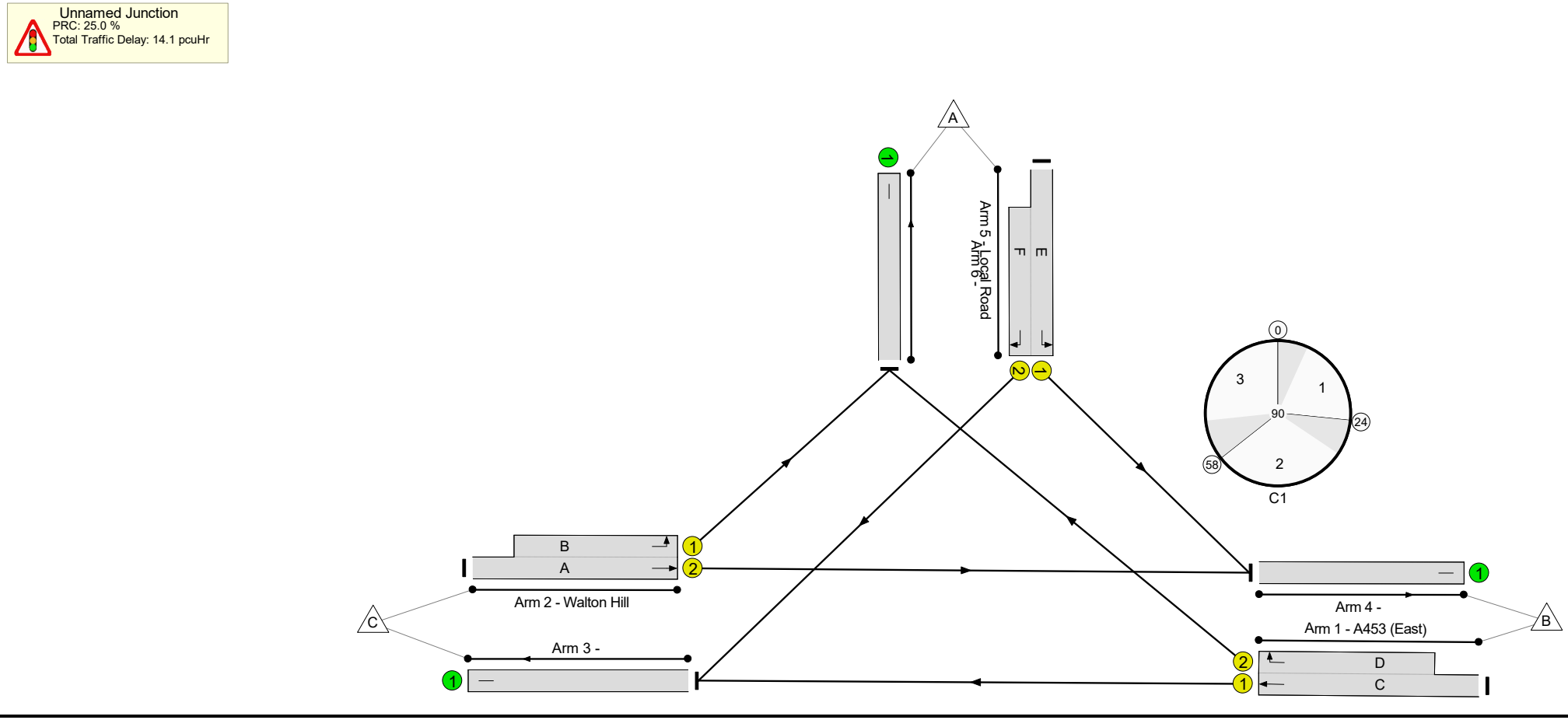
Stage	1	2	3
Duration	18	27	24
Change Point	0	24	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	52:28	-	530	1965:1828	393+589	54.0 : 54.0%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	18:48	-	634	2105:1828	444+442	71.6 : 71.6%
3/1		U	N/A	N/A	-		-	-	-	590	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	1009	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	59:27	-	1069	1786:1828	960+525	72.0 : 72.0%
6/1		U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%

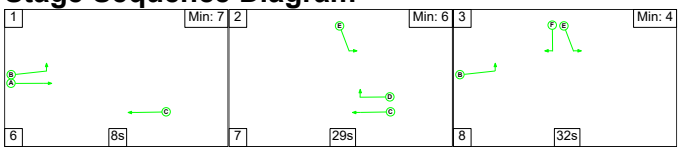
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.0**	**3.1**	**0.0**	**14.1**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.0**	**3.1**	**0.0**	**14.1**	-	-	-	-
1/1+1/2	530	530	-	-	-	2.7	0.6	-	3.3	22.4	6.4	0.6	7.0
2/2+2/1	634	634	-	-	-	3.9	1.2	-	5.2	29.3	7.3	1.2	8.6
3/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	1009	1009	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1069	1069	-	-	-	4.4	1.3	-	5.7	19.1	9.2	1.3	10.5
6/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 25.0 Total Delay for Signalled Lanes (pcuHr): 14.12 Cycle Time (s): 90
PRC Over All Lanes (%): 25.0 Total Delay Over All Lanes(pcuHr): 14.12

Full Input Data And Results

Scenario 6: '2028 Forecast Year With Development (PM)' (FG6: '2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

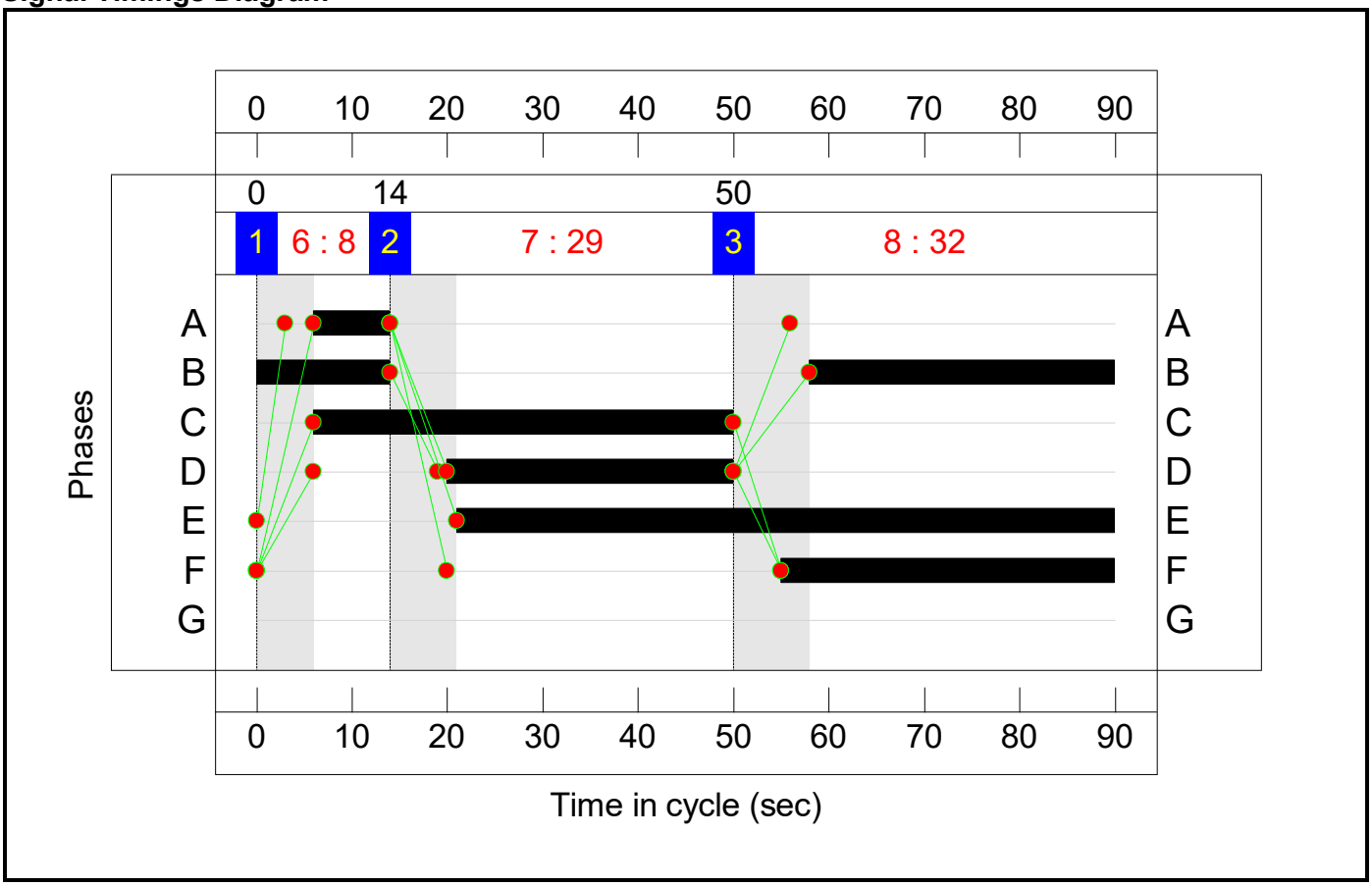
Stage Sequence Diagram



Stage Timings

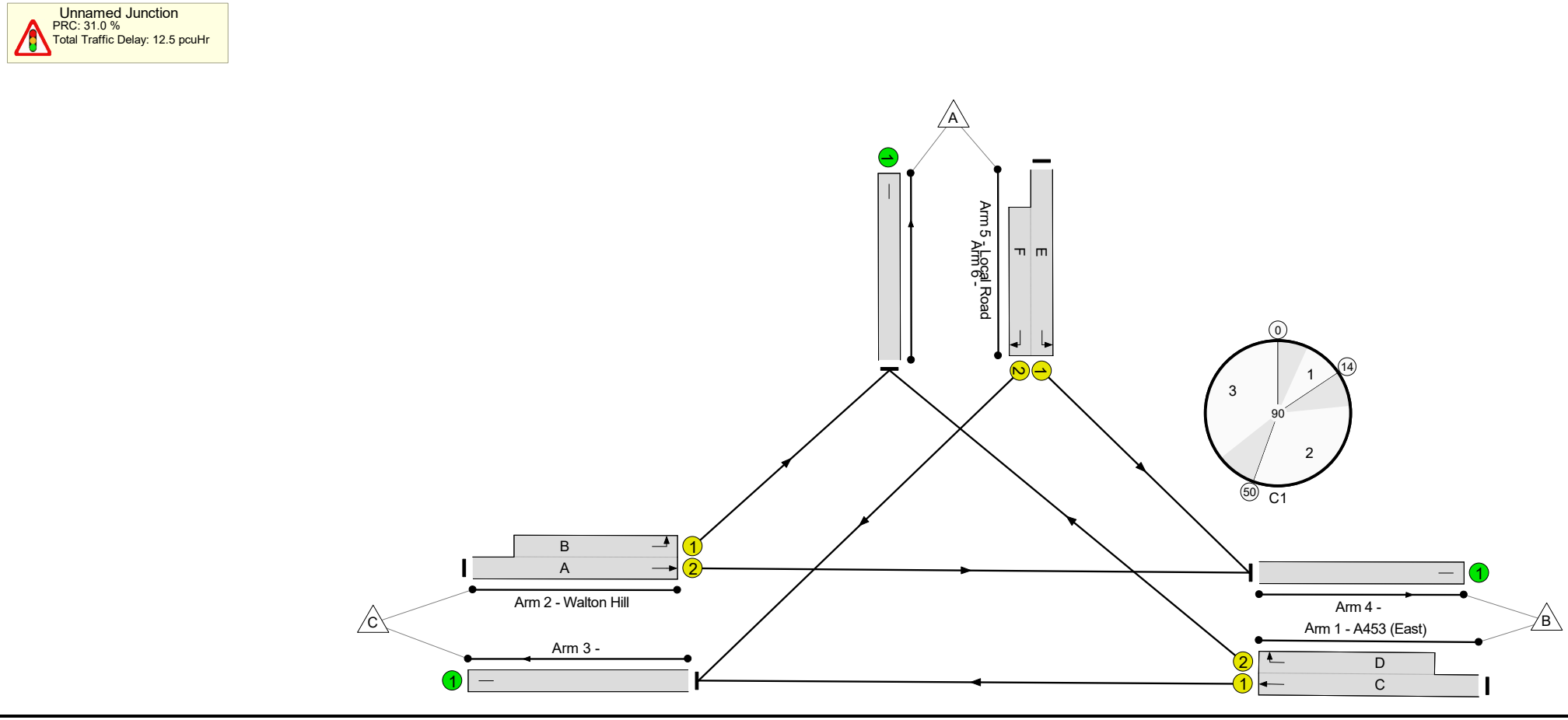
Stage	1	2	3
Duration	8	29	32
Change Point	0	14	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.7%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.7%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	44:30	-	769	1965:1828	491+630	68.6 : 68.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	8:46	-	322	2105:1828	210+267	67.5 : 67.5%
3/1		U	N/A	N/A	-		-	-	-	771	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	69:35	-	782	1786:1828	506+632	68.7 : 68.7%
6/1		U	N/A	N/A	-		-	-	-	612	Inf	Inf	0.0%

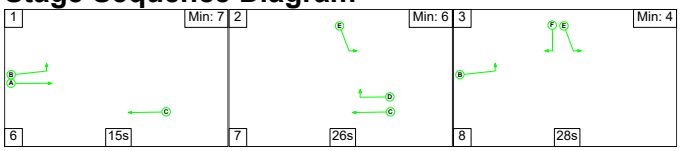
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**9.3**	**3.2**	**0.0**	**12.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**9.3**	**3.2**	**0.0**	**12.5**	**-**	**-**	**-**	**-**
1/1+1/2	769	769	-	-	-	4.3	1.1	-	5.4	25.3	9.2	1.1	10.3
2/2+2/1	322	322	-	-	-	2.1	1.0	-	3.1	35.1	3.4	1.0	4.4
3/1	771	771	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	782	782	-	-	-	2.8	1.1	-	3.9	18.0	8.4	1.1	9.5
6/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 31.0 Total Delay for Signalled Lanes (pcuHr): 12.45 Cycle Time (s): 90
PRC Over All Lanes (%): 31.0 Total Delay Over All Lanes(pcuHr): 12.45

Full Input Data And Results

Scenario 7: '2038 Forecast Year Without Development (AM)' (FG7: '2038 Forecast Year Without Development (AM)', Plan 1: 'Network Control Plan 1')

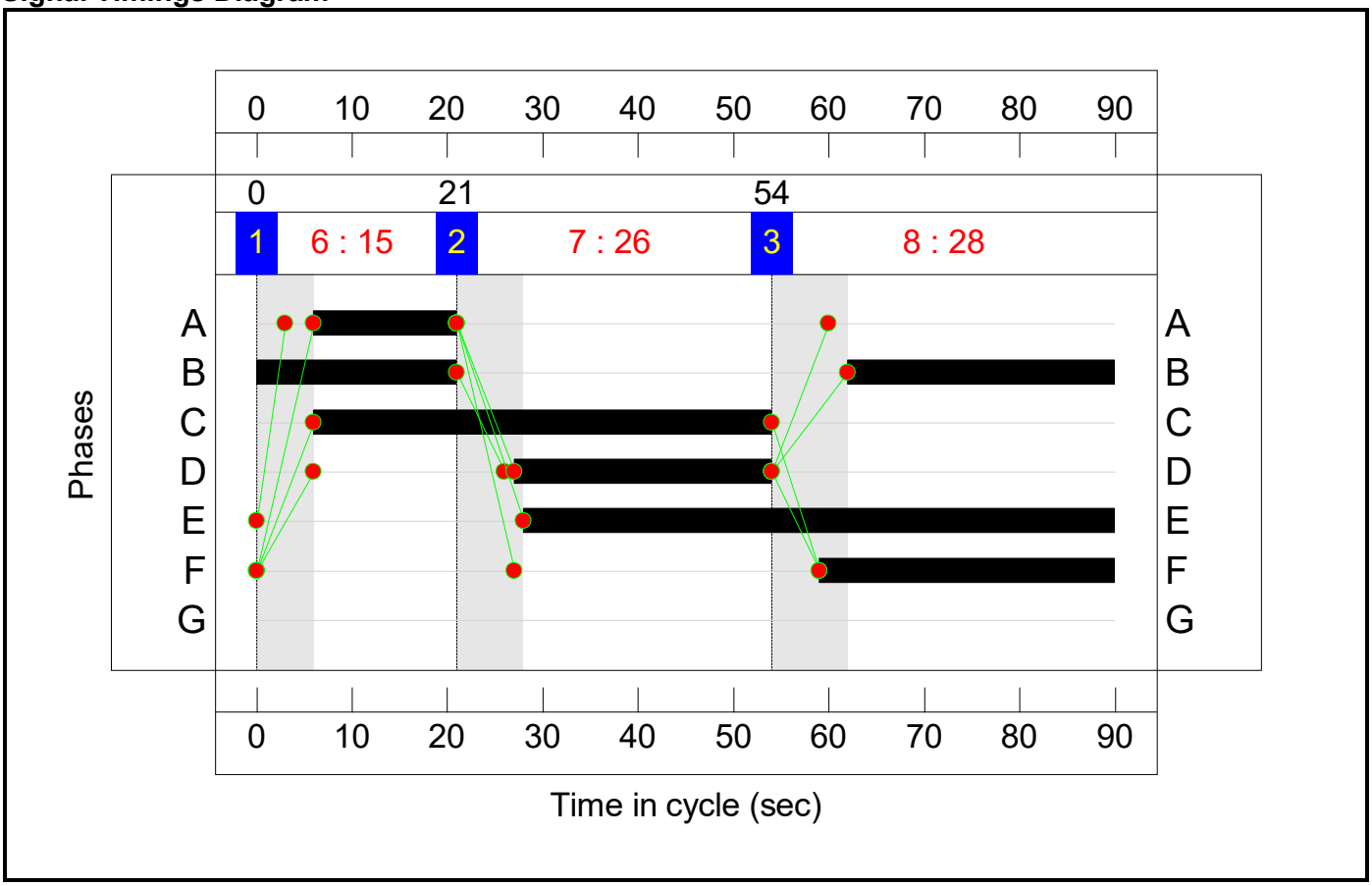
Stage Sequence Diagram



Stage Timings

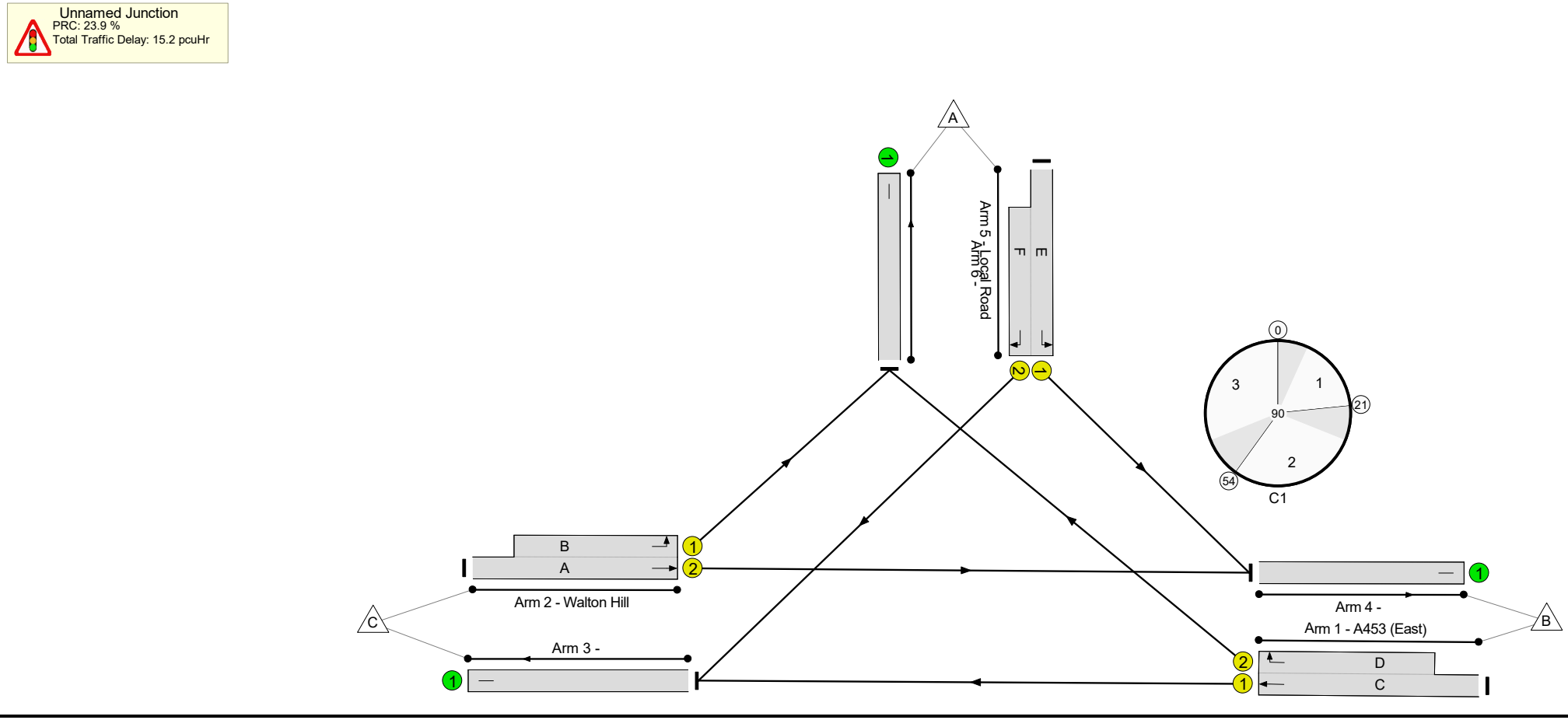
Stage	1	2	3
Duration	15	26	28
Change Point	0	21	54

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.6%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	48:27	-	758	1965:1828	488+569	71.7 : 71.7%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	15:49	-	575	2105:1828	374+420	72.4 : 72.4%
3/1		U	N/A	N/A	-		-	-	-	767	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	781	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	62:31	-	927	1786:1828	702+574	72.6 : 72.6%
6/1		U	N/A	N/A	-		-	-	-	712	Inf	Inf	0.0%

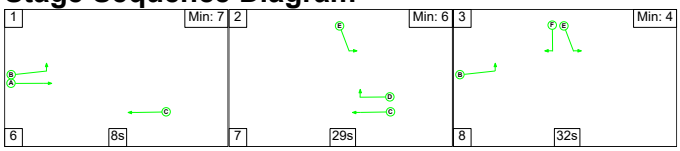
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.4**	**3.9**	**0.0**	**15.2**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.4**	**3.9**	**0.0**	**15.2**	-	-	-	-
1/1+1/2	758	758	-	-	-	4.2	1.3	-	5.5	26.0	9.0	1.3	10.2
2/2+2/1	575	575	-	-	-	3.5	1.3	-	4.8	30.2	6.3	1.3	7.6
3/1	767	767	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	781	781	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	927	927	-	-	-	3.6	1.3	-	4.9	19.1	8.7	1.3	10.0
6/1	712	712	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 23.9 Total Delay for Signalled Lanes (pcuHr): 15.23 Cycle Time (s): 90
PRC Over All Lanes (%): 23.9 Total Delay Over All Lanes(pcuHr): 15.23

Full Input Data And Results

Scenario 8: '2038 Forecast Year Without Development (PM)' (FG8: '2038 Forecast Year Without Development (PM)', Plan 1: 'Network Control Plan 1')

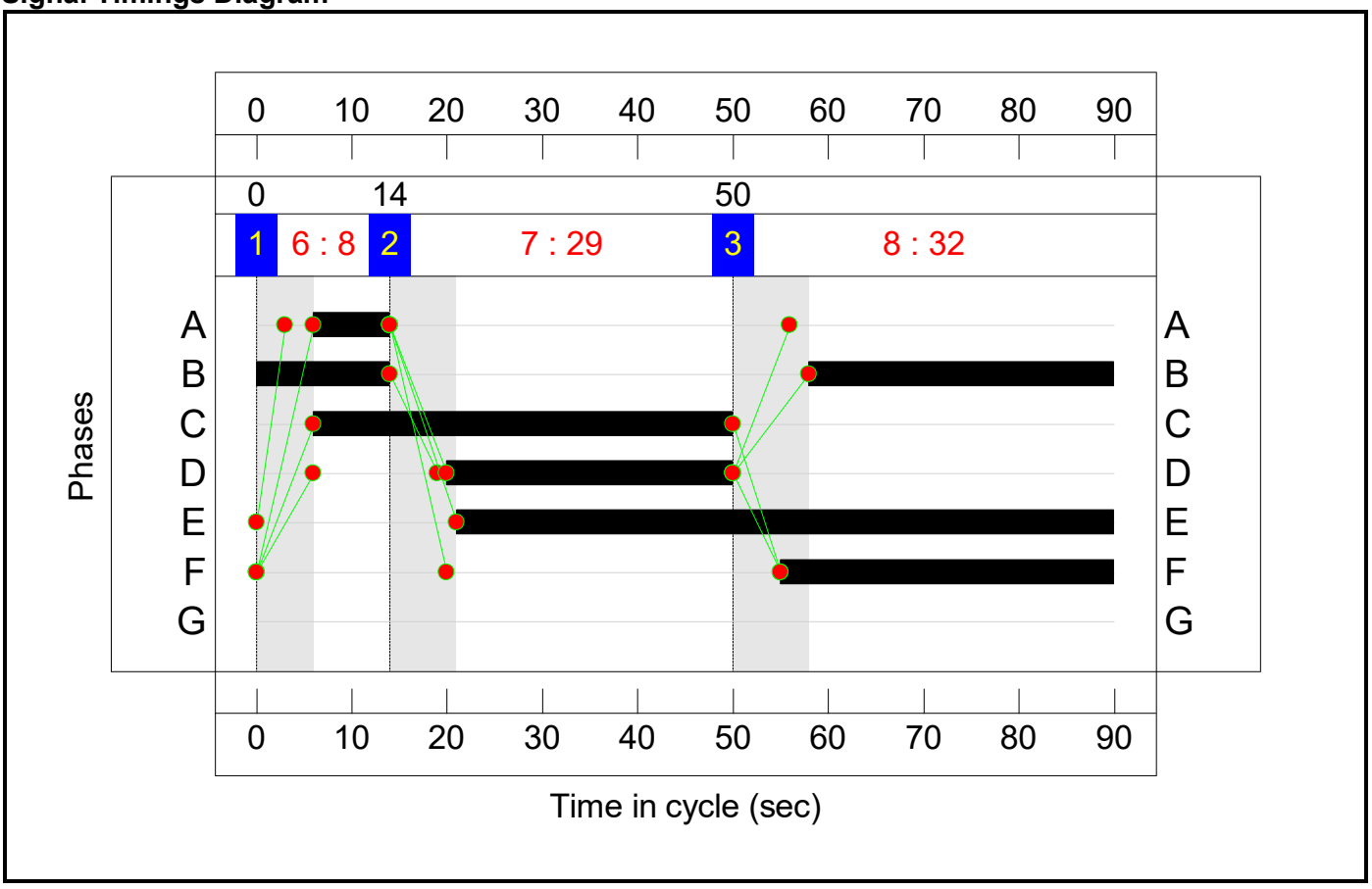
Stage Sequence Diagram



Stage Timings

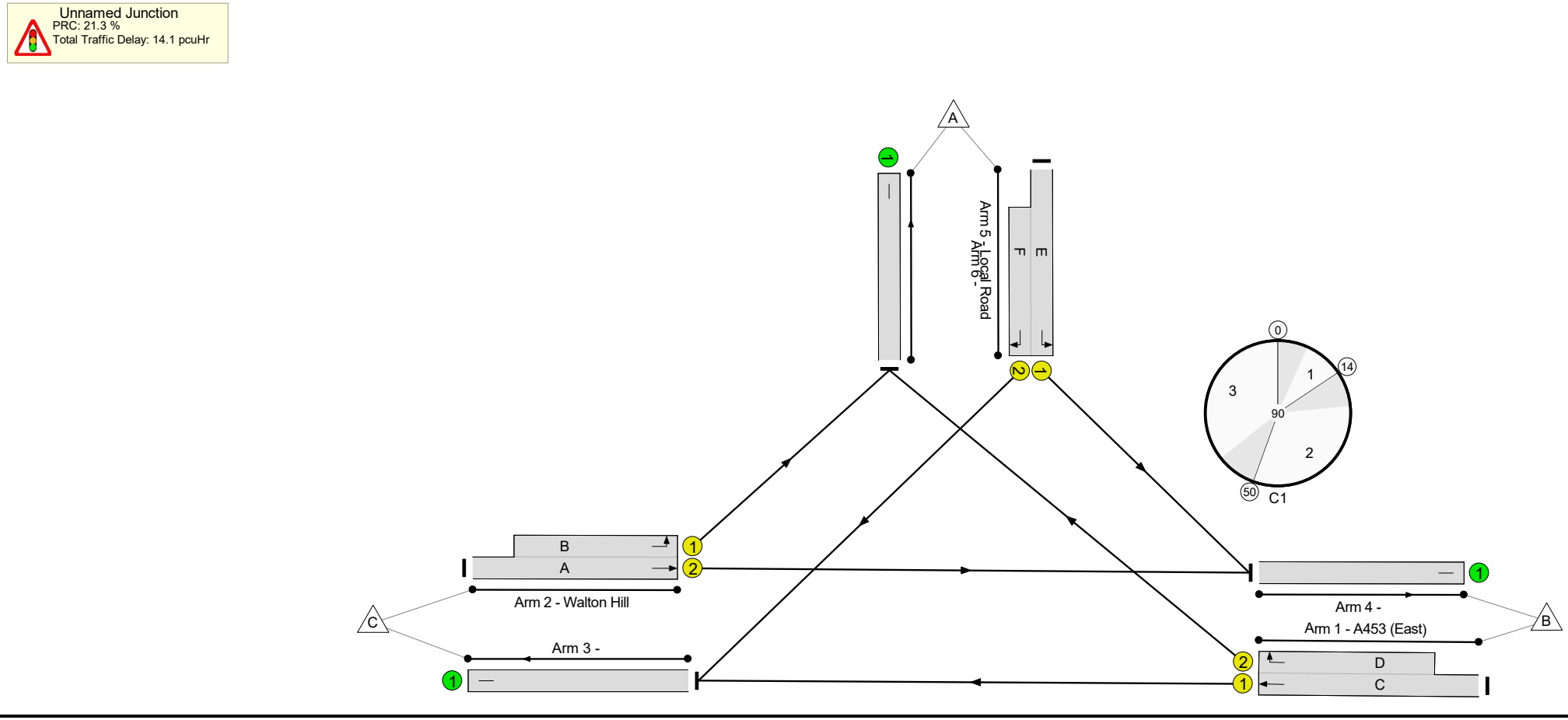
Stage	1	2	3
Duration	8	29	32
Change Point	0	14	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.2%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	44:30	-	931	1965:1828	642+630	73.2 : 73.2%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	8:46	-	303	2105:1828	210+248	66.0 : 66.0%
3/1		U	N/A	N/A	-		-	-	-	945	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	458	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	69:35	-	794	1786:1828	430+640	74.2 : 74.2%
6/1		U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%

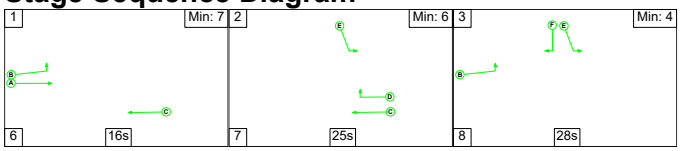
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**10.4**	**3.7**	**0.0**	**14.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**10.4**	**3.7**	**0.0**	**14.1**	**-**	**-**	**-**	**-**
1/1+1/2	931	931	-	-	-	5.2	1.4	-	6.6	25.5	10.0	1.4	11.3
2/2+2/1	303	303	-	-	-	2.0	1.0	-	3.0	35.4	3.3	1.0	4.3
3/1	945	945	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	794	794	-	-	-	3.1	1.4	-	4.5	20.6	9.5	1.4	10.9
6/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 21.3 Total Delay for Signalled Lanes (pcuHr): 14.13 Cycle Time (s): 90
PRC Over All Lanes (%): 21.3 Total Delay Over All Lanes(pcuHr): 14.13

Full Input Data And Results

Scenario 9: '2038 Forecast Year With Development (AM)' (FG9: '2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

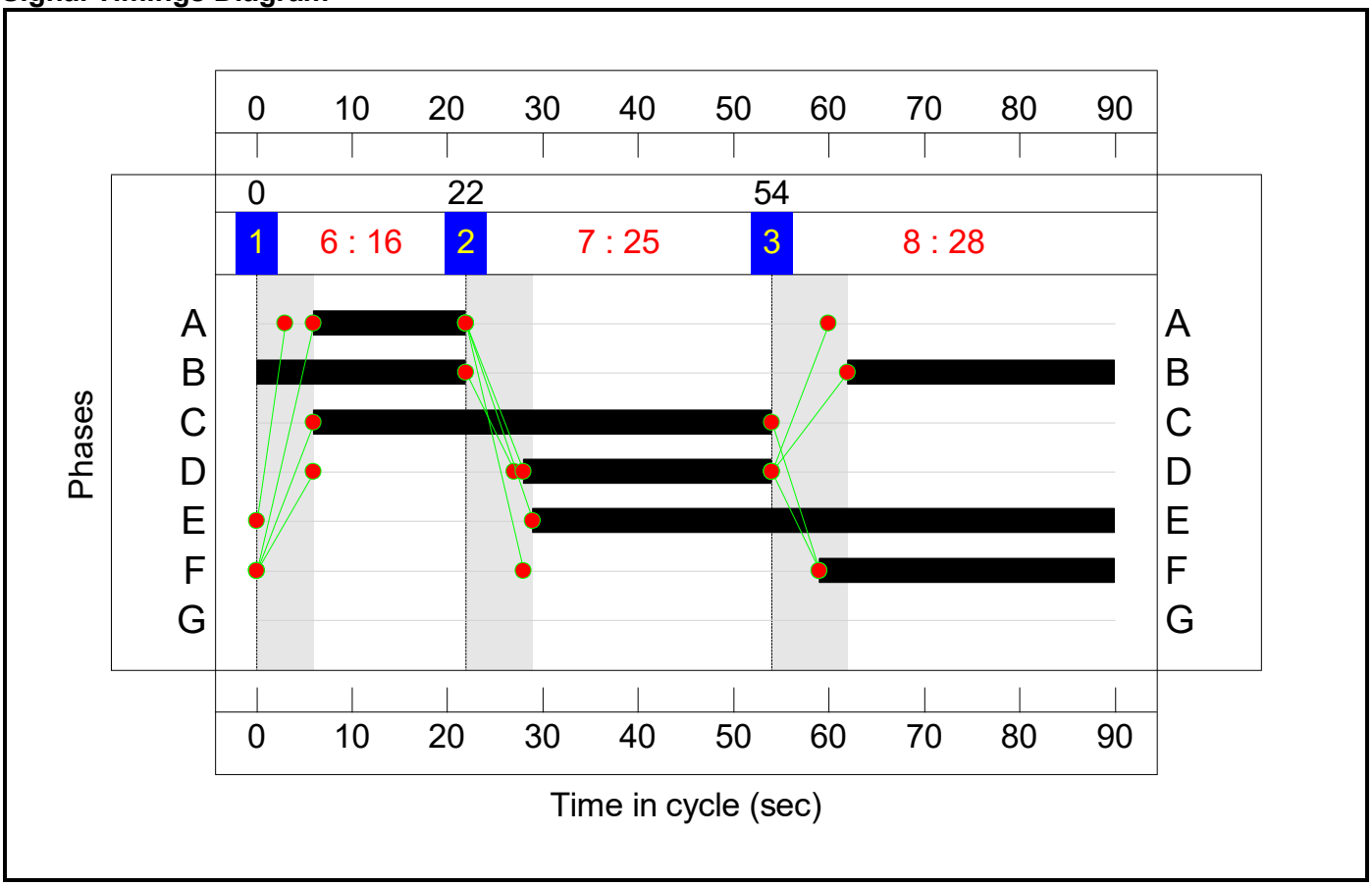
Stage Sequence Diagram



Stage Timings

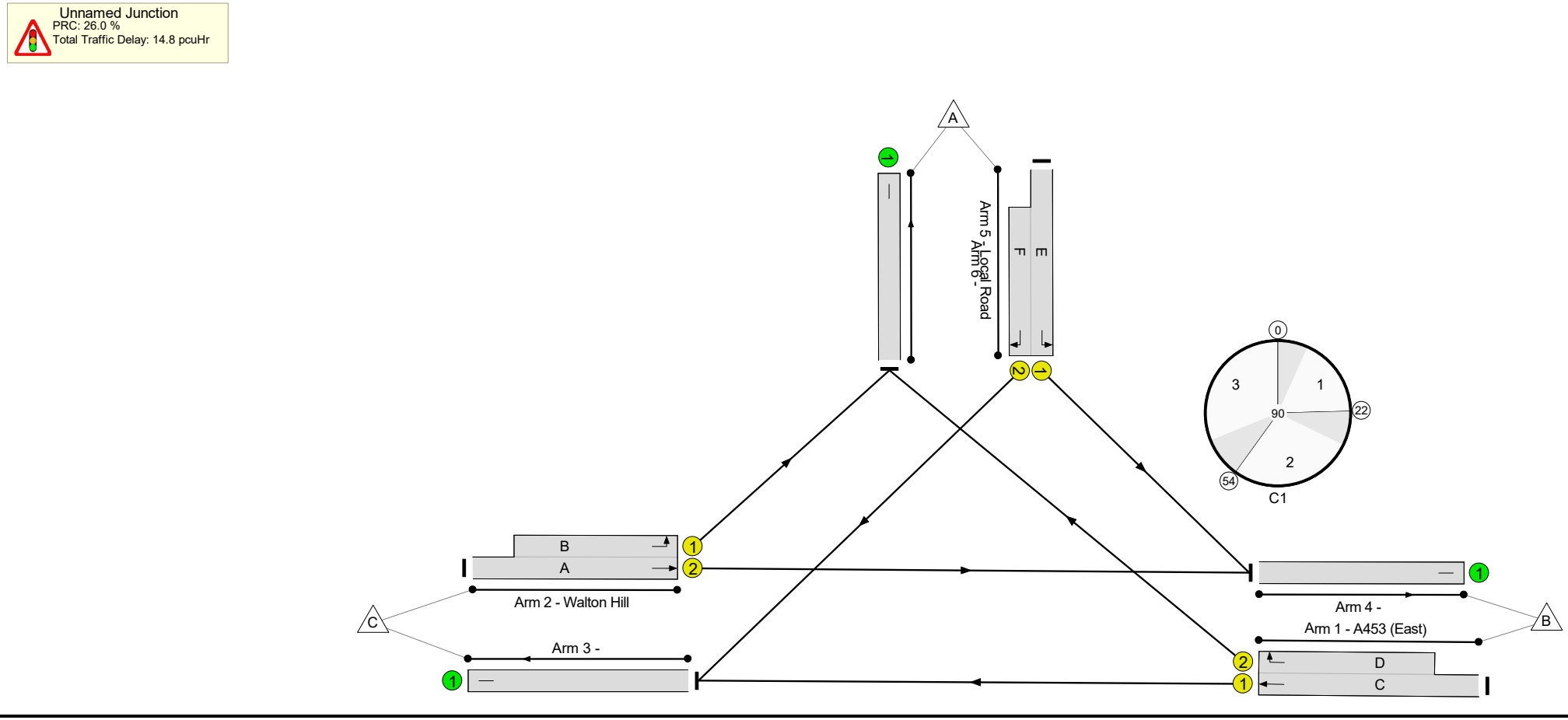
Stage	1	2	3
Duration	16	25	28
Change Point	0	22	54

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.4%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.4%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	48:26	-	680	1965:1828	415+548	70.6 : 70.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	16:50	-	610	2105:1828	398+456	71.4 : 71.4%
3/1		U	N/A	N/A	-		-	-	-	696	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	61:31	-	942	1786:1828	764+571	70.5 : 70.5%
6/1		U	N/A	N/A	-		-	-	-	713	Inf	Inf	0.0%

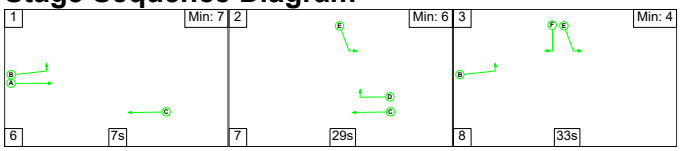
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.2**	**3.6**	**0.0**	**14.8**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.2**	**3.6**	**0.0**	**14.8**	-	-	-	-
1/1+1/2	680	680	-	-	-	3.9	1.2	-	5.1	26.9	8.5	1.2	9.7
2/2+2/1	610	610	-	-	-	3.6	1.2	-	4.9	28.7	6.6	1.2	7.9
3/1	696	696	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	942	942	-	-	-	3.6	1.2	-	4.8	18.4	8.3	1.2	9.5
6/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.0 Total Delay for Signalled Lanes (pcuHr): 14.77 Cycle Time (s): 90
PRC Over All Lanes (%): 26.0 Total Delay Over All Lanes(pcuHr): 14.77

Full Input Data And Results

Scenario 10: '2038 Forecast Year With Development (PM)' (FG10: '2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

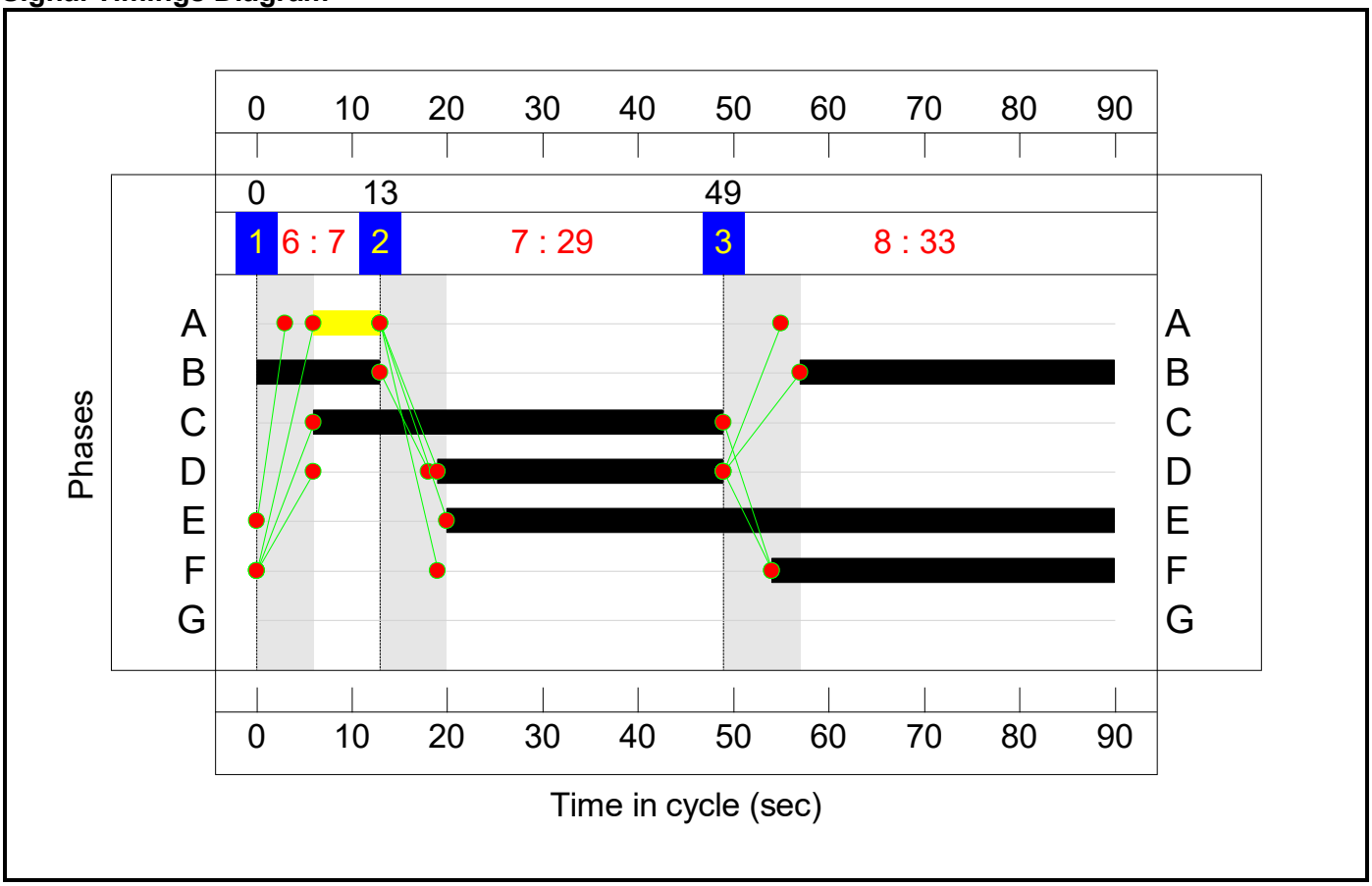
Stage Sequence Diagram



Stage Timings

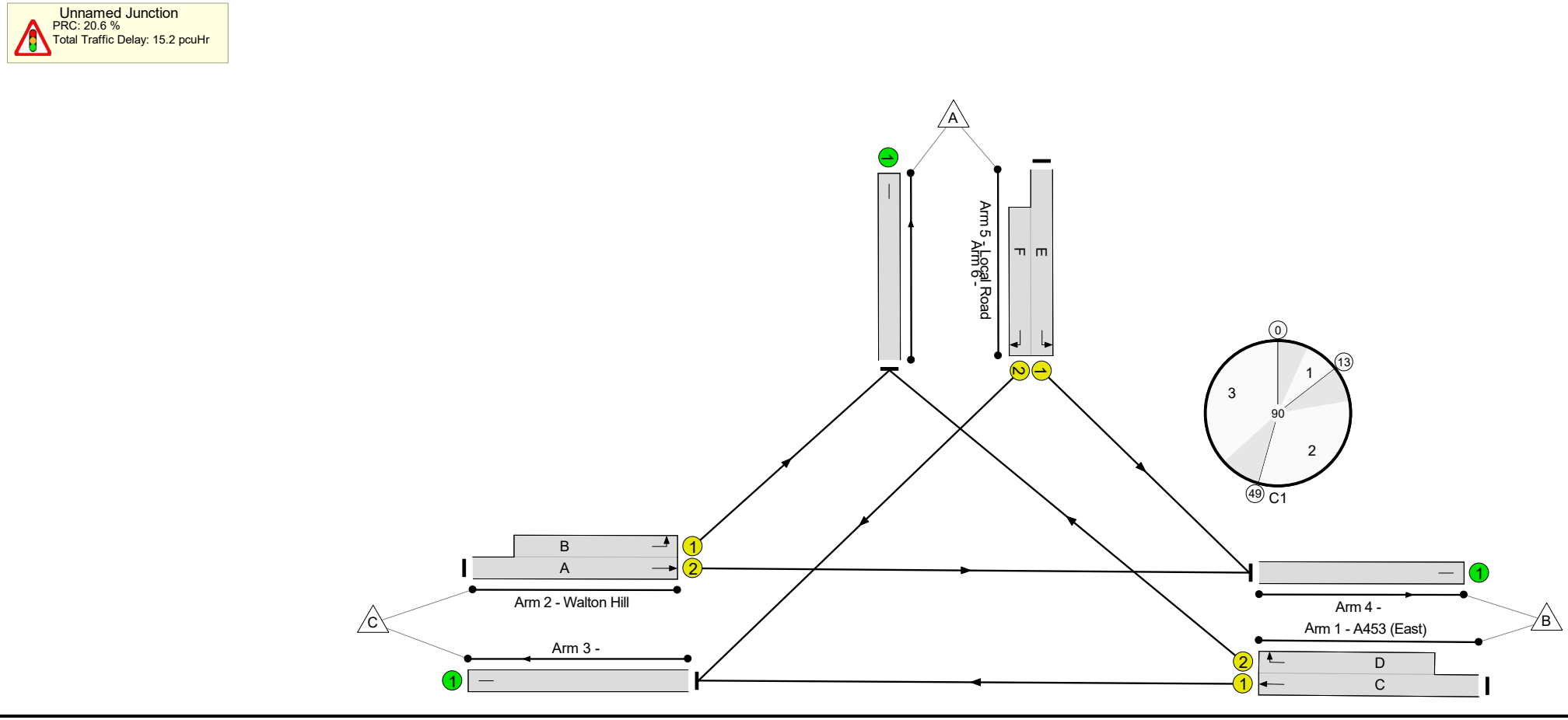
Stage	1	2	3
Duration	7	29	33
Change Point	0	13	49

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.6%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**74.6%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	43:30	-	1023	1965:1828	751+630	73.6 : 74.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	7:46	-	304	2105:1828	187+225	73.8 : 73.8%
3/1		U	N/A	N/A	-		-	-	-	1041	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	70:36	-	763	1786:1828	373+662	73.7 : 73.7%
6/1		U	N/A	N/A	-		-	-	-	636	Inf	Inf	0.0%

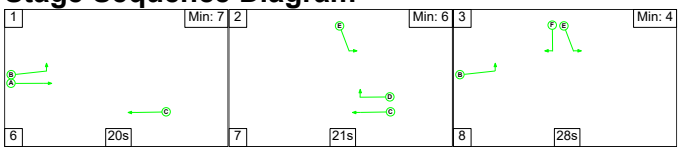
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**11.0**	**4.2**	**0.0**	**15.2**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**11.0**	**4.2**	**0.0**	**15.2**	**-**	**-**	**-**	**-**
1/1+1/2	1023	1023	-	-	-	5.9	1.4	-	7.3	25.8	10.3	1.4	11.7
2/2+2/1	304	304	-	-	-	2.1	1.4	-	3.4	40.6	3.3	1.4	4.7
3/1	1041	1041	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	763	763	-	-	-	3.1	1.4	-	4.5	21.0	9.8	1.4	11.2
6/1	636	636	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 20.6 Total Delay for Signalled Lanes (pcuHr): 15.21 Cycle Time (s): 90
PRC Over All Lanes (%): 20.6 Total Delay Over All Lanes(pcuHr): 15.21

Full Input Data And Results

Scenario 11: '2b 2028 Forecast Year With Development (AM)' (FG11: '2b 2028 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

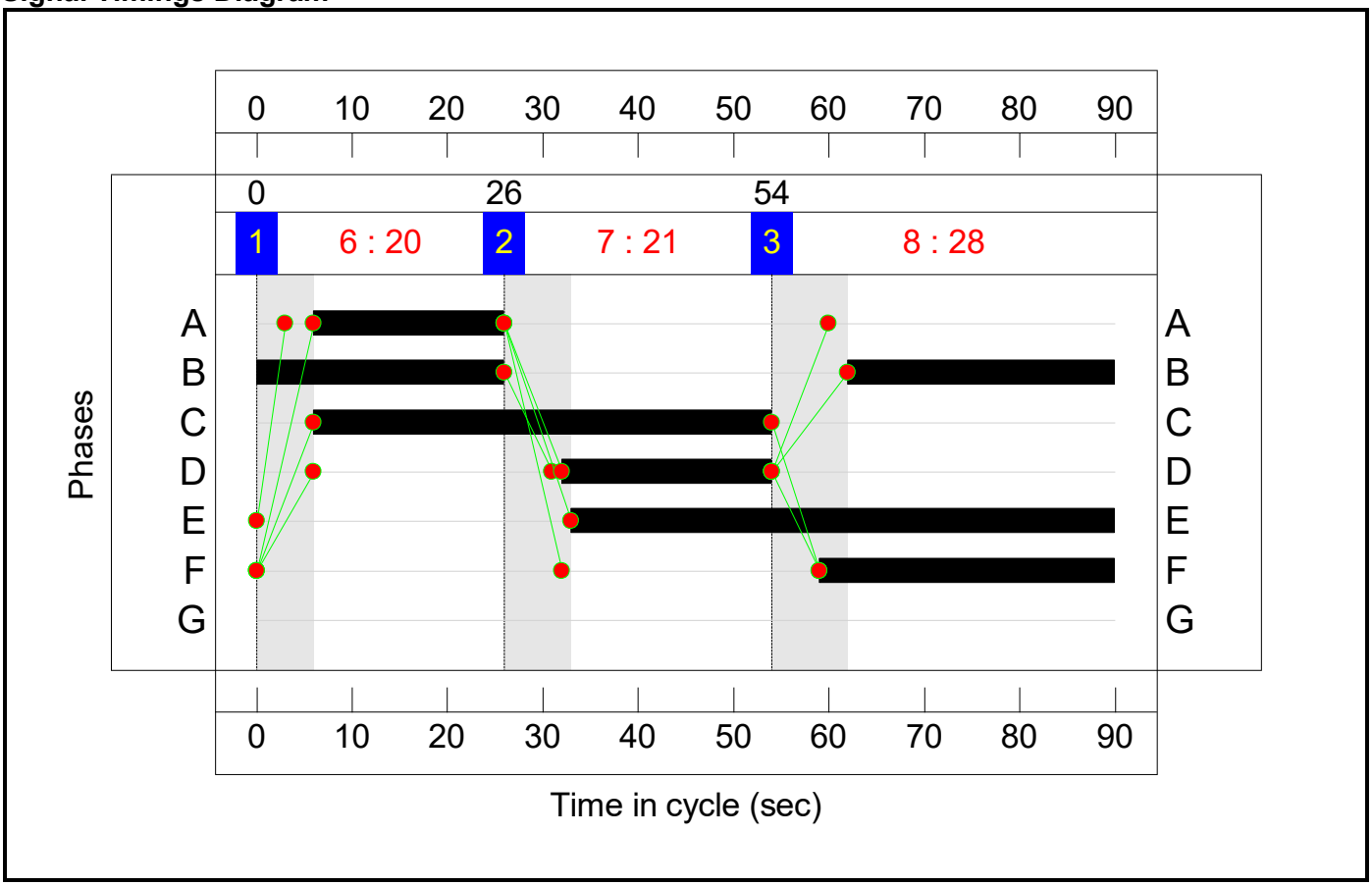
Stage Sequence Diagram



Stage Timings

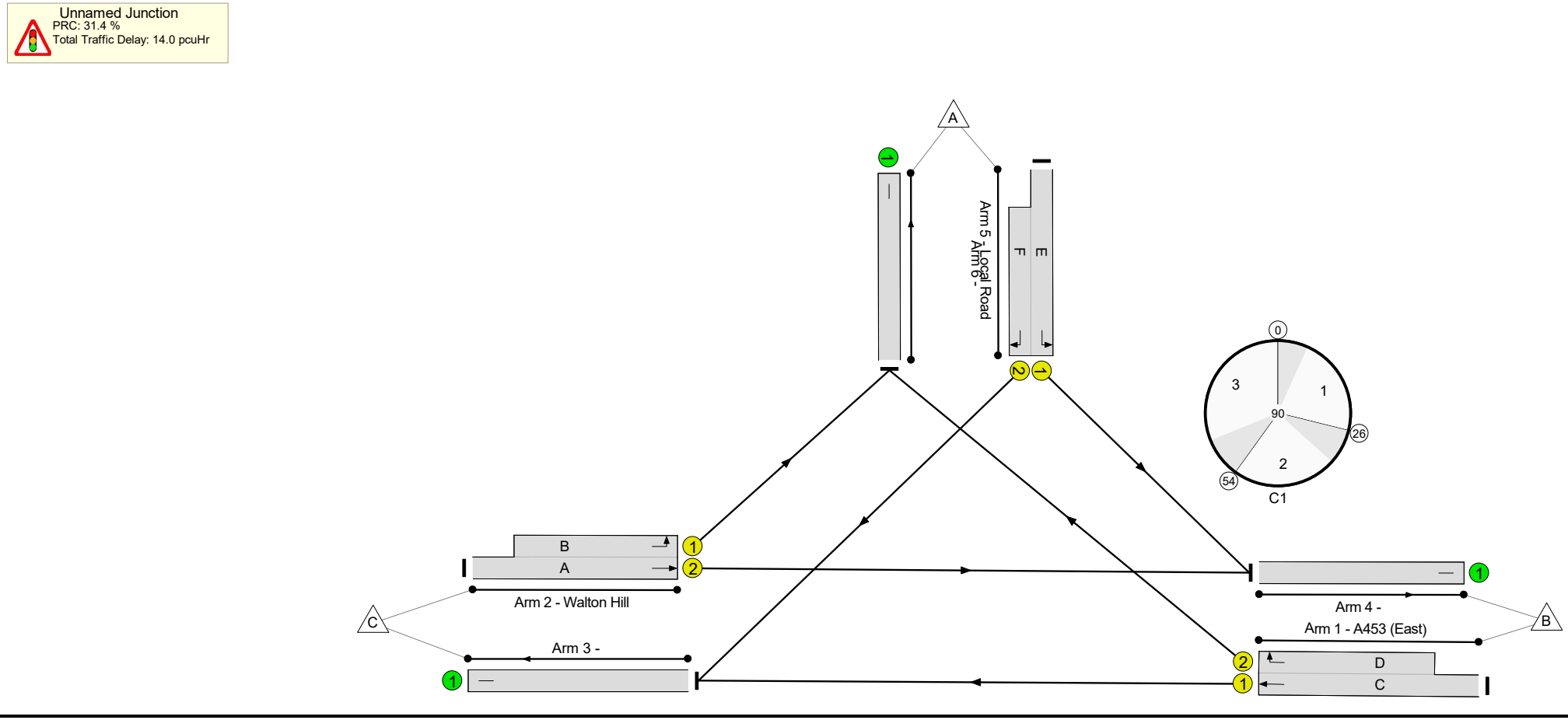
Stage	1	2	3
Duration	20	21	28
Change Point	0	26	54

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.5%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	48:22	-	546	1965:1828	350+467	66.8 : 66.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	20:54	-	652	2105:1828	491+476	67.4 : 67.4%
3/1		U	N/A	N/A	-		-	-	-	613	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	961	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	57:31	-	1009	1786:1828	920+553	68.5 : 68.5%
6/1		U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%

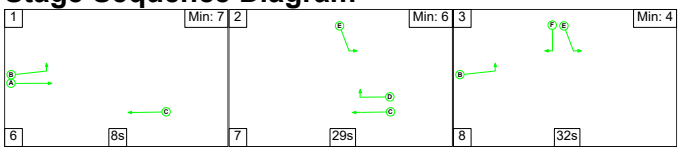
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**10.9**	**3.1**	**0.0**	**14.0**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**10.9**	**3.1**	**0.0**	**14.0**	-	-	-	-
1/1+1/2	546	546	-	-	-	3.3	1.0	-	4.3	28.3	6.9	1.0	7.9
2/2+2/1	652	652	-	-	-	3.6	1.0	-	4.6	25.7	7.4	1.0	8.5
3/1	613	613	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	961	961	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1009	1009	-	-	-	4.0	1.1	-	5.1	18.2	8.6	1.1	9.7
6/1	633	633	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 31.4 Total Delay for Signalled Lanes (pcuHr): 14.05 Cycle Time (s): 90
PRC Over All Lanes (%): 31.4 Total Delay Over All Lanes(pcuHr): 14.05

Full Input Data And Results

Scenario 12: '2b 2028 Forecast Year With Development (PM)' (FG12: '2b 2028 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

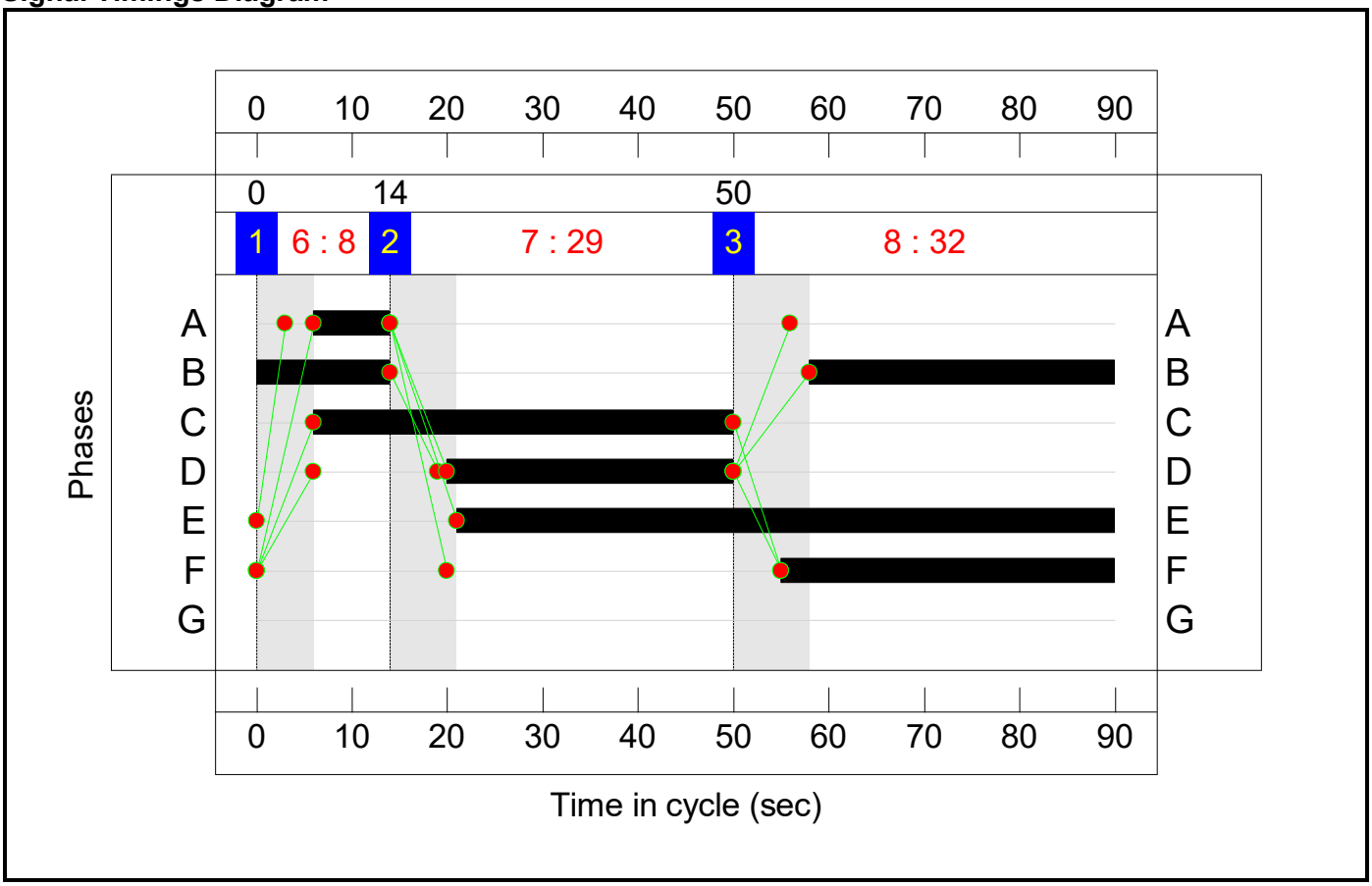
Stage Sequence Diagram



Stage Timings

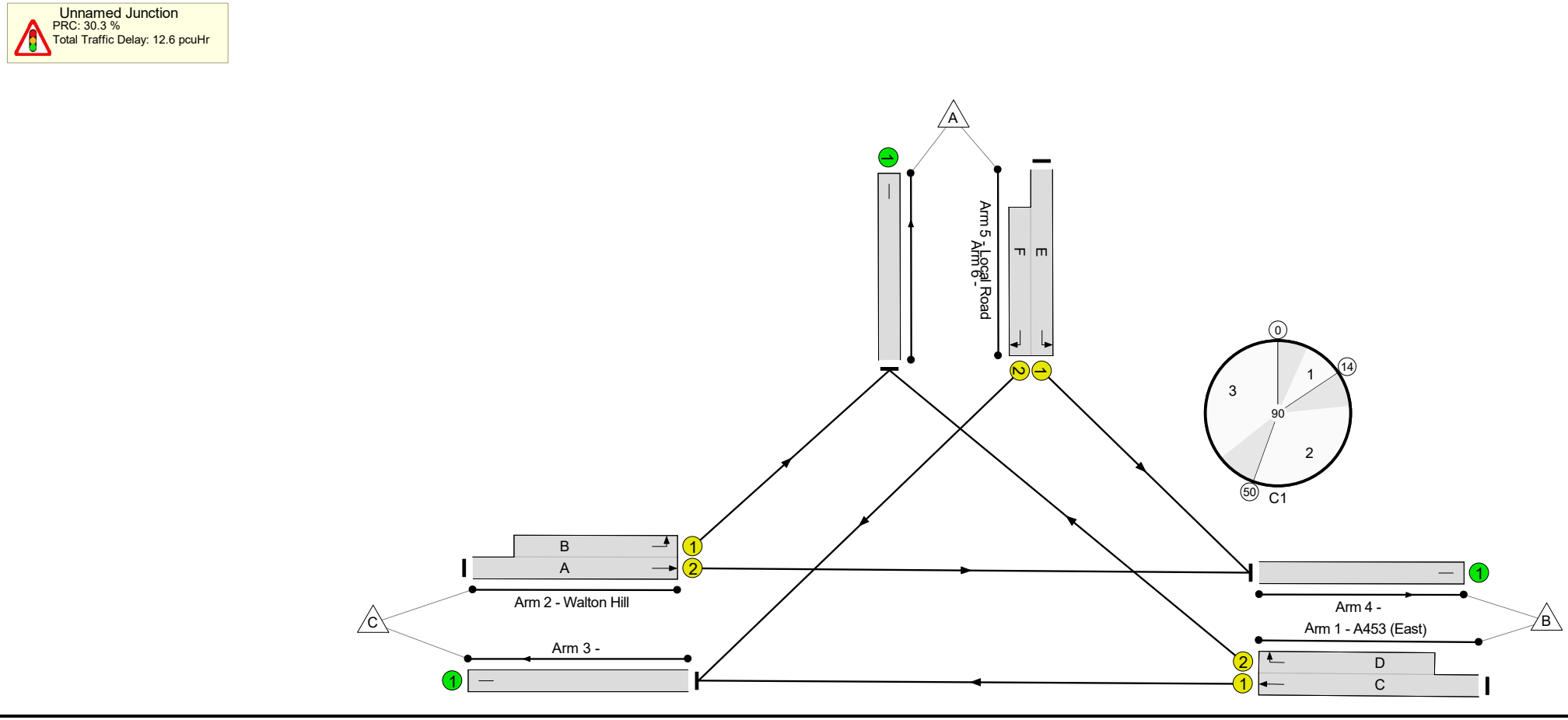
Stage	1	2	3
Duration	8	29	32
Change Point	0	14	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**69.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**69.1%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	44:30	-	802	1965:1828	539+630	68.6 : 68.6%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	8:46	-	315	2105:1828	210+260	67.0 : 67.0%
3/1		U	N/A	N/A	-		-	-	-	808	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	474	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	69:35	-	771	1786:1828	482+634	69.1 : 69.1%
6/1		U	N/A	N/A	-		-	-	-	606	Inf	Inf	0.0%

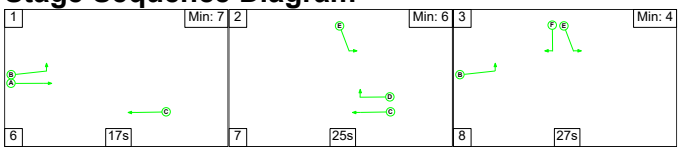
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**9.4**	**3.2**	**0.0**	**12.6**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**9.4**	**3.2**	**0.0**	**12.6**	-	-	-	-
1/1+1/2	802	802	-	-	-	4.5	1.1	-	5.6	24.9	9.2	1.1	10.3
2/2+2/1	315	315	-	-	-	2.1	1.0	-	3.1	35.2	3.4	1.0	4.4
3/1	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	474	474	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	771	771	-	-	-	2.8	1.1	-	4.0	18.5	8.6	1.1	9.7
6/1	606	606	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 30.3 Total Delay for Signalled Lanes (pcuHr): 12.59 Cycle Time (s): 90
PRC Over All Lanes (%): 30.3 Total Delay Over All Lanes(pcuHr): 12.59

Full Input Data And Results

Scenario 13: '2b 2038 Forecast Year With Development (AM)' (FG13: '2b 2038 Forecast Year With Development (AM)', Plan 1: 'Network Control Plan 1')

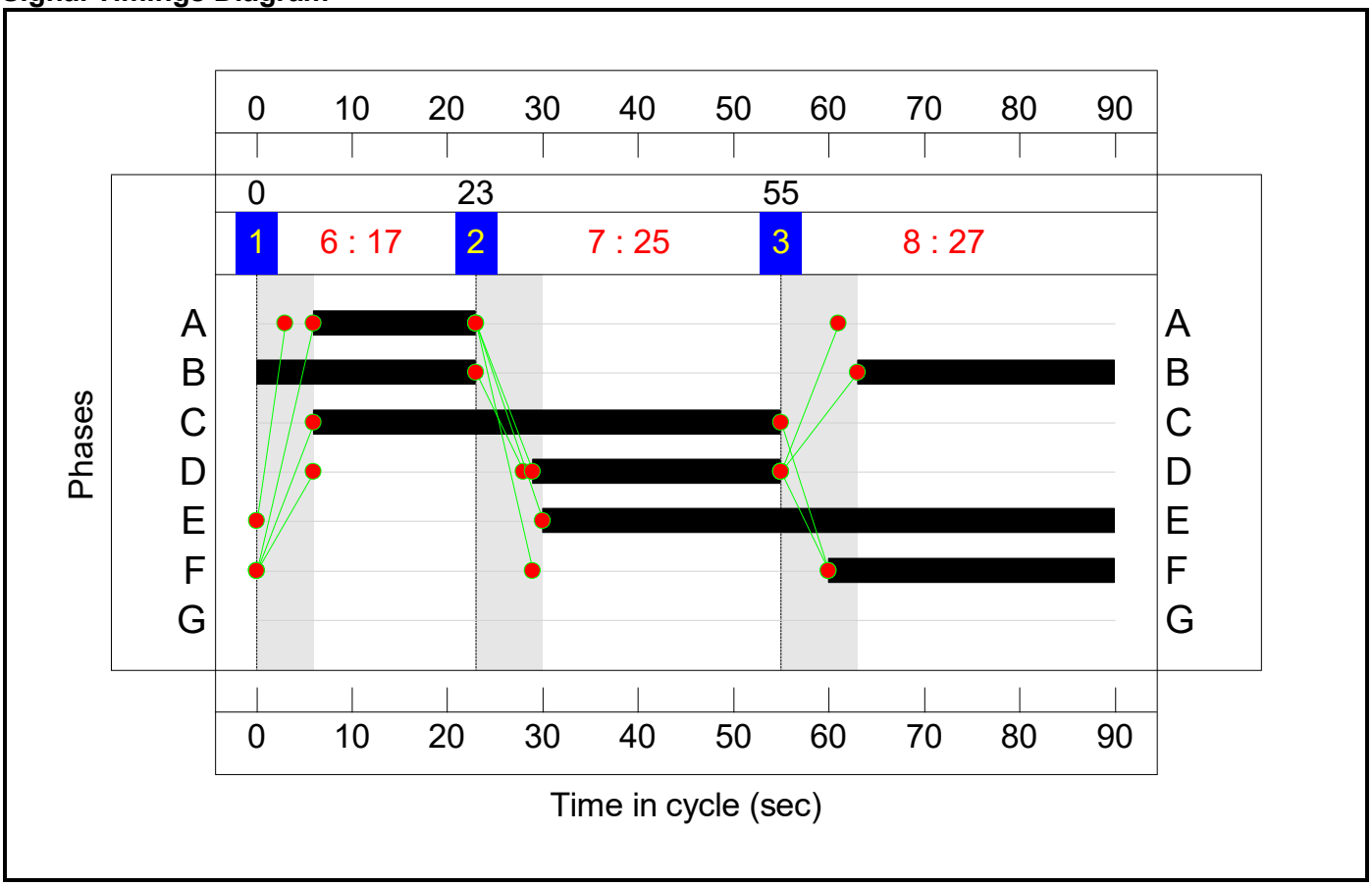
Stage Sequence Diagram



Stage Timings

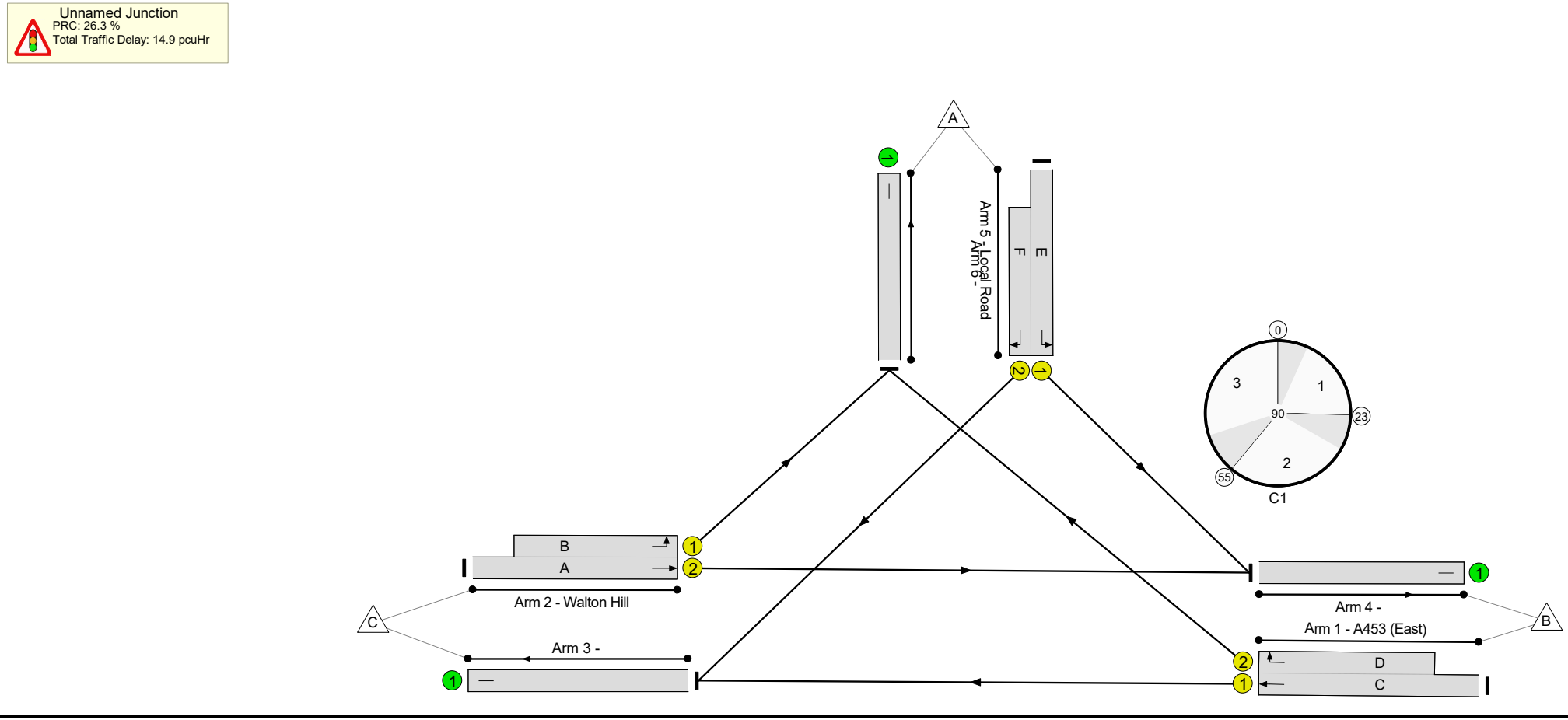
Stage	1	2	3
Duration	17	25	27
Change Point	0	23	55

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.3%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	49:26	-	716	1965:1828	474+548	70.0 : 70.0%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	17:50	-	618	2105:1828	421+464	69.8 : 69.8%
3/1		U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	805	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	60:30	-	913	1786:1828	717+564	71.3 : 71.3%
6/1		U	N/A	N/A	-		-	-	-	708	Inf	Inf	0.0%

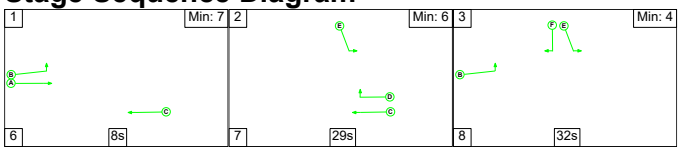
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	-	-	**0**	**0**	**0**	**11.3**	**3.5**	**0.0**	**14.9**	-	-	-	-
Unnamed Junction	-	-	**0**	**0**	**0**	**11.3**	**3.5**	**0.0**	**14.9**	-	-	-	-
1/1+1/2	716	716	-	-	-	4.0	1.2	-	5.1	25.8	8.4	1.2	9.6
2/2+2/1	618	618	-	-	-	3.7	1.1	-	4.8	28.0	6.8	1.1	7.9
3/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	805	805	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	913	913	-	-	-	3.7	1.2	-	4.9	19.4	8.4	1.2	9.6
6/1	708	708	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.3 Total Delay for Signalled Lanes (pcuHr): 14.86 Cycle Time (s): 90
PRC Over All Lanes (%): 26.3 Total Delay Over All Lanes(pcuHr): 14.86

Full Input Data And Results

Scenario 14: '2b 2038 Forecast Year With Development (PM)' (FG14: '2b 2038 Forecast Year With Development (PM)', Plan 1: 'Network Control Plan 1')

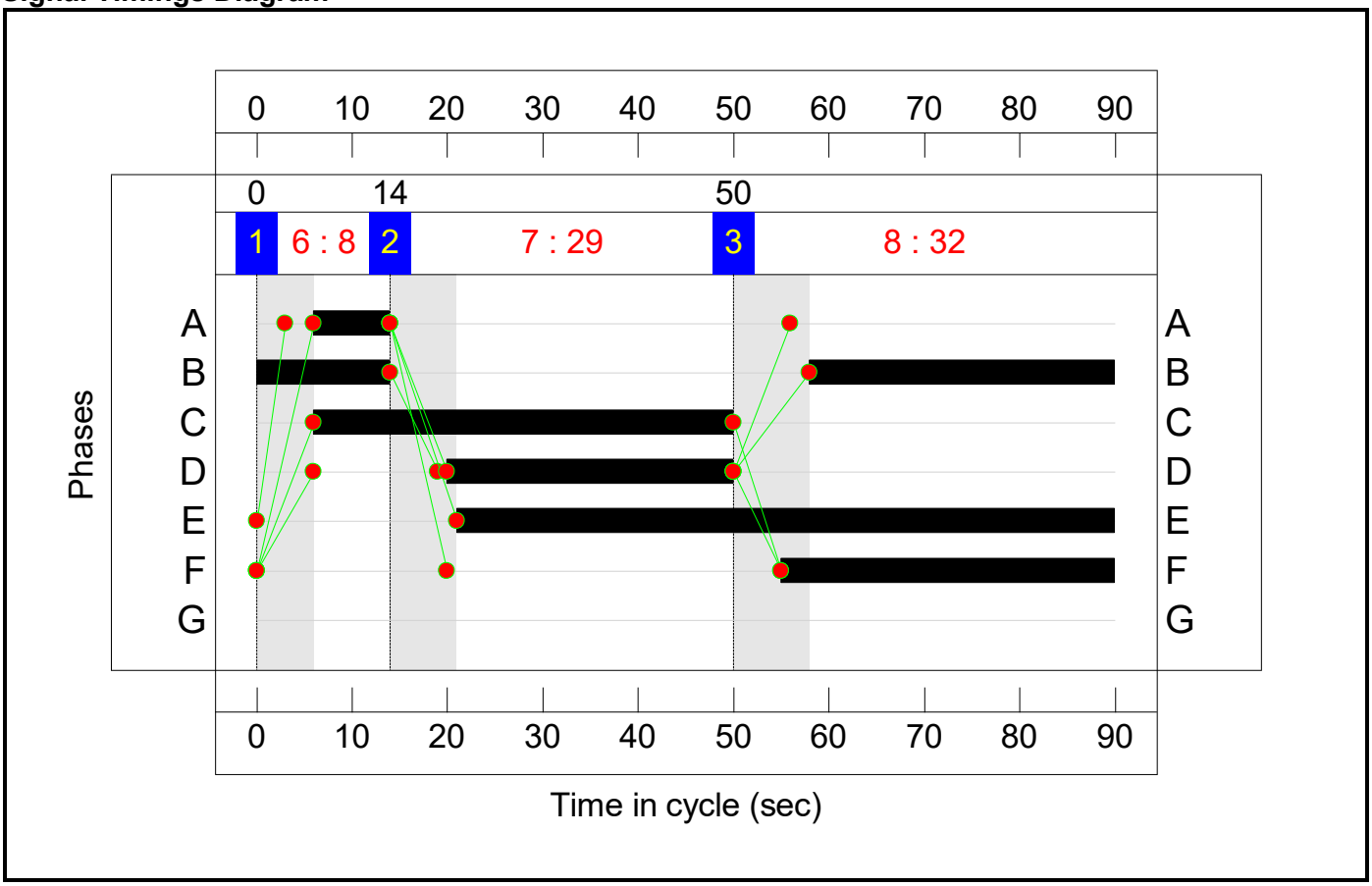
Stage Sequence Diagram



Stage Timings

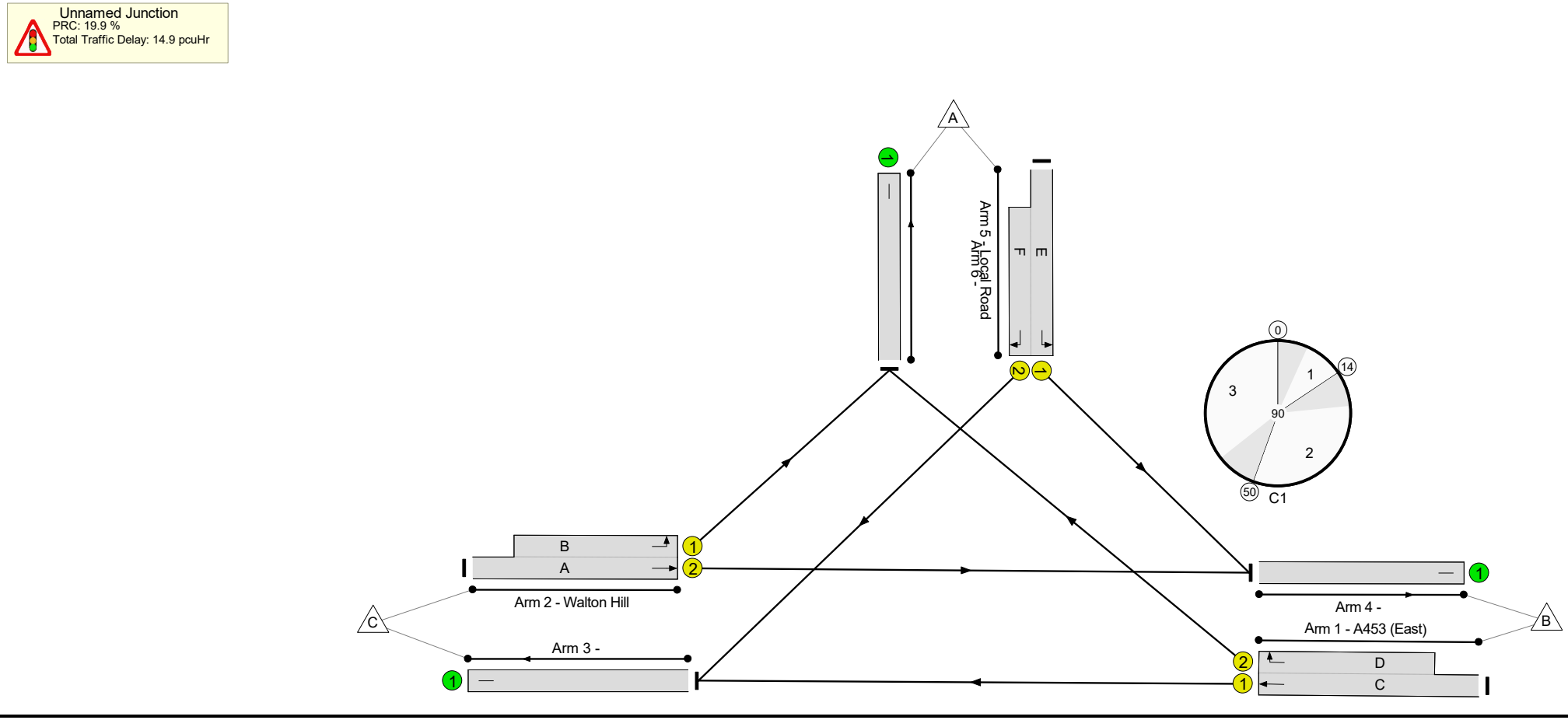
Stage	1	2	3
Duration	8	29	32
Change Point	0	14	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A453 Walton Hill Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.0%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.0%**
1/1+1/2	A453 (East) Ahead Right	U	N/A	N/A	C D		1	44:30	-	1011	1965:1828	722+630	74.8 : 74.8%
2/2+2/1	Walton Hill Ahead Left	U	N/A	N/A	A B		1	8:46	-	295	2105:1828	210+230	67.0 : 67.0%
3/1		U	N/A	N/A	-		-	-	-	1022	Inf	Inf	0.0%
4/1		U	N/A	N/A	-		-	-	-	452	Inf	Inf	0.0%
5/1+5/2	Local Road Right Left	U	N/A	N/A	E F		1	69:35	-	793	1786:1828	414+642	75.0 : 75.0%
6/1		U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A453 Walton Hill Junction	**-**	**-**	**0**	**0**	**0**	**10.9**	**4.0**	**0.0**	**14.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**10.9**	**4.0**	**0.0**	**14.9**	**-**	**-**	**-**	**-**
1/1+1/2	1011	1011	-	-	-	5.7	1.5	-	7.2	25.7	10.3	1.5	11.8
2/2+2/1	295	295	-	-	-	2.0	1.0	-	3.0	36.7	3.4	1.0	4.4
3/1	1022	1022	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	452	452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	793	793	-	-	-	3.2	1.5	-	4.7	21.2	9.8	1.5	11.3
6/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 19.9 Total Delay for Signalled Lanes (pcuHr): 14.88 Cycle Time (s): 90
PRC Over All Lanes (%): 19.9 Total Delay Over All Lanes(pcuHr): 14.88

APPENDIX 66: Junction 12: M1 Junction 23 Stage 1B/2B Modelling Results

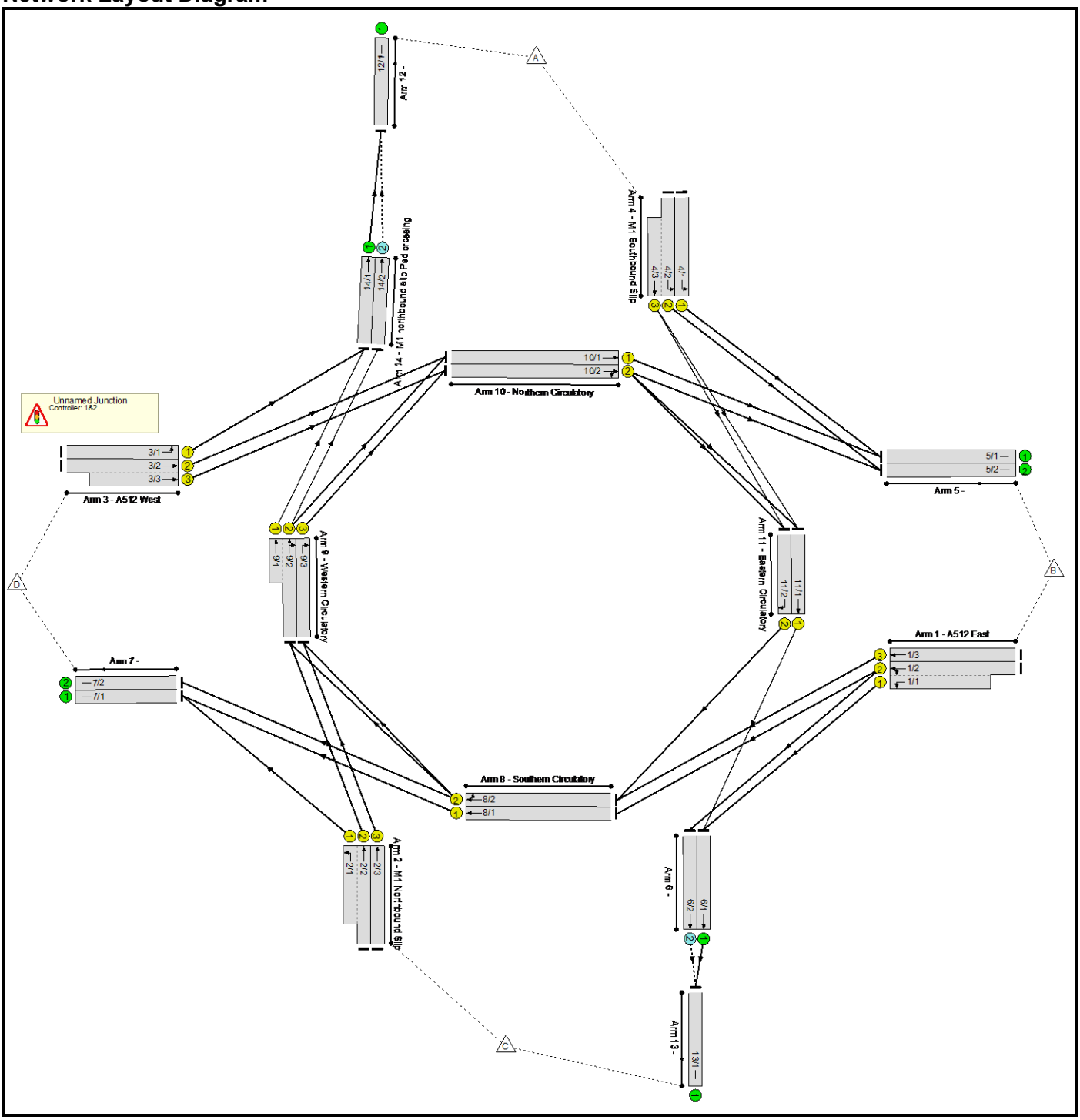
Full Input Data And Results

User and Project Details

Project:	**East Midlands Gateway 2**
Title:	**M1 Junction 23**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 12
Date Started:	26/10/23
Checked By:	Vibeeshan Devaharan
Additional detail:	
File name:	250624 M1 Junction 23_Stage 1b+2b.lsg3x
Author:	Charlie Cresswell
Company:	BWB
Address:	

Full Input Data And Results

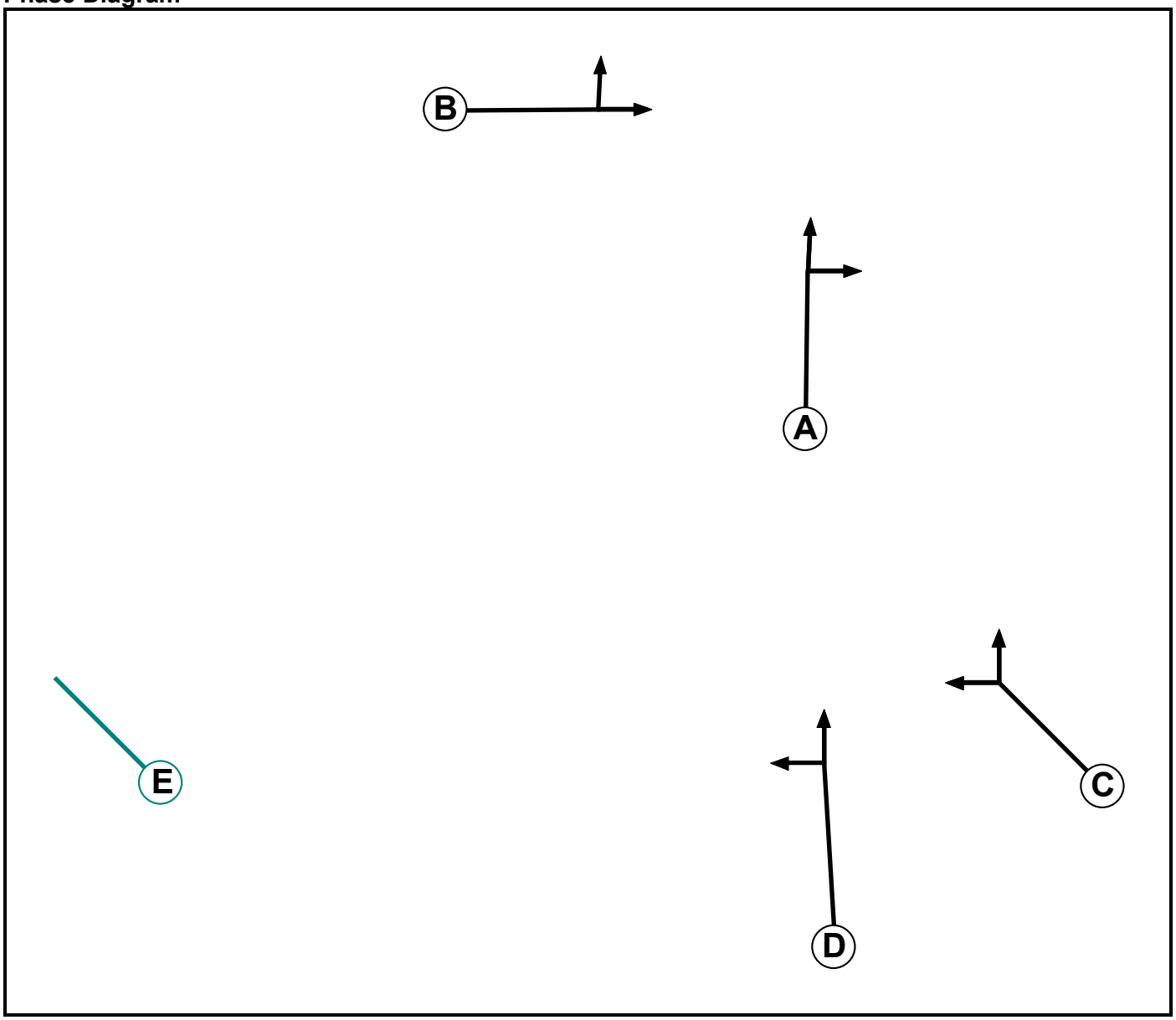
Network Layout Diagram



Full Input Data And Results

Controller :C1 - Westside 25911

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Dummy		4	4

Full Input Data And Results

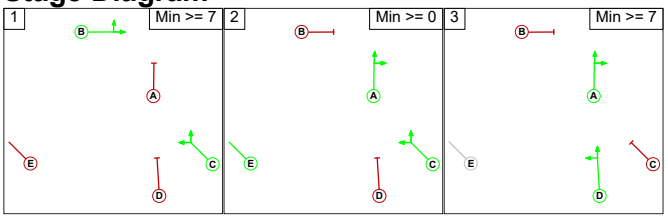
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		6	-	-	-
	B	6		-	-	6
	C	-	-		6	-
	D	-	-	7		-
	E	-	1	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	B C
2	A C E
3	A D

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	A	Losing	7	7

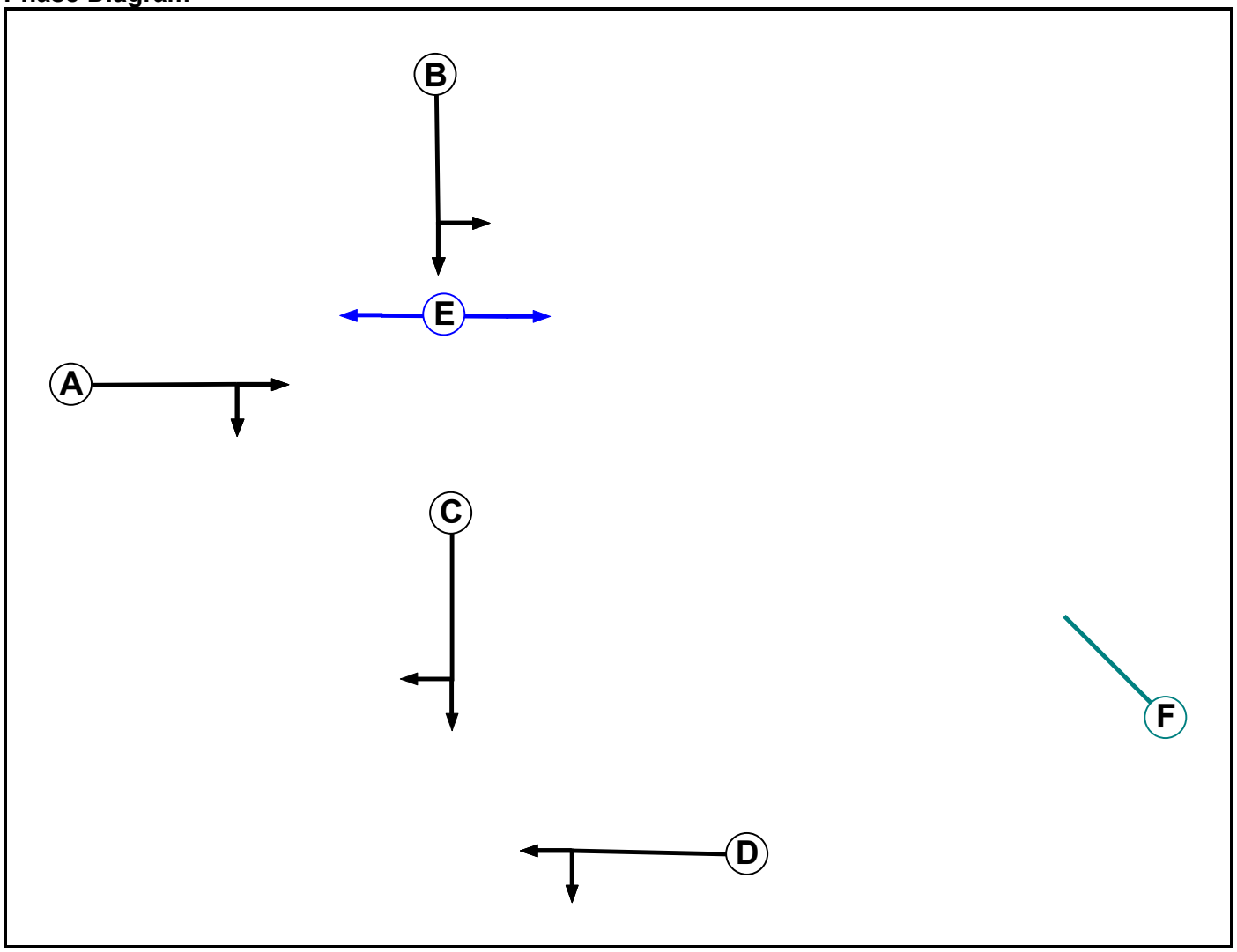
Prohibited Stage Change

From Stage	To Stage		
	1	2	3
1		6	6
2	6		6
3	13	7	

Full Input Data And Results

Controller :C2 - Eastside 25921

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		9	9
F	Dummy		4	4

Full Input Data And Results

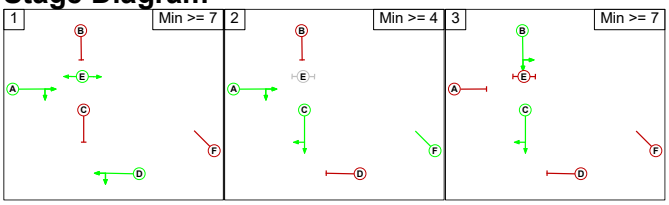
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
	A	B	C	D	E	F
A		6	-	-	-	-
B	7		-	-	5	7
C	-	-		6	-	-
D	-	-	6		-	6
E	-	10	-	-		-
F	-	1	-	1	-	

Phases in Stage

Stage No.	Phases in Stage
1	A D E
2	A C F
3	B C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	C	Losing	7	7

Prohibited Stage Change

From Stage	To Stage			
	1	2	3
1		6	10
2	6		6
3	13	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
6/2	13/1 (Ahead)	715	0	6/1	0.22	All	-	-	-	-	-
14/2 (M1 northbound slip Ped crossing)	12/1 (Ahead)	715	0	14/1	0.22	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A512 East)	U	D	2	3	16.0	Geom	-	3.75	0.00	Y	Arm 6 Left	110.00
1/2 (A512 East)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 6 Left Arm 8 Ahead	Inf 71.00
1/3 (A512 East)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 8 Ahead	85.00
2/1 (M1 Northbound Slip)	U	D	2	3	13.9	Geom	-	3.75	0.00	Y	Arm 7 Left	110.00
2/2 (M1 Northbound Slip)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 9 Ahead	170.00
2/3 (M1 Northbound Slip)	U	D	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 9 Ahead	276.00
3/1 (A512 West)	U	B	2	3	18.3	Geom	-	3.75	0.00	Y	Arm 14 Left	45.00
3/2 (A512 West)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 10 Ahead	55.00
3/3 (A512 West)	U	B	2	3	10.4	Geom	-	3.75	0.00	Y	Arm 10 Ahead	60.00
4/1 (M1 Southbound Slip)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	55.00
4/2 (M1 Southbound Slip)	U	B	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	65.00
4/3 (M1 Southbound Slip)	U	B	2	3	14.8	Geom	-	3.75	0.00	Y	Arm 11 Ahead	70.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 13 Ahead	Inf
6/2	O		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 13 Ahead	Inf
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Southern Circulatory)	U	C	2	3	28.3	Geom	-	3.75	0.00	Y	Arm 7 Ahead	100.00

Full Input Data And Results

8/2 (Southern Circulatory)	U	C	2	3	28.0	Geom	-	3.75	0.00	Y	Arm 7 Ahead	100.00
											Arm 9 Right	45.00
9/1 (Western Circulatory)	U	A	2	3	4.9	Geom	-	3.75	0.00	Y	Arm 14 Ahead	60.00
9/2 (Western Circulatory)	U	A	2	3	12.8	Geom	-	3.75	0.00	Y	Arm 10 Right	45.00
											Arm 14 Ahead	45.00
9/3 (Western Circulatory)	U	A	2	3	11.6	Geom	-	3.75	0.00	Y	Arm 10 Right	50.00
10/1 (Northern Circulatory)	U	A	2	3	30.5	Geom	-	3.75	0.00	Y	Arm 5 Ahead	80.00
10/2 (Northern Circulatory)	U	A	2	3	29.1	Geom	-	3.75	0.00	Y	Arm 5 Ahead	55.00
											Arm 11 Right	55.00
11/1 (Eastern Circulatory)	U	C	2	3	14.9	Geom	-	4.25	0.00	Y	Arm 6 Ahead	70.00
11/2 (Eastern Circulatory)	U	C	2	3	13.3	Geom	-	4.25	0.00	Y	Arm 8 Right	65.00
12/1	U		2	3	60.0	Inf	-	-	-	-	-	-
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-
14/1 (M1 northbound slip Ped crossing)	U		2	3	11.3	Geom	-	3.25	0.00	Y	Arm 12 Ahead	Inf
14/2 (M1 northbound slip Ped crossing)	O		2	3	11.1	Geom	-	3.25	0.00	Y	Arm 12 Ahead	Inf

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Am'	07:45	08:45	01:00	
2: '2022 Pm'	17:00	18:00	01:00	
3: '2028 Without Development Flows (AM)'	07:45	08:45	01:00	
4: '2028 Without Development Flows (PM)'	17:00	18:00	01:00	
5: '2028 With Development Flows (AM)'	07:45	08:45	01:00	
6: '2028 With Development Flows (PM)'	17:00	18:00	01:00	
7: '2038 Without Development Flows (AM)'	07:45	08:45	01:00	
8: '2038 Without Development Flows (PM)'	17:00	18:00	01:00	
9: '2038 With Development Flows (AM)'	07:45	08:45	01:00	
10: '2038 With Development Flows (PM)'	17:00	18:00	01:00	
11: '2b 2028 With Development Flows (AM)'	07:45	08:45	01:00	
12: '2b 2028 With Development Flows (PM)'	17:00	18:00	01:00	
13: '2b 2038 With Development Flows (AM)'	07:45	08:45	01:00	
14: '2b 2038 With Development Flows (PM)'	17:00	18:00	01:00	

Scenario 1: 'AM Base' (FG1: '2022 Am', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	795	0	377	1172
	B	494	0	161	378	1033
	C	0	423	0	44	467
	D	290	735	132	0	1157
	Tot.	784	1953	293	799	3829

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Unnamed Junction	
1/1 (short)	161
1/2 (with short)	539(In) 378(Out)
1/3	494
2/1 (short)	44
2/2 (with short)	237(In) 193(Out)
2/3	230
3/1	290
3/2 (with short)	867(In) 504(Out)
3/3 (short)	363
4/1	343
4/2 (with short)	829(In) 452(Out)
4/3 (short)	377
5/1	1040
5/2	913
6/1	293
6/2	0
7/1	422
7/2	377
8/1	378
8/2	871
9/1 (short)	423
9/2 (with short)	687(In) 264(Out)
9/3	230
10/1	697
10/2	593
11/1	132
11/2	377
12/1	784
13/1	293
14/1	713
14/2	71

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	43.3 %	1941	1941
				Arm 9 Right	45.00	56.7 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	73.1 %	1926	1926
				Arm 14 Ahead	45.00	26.9 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	77.7 %	1937	1937
				Arm 11 Right	55.00	22.3 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 2: 'PM Base' (FG2: '2022 Pm', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	408	0	187	595
	B	491	0	351	520	1362
	C	0	203	0	168	371
	D	218	389	118	0	725
	Tot.	709	1000	469	875	3053

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Unnamed Junction	
1/1 (short)	351
1/2 (with short)	871(In) 520(Out)
1/3	491
2/1 (short)	168
2/2 (with short)	237(In) 69(Out)
2/3	134
3/1	218
3/2 (with short)	507(In) 233(Out)
3/3 (short)	274
4/1	167
4/2 (with short)	428(In) 241(Out)
4/3 (short)	187
5/1	469
5/2	531
6/1	469
6/2	0
7/1	688
7/2	187
8/1	520
8/2	678
9/1 (short)	491
9/2 (with short)	560(In) 69(Out)
9/3	134
10/1	302
10/2	408
11/1	118
11/2	187
12/1	709
13/1	469
14/1	709
14/2	0

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	27.6 %	1935	1935
				Arm 9 Right	45.00	72.4 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	100.0 %	1926	1926
				Arm 14 Ahead	45.00	0.0 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	71.1 %	1937	1937
				Arm 11 Right	55.00	28.9 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	0.0 %	1940	1940

Scenario 3: '2028 Without Development Flows (AM)' (FG3: '2028 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	810	0	440	1250
	B	553	0	193	540	1286
	C	0	509	0	44	553
	D	337	908	161	0	1406
	Tot.	890	2227	354	1024	4495

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2028 Without Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	193
1/2 (with short)	733(In) 540(Out)
1/3	553
2/1 (short)	44
2/2 (with short)	293(In) 249(Out)
2/3	260
3/1	337
3/2 (with short)	1069(In) 535(Out)
3/3 (short)	534
4/1	358
4/2 (with short)	892(In) 452(Out)
4/3 (short)	440
5/1	1142
5/2	1085
6/1	354
6/2	0
7/1	584
7/2	440
8/1	540
8/2	993
9/1 (short)	492
9/2 (with short)	802(In) 310(Out)
9/3	260
10/1	784
10/2	794
11/1	161
11/2	440
12/1	890
13/1	354
14/1	829
14/2	61

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	44.3 %	1941	1941
				Arm 9 Right	45.00	55.7 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	80.3 %	1926	1926
				Arm 14 Ahead	45.00	19.7 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	79.7 %	1937	1937
				Arm 11 Right	55.00	20.3 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 4: '2028 Without Development Flows (PM)' (FG4: '2028 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	515	0	271	786
	B	494	0	381	661	1536
	C	0	224	0	205	429
	D	315	606	187	0	1108
	Tot.	809	1345	568	1137	3859

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2028 Without Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	381
1/2 (with short)	1004(In) 623(Out)
1/3	532
2/1 (short)	205
2/2 (with short)	244(In) 39(Out)
2/3	185
3/1	315
3/2 (with short)	793(In) 394(Out)
3/3 (short)	399
4/1	201
4/2 (with short)	585(In) 314(Out)
4/3 (short)	271
5/1	634
5/2	711
6/1	568
6/2	0
7/1	828
7/2	309
8/1	623
8/2	803
9/1 (short)	412
9/2 (with short)	533(In) 121(Out)
9/3	185
10/1	433
10/2	584
11/1	187
11/2	271
12/1	809
13/1	568
14/1	727
14/2	82

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	38.5 %	1939	1939
				Arm 9 Right	45.00	61.5 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	32.2 %	1926	1926
				Arm 14 Ahead	45.00	67.8 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	68.0 %	1937	1937
				Arm 11 Right	55.00	32.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 5: '2028 With Development Flows (AM)' (FG5: '2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	832	0	461	1293
	B	592	0	196	550	1338
	C	0	494	0	48	542
	D	357	937	164	0	1458
	Tot.	949	2263	360	1059	4631

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2028 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	196
1/2 (with short)	746(In) 550(Out)
1/3	592
2/1 (short)	48
2/2 (with short)	287(In) 239(Out)
2/3	255
3/1	357
3/2 (with short)	1101(In) 553(Out)
3/3 (short)	548
4/1	375
4/2 (with short)	918(In) 457(Out)
4/3 (short)	461
5/1	1167
5/2	1096
6/1	360
6/2	0
7/1	598
7/2	461
8/1	550
8/2	1053
9/1 (short)	538
9/2 (with short)	831(In) 293(Out)
9/3	255
10/1	792
10/2	803
11/1	164
11/2	461
12/1	949
13/1	360
14/1	895
14/2	54

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	43.8 %	1941	1941
				Arm 9 Right	45.00	56.2 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.6 %	1926	1926
				Arm 14 Ahead	45.00	18.4 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	79.6 %	1937	1937
				Arm 11 Right	55.00	20.4 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 6: '2028 With Development Flows (PM)' (FG6: '2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	581	0	349	930
	B	486	0	365	712	1563
	C	0	206	0	213	419
	D	359	649	206	0	1214
	Tot.	845	1436	571	1274	4126

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	365
1/2 (with short)	1011(In) 646(Out)
1/3	552
2/1 (short)	213
2/2 (with short)	215(In) 2(Out)
2/3	204
3/1	359
3/2 (with short)	855(In) 439(Out)
3/3 (short)	416
4/1	245
4/2 (with short)	685(In) 336(Out)
4/3 (short)	349
5/1	686
5/2	750
6/1	571
6/2	0
7/1	859
7/2	415
8/1	646
8/2	901
9/1 (short)	404
9/2 (with short)	488(In) 84(Out)
9/3	204
10/1	441
10/2	620
11/1	206
11/2	349
12/1	845
13/1	571
14/1	763
14/2	82

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	46.1 %	1942	1942
				Arm 9 Right	45.00	53.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	2.4 %	1926	1926
				Arm 14 Ahead	45.00	97.6 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	66.8 %	1937	1937
				Arm 11 Right	55.00	33.2 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 7: '2038 Without Development Flows (AM)' (FG7: '2038 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	879	0	655	1534
	B	614	0	287	774	1675
	C	0	651	0	58	709
	D	451	1186	292	0	1929
	Tot.	1065	2716	579	1487	5847

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2038 Without Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	287
1/2 (with short)	1033(In) 746(Out)
1/3	642
2/1 (short)	58
2/2 (with short)	384(In) 326(Out)
2/3	325
3/1	451
3/2 (with short)	1478(In) 742(Out)
3/3 (short)	736
4/1	641
4/2 (with short)	893(In) 238(Out)
4/3 (short)	655
5/1	1709
5/2	1007
6/1	579
6/2	0
7/1	804
7/2	683
8/1	746
8/2	1297
9/1 (short)	531
9/2 (with short)	940(In) 409(Out)
9/3	325
10/1	1068
10/2	1061
11/1	292
11/2	655
12/1	1065
13/1	579
14/1	982
14/2	83

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	52.7 %	1944	1944
				Arm 9 Right	45.00	47.3 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	79.7 %	1926	1926
				Arm 14 Ahead	45.00	20.3 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.5 %	1937	1937
				Arm 11 Right	55.00	27.5 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 8: '2038 Without Development Flows (PM)' (FG8: '2038 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	600	0	320	920
	B	558	0	504	915	1977
	C	0	344	0	302	646
	D	427	999	296	0	1722
	Tot.	985	1943	800	1537	5265

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 Without Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	504
1/2 (with short)	1275(In) 771(Out)
1/3	702
2/1 (short)	302
2/2 (with short)	349(In) 47(Out)
2/3	297
3/1	427
3/2 (with short)	1295(In) 695(Out)
3/3 (short)	600
4/1	266
4/2 (with short)	654(In) 334(Out)
4/3 (short)	320
5/1	1008
5/2	935
6/1	800
6/2	0
7/1	1073
7/2	464
8/1	771
8/2	1022
9/1 (short)	490
9/2 (with short)	605(In) 115(Out)
9/3	297
10/1	742
10/2	897
11/1	296
11/2	320
12/1	985
13/1	800
14/1	917
14/2	68

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	45.4 %	1941	1941
				Arm 9 Right	45.00	54.6 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	40.9 %	1926	1926
				Arm 14 Ahead	45.00	59.1 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	67.0 %	1937	1937
				Arm 11 Right	55.00	33.0 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 9: '2038 With Development Flows (AM)' (FG9: '2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	895	0	667	1562
	B	650	0	288	785	1723
	C	0	626	0	58	684
	D	469	1219	289	0	1977
	Tot.	1119	2740	577	1510	5946

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2038 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	288
1/2 (with short)	1031(In) 743(Out)
1/3	692
2/1 (short)	58
2/2 (with short)	368(In) 310(Out)
2/3	316
3/1	469
3/2 (with short)	1508(In) 761(Out)
3/3 (short)	747
4/1	653
4/2 (with short)	909(In) 242(Out)
4/3 (short)	667
5/1	1724
5/2	1016
6/1	577
6/2	0
7/1	801
7/2	709
8/1	743
8/2	1359
9/1 (short)	570
9/2 (with short)	960(In) 390(Out)
9/3	316
10/1	1071
10/2	1063
11/1	289
11/2	667
12/1	1119
13/1	577
14/1	1039
14/2	80

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	52.2 %	1944	1944
				Arm 9 Right	45.00	47.8 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	79.5 %	1926	1926
				Arm 14 Ahead	45.00	20.5 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	72.8 %	1937	1937
				Arm 11 Right	55.00	27.2 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 10: '2038 With Development Flows (PM)' (FG10: '2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	687	0	410	1097
	B	633	0	496	1047	2176
	C	0	346	0	326	672
	D	483	1127	298	0	1908
	Tot.	1116	2160	794	1783	5853

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	496
1/2 (with short)	1355(In) 859(Out)
1/3	821
2/1 (short)	326
2/2 (with short)	347(In) 21(Out)
2/3	325
3/1	483
3/2 (with short)	1425(In) 774(Out)
3/3 (short)	651
4/1	334
4/2 (with short)	763(In) 353(Out)
4/3 (short)	410
5/1	1129
5/2	1031
6/1	794
6/2	0
7/1	1185
7/2	598
8/1	859
8/2	1231
9/1 (short)	580
9/2 (with short)	654(In) 74(Out)
9/3	325
10/1	795
10/2	976
11/1	298
11/2	410
12/1	1116
13/1	794
14/1	1063
14/2	53

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	48.6 %	1943	1943
				Arm 9 Right	45.00	51.4 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	28.4 %	1926	1926
				Arm 14 Ahead	45.00	71.6 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	69.5 %	1937	1937
				Arm 11 Right	55.00	30.5 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 11: '2b 2028 With Development Flows (AM)' (FG11: '2b 2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	812	0	421	1233
	B	593	0	202	552	1347
	C	0	496	0	44	540
	D	350	963	161	0	1474
	Tot.	943	2271	363	1017	4594

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2b 2028 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	202
1/2 (with short)	754(In) 552(Out)
1/3	593
2/1 (short)	44
2/2 (with short)	285(In) 241(Out)
2/3	255
3/1	350
3/2 (with short)	1124(In) 561(Out)
3/3 (short)	563
4/1	367
4/2 (with short)	866(In) 445(Out)
4/3 (short)	421
5/1	1169
5/2	1102
6/1	363
6/2	0
7/1	596
7/2	421
8/1	552
8/2	1014
9/1 (short)	539
9/2 (with short)	834(In) 295(Out)
9/3	255
10/1	802
10/2	818
11/1	161
11/2	421
12/1	943
13/1	363
14/1	889
14/2	54

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	41.5 %	1940	1940
				Arm 9 Right	45.00	58.5 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	81.7 %	1926	1926
				Arm 14 Ahead	45.00	18.3 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	80.3 %	1937	1937
				Arm 11 Right	55.00	19.7 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 12: '2b 2028 With Development Flows (PM)' (FG12: '2b 2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	539	0	293	832
	B	483	0	371	692	1546
	C	0	218	0	207	425
	D	330	639	192	0	1161
	Tot.	813	1396	563	1192	3964

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2b 2028 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	371
1/2 (with short)	1005(In) 634(Out)
1/3	541
2/1 (short)	207
2/2 (with short)	237(In) 30(Out)
2/3	188
3/1	330
3/2 (with short)	831(In) 413(Out)
3/3 (short)	418
4/1	221
4/2 (with short)	611(In) 318(Out)
4/3 (short)	293
5/1	664
5/2	732
6/1	563
6/2	0
7/1	841
7/2	351
8/1	634
8/2	834
9/1 (short)	401
9/2 (with short)	513(In) 112(Out)
9/3	188
10/1	443
10/2	606
11/1	192
11/2	293
12/1	813
13/1	563
14/1	731
14/2	82

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	42.1 %	1940	1940
				Arm 9 Right	45.00	57.9 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	26.8 %	1926	1926
				Arm 14 Ahead	45.00	73.2 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	68.3 %	1937	1937
				Arm 11 Right	55.00	31.7 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 13: '2b 2038 With Development Flows (AM)' (FG13: '2b 2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	879	0	618	1497
	B	645	0	290	770	1705
	C	0	623	0	58	681
	D	453	1236	284	0	1973
	Tot.	1098	2738	574	1446	5856

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2b 2038 With Development Flows (AM)
Junction: Unnamed Junction	
1/1 (short)	290
1/2 (with short)	1033(In) 743(Out)
1/3	672
2/1 (short)	58
2/2 (with short)	363(In) 305(Out)
2/3	318
3/1	453
3/2 (with short)	1520(In) 770(Out)
3/3 (short)	750
4/1	605
4/2 (with short)	892(In) 274(Out)
4/3 (short)	618
5/1	1680
5/2	1058
6/1	574
6/2	0
7/1	801
7/2	645
8/1	743
8/2	1290
9/1 (short)	584
9/2 (with short)	950(In) 366(Out)
9/3	318
10/1	1075
10/2	1068
11/1	284
11/2	618
12/1	1098
13/1	574
14/1	1037
14/2	61

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	50.0 %	1943	1943
				Arm 9 Right	45.00	50.0 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	83.3 %	1926	1926
				Arm 14 Ahead	45.00	16.7 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	73.4 %	1937	1937
				Arm 11 Right	55.00	26.6 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 14: '2b 2038 With Development Flows (PM)' (FG14: '2b 2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	609	0	327	936
	B	567	0	494	928	1989
	C	0	346	0	304	650
	D	427	995	283	0	1705
	Tot.	994	1950	777	1559	5280

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 2b 2038 With Development Flows (PM)
Junction: Unnamed Junction	
1/1 (short)	494
1/2 (with short)	1276(In) 782(Out)
1/3	713
2/1 (short)	304
2/2 (with short)	358(In) 54(Out)
2/3	292
3/1	427
3/2 (with short)	1278(In) 681(Out)
3/3 (short)	597
4/1	273
4/2 (with short)	663(In) 336(Out)
4/3 (short)	327
5/1	1008
5/2	942
6/1	777
6/2	0
7/1	1086
7/2	473
8/1	782
8/2	1040
9/1 (short)	501
9/2 (with short)	621(In) 120(Out)
9/3	292
10/1	735
10/2	889
11/1	283
11/2	327
12/1	994
13/1	777
14/1	928
14/2	66

Lane Saturation Flows

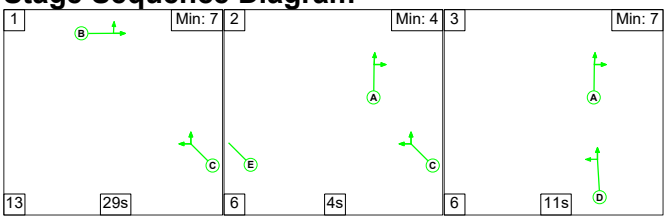
Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A512 East)	3.75	0.00	Y	Arm 6 Left	110.00	100.0 %	1963	1963
1/2 (A512 East)	3.75	0.00	Y	Arm 6 Left	Inf	0.0 %	1949	1949
				Arm 8 Ahead	71.00	100.0 %		
1/3 (A512 East)	3.75	0.00	Y	Arm 8 Ahead	85.00	100.0 %	1955	1955
2/1 (M1 Northbound Slip)	3.75	0.00	Y	Arm 7 Left	110.00	100.0 %	1963	1963
2/2 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	170.00	100.0 %	1973	1973
2/3 (M1 Northbound Slip)	3.75	0.00	Y	Arm 9 Ahead	276.00	100.0 %	1979	1979
3/1 (A512 West)	3.75	0.00	Y	Arm 14 Left	45.00	100.0 %	1926	1926
3/2 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	55.00	100.0 %	1937	1937
3/3 (A512 West)	3.75	0.00	Y	Arm 10 Ahead	60.00	100.0 %	1941	1941
4/1 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	55.00	100.0 %	1937	1937
4/2 (M1 Southbound Slip)	3.75	0.00	Y	Arm 5 Left	65.00	100.0 %	1945	1945
4/3 (M1 Southbound Slip)	3.75	0.00	Y	Arm 11 Ahead	70.00	100.0 %	1948	1948
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 13 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 13 Ahead	Inf	0.0 %	1980	1980
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	100.0 %	1961	1961
8/2 (Southern Circulatory)	3.75	0.00	Y	Arm 7 Ahead	100.00	45.5 %	1941	1941
				Arm 9 Right	45.00	54.5 %		
9/1 (Western Circulatory)	3.75	0.00	Y	Arm 14 Ahead	60.00	100.0 %	1941	1941
9/2 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	45.00	45.0 %	1926	1926
				Arm 14 Ahead	45.00	55.0 %		
9/3 (Western Circulatory)	3.75	0.00	Y	Arm 10 Right	50.00	100.0 %	1932	1932
10/1 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	80.00	100.0 %	1953	1953

Full Input Data And Results

10/2 (Northern Circulatory)	3.75	0.00	Y	Arm 5 Ahead	55.00	68.2 %	1937	1937
				Arm 11 Right	55.00	31.8 %		
11/1 (Eastern Circulatory)	4.25	0.00	Y	Arm 6 Ahead	70.00	100.0 %	1997	1997
11/2 (Eastern Circulatory)	4.25	0.00	Y	Arm 8 Right	65.00	100.0 %	1994	1994
12/1	Infinite Saturation Flow						Inf	Inf
13/1	Infinite Saturation Flow						Inf	Inf
14/1 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940
14/2 (M1 northbound slip Ped crossing)	3.25	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1940	1940

Scenario 1: 'AM Base' (FG1: '2022 Am', Plan 1: 'Network Control Plan 1')
Controller :C1 - Westside 25911

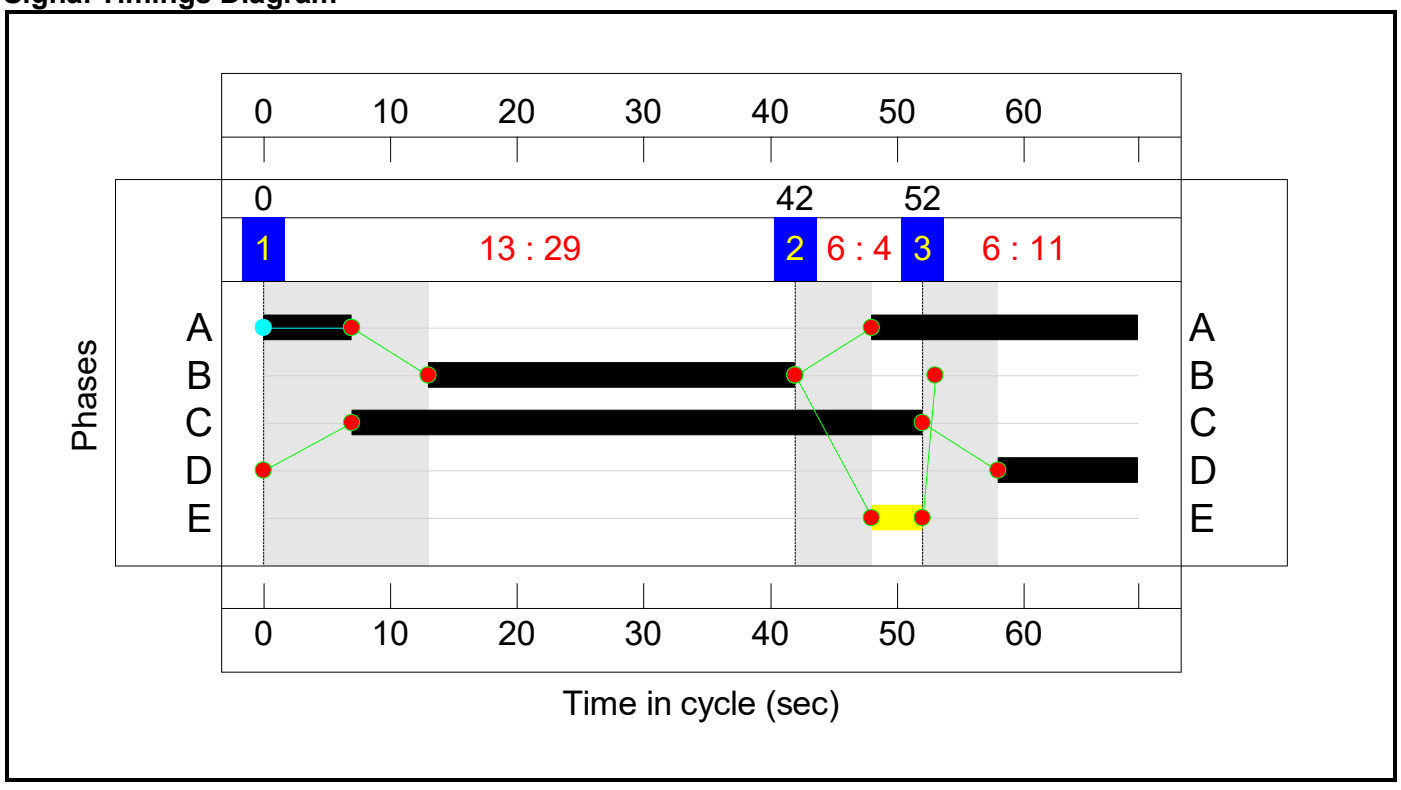
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	29	4	11
Change Point	0	42	52

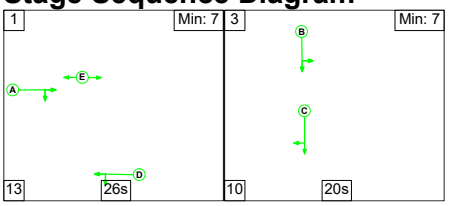
Signal Timings Diagram



Full Input Data And Results

Controller :C2 - Eastside 25921

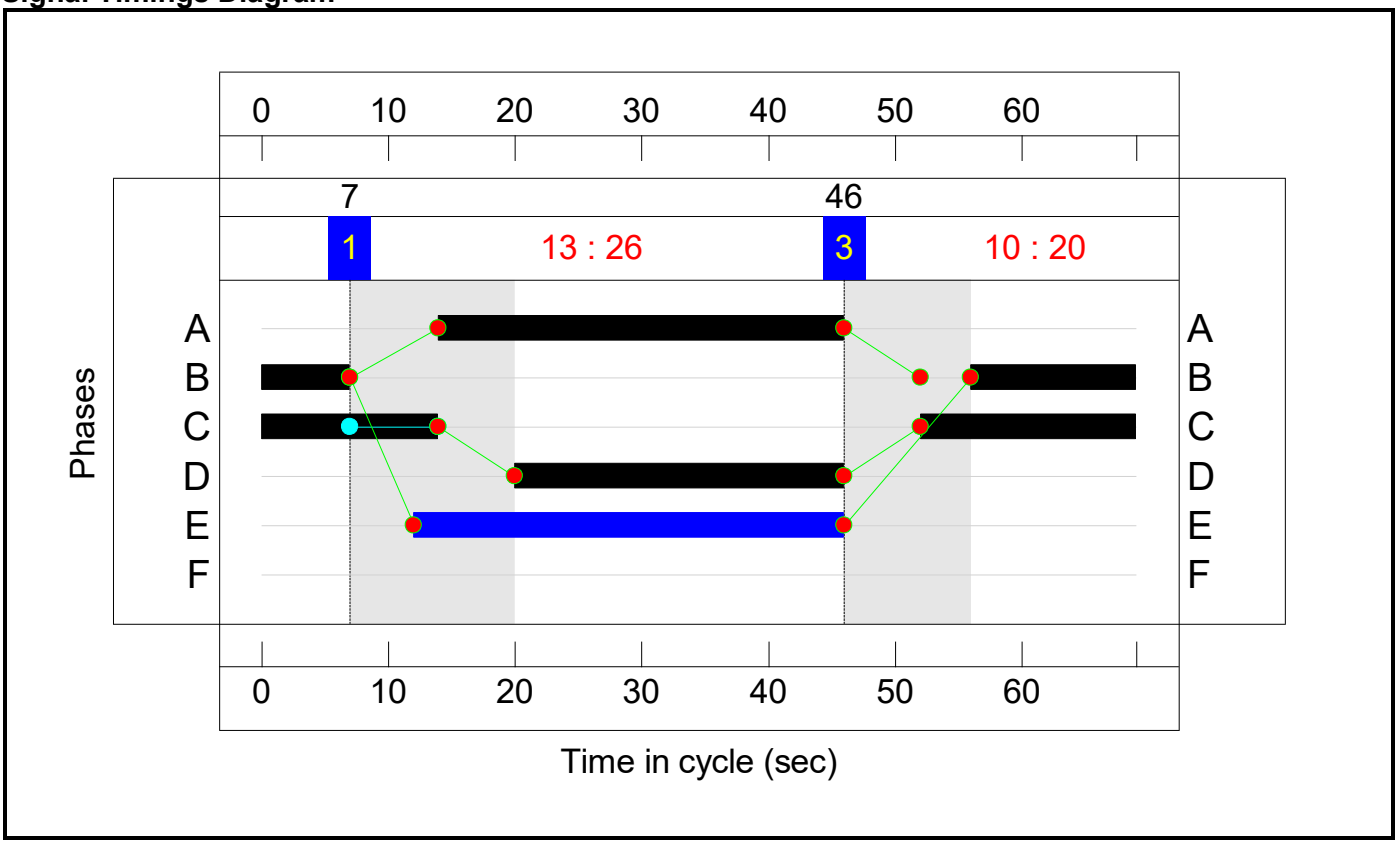
Stage Sequence Diagram



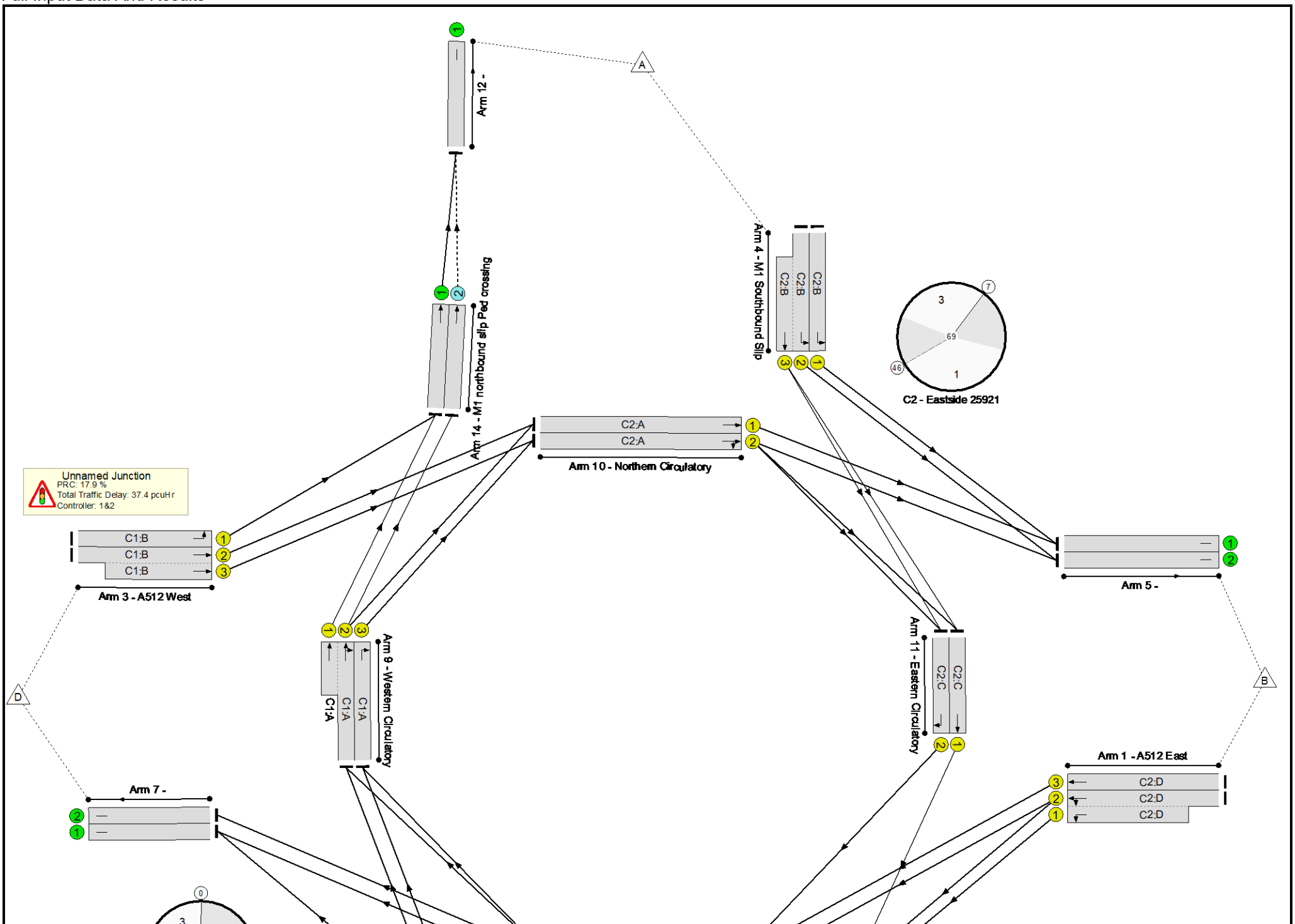
Stage Timings

Stage	1	3
Duration	26	20
Change Point	7	46

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.4%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**76.4%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	539	1949:1963	763+325	49.6 : 49.6%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	494	1955	765	64.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	11	-	237	1973:1963	343+78	56.2 : 56.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	11	-	230	1979	344	66.8%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	290	1926	837	34.6%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	867	1937:1941	718+517	70.2 : 70.2%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	343	1937	590	58.2%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	829	1945:1948	592+545	76.4 : 69.2%
5/1		U	N/A	N/A	-		-	-	-	1040	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	293	1980	1980	14.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	976	0.0%
7/1		U	N/A	N/A	-		-	-	-	422	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	377	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	45	-	378	1961	1307	28.9%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	45	-	871	1941	1294	67.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	687	1926:1941	388+621	68.1 : 68.1%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	230	1932	812	28.3%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	697	1953	934	74.6%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	593	1937	926	64.0%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	132	1997	926	14.3%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	377	1994	925	40.8%
12/1		U	N/A	N/A	-		-	-	-	784	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	293	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	713	1940	1940	36.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	71	1940	558	12.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**71**	**0**	**0**	**25.2**	**12.2**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**71**	**0**	**0**	**25.2**	**12.2**	**0.0**	**37.4**	**-**	**-**	**-**	**-**
1/2+1/1	539	539	-	-	-	2.3	0.5	-	2.8	18.6	5.5	0.5	6.0
1/3	494	494	-	-	-	2.3	0.9	-	3.3	23.7	7.7	0.9	8.6
2/2+2/1	237	237	-	-	-	1.7	0.6	-	2.3	35.4	3.4	0.6	4.0
2/3	230	230	-	-	-	1.7	1.0	-	2.7	42.1	4.1	1.0	5.1
3/1	290	290	-	-	-	1.0	0.3	-	1.3	16.3	3.6	0.3	3.9
3/2+3/3	867	867	-	-	-	3.5	1.2	-	4.6	19.2	7.3	1.2	8.5
4/1	343	343	-	-	-	1.9	0.7	-	2.6	27.6	5.5	0.7	6.2
4/2+4/3	829	829	-	-	-	4.9	1.3	-	6.2	27.1	7.8	1.3	9.1
5/1	1040	1040	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	293	293	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	422	422	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	377	377	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	378	378	-	-	-	0.4	0.2	-	0.6	6.0	1.7	0.2	1.9
8/2	871	871	-	-	-	0.7	1.0	-	1.7	7.2	3.9	1.0	4.9
9/2+9/1	687	687	-	-	-	1.7	1.1	-	2.7	14.3	8.7	1.1	9.7
9/3	230	230	-	-	-	0.1	0.2	-	0.3	4.9	0.2	0.2	0.4
10/1	697	697	-	-	-	1.4	1.5	-	2.8	14.7	5.7	1.5	7.1
10/2	593	593	-	-	-	1.0	0.9	-	1.8	11.2	5.2	0.9	6.0
11/1	132	132	-	-	-	0.5	0.1	-	0.6	15.9	2.4	0.1	2.5
11/2	377	377	-	-	-	0.1	0.3	-	0.4	4.1	0.2	0.3	0.5
12/1	784	784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	293	293	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

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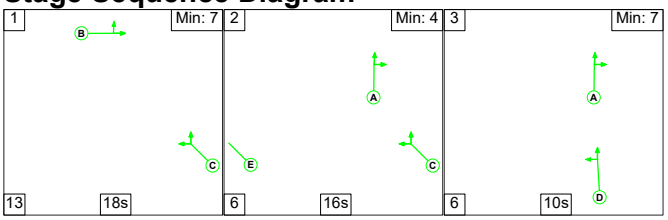
14/1	713	713	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	71	71	71	0	0	0.0	0.1	-	0.1	3.7	0.0	0.1	0.1

C1 - Westside 25911	PRC for Signalled Lanes (%):	28.2	Total Delay for Signalled Lanes (pcuHr):	16.38	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	17.9	Total Delay for Signalled Lanes (pcuHr):	20.59	Cycle Time (s):	69
	PRC Over All Lanes (%):	17.9	Total Delay Over All Lanes(pcuHr):	37.42		

Full Input Data And Results
Scenario 2: 'PM Base' (FG2: '2022 Pm', Plan 1: 'Network Control Plan 1')
Controller :C1 - Westside 25911

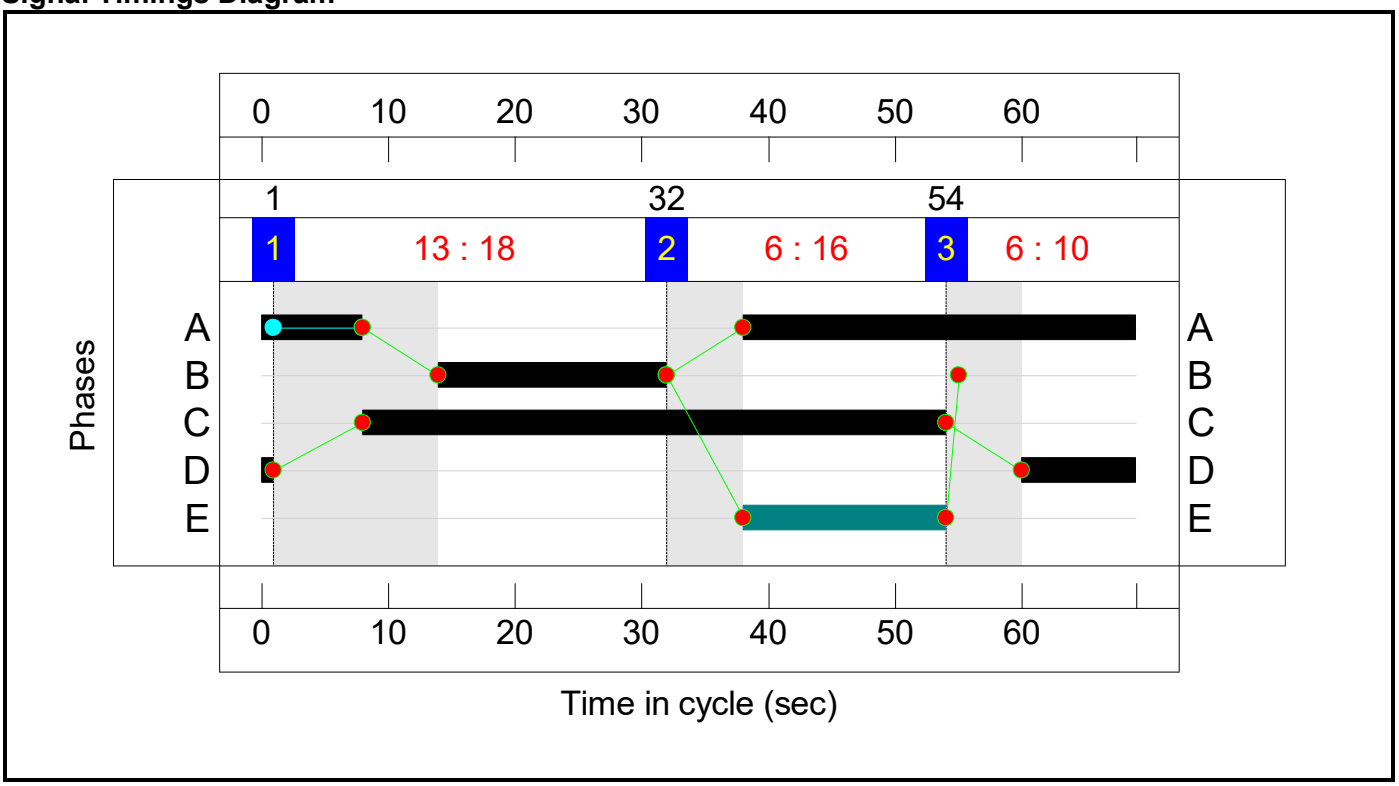
Stage Sequence Diagram



Stage Timings

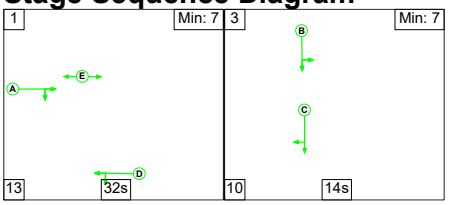
Stage	1	2	3
Duration	18	16	10
Change Point	1	32	54

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

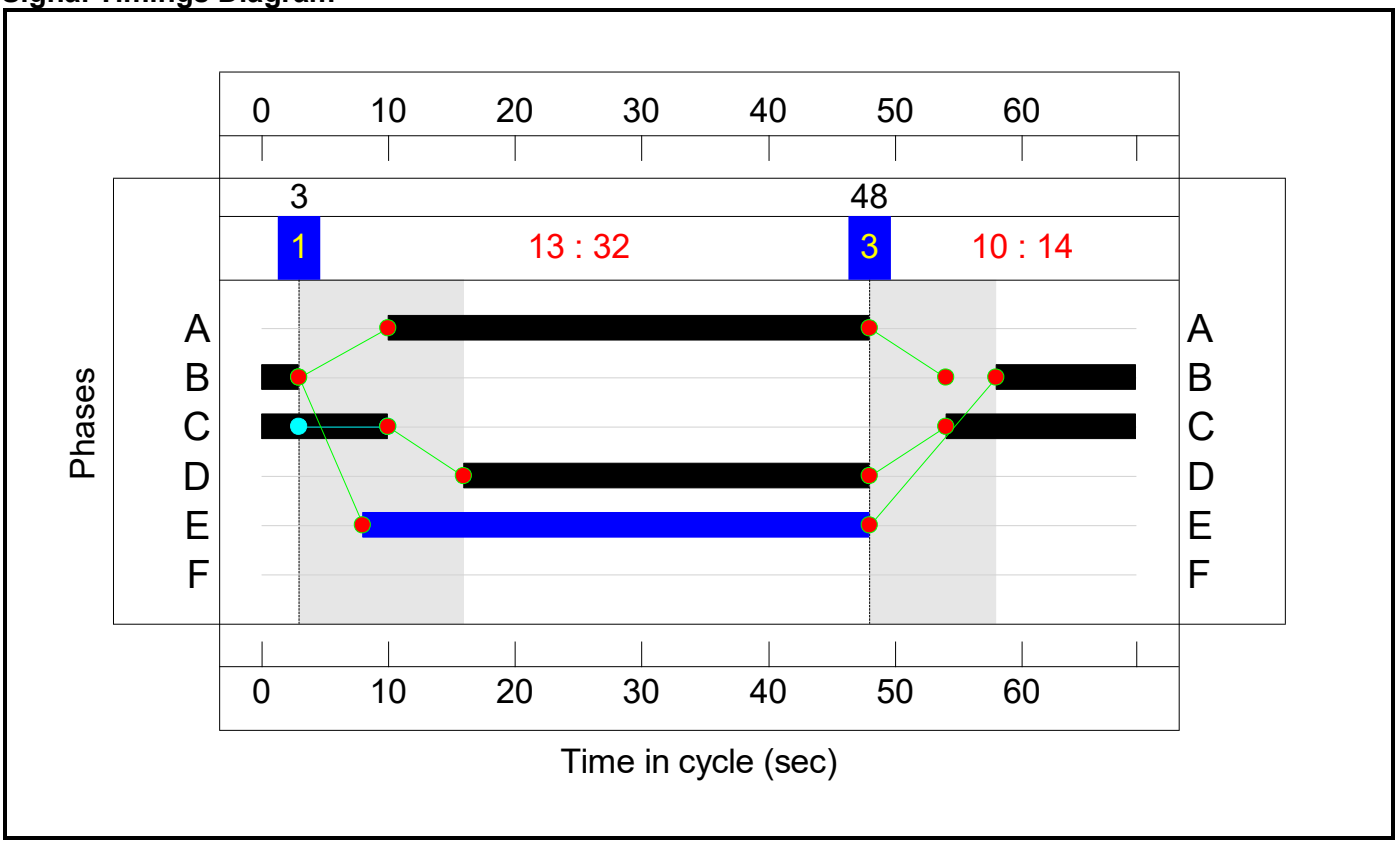


Stage Timings

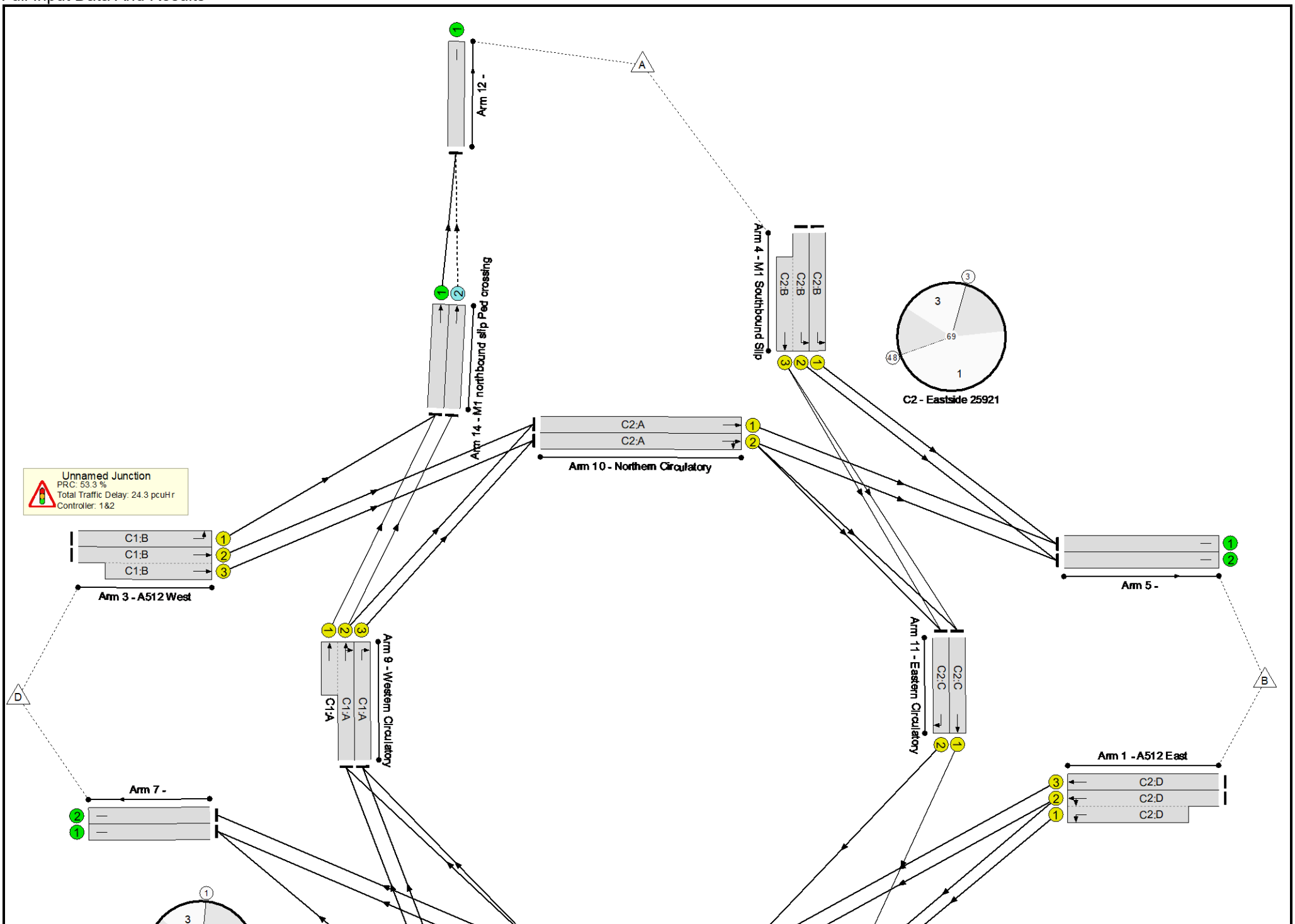
Stage	1	3
Duration	32	14
Change Point	3	48

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**58.7%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	32	-	871	1949:1963	886+598	58.7 : 58.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	32	-	491	1955	935	52.5%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	237	1973:1963	129+313	53.7 : 53.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	134	1979	315	42.5%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	18	-	218	1926	530	41.1%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	18	-	507	1937:1941	455+534	51.3 : 51.3%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	14	-	167	1937	421	39.7%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	14	-	428	1945:1948	423+423	57.0 : 44.2%
5/1		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	469	1980	1980	23.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	612	0.0%
7/1		U	N/A	N/A	-		-	-	-	688	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	187	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	520	1961	1336	38.9%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	678	1935	1318	51.4%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	39	-	560	1926:1941	147+1047	46.9 : 46.9%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	39	-	134	1932	1120	12.0%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	38	-	302	1953	1104	27.4%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	38	-	408	1937	1095	37.3%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	25	-	118	1997	752	15.7%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	25	-	187	1994	751	24.9%
12/1		U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	709	1940	1940	36.5%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	0	1940	728	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**0**	**0**	**0**	**17.8**	**6.5**	**0.0**	**24.3**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**17.8**	**6.5**	**0.0**	**24.3**	**-**	**-**	**-**	**-**
1/2+1/1	871	871	-	-	-	3.0	0.7	-	3.7	15.2	7.1	0.7	7.8
1/3	491	491	-	-	-	1.7	0.6	-	2.3	16.6	6.5	0.6	7.1
2/2+2/1	237	237	-	-	-	1.7	0.6	-	2.3	35.0	2.9	0.6	3.5
2/3	134	134	-	-	-	1.0	0.4	-	1.3	36.0	2.3	0.4	2.7
3/1	218	218	-	-	-	1.2	0.3	-	1.6	26.2	3.4	0.3	3.7
3/2+3/3	507	507	-	-	-	2.9	0.5	-	3.5	24.6	4.4	0.5	4.9
4/1	167	167	-	-	-	1.1	0.3	-	1.4	30.2	2.7	0.3	3.1
4/2+4/3	428	428	-	-	-	2.8	0.5	-	3.3	28.1	4.1	0.5	4.6
5/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	469	469	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	688	688	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	520	520	-	-	-	0.5	0.3	-	0.8	5.6	2.0	0.3	2.3
8/2	678	678	-	-	-	0.5	0.5	-	1.0	5.3	2.2	0.5	2.7
9/2+9/1	560	560	-	-	-	0.6	0.4	-	1.1	6.9	3.3	0.4	3.7
9/3	134	134	-	-	-	0.0	0.1	-	0.1	2.8	0.1	0.1	0.2
10/1	302	302	-	-	-	0.1	0.2	-	0.3	3.8	0.4	0.2	0.6
10/2	408	408	-	-	-	0.2	0.3	-	0.5	4.2	0.5	0.3	0.8
11/1	118	118	-	-	-	0.4	0.1	-	0.5	14.5	2.2	0.1	2.3
11/2	187	187	-	-	-	0.1	0.2	-	0.2	4.2	0.1	0.2	0.3
12/1	709	709	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	709	709	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

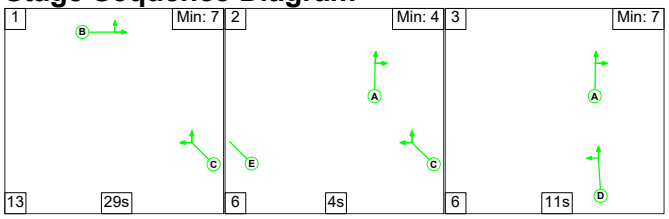
C1 - Westside 25911	PRC for Signalled Lanes (%):	67.6	Total Delay for Signalled Lanes (pcuHr):	11.69	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	53.3	Total Delay for Signalled Lanes (pcuHr):	12.17	Cycle Time (s):	69
	PRC Over All Lanes (%):	53.3	Total Delay Over All Lanes(pcuHr):	24.31		

Full Input Data And Results

Scenario 3: '2028 Without Development Flows (AM)' (FG3: '2028 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

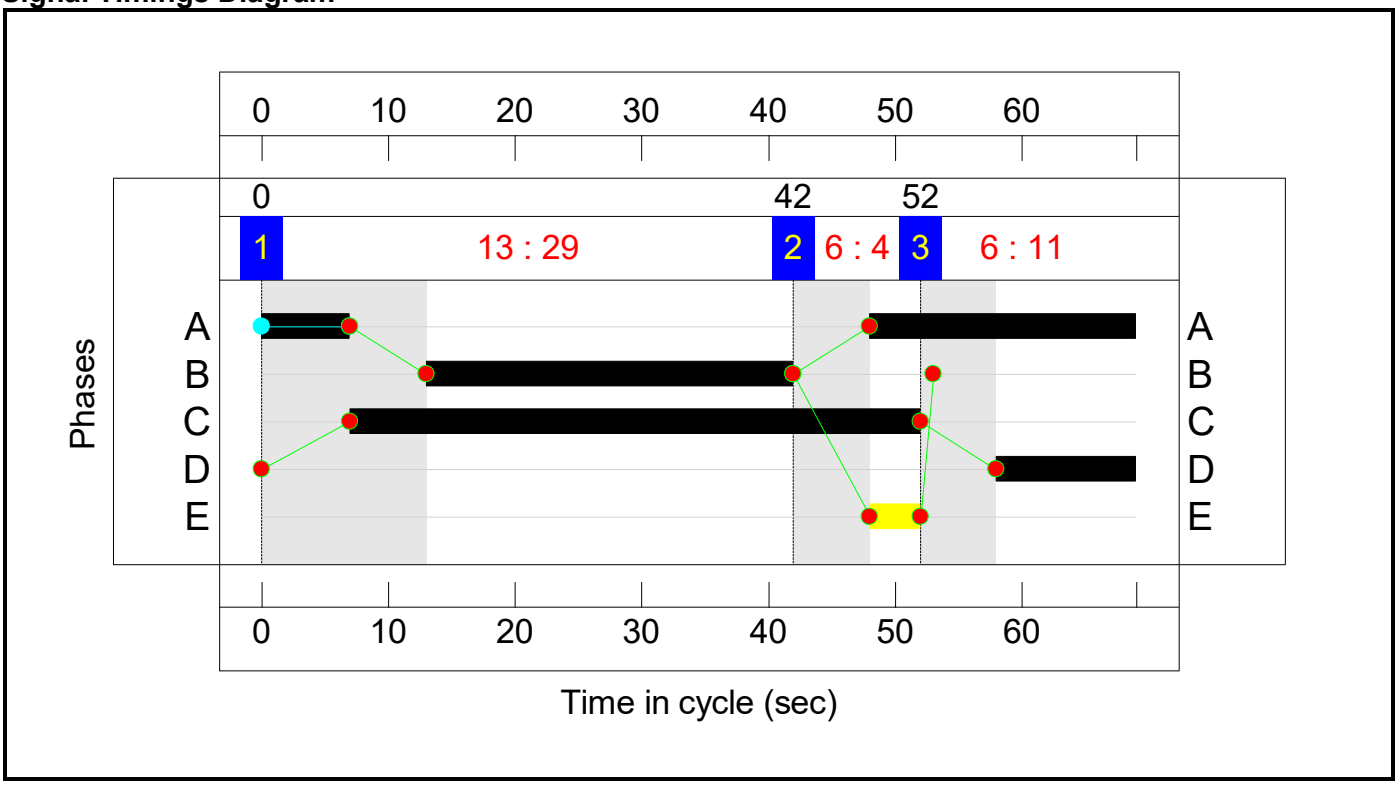
Stage Sequence Diagram



Stage Timings

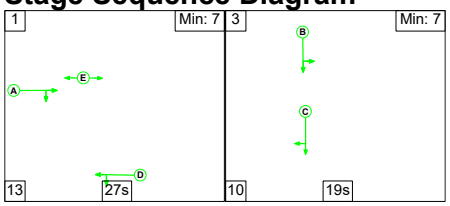
Stage	1	2	3
Duration	29	4	11
Change Point	0	42	52

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

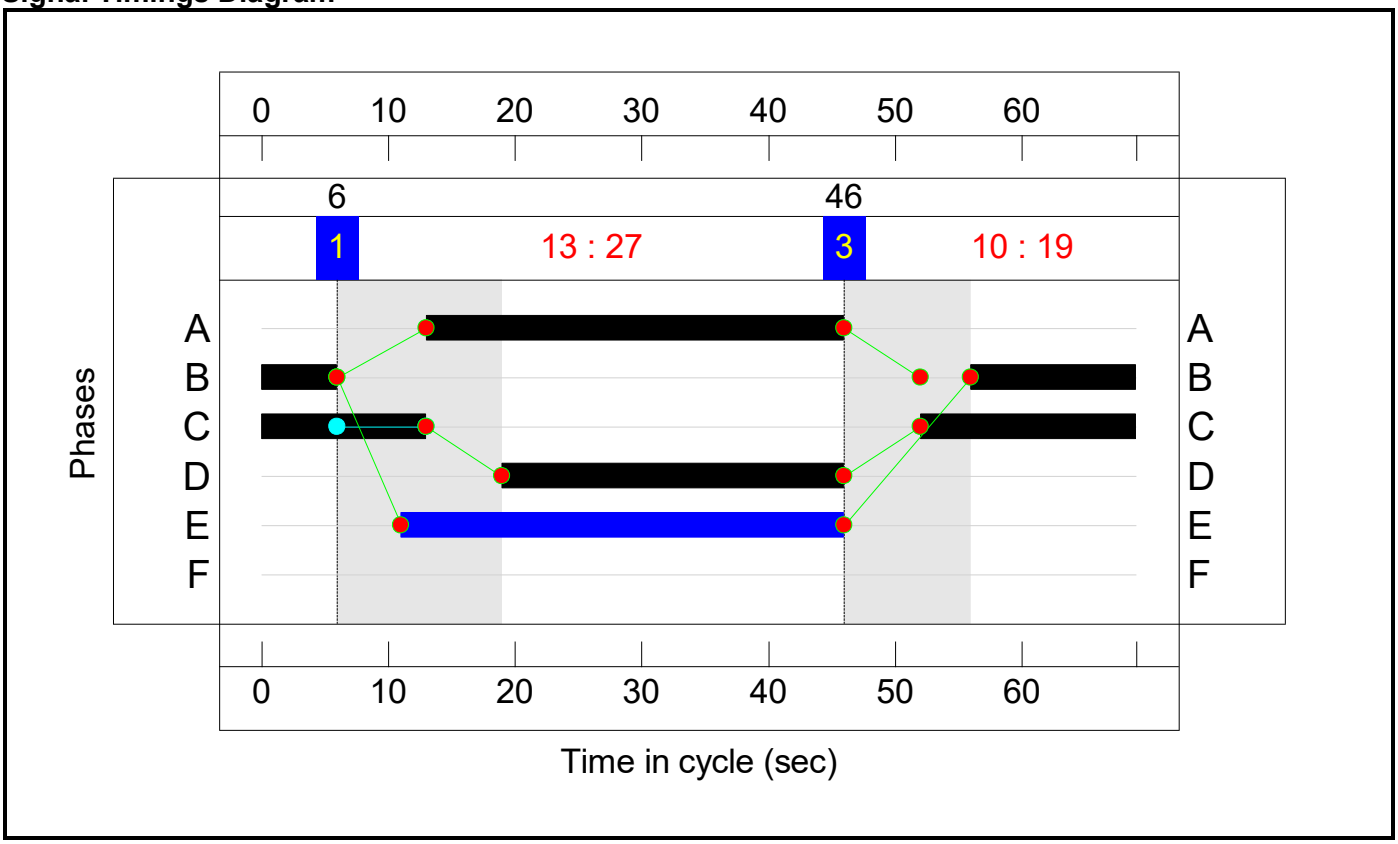


Stage Timings

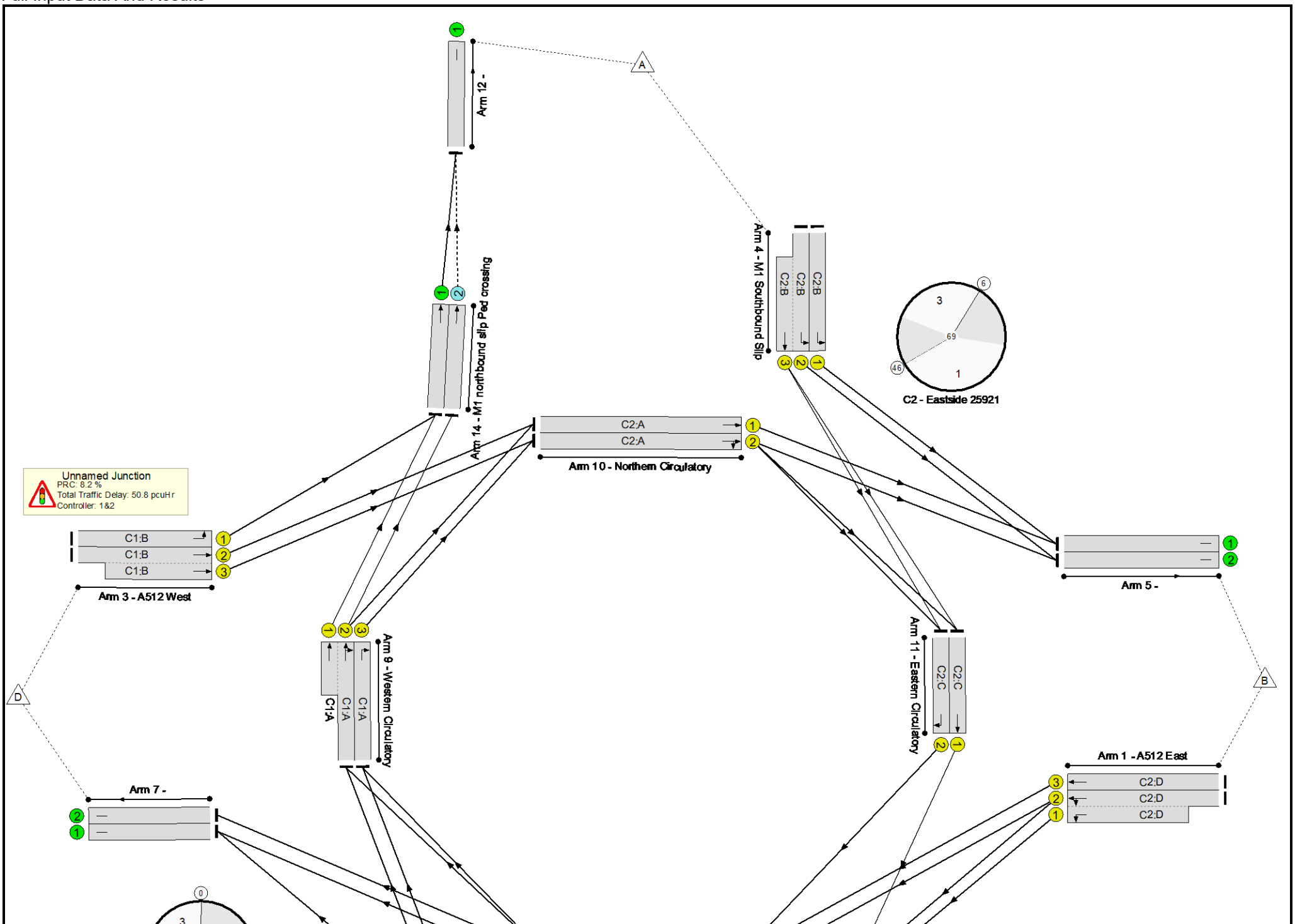
Stage	1	3
Duration	27	19
Change Point	6	46

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.2%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	27	-	733	1949:1963	791+283	68.3 : 68.3%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	27	-	553	1955	793	69.7%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	11	-	293	1973:1963	343+61	72.6 : 72.6%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	11	-	260	1979	344	75.5%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	337	1926	837	40.2%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	1069	1937:1941	692+691	77.3 : 77.3%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	19	-	358	1937	561	63.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	19	-	892	1945:1948	564+565	80.2 : 77.9%
5/1		U	N/A	N/A	-		-	-	-	1142	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1085	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	354	1980	1980	17.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	637	0.0%
7/1		U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	440	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	45	-	540	1961	1307	41.3%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	45	-	993	1941	1294	76.7%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	802	1926:1941	390+620	79.4 : 79.4%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	260	1932	812	32.0%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	33	-	784	1953	962	81.5%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	33	-	794	1937	954	83.2%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	30	-	161	1997	897	17.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	30	-	440	1994	896	49.1%
12/1		U	N/A	N/A	-		-	-	-	890	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	829	1940	1940	42.7%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	61	1940	533	11.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**61**	**0**	**0**	**31.2**	**19.5**	**0.0**	**50.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**61**	**0**	**0**	**31.2**	**19.5**	**0.0**	**50.8**	**-**	**-**	**-**	**-**
1/2+1/1	733	733	-	-	-	3.3	1.1	-	4.3	21.2	8.4	1.1	9.5
1/3	553	553	-	-	-	2.6	1.1	-	3.7	24.4	8.8	1.1	9.9
2/2+2/1	293	293	-	-	-	2.2	1.3	-	3.5	42.4	4.5	1.3	5.8
2/3	260	260	-	-	-	2.0	1.5	-	3.4	47.8	4.7	1.5	6.2
3/1	337	337	-	-	-	1.3	0.3	-	1.6	17.0	4.4	0.3	4.7
3/2+3/3	1069	1069	-	-	-	4.5	1.7	-	6.2	20.9	7.9	1.7	9.6
4/1	358	358	-	-	-	2.1	0.9	-	3.0	30.1	6.0	0.9	6.8
4/2+4/3	892	892	-	-	-	5.6	1.9	-	7.5	30.1	7.9	1.9	9.8
5/1	1142	1142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1085	1085	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	354	354	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	540	540	-	-	-	0.7	0.4	-	1.1	7.3	2.7	0.4	3.1
8/2	993	993	-	-	-	0.9	1.6	-	2.5	9.1	5.4	1.6	7.1
9/2+9/1	802	802	-	-	-	2.1	1.9	-	4.0	18.1	10.0	1.9	11.8
9/3	260	260	-	-	-	0.2	0.2	-	0.4	5.4	0.3	0.2	0.5
10/1	784	784	-	-	-	1.5	2.1	-	3.7	16.9	6.8	2.1	9.0
10/2	794	794	-	-	-	1.6	2.4	-	4.0	18.1	7.2	2.4	9.6
11/1	161	161	-	-	-	0.6	0.1	-	0.7	16.2	3.0	0.1	3.1
11/2	440	440	-	-	-	0.1	0.5	-	0.6	5.0	0.2	0.5	0.7
12/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	829	829	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	61	61	61	0	0	0.0	0.1	-	0.1	3.8	0.0	0.1	0.1

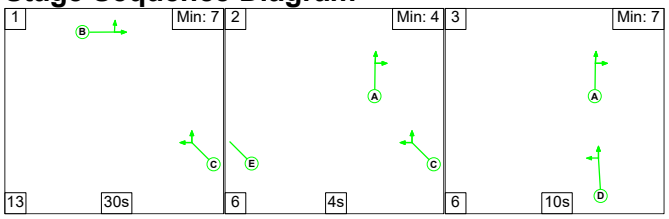
C1 - Westside 25911	PRC for Signalled Lanes (%):	13.3	Total Delay for Signalled Lanes (pcuHr):	22.70	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	8.2	Total Delay for Signalled Lanes (pcuHr):	27.53	Cycle Time (s):	69
	PRC Over All Lanes (%):	8.2	Total Delay Over All Lanes(pcuHr):	50.78		

Full Input Data And Results

Scenario 4: '2028 Without Development Flows (PM)' (FG4: '2028 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

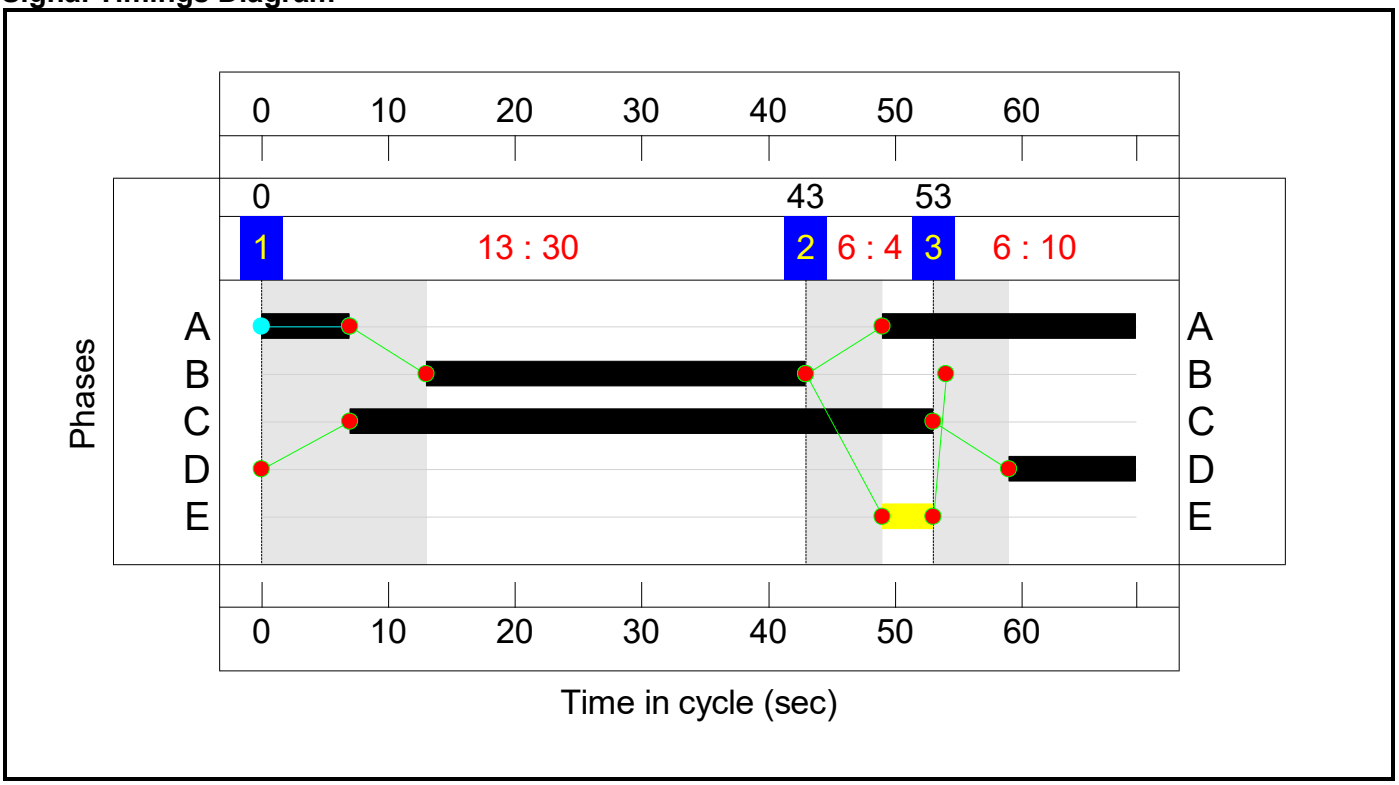
Stage Sequence Diagram



Stage Timings

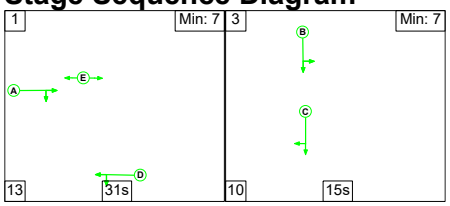
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

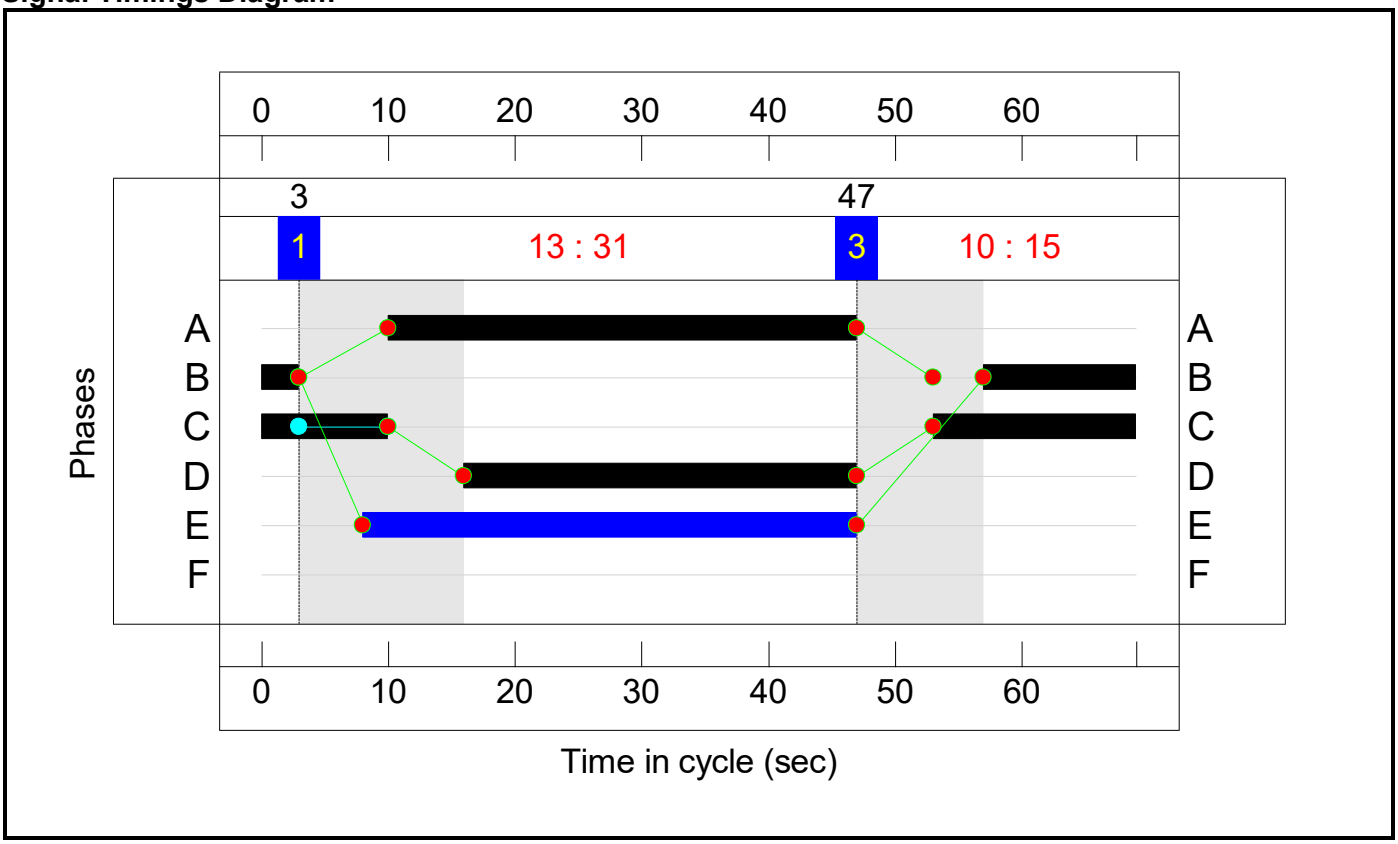


Stage Timings

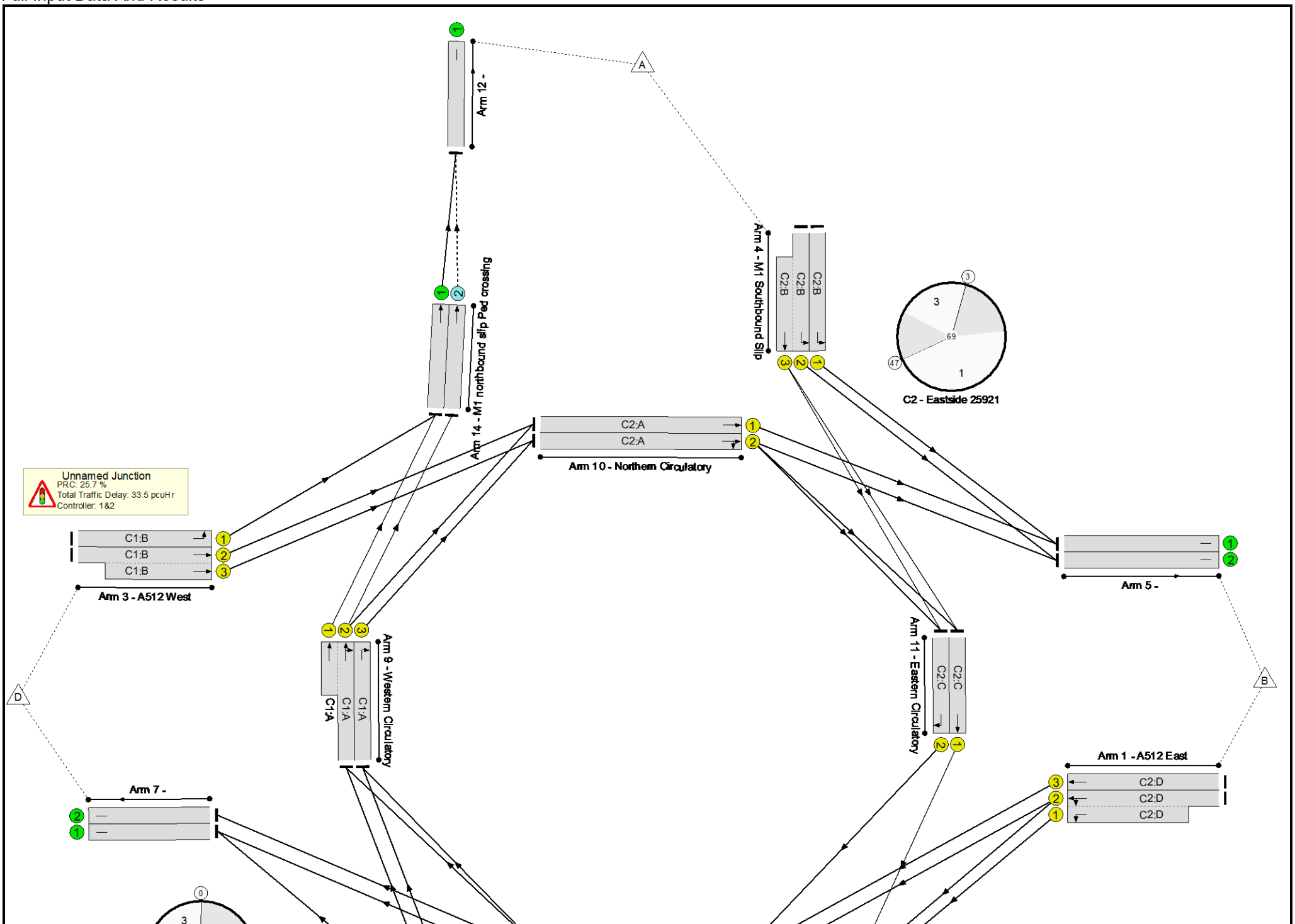
Stage	1	3
Duration	31	15
Change Point	3	47

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**71.6%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	31	-	1004	1949:1963	870+532	71.6 : 71.6%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	31	-	532	1955	907	58.7%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	244	1973:1963	60+313	65.5 : 65.5%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	185	1979	315	58.6%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	315	1926	865	36.4%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	793	1937:1941	700+709	56.3 : 56.3%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	15	-	201	1937	449	44.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	15	-	585	1945:1948	451+452	69.6 : 60.0%
5/1		U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	711	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	568	1980	1980	28.7%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	590	0.0%
7/1		U	N/A	N/A	-		-	-	-	828	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	309	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	623	1961	1336	46.6%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	803	1939	1321	60.8%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	533	1926:1941	203+693	59.5 : 59.5%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	185	1932	784	23.6%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	37	-	433	1953	1076	40.3%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	37	-	584	1937	1067	54.7%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	26	-	187	1997	781	23.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	26	-	271	1994	780	34.7%
12/1		U	N/A	N/A	-		-	-	-	809	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	727	1940	1940	37.5%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	82	1940	555	14.8%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**82**	**0**	**0**	**23.6**	**9.9**	**0.0**	**33.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**82**	**0**	**0**	**23.6**	**9.9**	**0.0**	**33.5**	**-**	**-**	**-**	**-**
1/2+1/1	1004	1004	-	-	-	3.8	1.3	-	5.1	18.2	9.3	1.3	10.6
1/3	532	532	-	-	-	2.0	0.7	-	2.7	18.4	7.4	0.7	8.1
2/2+2/1	244	244	-	-	-	1.8	0.9	-	2.8	40.7	3.6	0.9	4.6
2/3	185	185	-	-	-	1.4	0.7	-	2.1	40.5	3.2	0.7	3.9
3/1	315	315	-	-	-	1.1	0.3	-	1.4	15.8	3.9	0.3	4.2
3/2+3/3	793	793	-	-	-	2.9	0.6	-	3.5	16.1	5.2	0.6	5.9
4/1	201	201	-	-	-	1.3	0.4	-	1.7	29.9	3.3	0.4	3.7
4/2+4/3	585	585	-	-	-	3.9	0.9	-	4.8	29.6	5.5	0.9	6.4
5/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	711	711	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	568	568	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	828	828	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	623	623	-	-	-	0.7	0.4	-	1.1	6.5	2.7	0.4	3.1
8/2	803	803	-	-	-	0.6	0.8	-	1.3	5.9	2.5	0.8	3.3
9/2+9/1	533	533	-	-	-	1.7	0.7	-	2.5	16.7	8.4	0.7	9.1
9/3	185	185	-	-	-	0.1	0.2	-	0.2	4.8	0.2	0.2	0.3
10/1	433	433	-	-	-	0.7	0.3	-	1.0	8.3	1.9	0.3	2.3
10/2	584	584	-	-	-	0.7	0.6	-	1.3	8.1	2.4	0.6	3.0
11/1	187	187	-	-	-	0.8	0.2	-	1.0	19.1	3.5	0.2	3.7
11/2	271	271	-	-	-	0.1	0.3	-	0.3	4.6	0.1	0.3	0.4
12/1	809	809	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	727	727	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	82	82	82	0	0	0.0	0.1	-	0.1	4.0	0.6	0.1	0.7

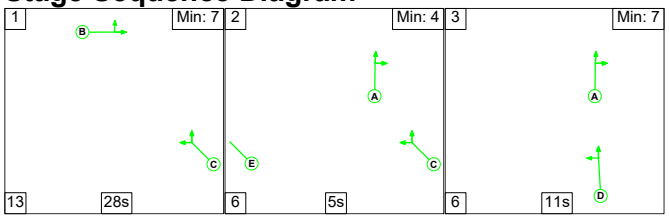
C1 - Westside 25911	PRC for Signalled Lanes (%):	37.4	Total Delay for Signalled Lanes (pcuHr):	14.93	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	25.7	Total Delay for Signalled Lanes (pcuHr):	17.94	Cycle Time (s):	69
	PRC Over All Lanes (%):	25.7	Total Delay Over All Lanes(pcuHr):	33.46		

Full Input Data And Results

Scenario 5: '2028 With Development Flows (AM)' (FG5: '2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

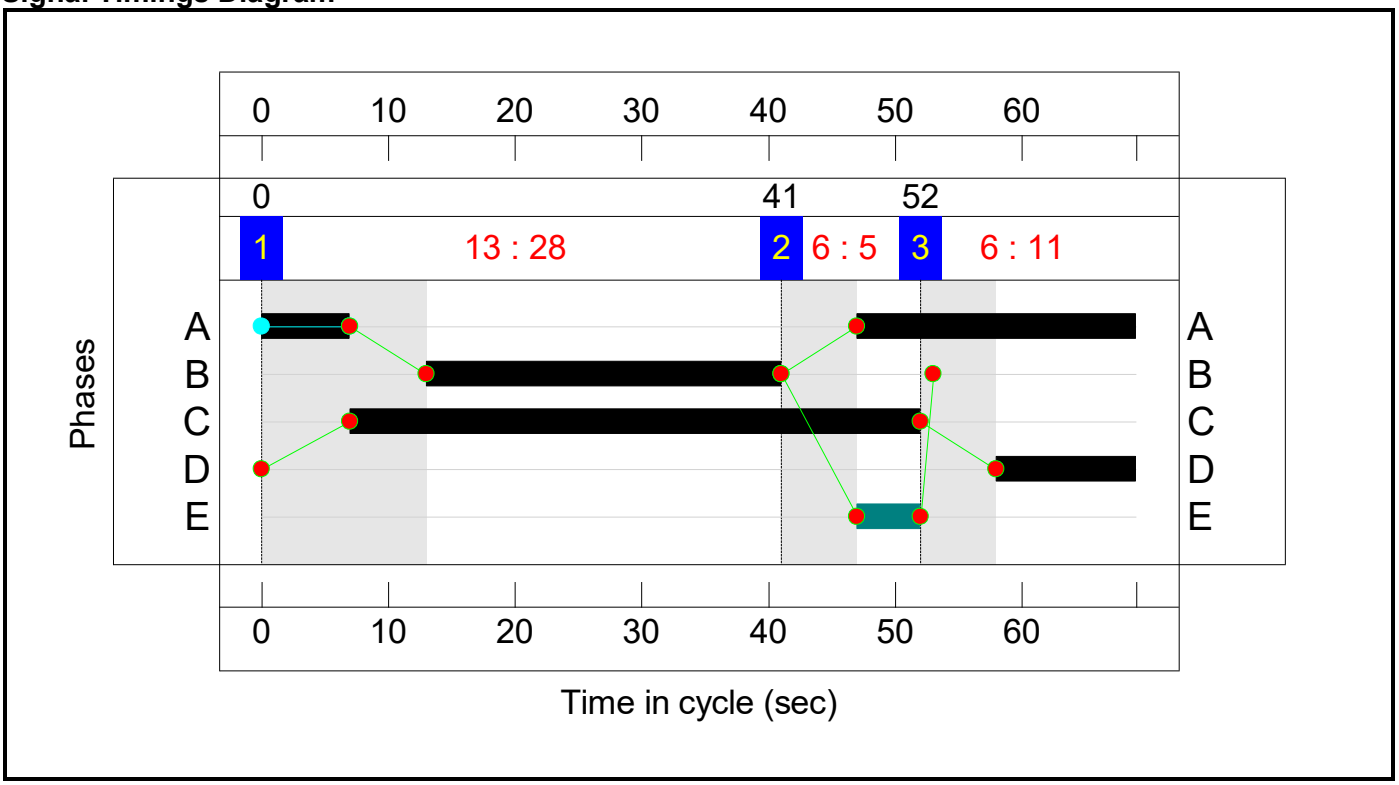
Stage Sequence Diagram



Stage Timings

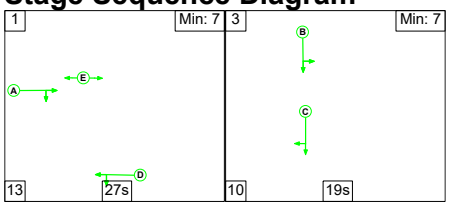
Stage	1	2	3
Duration	28	5	11
Change Point	0	41	52

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

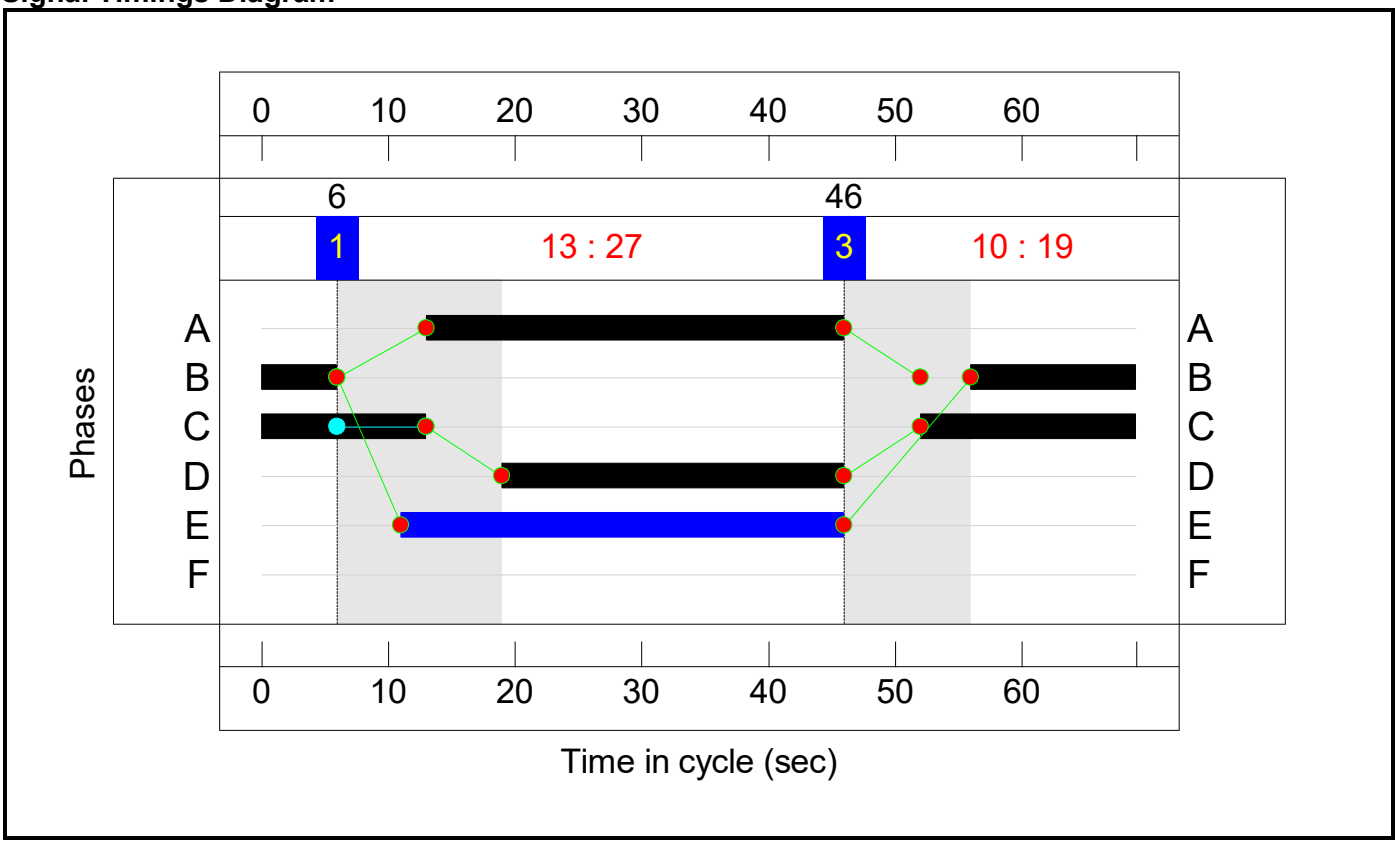


Stage Timings

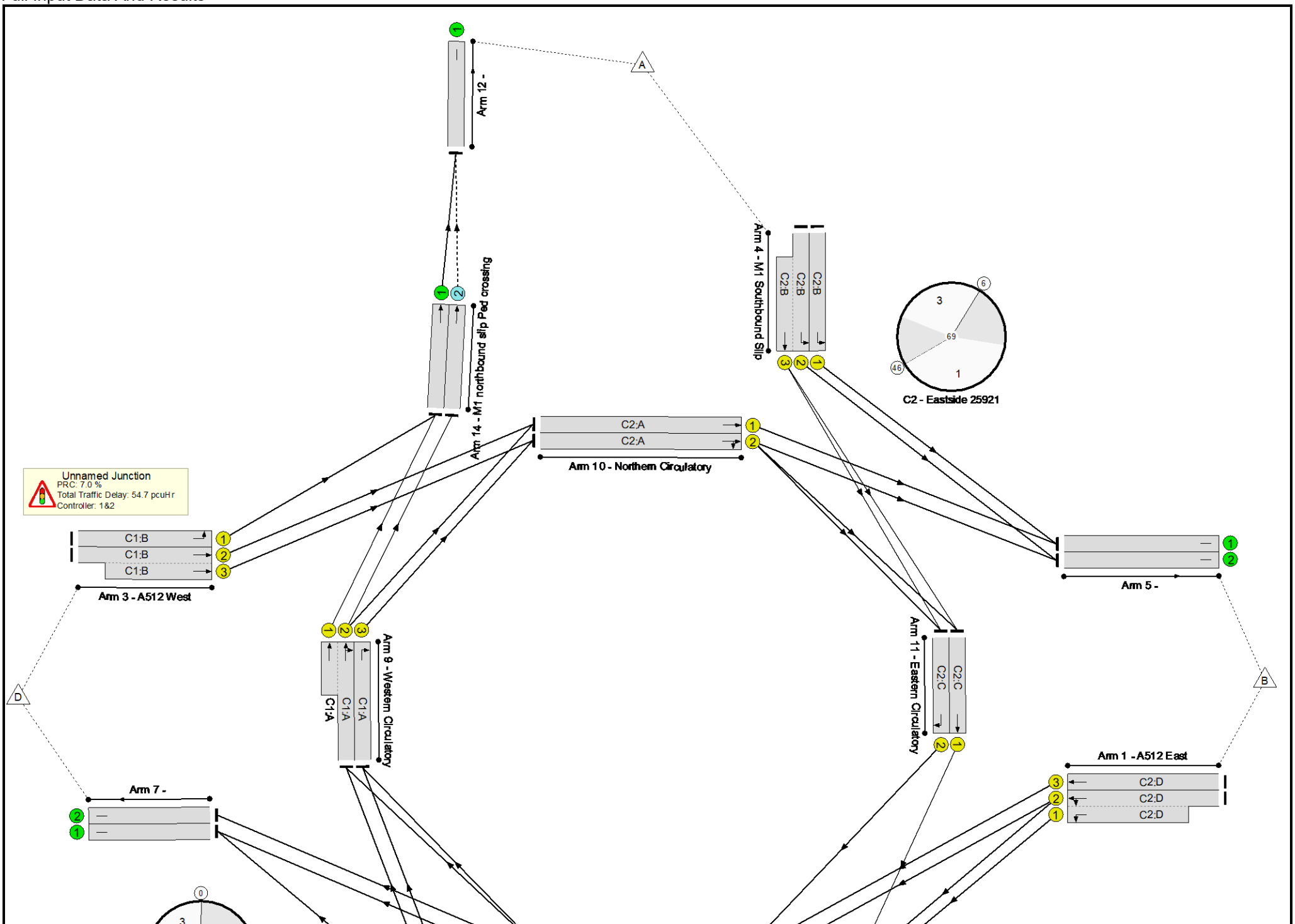
Stage	1	3
Duration	27	19
Change Point	6	46

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.1%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	27	-	746	1949:1963	791+282	69.5 : 69.5%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	27	-	592	1955	793	74.6%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	11	-	287	1973:1963	343+69	69.7 : 69.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	11	-	255	1979	344	74.1%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	357	1926	809	44.1%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1101	1937:1941	680+674	81.4 : 81.4%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	19	-	375	1937	561	66.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	19	-	918	1945:1948	564+565	81.1 : 81.6%
5/1		U	N/A	N/A	-		-	-	-	1167	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1096	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	360	1980	1980	18.2%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	636	0.0%
7/1		U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	461	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	45	-	550	1961	1307	42.1%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	45	-	1053	1941	1294	81.4%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	831	1926:1941	358+658	81.8 : 81.8%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	255	1932	840	30.4%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	33	-	792	1953	962	82.3%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	33	-	803	1937	954	84.1%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	30	-	164	1997	897	18.3%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	30	-	461	1994	896	51.5%
12/1		U	N/A	N/A	-		-	-	-	949	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	360	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	895	1940	1940	46.1%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	54	1940	518	10.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**54**	**0**	**0**	**32.9**	**21.8**	**0.0**	**54.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**54**	**0**	**0**	**32.9**	**21.8**	**0.0**	**54.7**	**-**	**-**	**-**	**-**
1/2+1/1	746	746	-	-	-	3.3	1.1	-	4.5	21.5	8.7	1.1	9.8
1/3	592	592	-	-	-	2.9	1.4	-	4.3	26.3	9.5	1.4	11.0
2/2+2/1	287	287	-	-	-	2.1	1.1	-	3.2	40.5	4.2	1.1	5.4
2/3	255	255	-	-	-	1.9	1.4	-	3.3	46.6	4.6	1.4	6.0
3/1	357	357	-	-	-	1.4	0.4	-	1.8	18.2	4.9	0.4	5.3
3/2+3/3	1101	1101	-	-	-	5.0	2.1	-	7.1	23.2	8.4	2.1	10.6
4/1	375	375	-	-	-	2.2	1.0	-	3.2	31.1	6.3	1.0	7.2
4/2+4/3	918	918	-	-	-	5.8	2.1	-	7.9	31.2	8.2	2.1	10.3
5/1	1167	1167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1096	1096	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	360	360	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	550	550	-	-	-	0.8	0.4	-	1.1	7.4	2.8	0.4	3.2
8/2	1053	1053	-	-	-	1.1	2.1	-	3.2	11.0	8.7	2.1	10.8
9/2+9/1	831	831	-	-	-	2.3	2.2	-	4.5	19.5	11.4	2.2	13.6
9/3	255	255	-	-	-	0.1	0.2	-	0.4	5.1	0.3	0.2	0.5
10/1	792	792	-	-	-	1.6	2.3	-	3.8	17.5	6.8	2.3	9.0
10/2	803	803	-	-	-	1.6	2.6	-	4.2	18.8	7.2	2.6	9.7
11/1	164	164	-	-	-	0.6	0.1	-	0.7	16.1	3.0	0.1	3.2
11/2	461	461	-	-	-	0.1	0.5	-	0.7	5.2	0.3	0.5	0.8
12/1	949	949	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	895	895	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	54	54	54	0	0	0.0	0.1	-	0.1	3.9	0.0	0.1	0.1

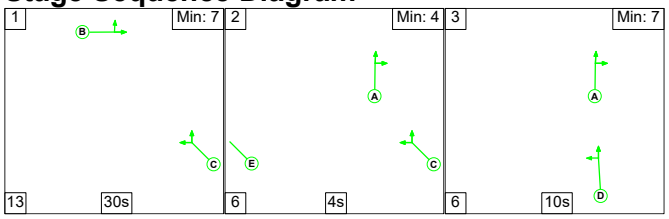
C1 - Westside 25911	PRC for Signalled Lanes (%):	10.1	Total Delay for Signalled Lanes (pcuHr):	24.64	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	7.0	Total Delay for Signalled Lanes (pcuHr):	29.41	Cycle Time (s):	69
	PRC Over All Lanes (%):	7.0	Total Delay Over All Lanes(pcuHr):	54.66		

Full Input Data And Results

Scenario 6: '2028 With Development Flows (PM)' (FG6: '2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

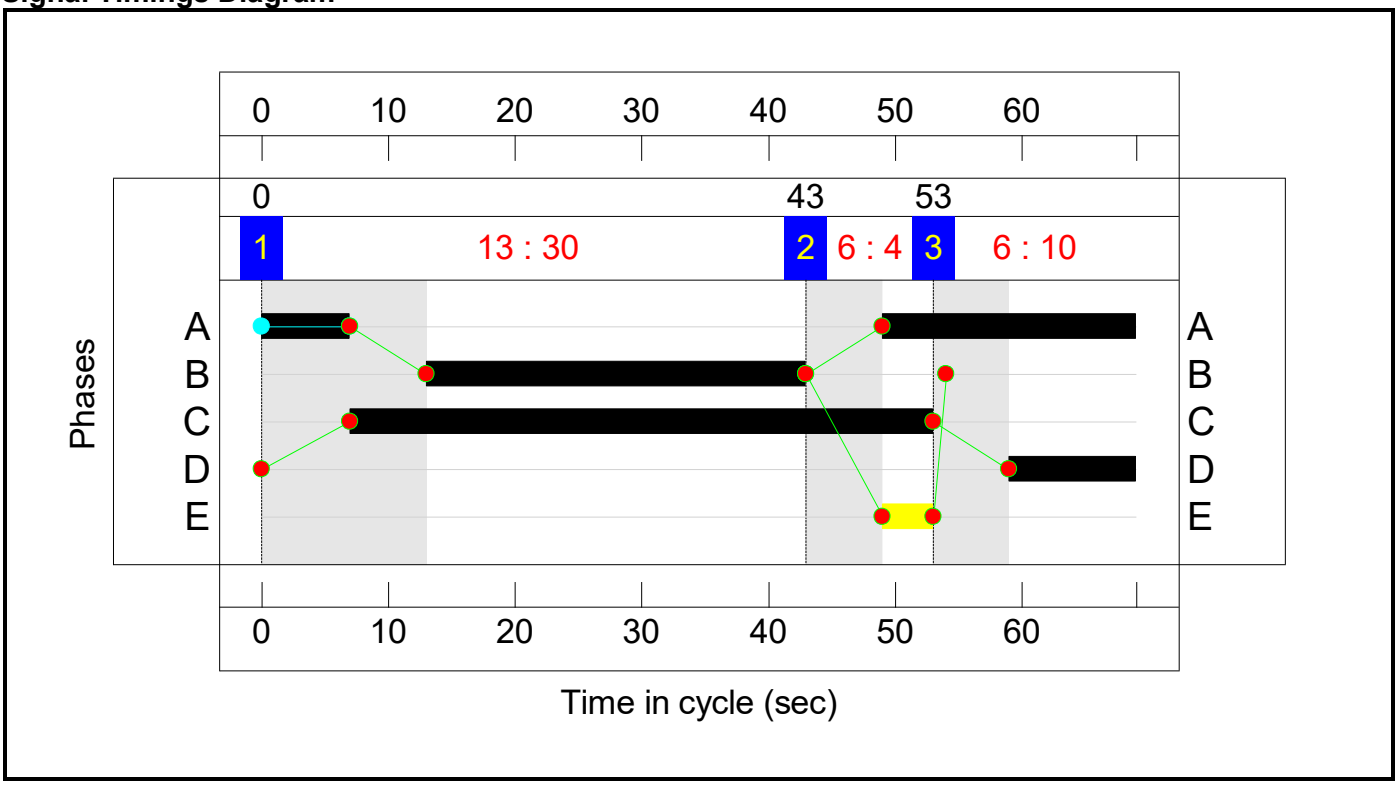
Stage Sequence Diagram



Stage Timings

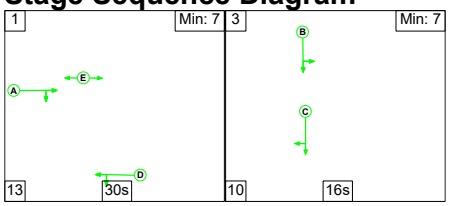
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

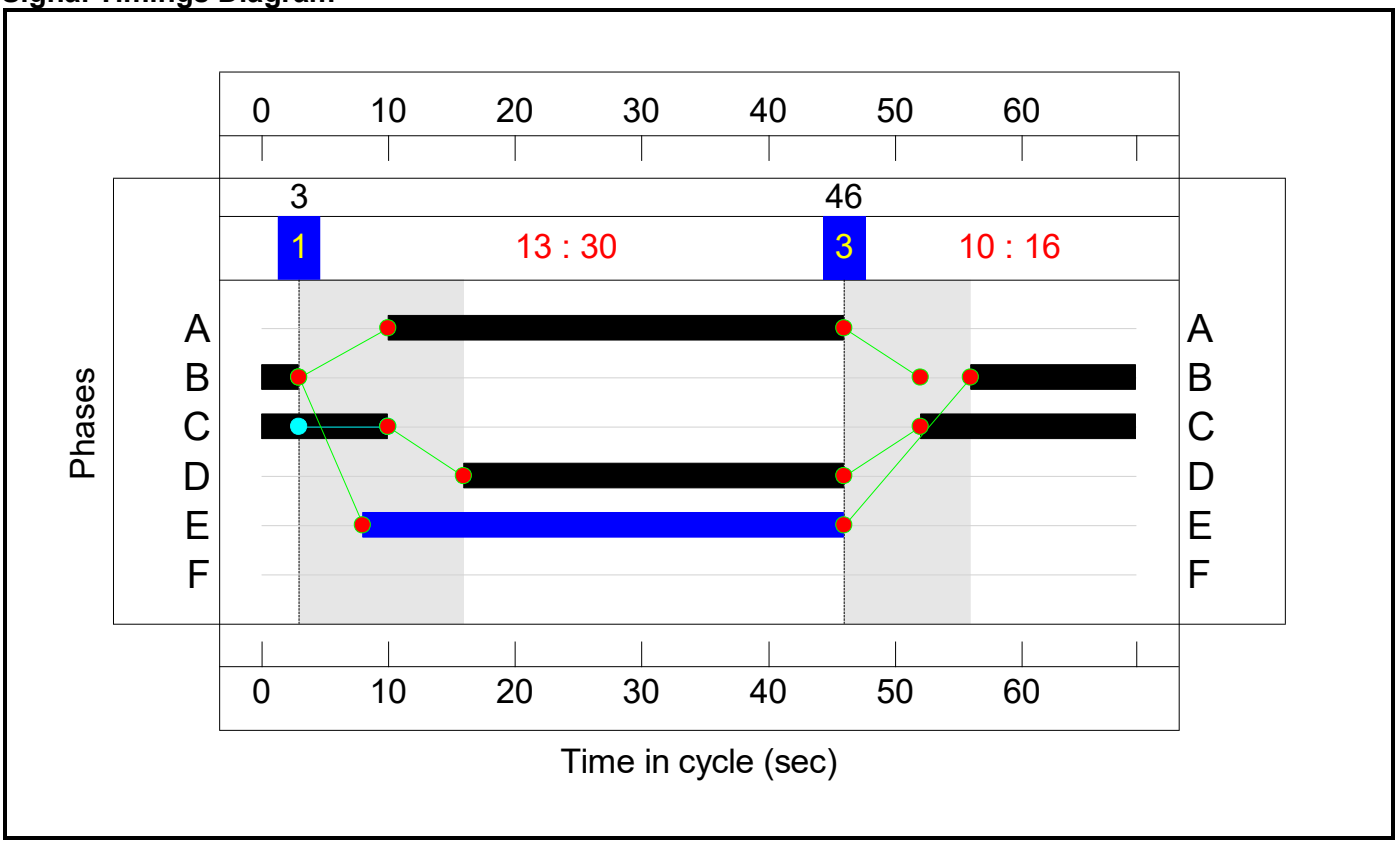


Stage Timings

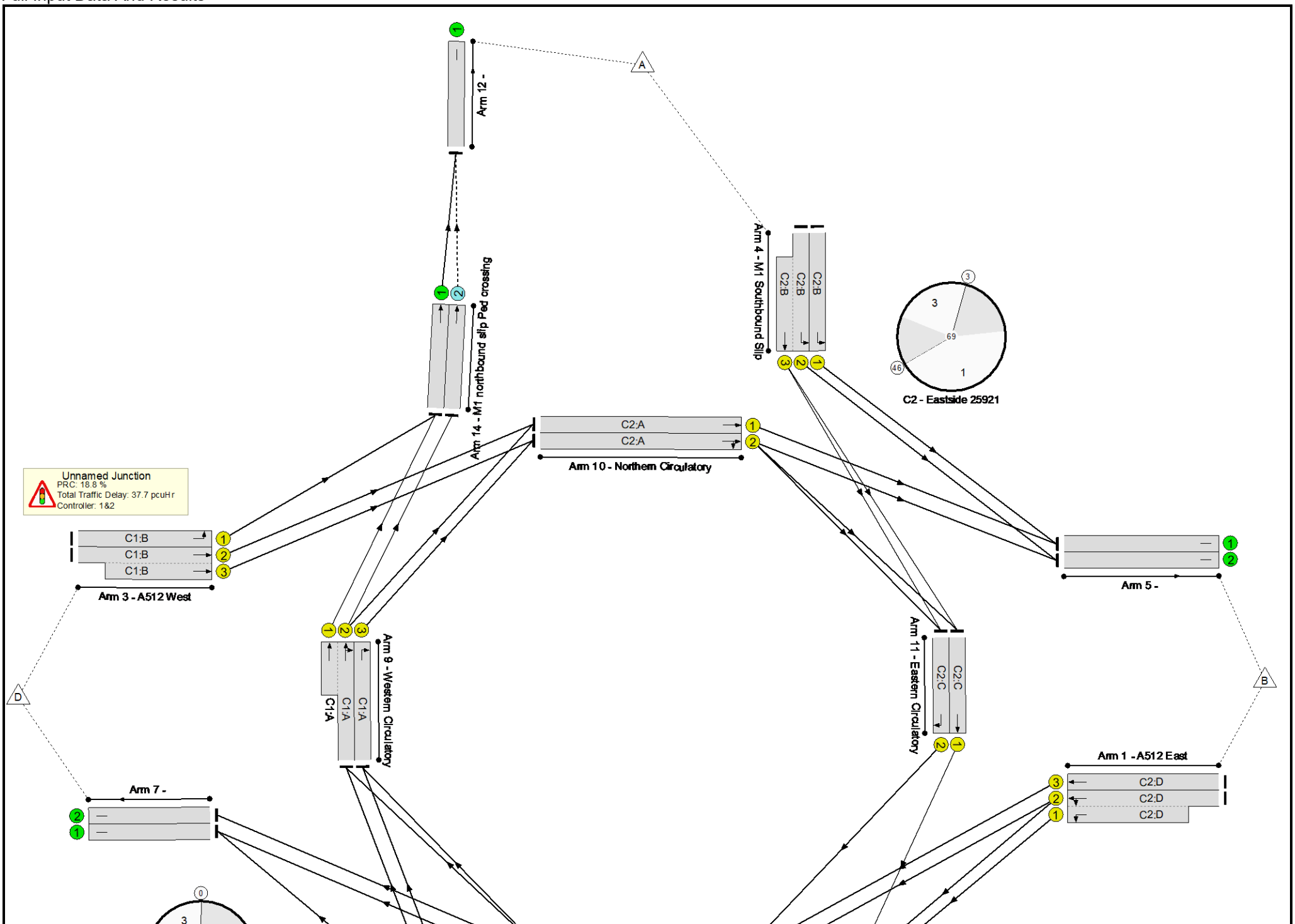
Stage	1	3
Duration	30	16
Change Point	3	46

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.7%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	30	-	1011	1949:1963	853+482	75.7 : 75.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	30	-	552	1955	878	62.8%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	215	1973:1963	3+313	68.1 : 68.1%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	204	1979	315	64.7%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	359	1926	865	41.5%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	855	1937:1941	712+675	61.7 : 61.7%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	16	-	245	1937	477	51.3%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	16	-	685	1945:1948	479+480	70.1 : 72.7%
5/1		U	N/A	N/A	-		-	-	-	686	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	750	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	571	1980	1980	28.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	589	0.0%
7/1		U	N/A	N/A	-		-	-	-	859	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	646	1961	1336	48.4%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	901	1942	1323	68.1%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	488	1926:1941	150+724	55.8 : 55.8%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	204	1932	784	26.0%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	36	-	441	1953	1047	42.1%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	36	-	620	1937	1039	59.7%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	27	-	206	1997	810	25.4%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	27	-	349	1994	809	43.1%
12/1		U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	571	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	763	1940	1940	39.3%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	82	1940	547	15.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**82**	**0**	**0**	**25.8**	**11.9**	**0.0**	**37.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**82**	**0**	**0**	**25.8**	**11.9**	**0.0**	**37.7**	**-**	**-**	**-**	**-**
1/2+1/1	1011	1011	-	-	-	4.1	1.5	-	5.7	20.2	10.0	1.5	11.6
1/3	552	552	-	-	-	2.2	0.8	-	3.1	20.1	8.0	0.8	8.8
2/2+2/1	215	215	-	-	-	1.6	1.0	-	2.7	44.8	3.8	1.0	4.9
2/3	204	204	-	-	-	1.5	0.9	-	2.4	43.1	3.6	0.9	4.5
3/1	359	359	-	-	-	1.3	0.4	-	1.6	16.4	4.6	0.4	4.9
3/2+3/3	855	855	-	-	-	3.2	0.8	-	4.0	16.8	6.0	0.8	6.8
4/1	245	245	-	-	-	1.5	0.5	-	2.1	30.2	4.0	0.5	4.5
4/2+4/3	685	685	-	-	-	4.5	1.2	-	5.8	30.3	6.1	1.2	7.3
5/1	686	686	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	750	750	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	571	571	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	859	859	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	646	646	-	-	-	0.7	0.5	-	1.2	6.6	2.8	0.5	3.2
8/2	901	901	-	-	-	0.6	1.1	-	1.6	6.6	3.0	1.1	4.0
9/2+9/1	488	488	-	-	-	1.6	0.6	-	2.2	16.5	8.2	0.6	8.8
9/3	204	204	-	-	-	0.1	0.2	-	0.3	5.1	0.2	0.2	0.4
10/1	441	441	-	-	-	0.8	0.4	-	1.2	9.9	2.3	0.4	2.6
10/2	620	620	-	-	-	0.9	0.7	-	1.6	9.2	3.2	0.7	4.0
11/1	206	206	-	-	-	0.9	0.2	-	1.1	18.9	3.9	0.2	4.1
11/2	349	349	-	-	-	0.1	0.4	-	0.5	5.1	0.2	0.4	0.6
12/1	845	845	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	571	571	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	763	763	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	82	82	82	0	0	0.0	0.1	-	0.1	4.0	0.6	0.1	0.7

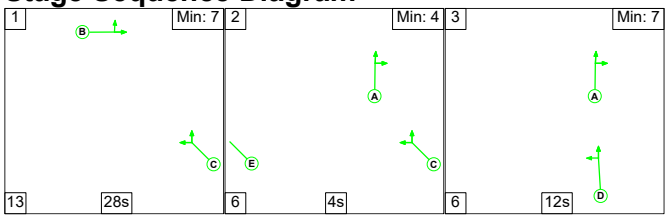
C1 - Westside 25911	PRC for Signalled Lanes (%):	32.1	Total Delay for Signalled Lanes (pcuHr):	16.11	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	18.8	Total Delay for Signalled Lanes (pcuHr):	20.93	Cycle Time (s):	69
	PRC Over All Lanes (%):	18.8	Total Delay Over All Lanes(pcuHr):	37.66		

Full Input Data And Results

Scenario 7: '2038 Without Development Flows (AM)' (FG7: '2038 Without Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

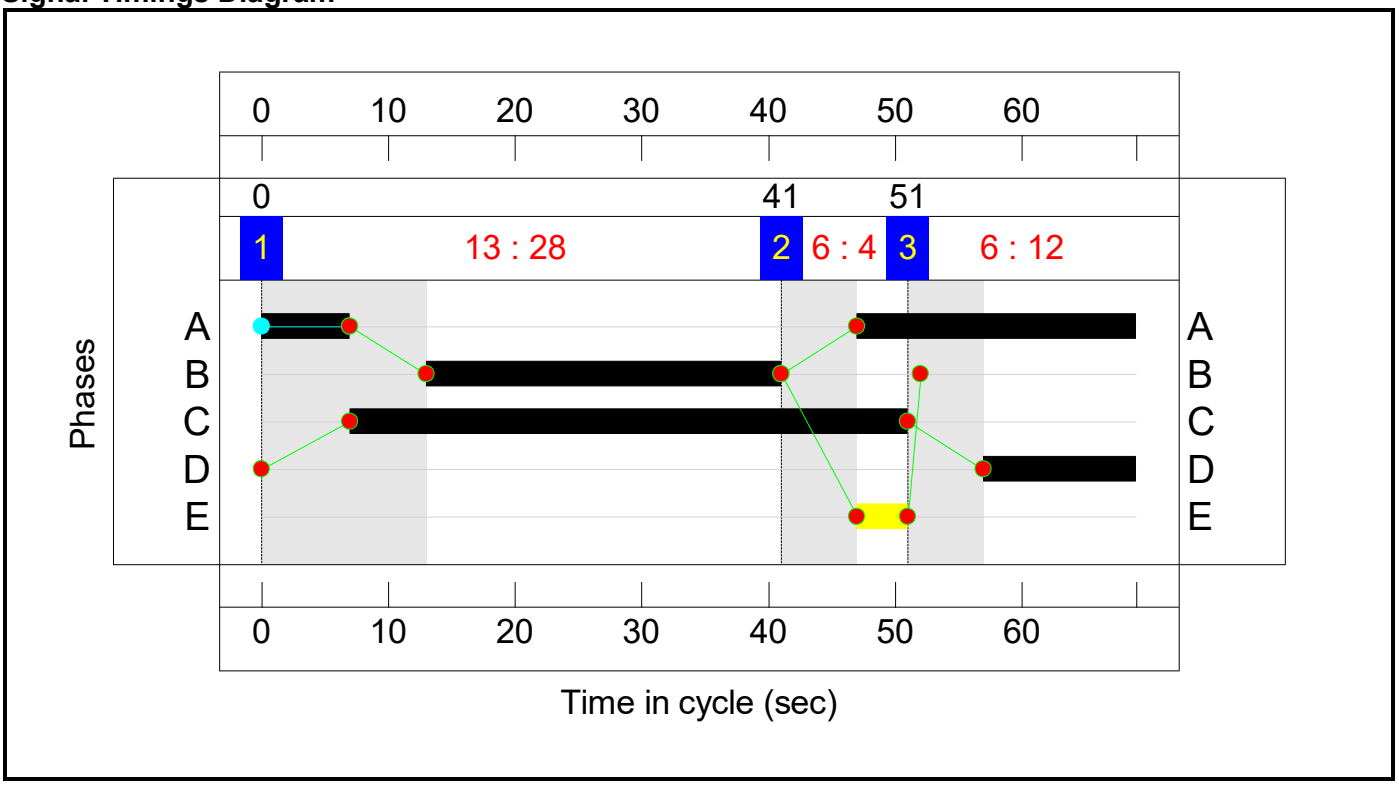
Stage Sequence Diagram



Stage Timings

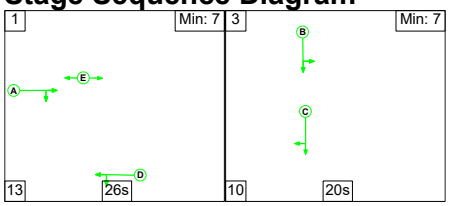
Stage	1	2	3
Duration	28	4	12
Change Point	0	41	51

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

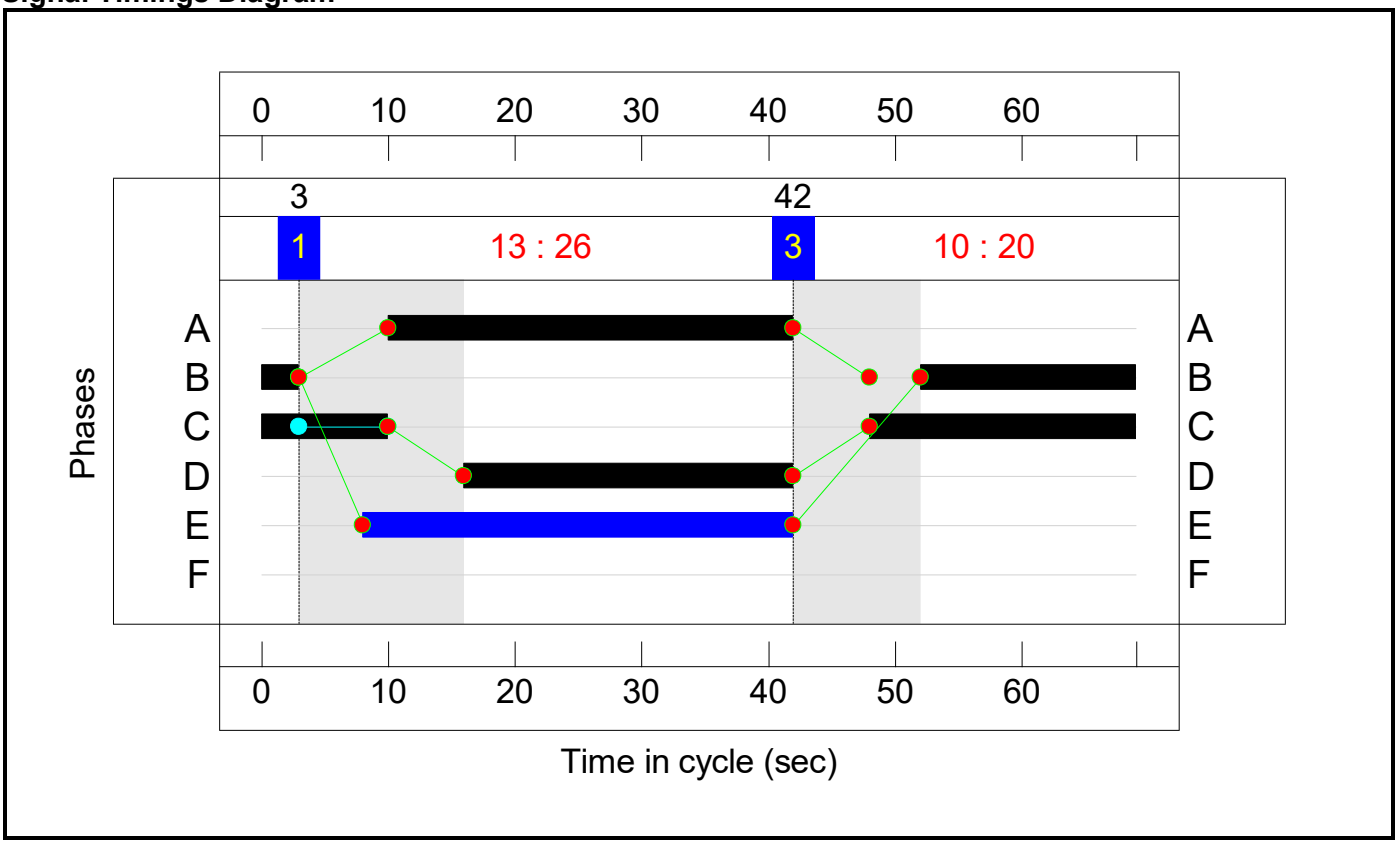


Stage Timings

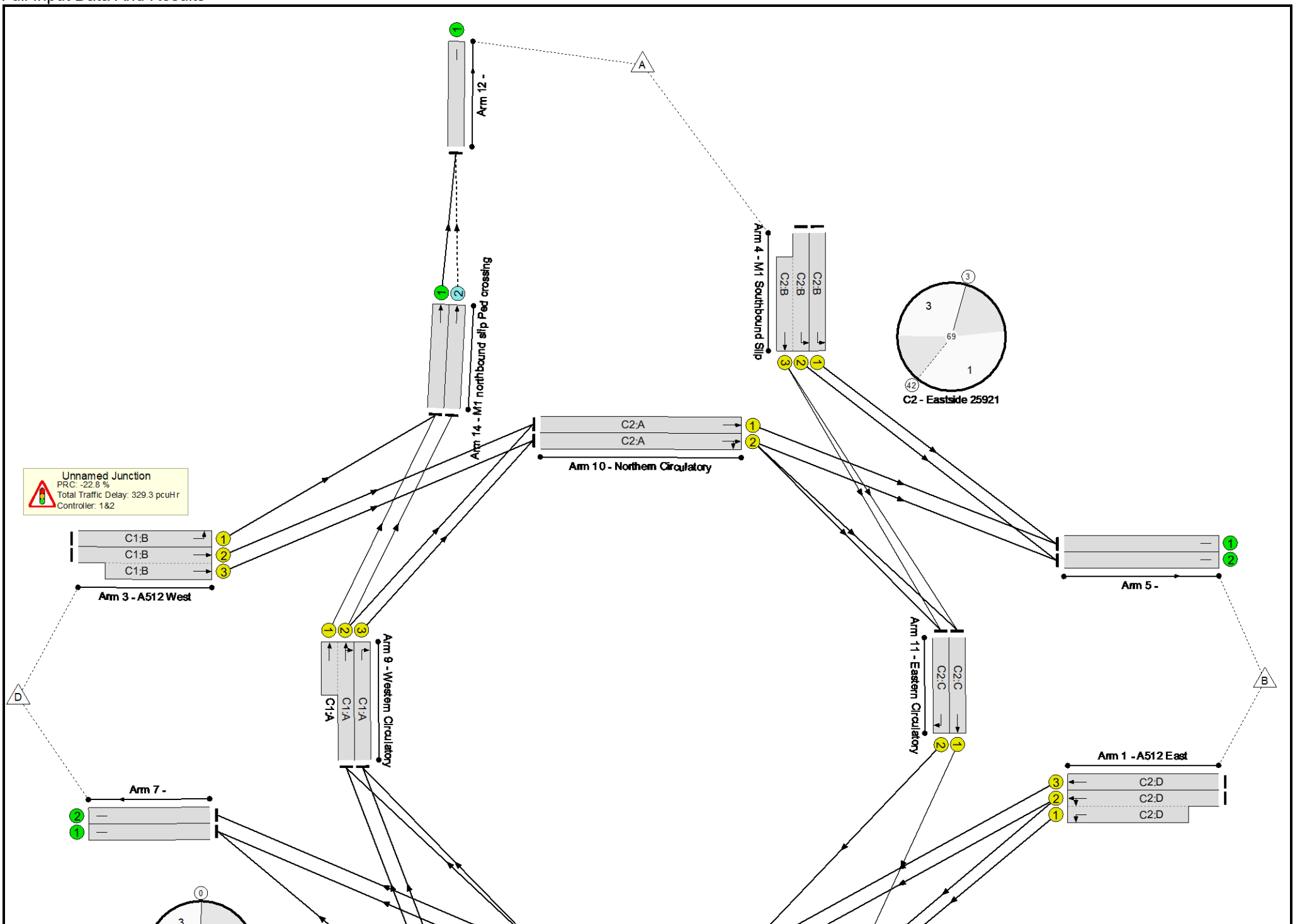
Stage	1	3
Duration	26	20
Change Point	3	42

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.5%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	1033	1949:1963	763+293	97.8 : 97.8%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	642	1955	765	83.9%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	12	-	384	1973:1963	372+66	87.7 : 87.7%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	12	-	325	1979	373	87.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	451	1926	809	55.7%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1478	1937:1941	679+674	109.2 : 109.2%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	641	1937	590	108.7%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	893	1945:1948	215+593	110.5 : 110.5%
5/1		U	N/A	N/A	-		-	-	-	1709	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1007	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	579	1980	1980	26.6%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	599	0.0%
7/1		U	N/A	N/A	-		-	-	-	804	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	44	-	746	1961	1279	58.3%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	44	-	1297	1944	1268	97.4%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	940	1926:1941	467+607	87.5 : 87.5%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	325	1932	840	38.7%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	1068	1953	934	107.7%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	1061	1937	926	107.9%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	292	1997	926	25.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	655	1994	925	64.1%
12/1		U	N/A	N/A	-		-	-	-	1065	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	982	1940	1940	50.6%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	83	1940	499	16.6%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**83**	**0**	**0**	**61.4**	**267.9**	**0.0**	**329.3**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**83**	**0**	**0**	**61.4**	**267.9**	**0.0**	**329.3**	**-**	**-**	**-**	**-**
1/2+1/1	1033	1033	-	-	-	5.5	11.3	-	16.8	58.5	14.1	11.3	25.4
1/3	642	642	-	-	-	3.4	2.5	-	5.9	33.1	11.1	2.5	13.6
2/2+2/1	384	384	-	-	-	2.8	3.2	-	6.0	56.5	6.1	3.2	9.3
2/3	325	325	-	-	-	2.5	3.0	-	5.5	60.6	6.0	3.0	9.1
3/1	451	451	-	-	-	1.9	0.6	-	2.5	20.1	6.5	0.6	7.1
3/2+3/3	1478	1354	-	-	-	11.2	67.8	-	79.0	192.4	24.1	67.8	91.8
4/1	641	590	-	-	-	6.3	30.9	-	37.2	209.1	13.3	30.9	44.2
4/2+4/3	893	831	-	-	-	7.0	47.1	-	54.1	218.1	12.8	47.1	59.8
5/1	1524	1524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	925	925	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	526	526	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	804	804	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	746	746	-	-	-	1.6	0.7	-	2.3	11.2	5.0	0.7	5.7
8/2	1235	1235	-	-	-	1.8	11.2	-	13.0	37.9	15.2	11.2	26.4
9/2+9/1	940	940	-	-	-	2.6	3.3	-	6.0	22.9	16.9	3.3	20.2
9/3	325	325	-	-	-	0.2	0.3	-	0.5	6.0	1.1	0.3	1.4
10/1	1006	934	-	-	-	6.4	41.8	-	48.2	172.6	20.6	41.8	62.5
10/2	999	926	-	-	-	6.4	42.3	-	48.7	175.6	20.5	42.3	62.9
11/1	239	239	-	-	-	1.2	0.2	-	1.4	21.2	4.5	0.2	4.7
11/2	593	593	-	-	-	0.4	0.9	-	1.3	7.8	0.8	0.9	1.7
12/1	1065	1065	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	982	982	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
14/2	83	83	83	0	0	0.0	0.1	-	0.1	4.3	0.3	0.1	0.4

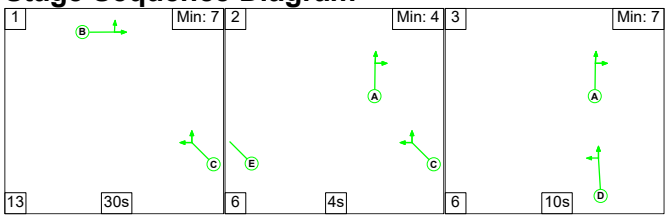
C1 - Westside 25911	PRC for Signalled Lanes (%):	-21.3	Total Delay for Signalled Lanes (pcuHr):	114.85	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-22.8	Total Delay for Signalled Lanes (pcuHr):	213.69	Cycle Time (s):	69
	PRC Over All Lanes (%):	-22.8	Total Delay Over All Lanes(pcuHr):	329.33		

Full Input Data And Results

Scenario 8: '2038 Without Development Flows (PM)' (FG8: '2038 Without Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

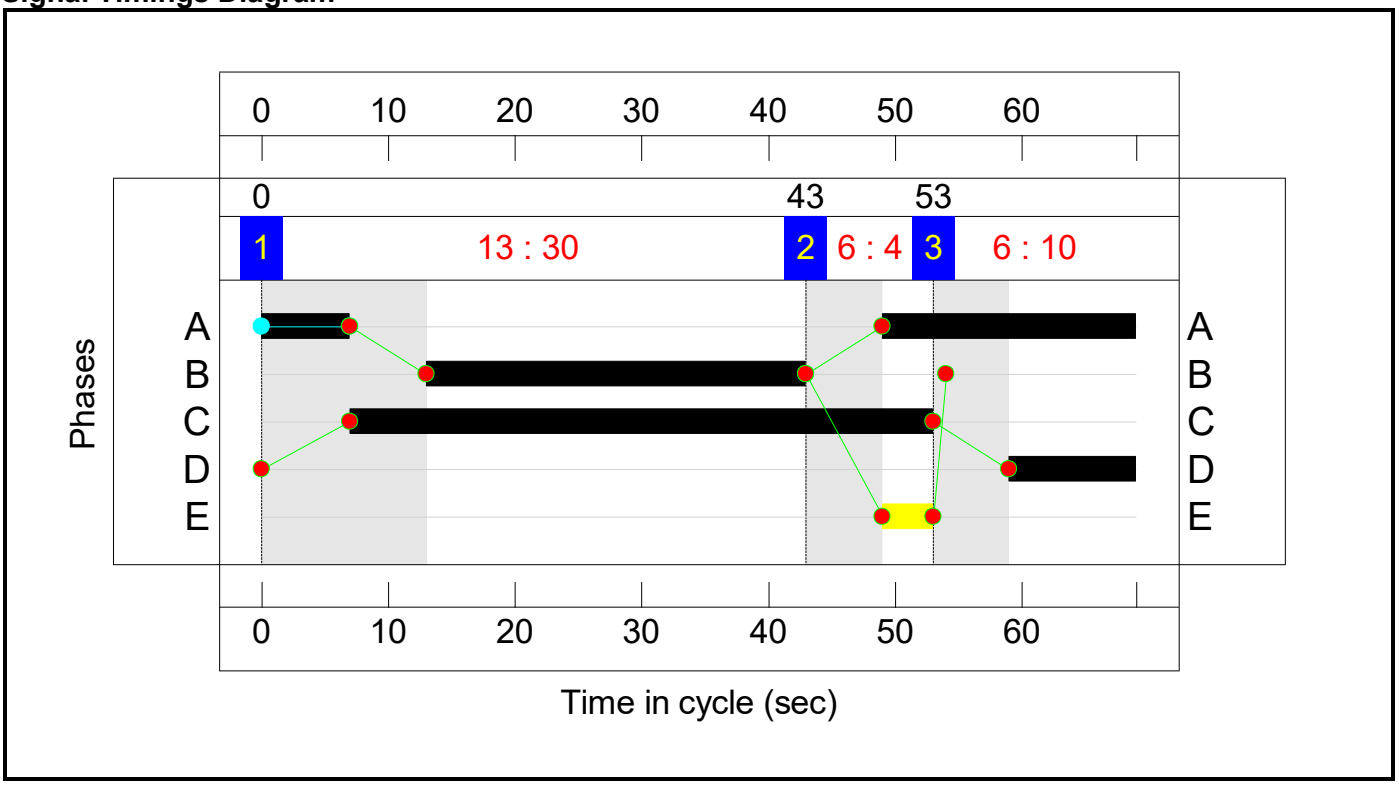
Stage Sequence Diagram



Stage Timings

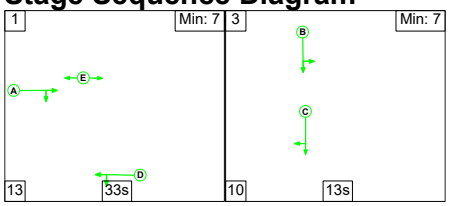
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

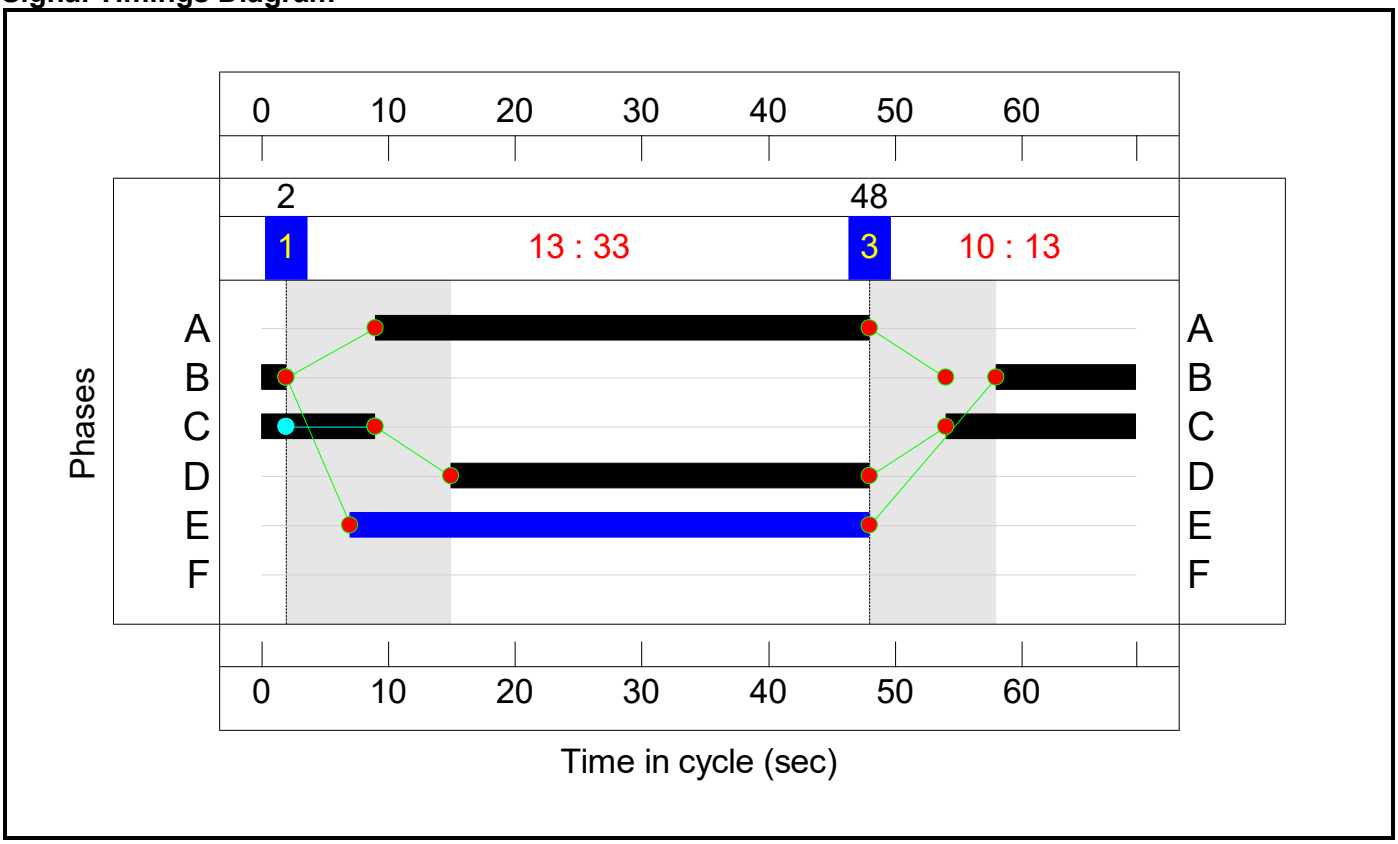


Stage Timings

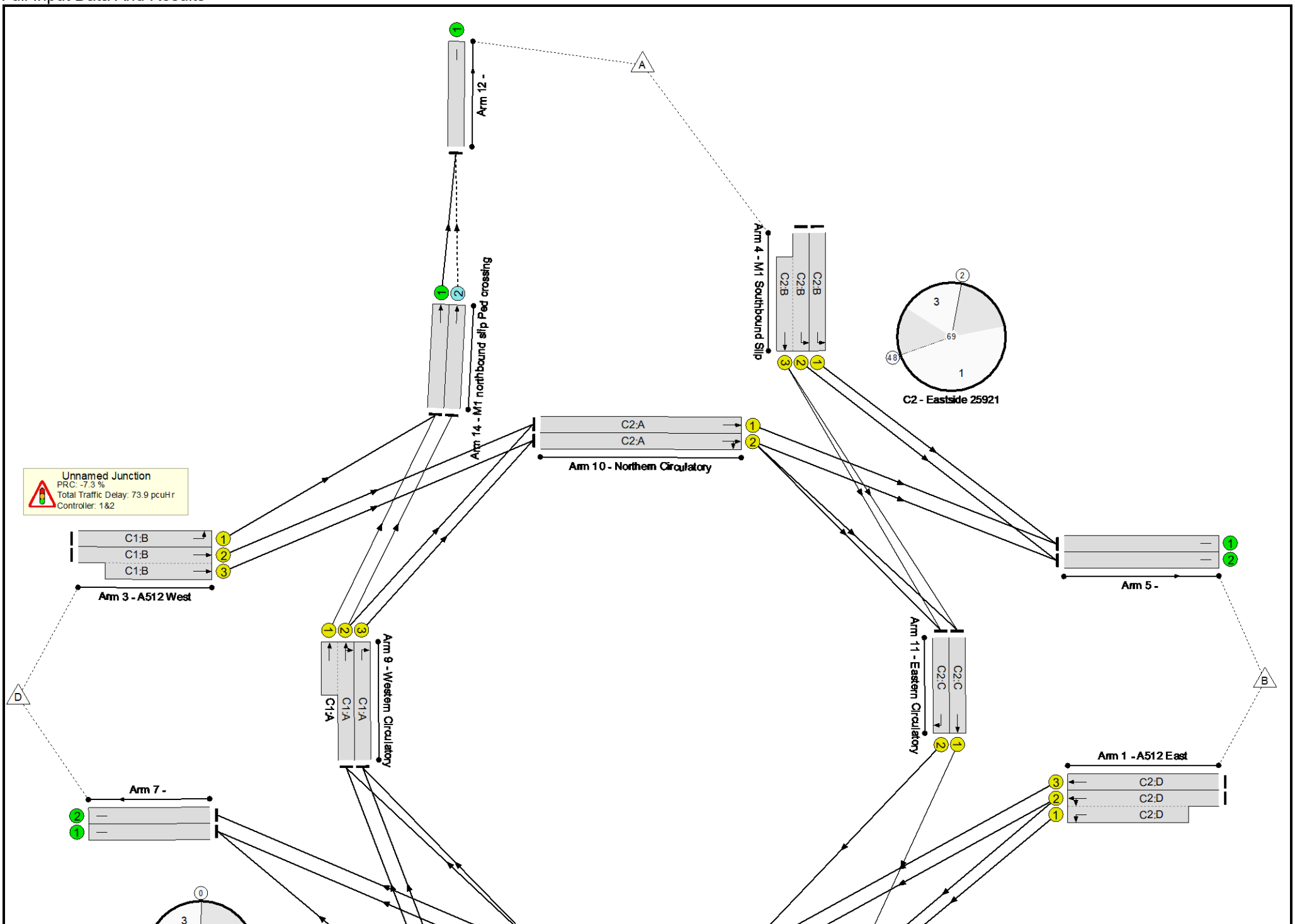
Stage	1	3
Duration	33	13
Change Point	2	48

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.6%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1275	1949:1963	903+590	85.4 : 85.4%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	702	1955	963	72.9%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	349	1973:1963	49+313	96.5 : 96.5%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	297	1979	315	94.1%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	427	1926	865	49.3%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1295	1937:1941	720+621	96.6 : 96.6%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	266	1937	393	67.7%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	654	1945:1948	395+395	84.6 : 81.0%
5/1		U	N/A	N/A	-		-	-	-	1008	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	935	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	800	1980	1980	40.4%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	539	0.0%
7/1		U	N/A	N/A	-		-	-	-	1073	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	771	1961	1336	57.7%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1022	1941	1322	77.3%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	605	1926:1941	167+713	68.7 : 68.7%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	297	1932	784	37.9%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	742	1953	1132	65.5%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	897	1937	1123	79.9%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	296	1997	724	40.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	320	1994	722	44.3%
12/1		U	N/A	N/A	-		-	-	-	985	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	917	1940	1940	47.3%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	68	1940	513	13.2%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**68**	**0**	**0**	**35.9**	**38.0**	**0.0**	**73.9**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**68**	**0**	**0**	**35.9**	**38.0**	**0.0**	**73.9**	**-**	**-**	**-**	**-**
1/2+1/1	1275	1275	-	-	-	4.8	2.8	-	7.7	21.6	12.2	2.8	15.0
1/3	702	702	-	-	-	2.7	1.3	-	4.0	20.7	10.5	1.3	11.9
2/2+2/1	349	349	-	-	-	2.7	6.7	-	9.4	97.4	5.7	6.7	12.4
2/3	297	297	-	-	-	2.4	5.2	-	7.5	91.2	5.6	5.2	10.8
3/1	427	427	-	-	-	1.6	0.5	-	2.1	17.5	5.7	0.5	6.2
3/2+3/3	1295	1295	-	-	-	5.7	9.9	-	15.6	43.4	14.4	9.9	24.2
4/1	266	266	-	-	-	1.9	1.0	-	2.9	39.4	4.7	1.0	5.7
4/2+4/3	654	654	-	-	-	4.8	2.3	-	7.1	39.2	6.1	2.3	8.5
5/1	1008	1008	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	935	935	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	800	800	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1073	1073	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	771	771	-	-	-	1.1	0.7	-	1.8	8.2	4.0	0.7	4.7
8/2	1022	1022	-	-	-	0.9	1.7	-	2.6	9.1	4.5	1.7	6.2
9/2+9/1	605	605	-	-	-	2.2	1.1	-	3.3	19.9	10.0	1.1	11.1
9/3	297	297	-	-	-	0.3	0.3	-	0.6	7.9	0.6	0.3	0.9
10/1	742	742	-	-	-	1.6	0.9	-	2.6	12.4	4.7	0.9	5.6
10/2	897	897	-	-	-	1.4	2.0	-	3.3	13.4	7.0	2.0	9.0
11/1	296	296	-	-	-	1.5	0.3	-	1.9	22.6	5.6	0.3	6.0
11/2	320	320	-	-	-	0.2	0.4	-	0.6	6.6	0.3	0.4	0.7
12/1	985	985	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	800	800	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	917	917	-	-	-	0.0	0.4	-	0.4	1.8	0.0	0.4	0.4
14/2	68	68	68	0	0	0.0	0.1	-	0.1	4.0	0.0	0.1	0.1

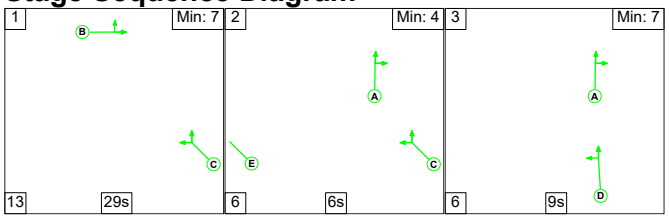
C1 - Westside 25911	PRC for Signalled Lanes (%):	-7.3	Total Delay for Signalled Lanes (pcuHr):	43.00	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	5.4	Total Delay for Signalled Lanes (pcuHr):	30.06	Cycle Time (s):	69
	PRC Over All Lanes (%):	-7.3	Total Delay Over All Lanes(pcuHr):	73.92		

Full Input Data And Results

Scenario 9: '2038 With Development Flows (AM)' (FG9: '2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

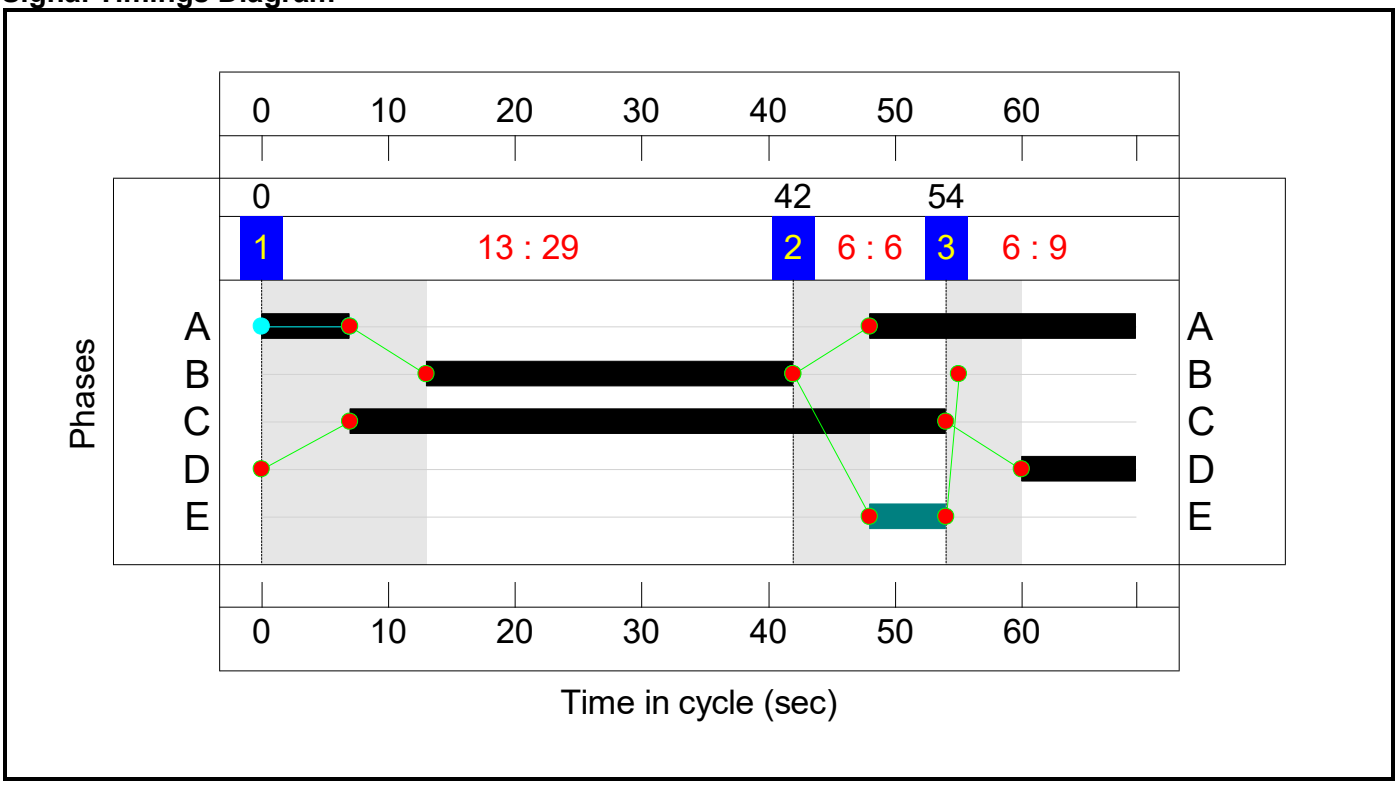
Stage Sequence Diagram



Stage Timings

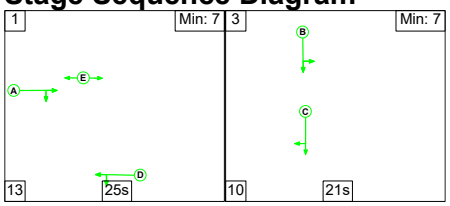
Stage	1	2	3
Duration	29	6	9
Change Point	0	42	54

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

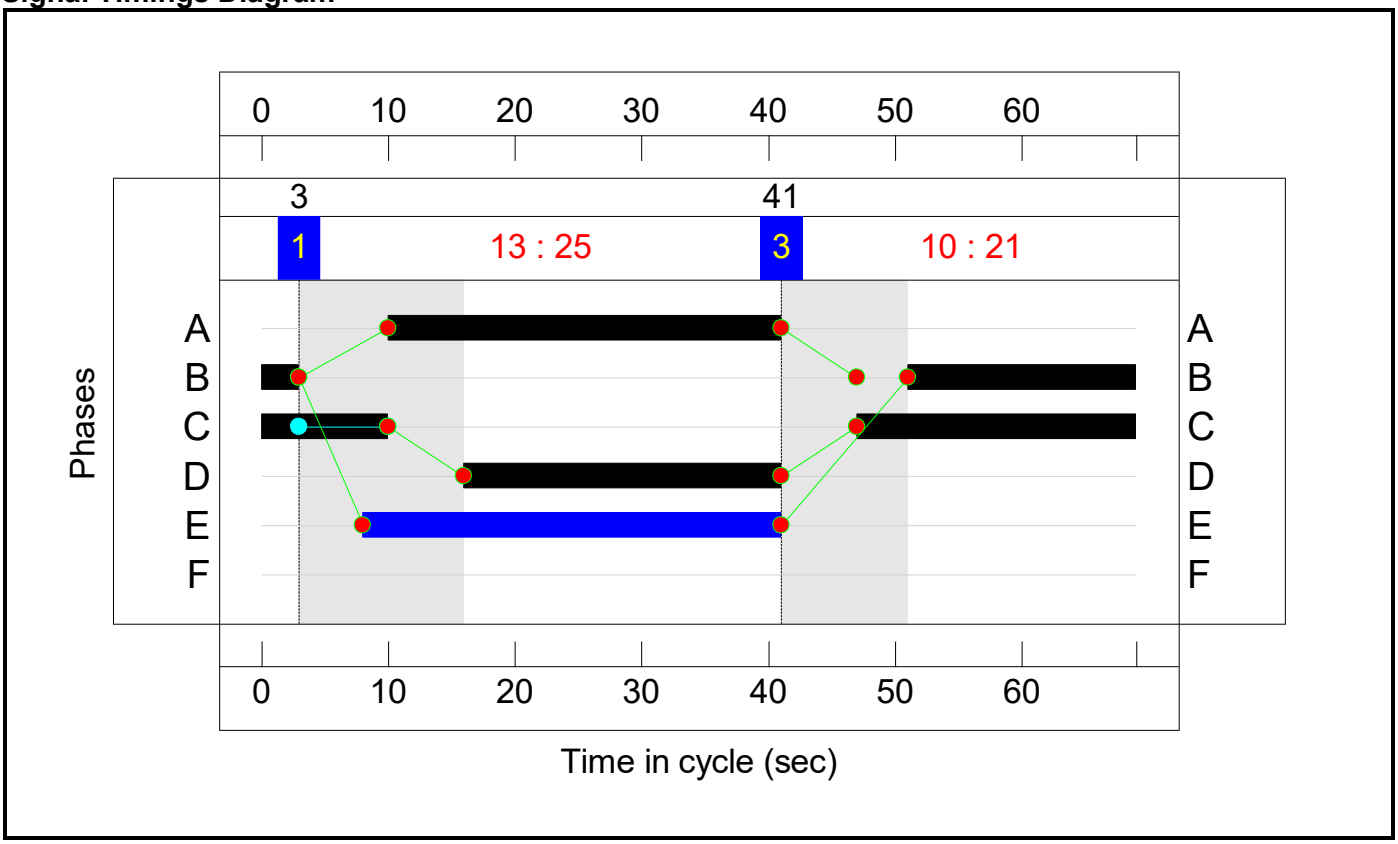


Stage Timings

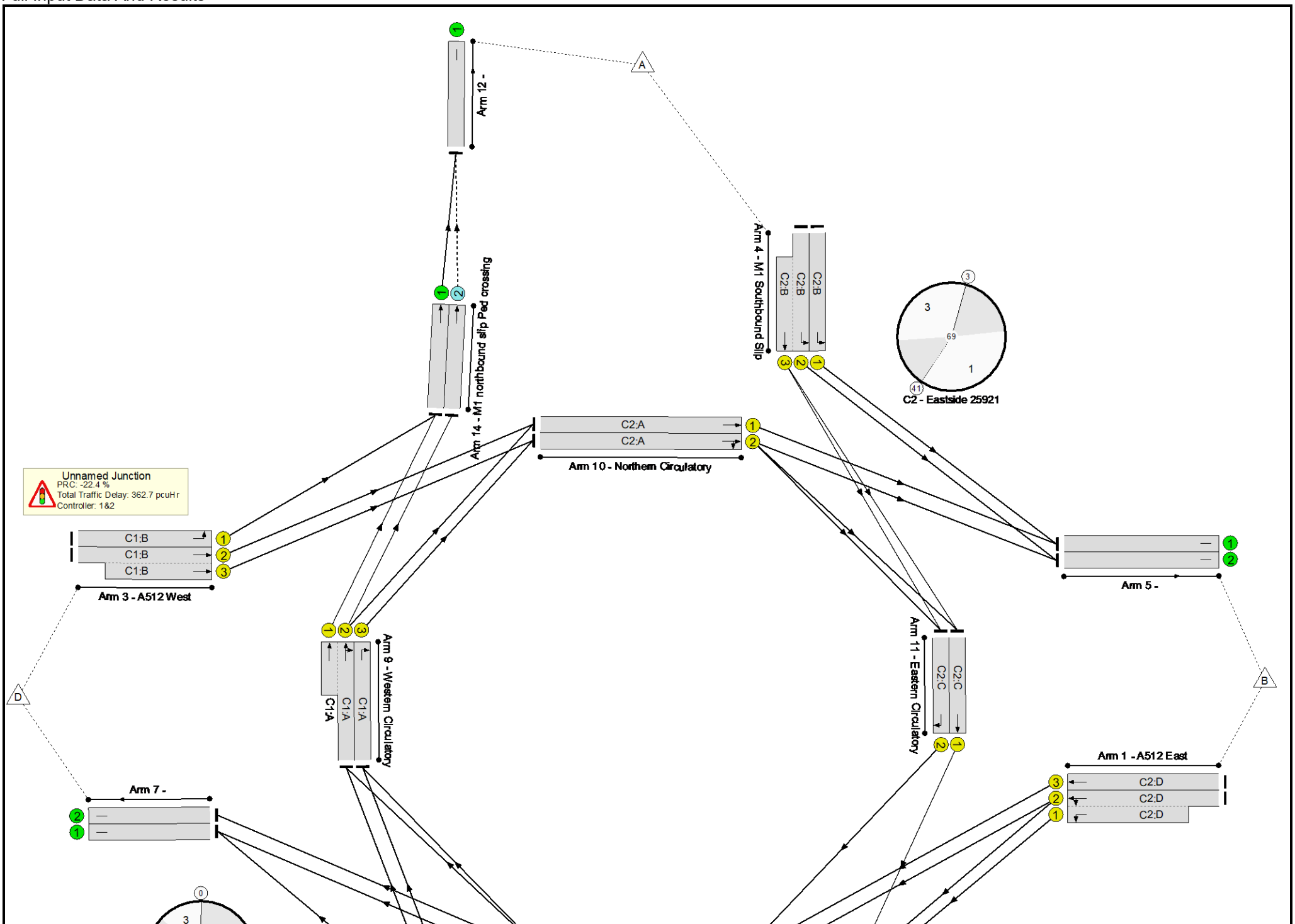
Stage	1	3
Duration	25	21
Change Point	3	41

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.2%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	25	-	1031	1949:1963	734+285	101.2 : 101.2%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	25	-	692	1955	737	93.9%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	9	-	368	1973:1963	286+53	108.4 : 108.4%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	9	-	316	1979	287	110.2%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	469	1926	837	56.0%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	1508	1937:1941	695+682	109.5 : 109.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	21	-	653	1937	618	105.7%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	21	-	909	1945:1948	225+621	107.4 : 107.4%
5/1		U	N/A	N/A	-		-	-	-	1724	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1016	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	577	1980	1980	26.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	913	0.0%
7/1		U	N/A	N/A	-		-	-	-	801	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	709	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	47	-	743	1961	1364	53.8%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	47	-	1359	1944	1352	97.1%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	960	1926:1941	416+608	88.0 : 93.8%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	316	1932	812	35.3%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	31	-	1071	1953	906	108.3%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	31	-	1063	1937	898	107.9%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	32	-	289	1997	955	24.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	32	-	667	1994	954	65.1%
12/1		U	N/A	N/A	-		-	-	-	1119	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	577	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1039	1940	1940	53.6%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	80	1940	486	16.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**80**	**0**	**0**	**63.4**	**299.3**	**0.0**	**362.7**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**80**	**0**	**0**	**63.4**	**299.3**	**0.0**	**362.7**	**-**	**-**	**-**	**-**
1/2+1/1	1031	1022	-	-	-	6.0	19.3	-	25.3	88.2	14.4	19.3	33.7
1/3	692	692	-	-	-	4.0	6.1	-	10.1	52.4	12.7	6.1	18.8
2/2+2/1	368	344	-	-	-	3.4	19.1	-	22.5	220.4	6.1	19.1	25.2
2/3	316	287	-	-	-	3.7	18.8	-	22.5	256.6	6.9	18.8	25.7
3/1	469	469	-	-	-	1.9	0.6	-	2.5	19.4	6.6	0.6	7.3
3/2+3/3	1508	1377	-	-	-	11.3	70.7	-	82.0	195.7	24.9	70.7	95.6
4/1	653	618	-	-	-	5.7	24.4	-	30.1	165.8	13.2	24.4	37.6
4/2+4/3	909	863	-	-	-	6.5	37.4	-	43.9	173.8	12.8	37.4	50.1
5/1	1523	1523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	903	903	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	526	526	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	792	792	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	663	663	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	734	734	-	-	-	0.9	0.6	-	1.4	7.0	3.1	0.6	3.7
8/2	1313	1313	-	-	-	1.5	10.8	-	12.3	33.7	14.7	10.8	25.5
9/2+9/1	936	936	-	-	-	2.7	4.8	-	7.5	29.0	16.8	4.8	21.6
9/3	287	287	-	-	-	0.4	0.3	-	0.7	8.7	0.8	0.3	1.0
10/1	981	906	-	-	-	7.1	43.3	-	50.3	184.7	20.2	43.3	63.5
10/2	969	898	-	-	-	6.7	41.2	-	48.0	178.2	19.9	41.2	61.2
11/1	238	238	-	-	-	1.2	0.2	-	1.4	20.7	4.5	0.2	4.7
11/2	621	621	-	-	-	0.4	0.9	-	1.3	7.6	0.8	0.9	1.7
12/1	1119	1119	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1039	1039	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
14/2	80	80	80	0	0	0.0	0.1	-	0.1	4.5	0.5	0.1	0.6

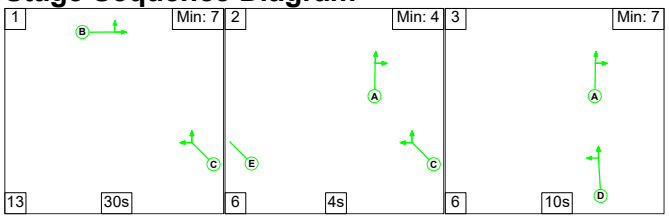
C1 - Westside 25911	PRC for Signalled Lanes (%):	-22.4	Total Delay for Signalled Lanes (pcuHr):	151.53	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-20.3	Total Delay for Signalled Lanes (pcuHr):	210.27	Cycle Time (s):	69
	PRC Over All Lanes (%):	-22.4	Total Delay Over All Lanes(pcuHr):	362.66		

Full Input Data And Results

Scenario 10: '2038 With Development Flows (PM)' (FG10: '2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

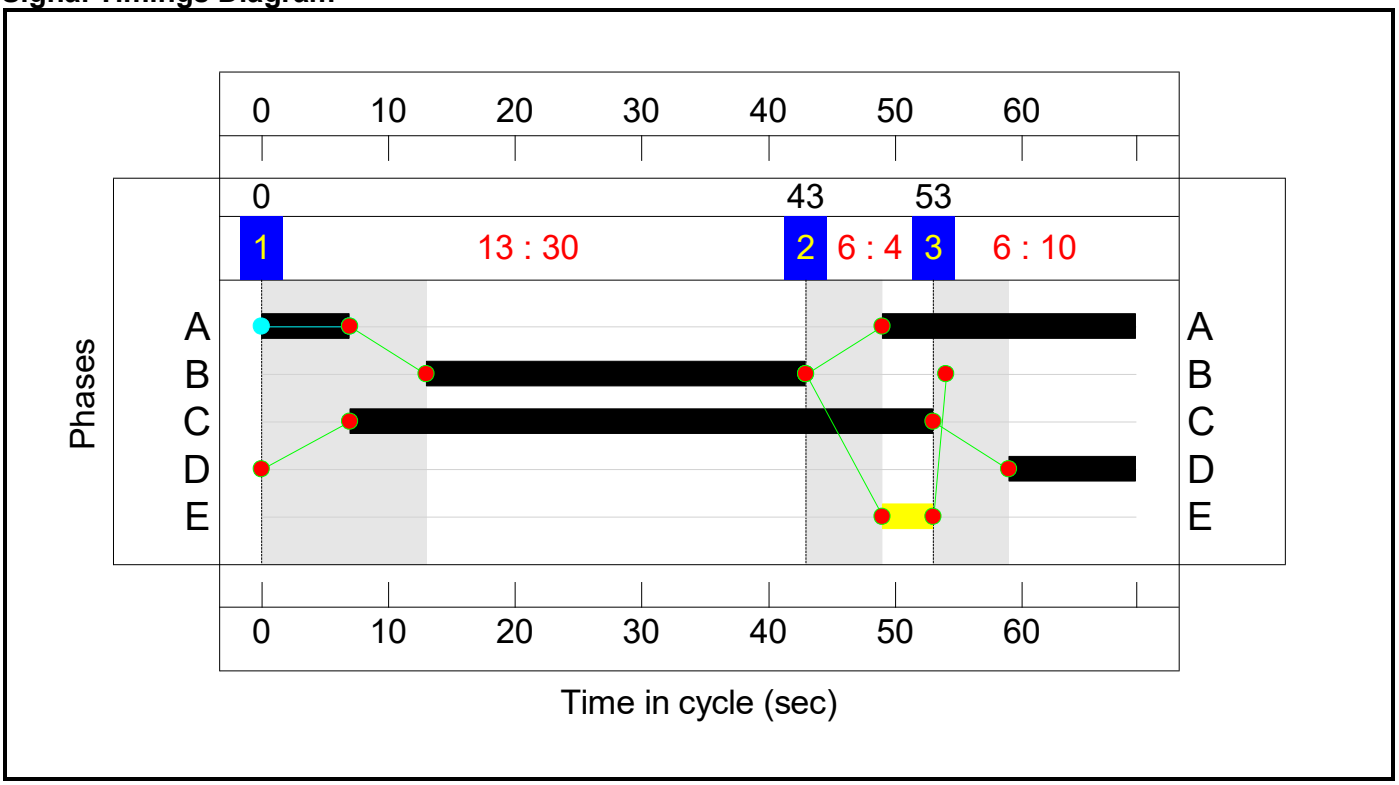
Stage Sequence Diagram



Stage Timings

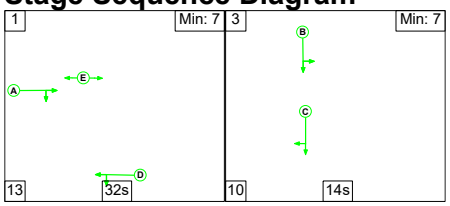
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

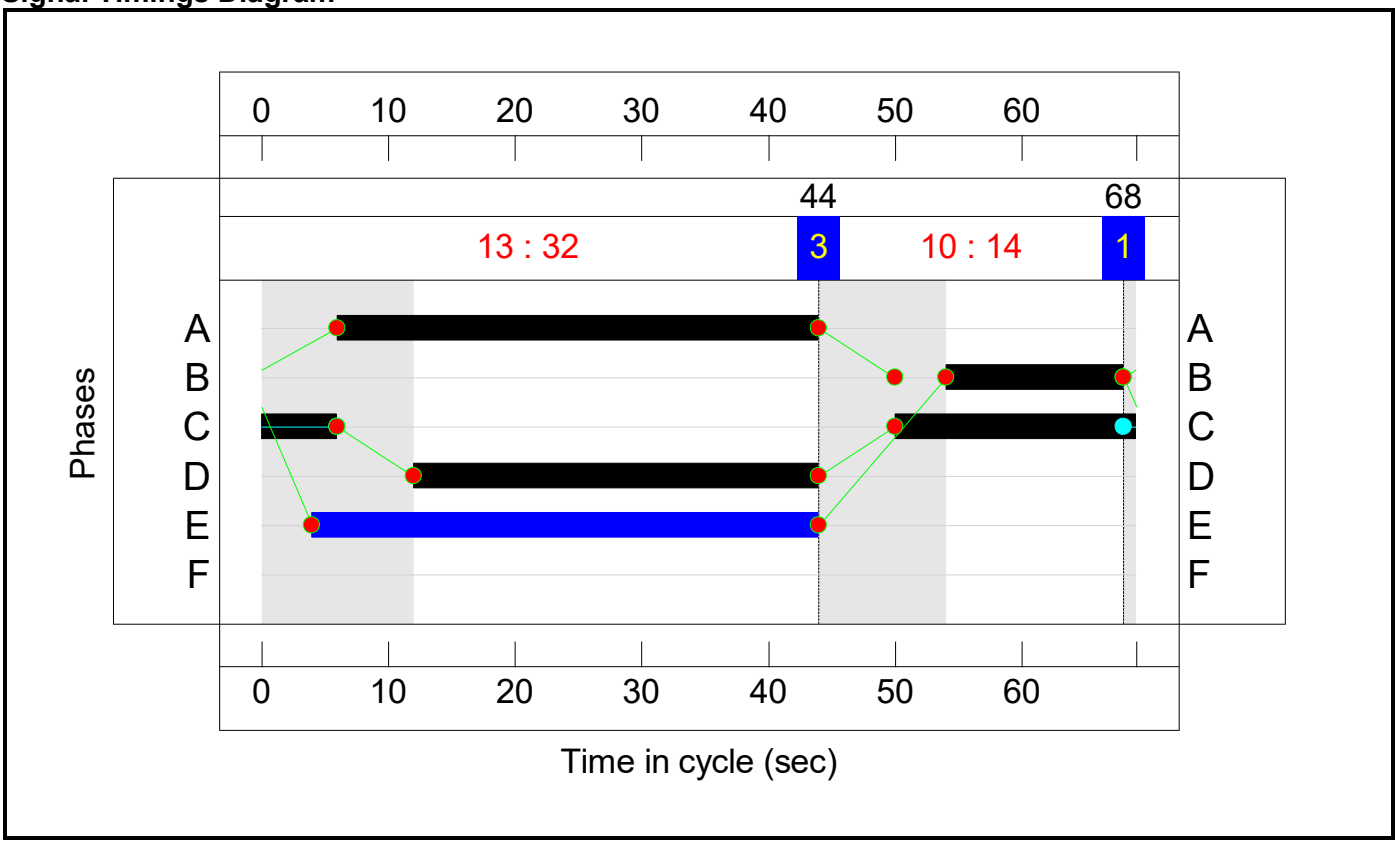


Stage Timings

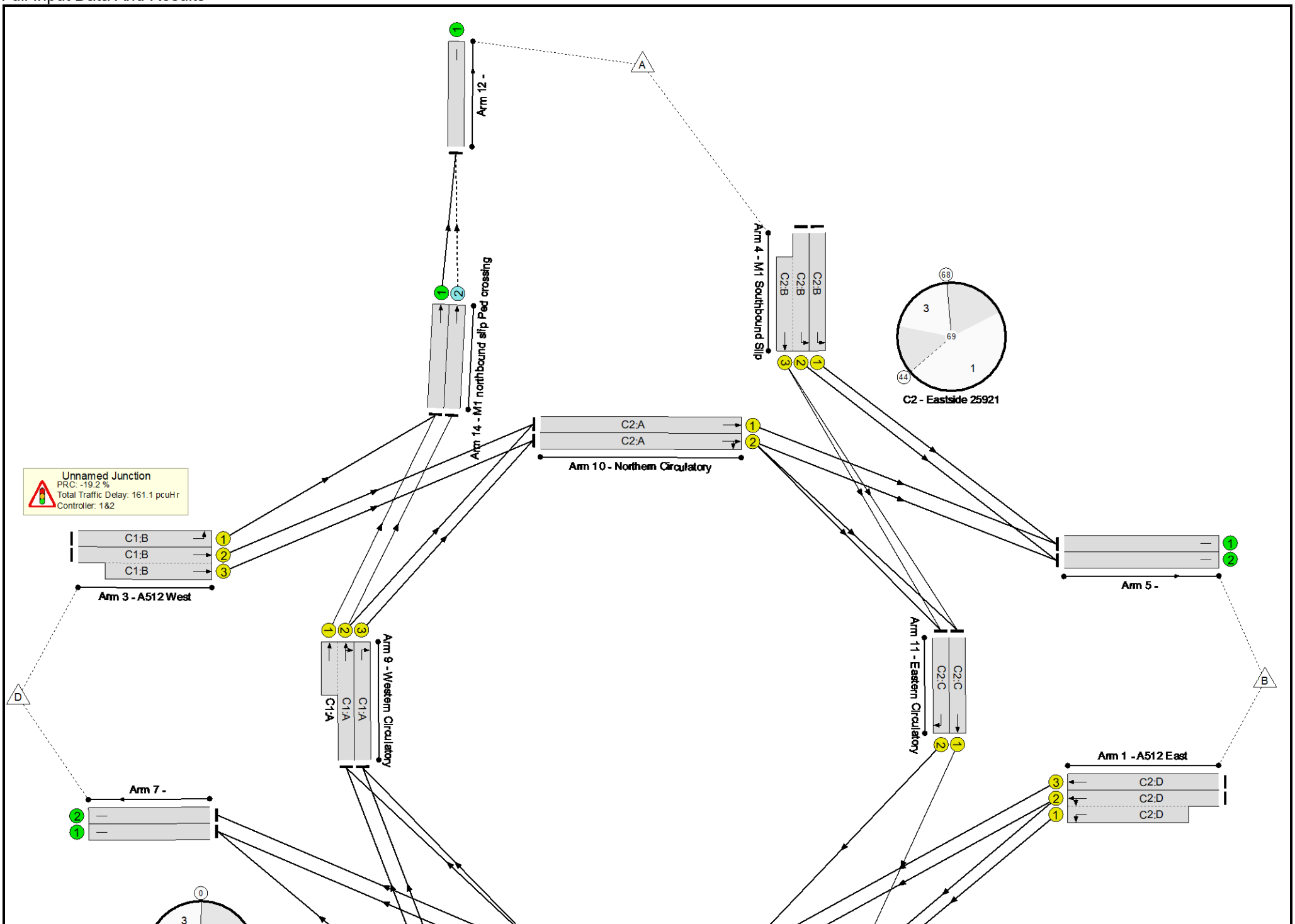
Stage	1	3
Duration	32	14
Change Point	68	44

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**107.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**107.2%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	32	-	1355	1949:1963	889+513	96.7 : 96.7%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	32	-	821	1955	935	87.8%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	347	1973:1963	20+313	104.2 : 104.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	325	1979	315	103.0%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	483	1926	865	55.8%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1425	1937:1941	722+607	107.2 : 107.2%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	14	-	334	1937	421	79.3%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	14	-	763	1945:1948	423+423	83.5 : 96.8%
5/1		U	N/A	N/A	-		-	-	-	1129	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1031	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	794	1980	1980	39.1%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	545	0.0%
7/1		U	N/A	N/A	-		-	-	-	1185	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	598	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	859	1961	1336	64.3%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1231	1943	1323	93.0%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	654	1926:1941	97+757	76.6 : 76.6%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	325	1932	784	40.2%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	38	-	795	1953	1104	67.3%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	38	-	976	1937	1095	84.3%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	25	-	298	1997	752	36.9%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	25	-	410	1994	751	54.6%
12/1		U	N/A	N/A	-		-	-	-	1116	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1063	1940	1940	54.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	53	1940	481	11.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**53**	**0**	**0**	**46.9**	**114.2**	**0.0**	**161.1**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**53**	**0**	**0**	**46.9**	**114.2**	**0.0**	**161.1**	**-**	**-**	**-**	**-**
1/2+1/1	1355	1355	-	-	-	5.7	10.1	-	15.9	42.1	15.3	10.1	25.4
1/3	821	821	-	-	-	3.7	3.4	-	7.1	31.1	14.1	3.4	17.5
2/2+2/1	347	334	-	-	-	3.0	13.4	-	16.4	170.6	6.2	13.4	19.7
2/3	325	315	-	-	-	3.0	11.7	-	14.7	162.7	6.4	11.7	18.1
3/1	483	483	-	-	-	1.9	0.6	-	2.5	18.7	6.7	0.6	7.3
3/2+3/3	1425	1329	-	-	-	9.5	54.7	-	64.1	162.0	24.0	54.7	78.6
4/1	334	334	-	-	-	2.4	1.8	-	4.2	45.4	6.0	1.8	7.9
4/2+4/3	763	763	-	-	-	5.6	4.2	-	9.7	46.0	7.7	4.2	11.9
5/1	1077	1077	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	998	998	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	774	774	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1172	1172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	598	598	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	859	859	-	-	-	1.1	0.9	-	2.0	8.5	3.9	0.9	4.8
8/2	1231	1231	-	-	-	1.4	5.9	-	7.3	21.3	10.3	5.9	16.2
9/2+9/1	654	654	-	-	-	2.8	1.6	-	4.4	24.1	12.0	1.6	13.6
9/3	315	315	-	-	-	0.4	0.3	-	0.8	8.8	1.1	0.3	1.4
10/1	743	743	-	-	-	2.7	1.0	-	3.7	17.9	6.9	1.0	7.9
10/2	922	922	-	-	-	2.0	2.6	-	4.6	17.8	8.7	2.6	11.3
11/1	278	278	-	-	-	1.5	0.3	-	1.8	22.7	5.3	0.3	5.6
11/2	410	410	-	-	-	0.4	0.6	-	1.0	8.6	0.6	0.6	1.2
12/1	1116	1116	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1063	1063	-	-	-	0.0	0.6	-	0.6	2.0	0.5	0.6	1.1
14/2	53	53	53	0	0	0.0	0.1	-	0.1	4.2	0.0	0.1	0.1

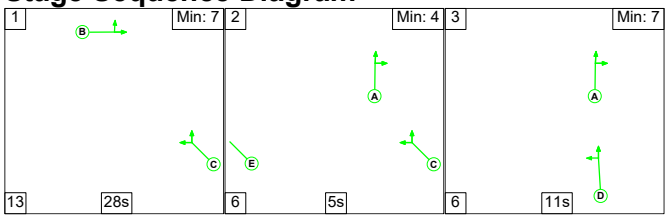
C1 - Westside 25911	PRC for Signalled Lanes (%):	-19.2	Total Delay for Signalled Lanes (pcuHr):	112.23	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-7.6	Total Delay for Signalled Lanes (pcuHr):	47.87	Cycle Time (s):	69
	PRC Over All Lanes (%):	-19.2	Total Delay Over All Lanes(pcuHr):	161.09		

Full Input Data And Results

Scenario 11: '2b 2028 With Development Flows (AM)' (FG11: '2b 2028 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

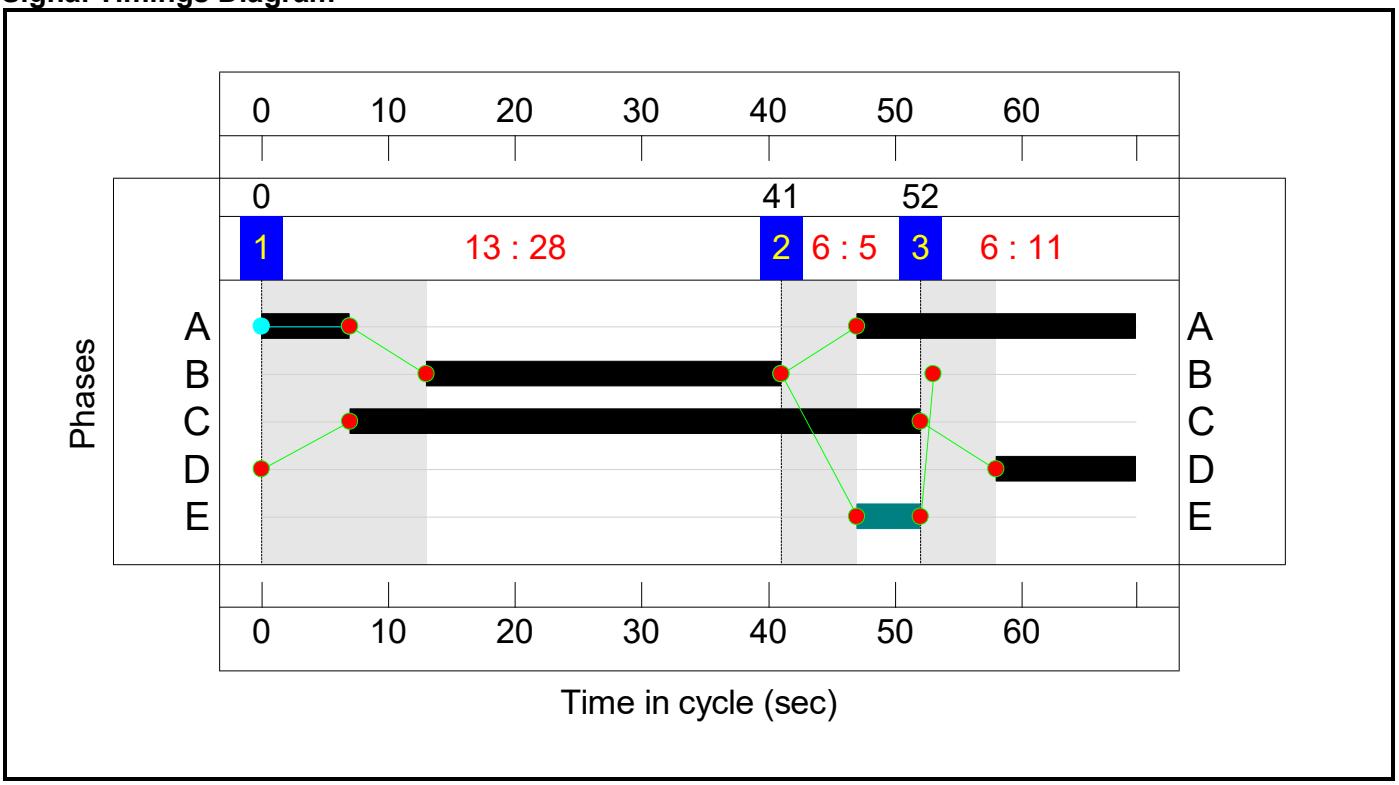
Stage Sequence Diagram



Stage Timings

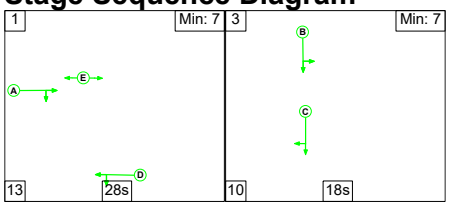
Stage	1	2	3
Duration	28	5	11
Change Point	0	41	52

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

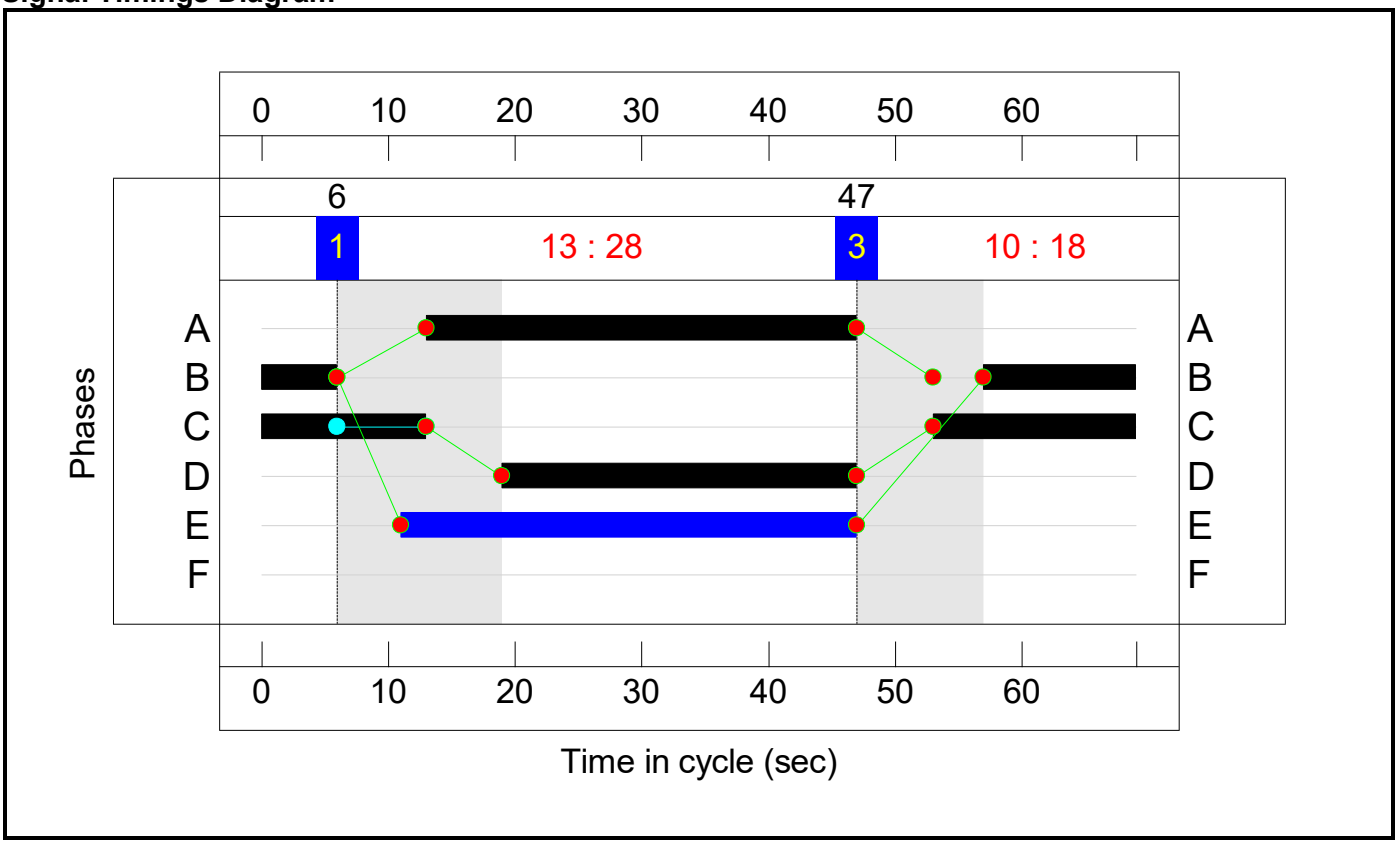


Stage Timings

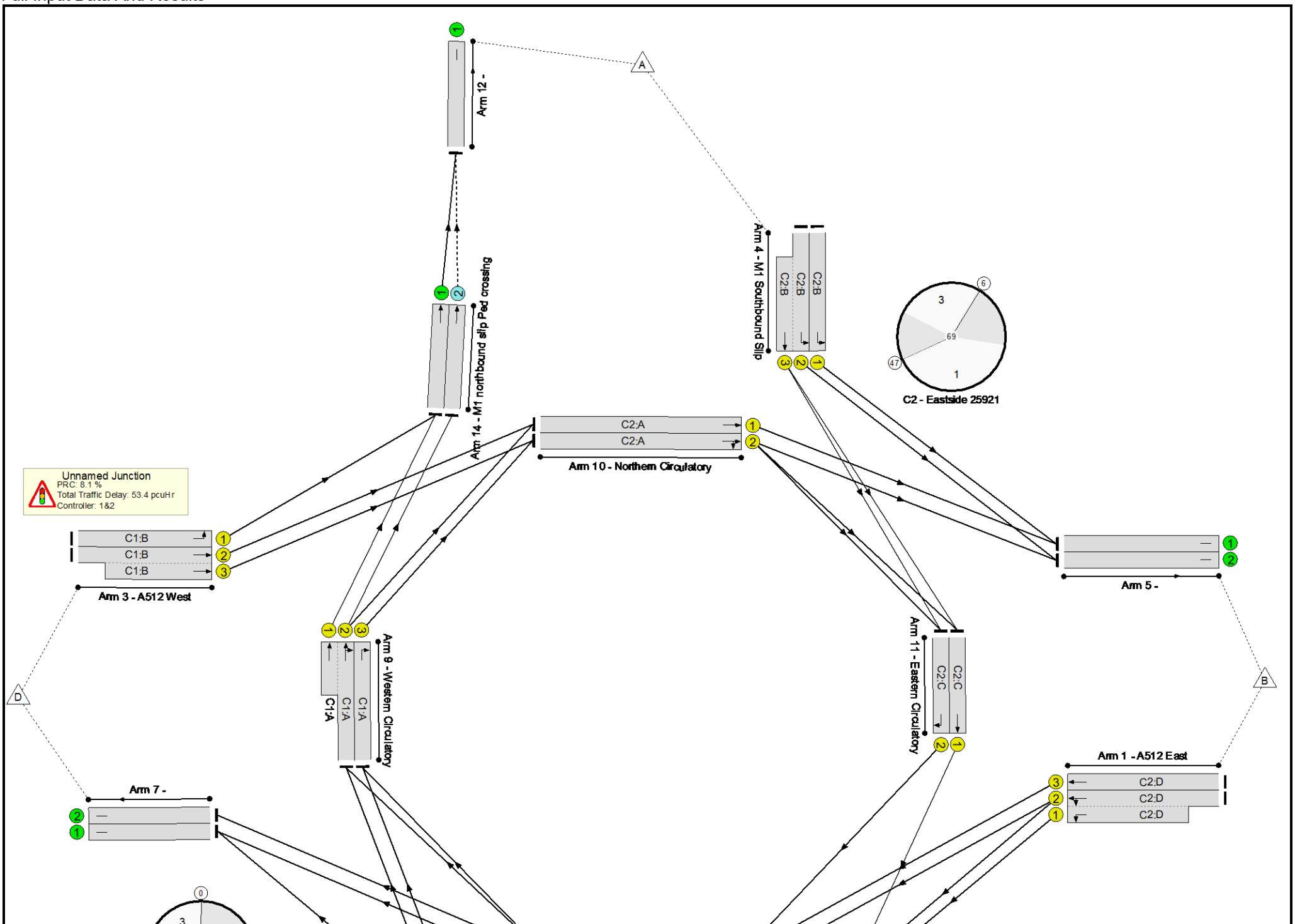
Stage	1	3
Duration	28	18
Change Point	6	47

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**83.3%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	28	-	754	1949:1963	819+300	67.4 : 67.4%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	28	-	593	1955	822	72.2%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	11	-	285	1973:1963	343+63	70.2 : 70.2%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	11	-	255	1979	344	74.1%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	28	-	350	1926	809	43.2%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	28	-	1124	1937:1941	676+678	83.0 : 83.0%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	18	-	367	1937	533	68.8%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	18	-	866	1945:1948	536+536	83.1 : 78.5%
5/1		U	N/A	N/A	-		-	-	-	1169	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	363	1980	1980	18.3%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	635	0.0%
7/1		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	45	-	552	1961	1307	42.2%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	45	-	1014	1940	1293	78.4%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	29	-	834	1926:1941	360+657	82.0 : 82.0%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	29	-	255	1932	840	30.4%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	34	-	802	1953	991	81.0%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	34	-	818	1937	983	83.3%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	29	-	161	1997	868	18.5%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	29	-	421	1994	867	48.6%
12/1		U	N/A	N/A	-		-	-	-	943	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	889	1940	1940	45.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	54	1940	519	10.4%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**54**	**0**	**0**	**32.3**	**21.0**	**0.0**	**53.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**54**	**0**	**0**	**32.3**	**21.0**	**0.0**	**53.4**	**-**	**-**	**-**	**-**
1/2+1/1	754	754	-	-	-	3.2	1.0	-	4.2	20.2	8.4	1.0	9.5
1/3	593	593	-	-	-	2.7	1.3	-	4.0	24.4	9.4	1.3	10.7
2/2+2/1	285	285	-	-	-	2.1	1.2	-	3.2	41.0	4.3	1.2	5.4
2/3	255	255	-	-	-	1.9	1.4	-	3.3	46.6	4.6	1.4	6.0
3/1	350	350	-	-	-	1.4	0.4	-	1.8	18.1	4.7	0.4	5.0
3/2+3/3	1124	1124	-	-	-	5.1	2.4	-	7.5	24.0	8.8	2.4	11.1
4/1	367	367	-	-	-	2.3	1.1	-	3.4	33.0	6.2	1.1	7.3
4/2+4/3	866	866	-	-	-	5.6	2.1	-	7.7	31.9	7.9	2.1	10.0
5/1	1169	1169	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	363	363	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	552	552	-	-	-	0.8	0.4	-	1.2	7.5	2.9	0.4	3.3
8/2	1014	1014	-	-	-	1.0	1.8	-	2.8	10.0	6.0	1.8	7.7
9/2+9/1	834	834	-	-	-	2.4	2.2	-	4.6	19.8	11.5	2.2	13.7
9/3	255	255	-	-	-	0.1	0.2	-	0.4	5.1	0.3	0.2	0.5
10/1	802	802	-	-	-	1.4	2.1	-	3.5	15.7	6.6	2.1	8.7
10/2	818	818	-	-	-	1.5	2.4	-	3.9	17.3	7.0	2.4	9.4
11/1	161	161	-	-	-	0.6	0.1	-	0.7	16.3	3.0	0.1	3.1
11/2	421	421	-	-	-	0.1	0.5	-	0.6	5.2	0.2	0.5	0.7
12/1	943	943	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	889	889	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	54	54	54	0	0	0.0	0.1	-	0.1	3.9	0.0	0.1	0.1

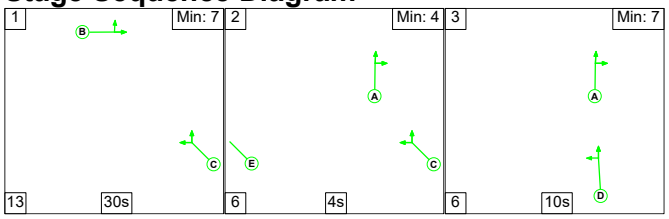
C1 - Westside 25911	PRC for Signalled Lanes (%):	8.5	Total Delay for Signalled Lanes (pcuHr):	24.71	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	8.1	Total Delay for Signalled Lanes (pcuHr):	28.05	Cycle Time (s):	69
	PRC Over All Lanes (%):	8.1	Total Delay Over All Lanes(pcuHr):	53.35		

Full Input Data And Results

Scenario 12: '2b 2028 With Development Flows (PM)' (FG12: '2b 2028 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

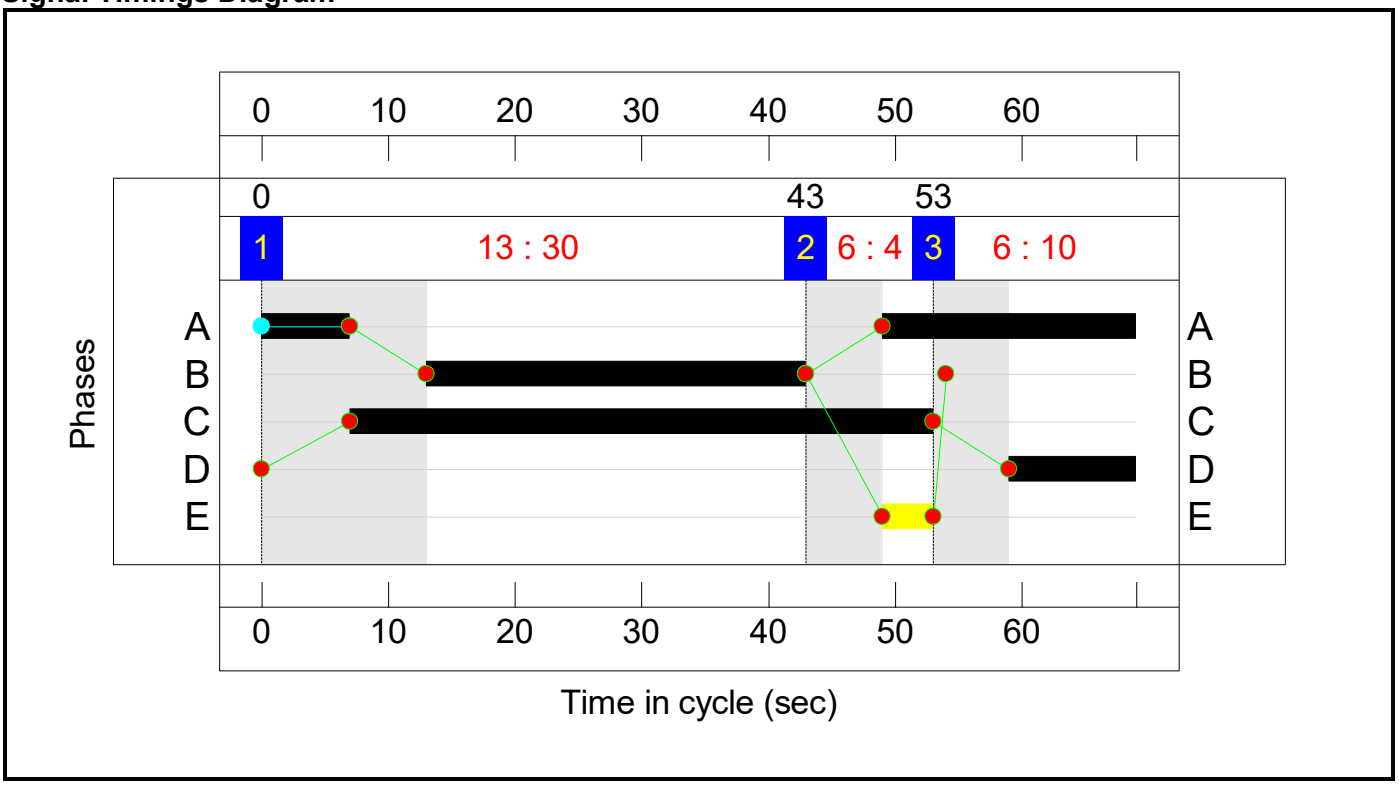
Stage Sequence Diagram



Stage Timings

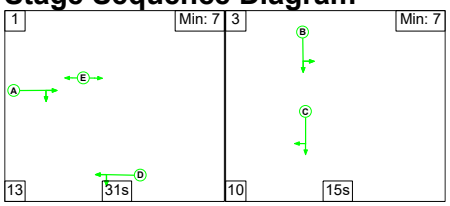
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

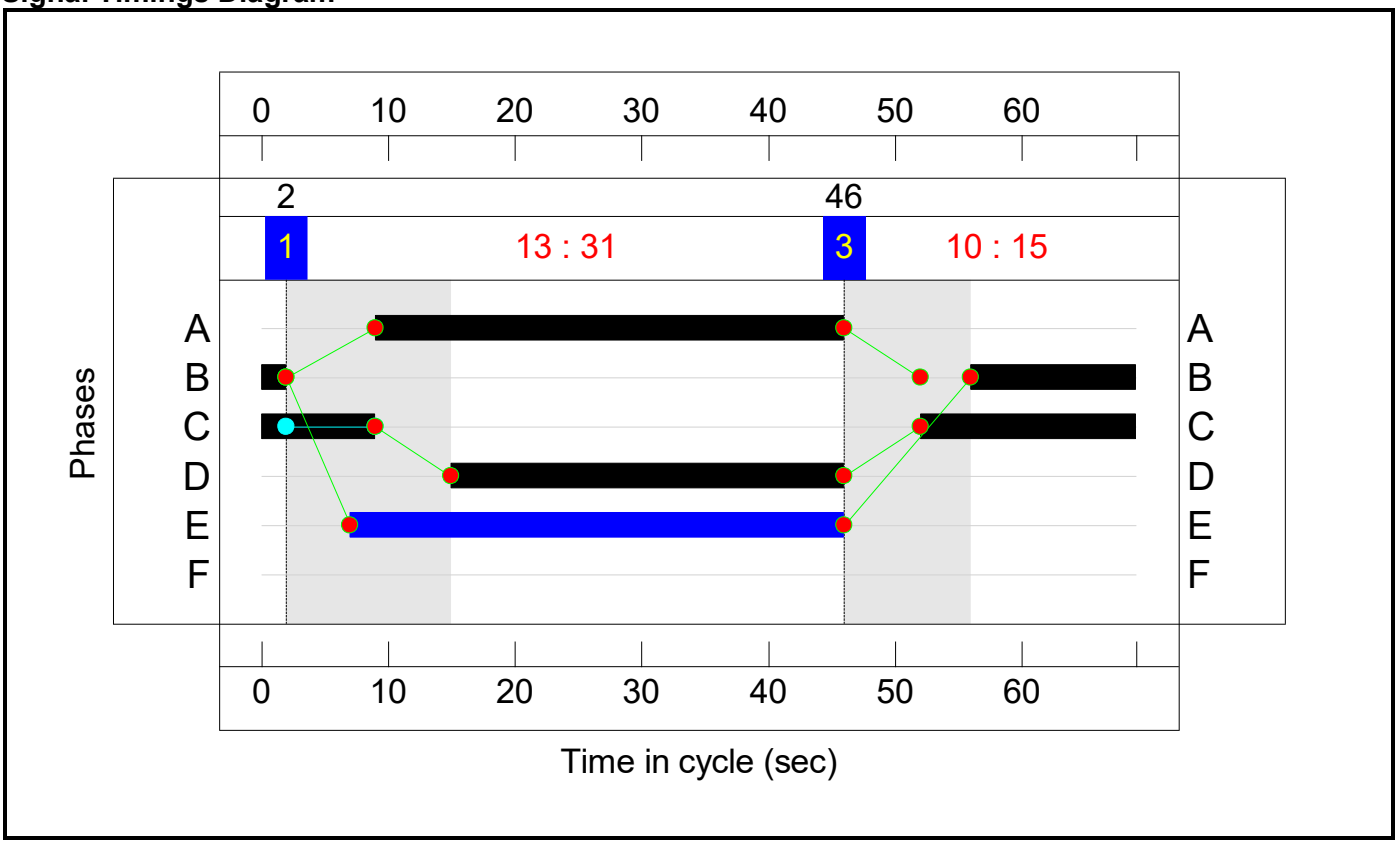


Stage Timings

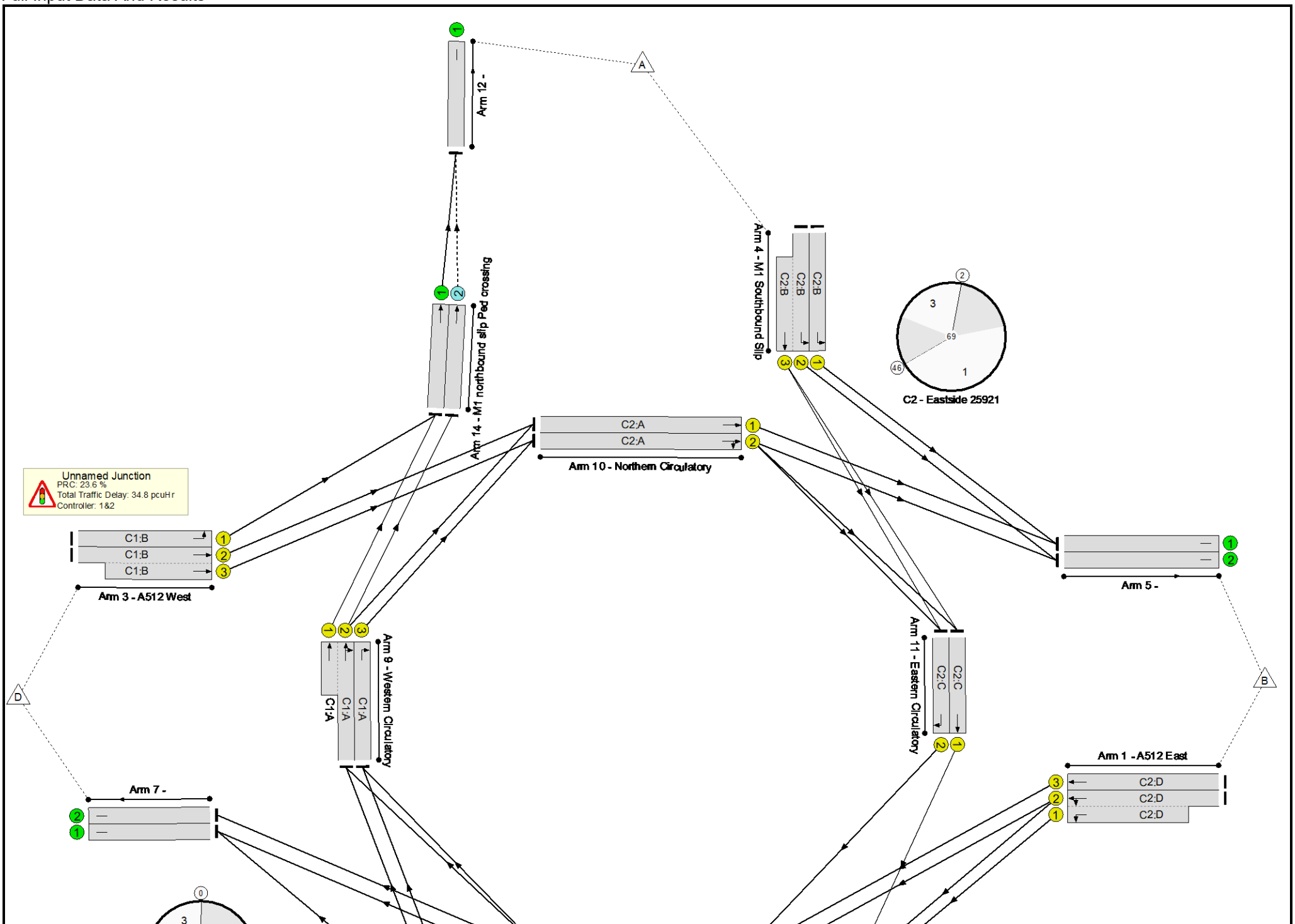
Stage	1	3
Duration	31	15
Change Point	2	46

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.8%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	31	-	1005	1949:1963	871+509	72.8 : 72.8%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	31	-	541	1955	907	59.7%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	237	1973:1963	45+313	66.1 : 66.1%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	188	1979	315	59.6%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	330	1926	865	38.1%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	831	1937:1941	700+709	59.0 : 59.0%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	15	-	221	1937	449	49.2%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	15	-	611	1945:1948	451+452	70.5 : 64.9%
5/1		U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	732	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	563	1980	1980	28.4%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	591	0.0%
7/1		U	N/A	N/A	-		-	-	-	841	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	351	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	634	1961	1336	47.5%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	834	1940	1321	63.1%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	513	1926:1941	195+697	57.5 : 57.5%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	188	1932	784	24.0%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	37	-	443	1953	1076	41.2%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	37	-	606	1937	1067	56.8%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	26	-	192	1997	781	24.6%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	26	-	293	1994	780	37.6%
12/1		U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	563	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	731	1940	1940	37.7%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	82	1940	554	14.8%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**82**	**0**	**0**	**24.3**	**10.5**	**0.0**	**34.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**82**	**0**	**0**	**24.3**	**10.5**	**0.0**	**34.8**	**-**	**-**	**-**	**-**
1/2+1/1	1005	1005	-	-	-	3.9	1.3	-	5.2	18.6	9.5	1.3	10.8
1/3	541	541	-	-	-	2.1	0.7	-	2.8	18.6	7.7	0.7	8.4
2/2+2/1	237	237	-	-	-	1.8	1.0	-	2.7	41.6	3.7	1.0	4.6
2/3	188	188	-	-	-	1.4	0.7	-	2.1	40.9	3.3	0.7	4.1
3/1	330	330	-	-	-	1.2	0.3	-	1.5	16.0	4.1	0.3	4.4
3/2+3/3	831	831	-	-	-	3.1	0.7	-	3.8	16.4	5.6	0.7	6.3
4/1	221	221	-	-	-	1.4	0.5	-	1.9	30.8	3.6	0.5	4.1
4/2+4/3	611	611	-	-	-	4.1	1.0	-	5.1	30.3	5.6	1.0	6.6
5/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	563	563	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	841	841	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	634	634	-	-	-	0.6	0.5	-	1.1	6.2	2.5	0.5	3.0
8/2	834	834	-	-	-	0.5	0.9	-	1.4	6.0	2.8	0.9	3.6
9/2+9/1	513	513	-	-	-	1.7	0.7	-	2.3	16.4	8.1	0.7	8.8
9/3	188	188	-	-	-	0.1	0.2	-	0.3	4.8	0.2	0.2	0.3
10/1	443	443	-	-	-	0.8	0.3	-	1.1	9.0	2.2	0.3	2.5
10/2	606	606	-	-	-	0.8	0.7	-	1.5	8.7	2.7	0.7	3.4
11/1	192	192	-	-	-	0.9	0.2	-	1.0	19.0	3.6	0.2	3.8
11/2	293	293	-	-	-	0.1	0.3	-	0.4	4.9	0.2	0.3	0.5
12/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	563	563	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	731	731	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
14/2	82	82	82	0	0	0.0	0.1	-	0.1	4.0	0.7	0.1	0.8

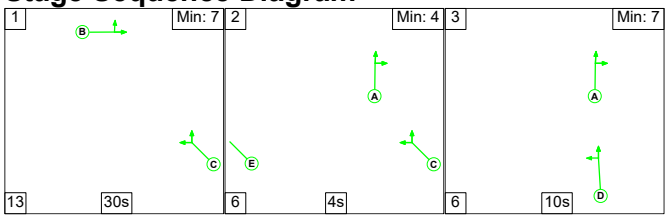
C1 - Westside 25911	PRC for Signalled Lanes (%):	36.1	Total Delay for Signalled Lanes (pcuHr):	15.20	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	23.6	Total Delay for Signalled Lanes (pcuHr):	18.99	Cycle Time (s):	69
	PRC Over All Lanes (%):	23.6	Total Delay Over All Lanes(pcuHr):	34.78		

Full Input Data And Results

Scenario 13: '2b 2038 With Development Flows (AM)' (FG13: '2b 2038 With Development Flows (AM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

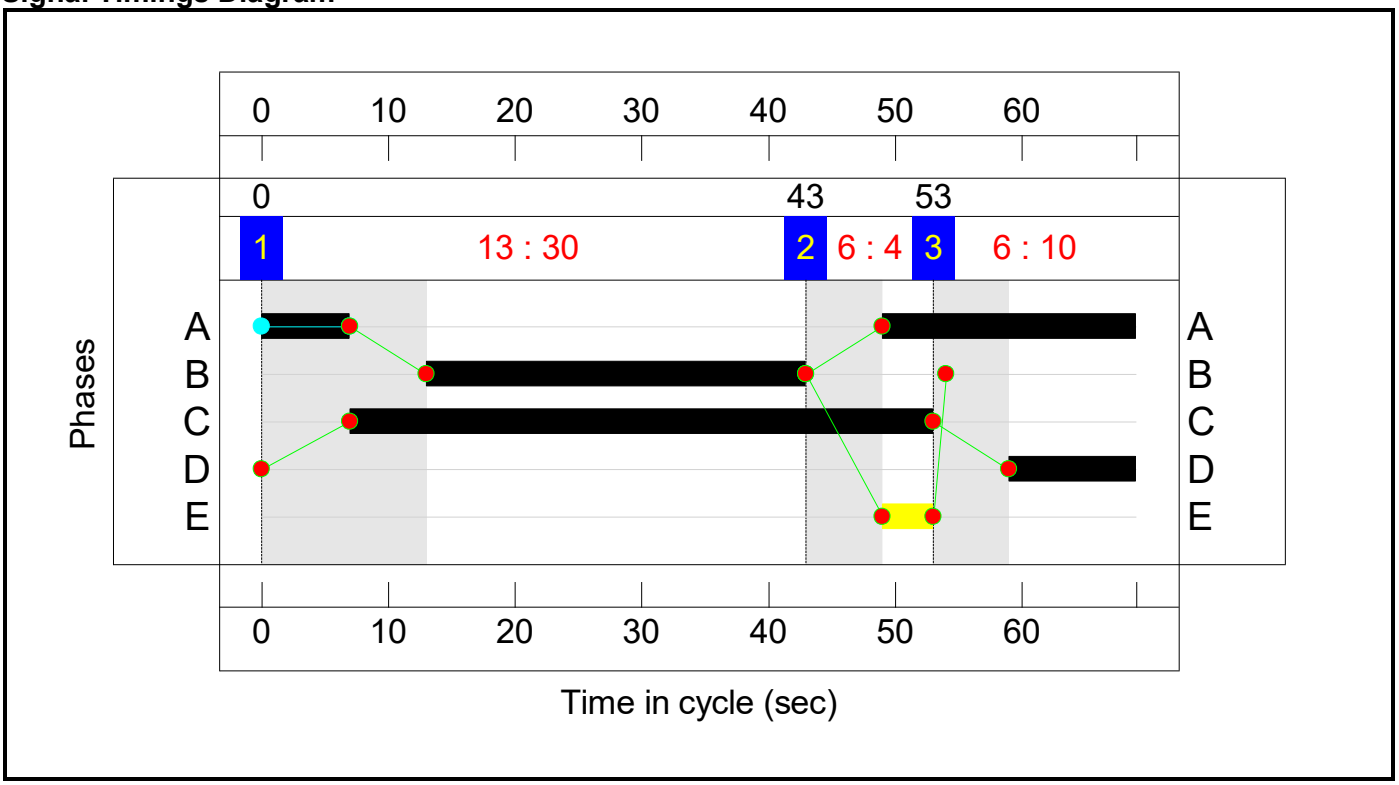
Stage Sequence Diagram



Stage Timings

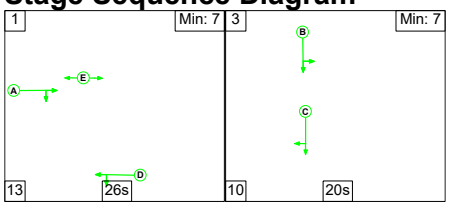
Stage	1	2	3
Duration	30	4	10
Change Point	0	43	53

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

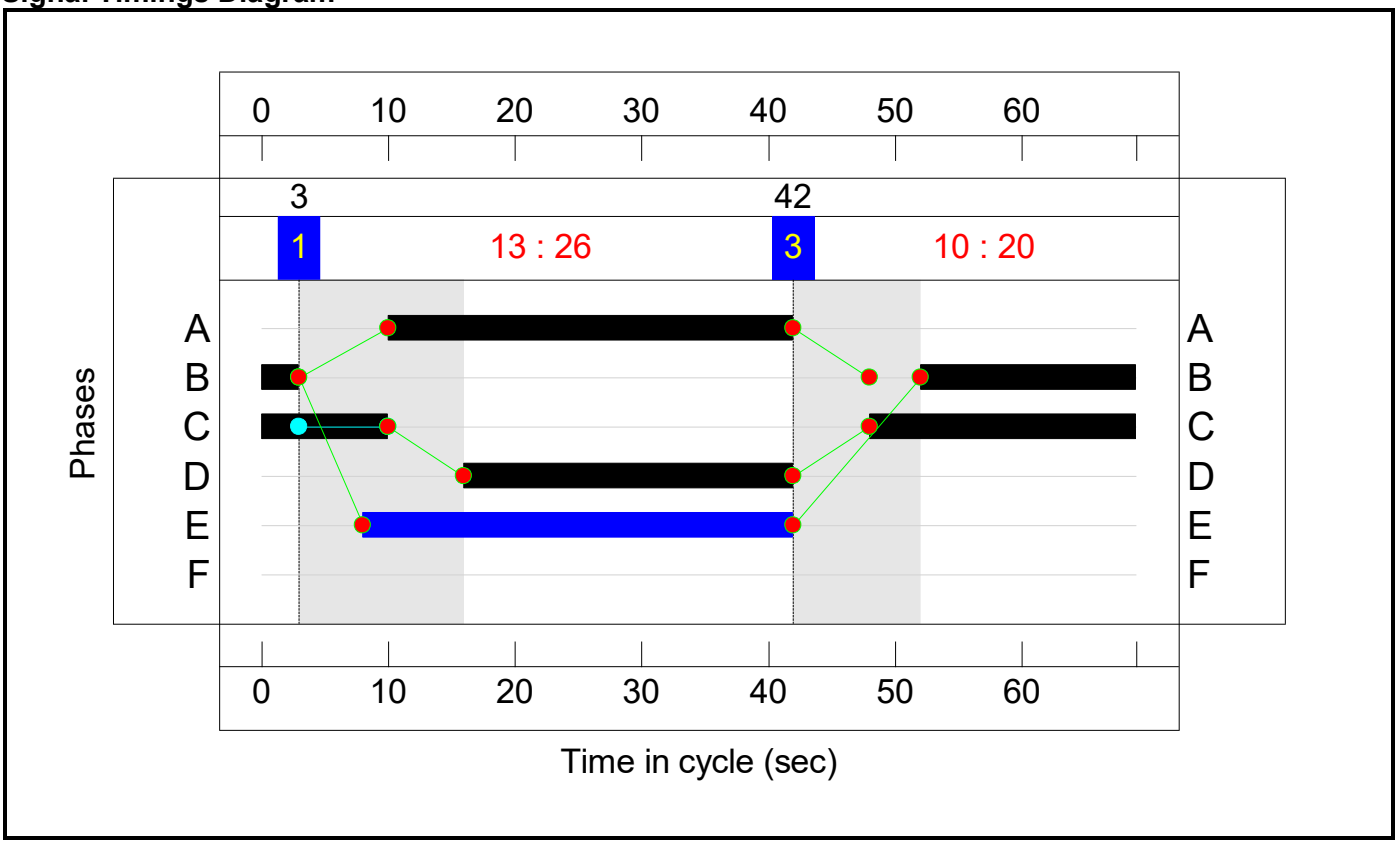


Stage Timings

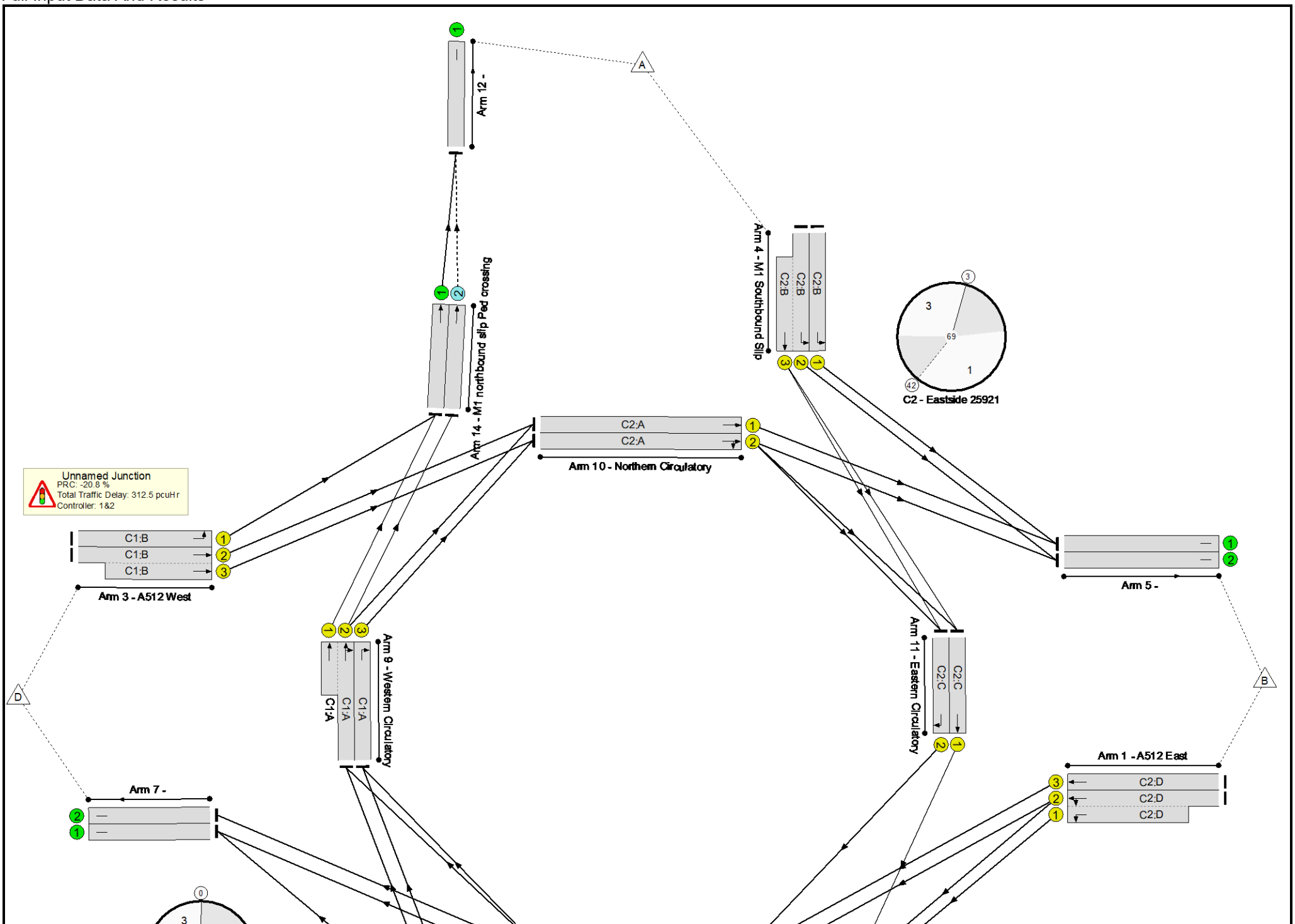
Stage	1	3
Duration	26	20
Change Point	3	42

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**108.7%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	26	-	1033	1949:1963	763+298	97.4 : 97.4%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	26	-	672	1955	765	87.8%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	10	-	363	1973:1963	315+60	97.0 : 97.0%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	10	-	318	1979	315	100.8%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	30	-	453	1926	865	52.4%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	30	-	1520	1937:1941	710+691	108.5 : 108.5%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	20	-	605	1937	590	102.6%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	20	-	892	1945:1948	263+593	104.2 : 104.2%
5/1		U	N/A	N/A	-		-	-	-	1680	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	1058	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	574	1980	1980	26.4%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	914	0.0%
7/1		U	N/A	N/A	-		-	-	-	801	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	645	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	46	-	743	1961	1336	55.6%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	46	-	1290	1943	1323	95.6%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	27	-	950	1926:1941	378+603	96.8 : 96.8%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	27	-	318	1932	784	40.2%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	32	-	1075	1953	934	108.6%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	32	-	1068	1937	926	108.7%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	31	-	284	1997	926	25.1%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	31	-	618	1994	925	64.1%
12/1		U	N/A	N/A	-		-	-	-	1098	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	574	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	1037	1940	1940	53.5%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	61	1940	487	12.5%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**61**	**0**	**0**	**60.4**	**252.1**	**0.0**	**312.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**61**	**0**	**0**	**60.4**	**252.1**	**0.0**	**312.5**	**-**	**-**	**-**	**-**
1/2+1/1	1033	1033	-	-	-	5.5	10.6	-	16.1	56.1	13.8	10.6	24.5
1/3	672	672	-	-	-	3.6	3.4	-	7.0	37.5	11.8	3.4	15.1
2/2+2/1	363	363	-	-	-	2.8	7.1	-	10.0	98.7	5.8	7.1	12.9
2/3	318	315	-	-	-	2.7	9.6	-	12.2	138.4	6.1	9.6	15.7
3/1	453	453	-	-	-	1.7	0.5	-	2.3	18.0	6.2	0.5	6.7
3/2+3/3	1520	1401	-	-	-	10.7	65.2	-	75.9	179.8	25.1	65.2	90.3
4/1	605	590	-	-	-	4.6	16.8	-	21.4	127.4	11.9	16.8	28.7
4/2+4/3	892	867	-	-	-	6.1	26.5	-	32.7	131.8	11.8	26.5	38.4
5/1	1524	1524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	968	968	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	522	522	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	801	801	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	620	620	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	743	743	-	-	-	1.1	0.6	-	1.7	8.5	3.9	0.6	4.5
8/2	1265	1265	-	-	-	1.5	8.4	-	9.9	28.1	13.6	8.4	22.0
9/2+9/1	950	950	-	-	-	4.0	9.5	-	13.4	50.9	17.6	9.5	27.1
9/3	315	315	-	-	-	0.4	0.3	-	0.8	8.8	1.1	0.3	1.4
10/1	1015	934	-	-	-	7.2	45.9	-	53.2	188.6	21.0	45.9	66.9
10/2	1007	926	-	-	-	6.8	45.8	-	52.5	187.8	20.8	45.8	66.6
11/1	232	232	-	-	-	1.2	0.2	-	1.4	21.3	4.4	0.2	4.5
11/2	593	593	-	-	-	0.4	0.9	-	1.3	7.8	0.8	0.9	1.7
12/1	1098	1098	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	1037	1037	-	-	-	0.0	0.6	-	0.6	2.0	0.5	0.6	1.1
14/2	61	61	61	0	0	0.0	0.1	-	0.1	4.3	0.3	0.1	0.4

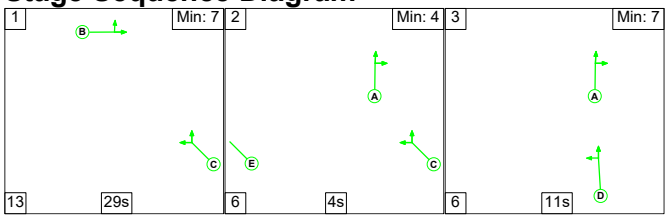
C1 - Westside 25911	PRC for Signalled Lanes (%):	-20.5	Total Delay for Signalled Lanes (pcuHr):	126.18	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	-20.8	Total Delay for Signalled Lanes (pcuHr):	185.50	Cycle Time (s):	69
	PRC Over All Lanes (%):	-20.8	Total Delay Over All Lanes(pcuHr):	312.51		

Full Input Data And Results

Scenario 14: '2b 2038 With Development Flows (PM)' (FG14: '2b 2038 With Development Flows (PM)', Plan 1: 'Network Control Plan 1')

Controller :C1 - Westside 25911

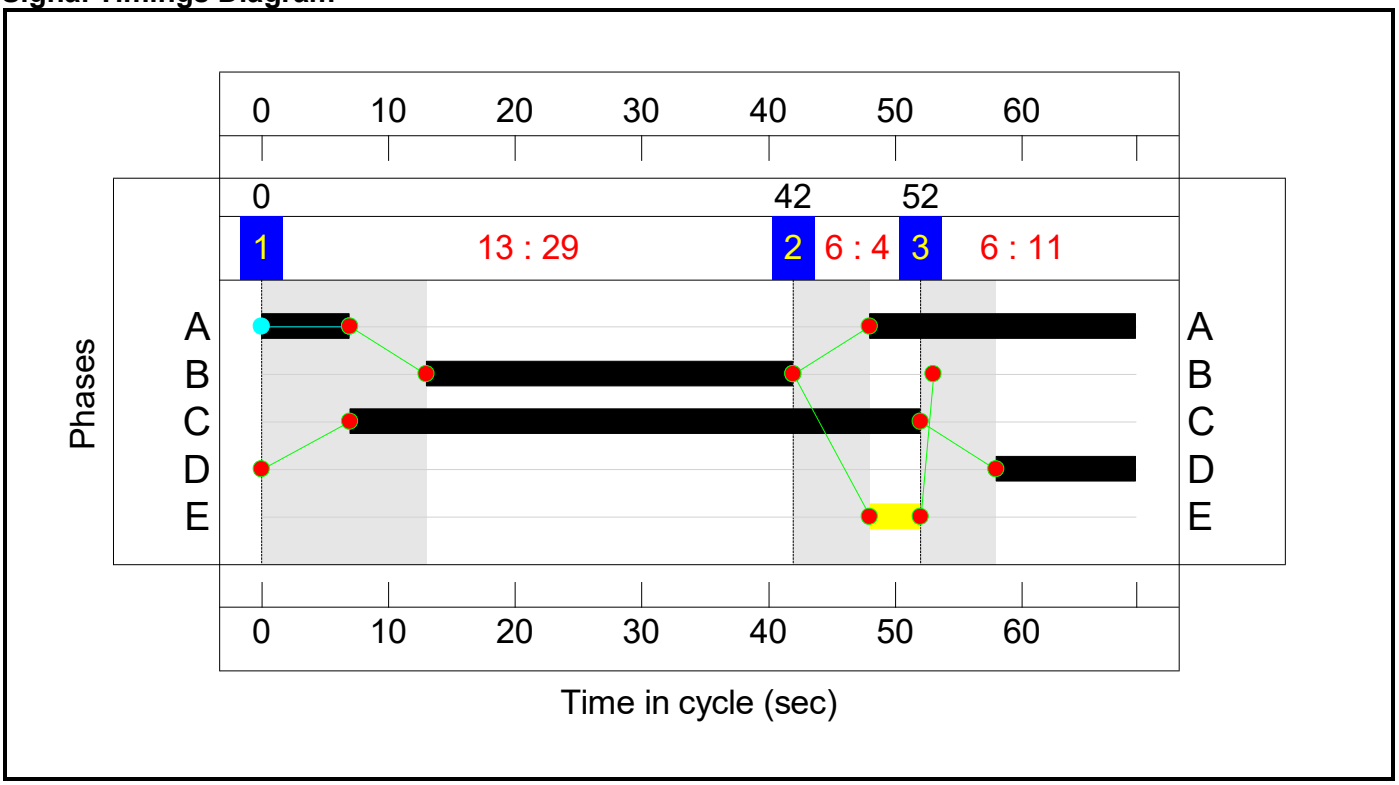
Stage Sequence Diagram



Stage Timings

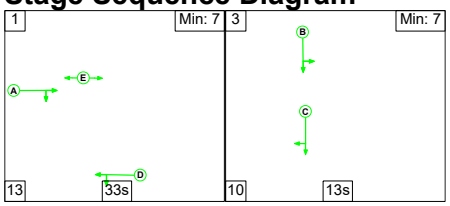
Stage	1	2	3
Duration	29	4	11
Change Point	0	42	52

Signal Timings Diagram



Controller :C2 - Eastside 25921

Stage Sequence Diagram

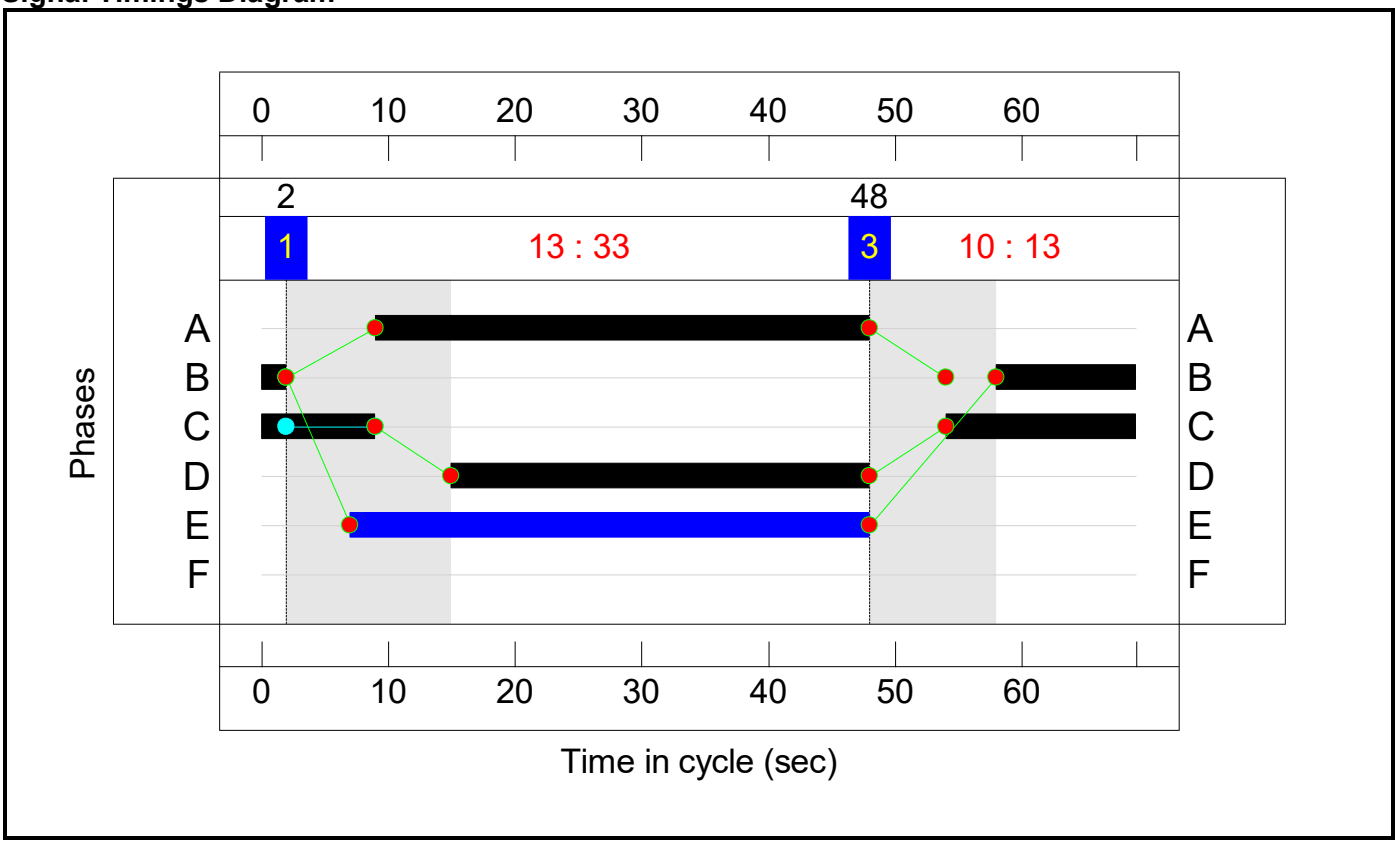


Stage Timings

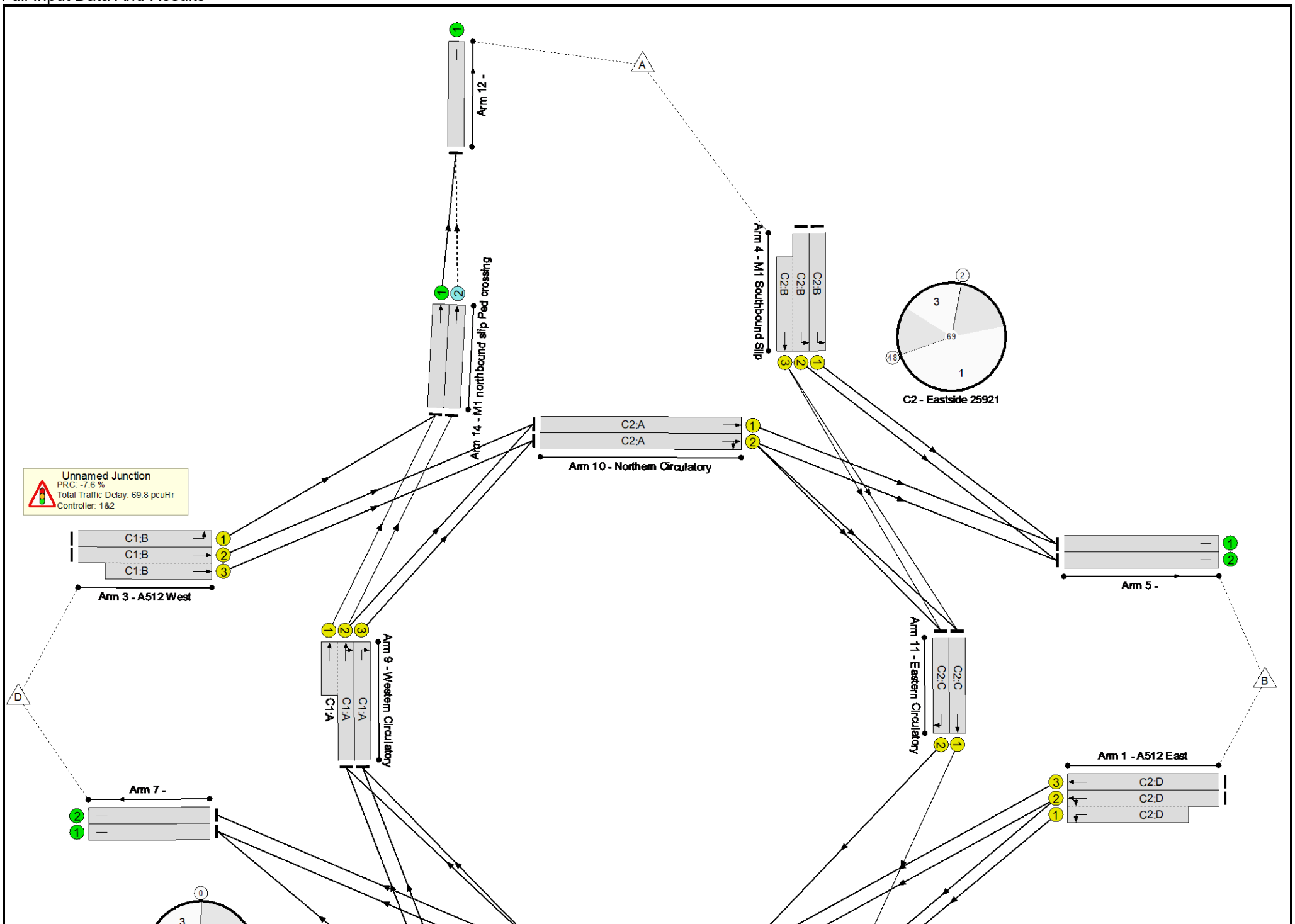
Stage	1	3
Duration	33	13
Change Point	2	48

Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M1 Junction 23	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**96.8%**
1/2+1/1	A512 East Left Ahead	U	N/A	N/A	C2:D		1	33	-	1276	1949:1963	904+571	86.5 : 86.5%
1/3	A512 East Ahead	U	N/A	N/A	C2:D		1	33	-	713	1955	963	74.0%
2/2+2/1	M1 Northbound Slip Left Ahead	U	N/A	N/A	C1:D		1	11	-	358	1973:1963	61+341	89.0 : 89.0%
2/3	M1 Northbound Slip Ahead	U	N/A	N/A	C1:D		1	11	-	292	1979	344	84.8%
3/1	A512 West Left	U	N/A	N/A	C1:B		1	29	-	427	1926	837	51.0%
3/2+3/3	A512 West Ahead	U	N/A	N/A	C1:B		1	29	-	1278	1937:1941	703+617	96.8 : 96.8%
4/1	M1 Southbound Slip Left	U	N/A	N/A	C2:B		1	13	-	273	1937	393	69.5%
4/2+4/3	M1 Southbound Slip Left Ahead	U	N/A	N/A	C2:B		1	13	-	663	1945:1948	395+395	85.1 : 82.7%
5/1		U	N/A	N/A	-		-	-	-	1008	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	942	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	777	1980	1980	39.2%
6/2	Ahead	O	N/A	N/A	-		-	-	-	0	1980	544	0.0%
7/1		U	N/A	N/A	-		-	-	-	1086	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%
8/1	Southern Circulatory Ahead	U	N/A	N/A	C1:C		1	45	-	782	1961	1307	59.8%
8/2	Southern Circulatory Ahead Right	U	N/A	N/A	C1:C		1	45	-	1040	1941	1294	80.4%
9/2+9/1	Western Circulatory Right Ahead	U	N/A	N/A	C1:A		1	28	-	621	1926:1941	176+734	68.2 : 68.2%

Full Input Data And Results

9/3	Western Circulatory Right	U	N/A	N/A	C1:A		1	28	-	292	1932	812	36.0%
10/1	Northern Circulatory Ahead	U	N/A	N/A	C2:A		1	39	-	735	1953	1132	64.9%
10/2	Northern Circulatory Ahead Right	U	N/A	N/A	C2:A		1	39	-	889	1937	1123	79.2%
11/1	Eastern Circulatory Ahead	U	N/A	N/A	C2:C		1	24	-	283	1997	724	39.1%
11/2	Eastern Circulatory Right	U	N/A	N/A	C2:C		1	24	-	327	1994	722	45.3%
12/1		U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
14/1	M1 northbound slip Ped crossing Ahead	U	N/A	N/A	-		-	-	-	928	1940	1940	47.8%
14/2	M1 northbound slip Ped crossing Ahead	O	N/A	N/A	-		-	-	-	66	1940	511	12.9%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: M1 Junction 23	**-**	**-**	**66**	**0**	**0**	**36.4**	**33.4**	**0.0**	**69.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**66**	**0**	**0**	**36.4**	**33.4**	**0.0**	**69.8**	**-**	**-**	**-**	**-**
1/2+1/1	1276	1276	-	-	-	4.8	3.1	-	8.0	22.4	12.6	3.1	15.7
1/3	713	713	-	-	-	2.8	1.4	-	4.2	21.1	10.9	1.4	12.3
2/2+2/1	358	358	-	-	-	2.7	3.5	-	6.2	62.6	5.7	3.5	9.2
2/3	292	292	-	-	-	2.2	2.5	-	4.8	59.1	5.4	2.5	7.9
3/1	427	427	-	-	-	1.7	0.5	-	2.2	18.5	5.9	0.5	6.4
3/2+3/3	1278	1278	-	-	-	5.9	10.2	-	16.1	45.5	13.9	10.2	24.2
4/1	273	273	-	-	-	1.9	1.1	-	3.1	40.2	4.9	1.1	6.0
4/2+4/3	663	663	-	-	-	4.9	2.5	-	7.4	40.1	6.2	2.5	8.7
5/1	1008	1008	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	942	942	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	777	777	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	1086	1086	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	782	782	-	-	-	1.3	0.7	-	2.1	9.6	4.6	0.7	5.4
8/2	1040	1040	-	-	-	1.1	2.0	-	3.1	10.8	6.0	2.0	8.0
9/2+9/1	621	621	-	-	-	2.3	1.1	-	3.4	19.6	10.4	1.1	11.5
9/3	292	292	-	-	-	0.2	0.3	-	0.5	6.2	0.4	0.3	0.7
10/1	735	735	-	-	-	1.5	0.9	-	2.4	12.0	4.6	0.9	5.5
10/2	889	889	-	-	-	1.3	1.9	-	3.2	12.9	7.0	1.9	8.9
11/1	283	283	-	-	-	1.4	0.3	-	1.7	22.0	5.4	0.3	5.7
11/2	327	327	-	-	-	0.2	0.4	-	0.6	6.8	0.3	0.4	0.7
12/1	994	994	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

14/1	928	928	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
14/2	66	66	66	0	0	0.0	0.1	-	0.1	4.0	0.0	0.1	0.1

C1 - Westside 25911	PRC for Signalled Lanes (%):	-7.6	Total Delay for Signalled Lanes (pcuHr):	38.43	Cycle Time (s):	69
C2 - Eastside 25921	PRC for Signalled Lanes (%):	4.1	Total Delay for Signalled Lanes (pcuHr):	30.53	Cycle Time (s):	69
	PRC Over All Lanes (%):	-7.6	Total Delay Over All Lanes(pcuHr):	69.82		

APPENDIX 67: Junction 13: A50 Junction 1 Stage 1B/2B Modelling Results

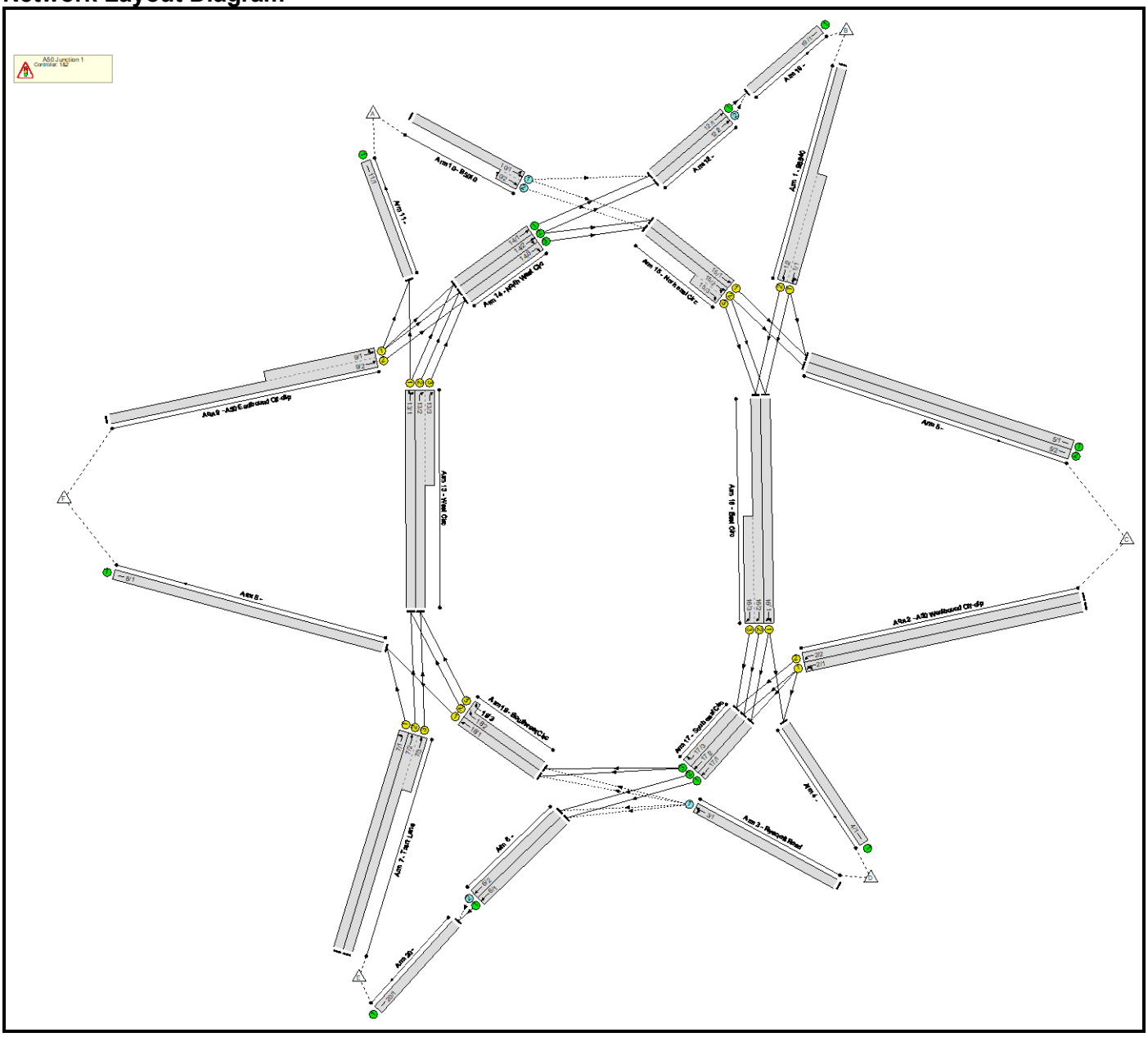
Full Input Data And Results

User and Project Details

Project:	**A50 Junction 1**
Title:	**A50 Junction 1**
Location:	
Client:	SEGRO
Site Ref(s):	Junction 13
Date Completed:	27/03/2024
Checked By:	Vibeeshan Devaharan
Additional detail:	
File name:	250624 A50 Junction 1 (Consented Scheme)_Stage 1b+2b.lsg3x
Author:	Charlie Cresswell
Company:	
Address:	

Full Input Data And Results

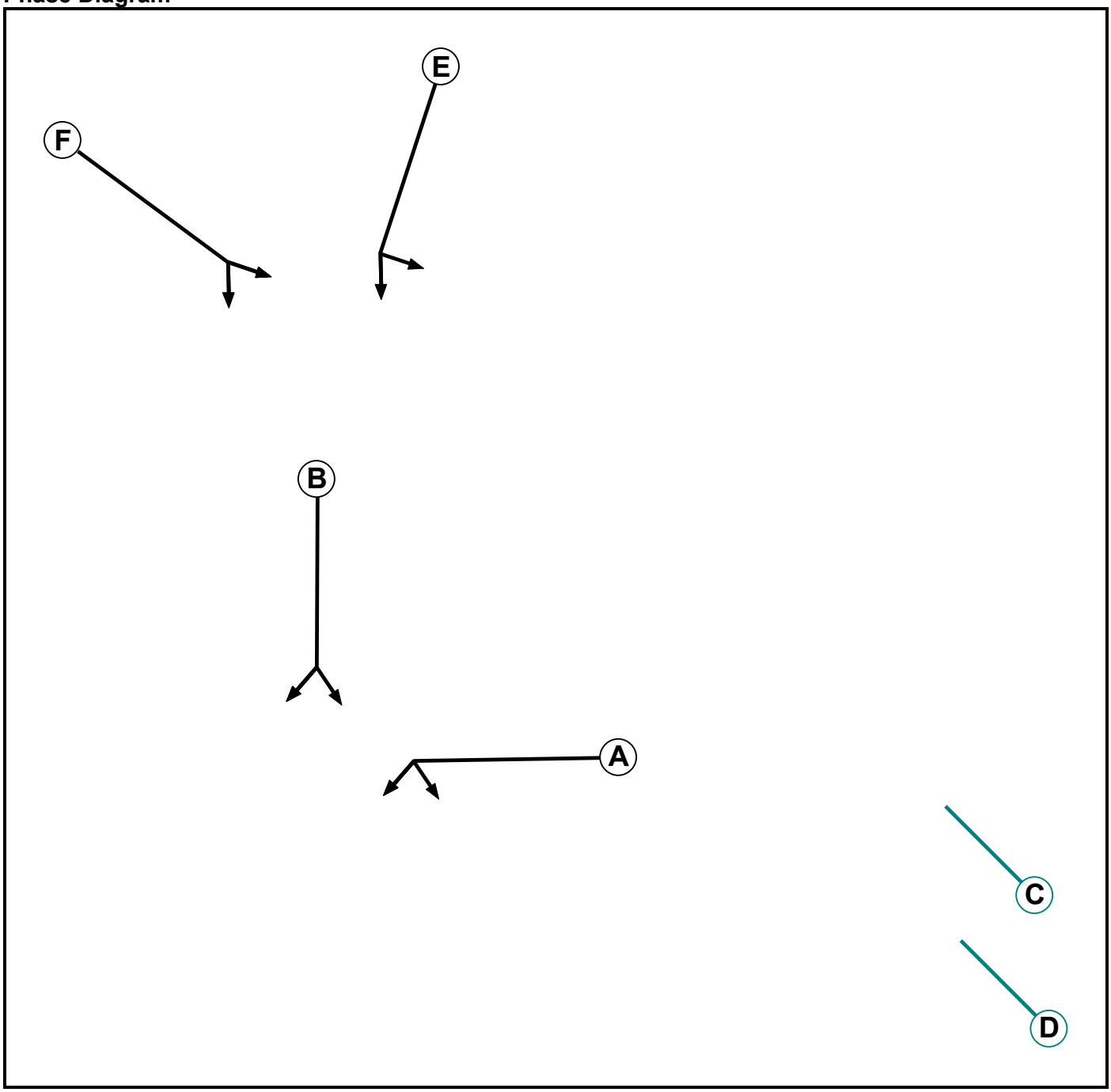
Network Layout Diagram



Full Input Data And Results

Controller :C1 - Eastsde E36308

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Dummy		7	7
D	Dummy		7	7
E	Traffic		7	7
F	Traffic		7	7

Full Input Data And Results

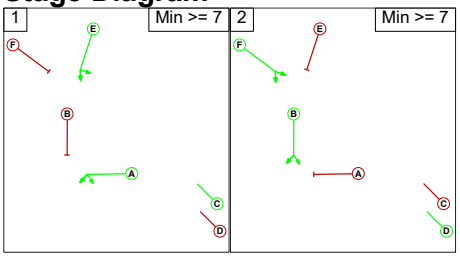
Phase Intergreens Matrix

Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		7	-	-	-	-
	B	5		-	-	-	-
	C	-	-		7	-	-
	D	-	-	5		-	-
	E	-	-	-	-		7
	F	-	-	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A C E
2	B D F

Stage Diagram



Phase Delays

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

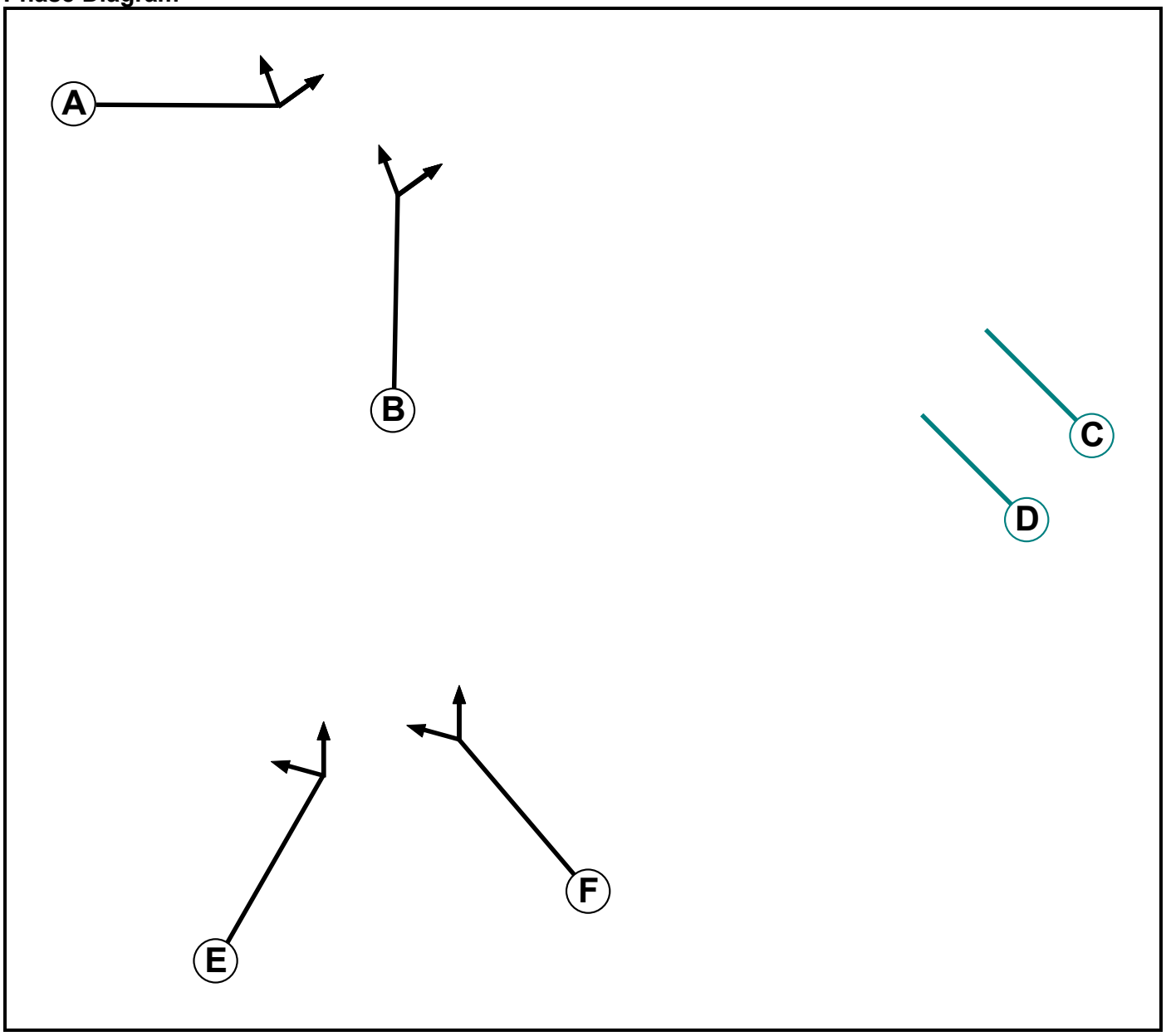
Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		7
	2	5	

Full Input Data And Results

Controller :C2 - Westside E36309

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Dummy		7	7
D	Dummy		7	7
E	Traffic		7	7
F	Traffic		7	7

Full Input Data And Results

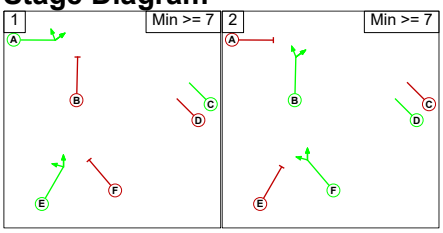
Phase Intergreens Matrix

Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		7	-	-	-	-
	B	5		-	-	-	-
	C	-	-		7	-	-
	D	-	-	5		-	-
	E	-	-	-	-		7
	F	-	-	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A C E
2	B D F

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		7
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A50 Junction 1

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/1 (Ryecroft Road)	6/1 (Left)	1000	0	17/1	0.33	All	-	-	-	-	-
				17/2	0.33	All					
	6/2 (Left)	1000	0	17/1	0.33	All					
				17/2	0.33	All					
	18/1 (Ahead)	1000	0	17/1	0.33	All					
				17/2	0.33	All					
				17/3	0.33	All					
	18/2 (Ahead)	1000	0	17/1	0.33	All					
				17/2	0.33	All					
				17/3	0.33	All					
6/2	20/1 (Ahead)	715	0	6/1	0.22	All	-	-	-	-	-
10/1 (B5010)	12/1 (Left)	1000	0	14/1	0.33	All	-	-	-	-	-
				14/2	0.33	All					
				14/3	0.33	All					
	15/1 (Ahead)	1000	0	14/1	0.33	All					
				14/2	0.33	All					
				14/3	0.33	All					
10/2 (B5010)	15/2 (Ahead)	1000	0	14/1	0.33	All	-	-	-	-	-
				14/2	0.33	All					
				14/3	0.33	All					
12/2	19/1 (Ahead)	715	0	12/1	0.22	All	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: A50 Junction 1

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (B6540)	U	E	2	3	17.4	Geom	-	4.00	0.00	Y	Arm 5 Left	45.00
											Arm 16 Ahead	45.00
1/2 (B6540)	U	E	2	3	60.0	Geom	-	4.00	0.00	N	Arm 16 Ahead	47.00
2/1 (A50 Westbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Left	39.00
											Arm 17 Ahead	39.00
2/2 (A50 Westbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 17 Ahead	43.00
3/1 (Ryecroft Road)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	36.00
											Arm 18 Ahead	36.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 20 Ahead	Inf
6/2	O		2	3	17.4	Geom	-	3.65	0.00	Y	Arm 20 Ahead	Inf
7/1 (Trent Lane)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Left	51.00
7/2 (Trent Lane)	U	E	2	3	60.0	Geom	-	3.65	0.00	N	Arm 13 Ahead	54.00
7/3 (Trent Lane)	U	E	2	3	8.7	Geom	-	4.00	0.00	N	Arm 13 Ahead	58.00
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (A50 Eastbound Off-slip)	U	A	2	3	17.4	Geom	-	3.00	0.00	Y	Arm 11 Left	40.00
											Arm 14 Ahead	45.00
9/2 (A50 Eastbound Off-slip)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 14 Ahead	50.00
10/1 (B5010)	O		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 12 Left	33.00
											Arm 15 Ahead	33.00
10/2 (B5010)	O		2	3	3.5	Geom	-	3.50	0.00	N	Arm 15 Ahead	43.00
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

12/1	U		2	3	12.2	Geom	-	3.50	0.00	Y	Arm 19 Ahead	Inf
12/2	O		2	3	12.2	Geom	-	3.50	0.00	Y	Arm 19 Ahead	Inf
13/1 (West Circ)	U	B	2	3	23.5	Geom	-	3.65	0.00	Y	Arm 11 Ahead	80.00
											Arm 14 Right	80.00
13/2 (West Circ)	U	B	2	3	24.0	Geom	-	3.65	0.00	Y	Arm 14 Right	77.00
13/3 (West Circ)	U	B	2	3	14.8	Geom	-	3.65	0.00	Y	Arm 14 Right	73.00
14/1 (North West Circ)	U		2	3	7.0	Geom	-	3.65	0.00	Y	Arm 12 Ahead	58.00
14/2 (North West Circ)	U		2	3	7.0	Geom	-	3.65	0.00	Y	Arm 12 Ahead	54.00
											Arm 15 Right	54.00
14/3 (North West Circ)	U		2	3	7.0	Geom	-	3.65	0.00	Y	Arm 15 Right	51.00
15/1 (Northeast Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	61.00
15/2 (Northeast Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	57.00
											Arm 16 Right	57.00
15/3 (Northeast Circ)	U	F	2	3	5.2	Geom	-	3.65	0.00	Y	Arm 16 Right	54.00
16/1 (East Circ)	U	B	2	3	26.1	Geom	-	3.65	0.00	Y	Arm 4 Ahead	62.00
											Arm 17 Ahead	62.00
16/2 (East Circ)	U	B	2	3	25.2	Geom	-	3.65	0.00	Y	Arm 17 Ahead	58.00
16/3 (East Circ)	U	B	2	3	16.5	Geom	-	3.65	0.00	Y	Arm 17 Ahead	55.00
17/1 (Southeast Circ)	U		2	3	9.6	Geom	-	3.65	0.00	Y	Arm 6 Ahead	42.00
17/2 (Southeast Circ)	U		2	3	9.0	Geom	-	3.65	0.00	Y	Arm 6 Ahead	39.00
17/3 (Southeast Circ)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 18 Right	35.00
18/1 (Southwest Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 8 Ahead	68.00
18/2 (Southwest Circ)	U	F	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 13 Right	64.00

18/3 (Southwest Circ)	U	F	2	3	1.0	Geom	-	3.65	0.00	Y	Arm 13 Right	58.00
19/1	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Base Flows AM'	07:45	08:45	01:00	
2: '2023 Base Flows PM'	17:00	18:00	01:00	
3: '2028 WoD Flows AM'	07:45	08:45	01:00	
4: '2028 WoD Flows PM'	17:00	18:00	01:00	
5: '2028 WD Flows AM'	07:45	08:45	01:00	
6: '2028 WD Flows PM'	17:00	18:00	01:00	
7: '2038 WoD Flows AM'	07:45	08:45	01:00	
8: '2038 WoD Flows PM'	17:00	18:00	01:00	
9: '2038 WD Flows AM'	07:45	08:45	01:00	
10: '2038 WD Flows PM'	17:00	18:00	01:00	
11: '2b 2028 WD Flows AM'	07:45	08:45	01:00	
12: '2b 2028 WD Flows PM'	17:00	18:00	01:00	
13: '2b 2038 WD Flows AM'	07:45	08:45	01:00	
14: '2b 2038 WD Flows PM'	17:00	18:00	01:00	

Scenario 1: '2022 Base AM' (FG1: '2023 Base Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	65	88	5	95	72	325
	B	37	0	315	11	237	198	798
	C	64	269	0	13	419	0	765
	D	3	10	15	0	10	12	50
	E	49	145	292	12	0	347	845
	F	14	245	0	15	449	0	723
	Tot.	167	734	710	56	1210	629	3506

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2022 Base AM
Junction: A50 Junction 1	
1/1 (short)	481
1/2 (with short)	798(In) 317(Out)
2/1	432
2/2	333
3/1	50
4/1	56
5/1	579
5/2	131
6/1	911
6/2	299
7/1	347
7/2 (with short)	498(In) 79(Out)
7/3 (short)	419
8/1	629
9/1 (short)	259
9/2 (with short)	723(In) 464(Out)
10/1 (with short)	325(In) 153(Out)
10/2 (short)	172
11/1	167
12/1	579
12/2	155
13/1	422
13/2 (with short)	474(In) 331(Out)
13/3 (short)	143
14/1	514
14/2	331
14/3	607
15/1	264
15/2 (with short)	779(In) 490(Out)
15/3 (short)	289
16/1	525
16/2 (with short)	606(In) 299(Out)

Full Input Data And Results

16/3 (short)	307
17/1	901
17/2	299
17/3	640
18/1	282
18/2 (with short)	398(In) 343(Out)
18/3 (short)	55
19/1	734
20/1	1210

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	65.5 %	1950	1950
				Arm 16 Ahead	45.00	34.5 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	3.0 %	1907	1907
				Arm 17 Ahead	39.00	97.0 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	20.0 %	1886	1886
				Arm 18 Ahead	36.00	80.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.4 %	1853	1853
				Arm 14 Ahead	45.00	94.6 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	42.5 %	1894	1894
				Arm 15 Ahead	33.00	57.5 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	36.3 %	1944	1944
				Arm 14 Right	80.00	63.7 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	46.8 %	1926	1926
				Arm 15 Right	54.00	53.2 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	26.7 %	1929	1929
				Arm 16 Right	57.00	73.3 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	8.2 %	1933	1933
				Arm 17 Ahead	62.00	91.8 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2022 Base PM' (FG2: '2023 Base Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	51	61	3	65	79	259
	B	69	0	261	6	173	182	691
	C	121	279	0	16	330	0	746
	D	5	15	17	0	11	15	63
	E	107	235	415	17	0	501	1275
	F	20	199	0	14	383	0	616
	Tot.	322	779	754	56	962	777	3650

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2022 Base PM
Junction: A50 Junction 1	
1/1 (short)	372
1/2 (with short)	691(In) 319(Out)
2/1	346
2/2	400
3/1	63
4/1	56
5/1	450
5/2	304
6/1	678
6/2	284
7/1	501
7/2 (with short)	774(In) 171(Out)
7/3 (short)	603
8/1	777
9/1 (short)	219
9/2 (with short)	616(In) 397(Out)
10/1 (with short)	259(In) 112(Out)
10/2 (short)	147
11/1	322
12/1	505
12/2	274
13/1	557
13/2 (with short)	723(In) 402(Out)
13/3 (short)	321
14/1	454
14/2	402
14/3	718
15/1	189
15/2 (with short)	865(In) 570(Out)
15/3 (short)	295
16/1	377
16/2 (with short)	614(In) 284(Out)

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16/3 (short)	330
17/1	667
17/2	284
17/3	730
18/1	276
18/2 (with short)	506(In) 386(Out)
18/3 (short)	120
19/1	779
20/1	962

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	70.2 %	1950	1950
				Arm 16 Ahead	45.00	29.8 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	4.6 %	1907	1907
				Arm 17 Ahead	39.00	95.4 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	17.5 %	1886	1886
				Arm 18 Ahead	36.00	82.5 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	9.1 %	1853	1853
				Arm 14 Ahead	45.00	90.9 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	45.5 %	1894	1894
				Arm 15 Ahead	33.00	54.5 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	54.2 %	1944	1944
				Arm 14 Right	80.00	45.8 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

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14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	68.2 %	1926	1926
				Arm 15 Right	54.00	31.8 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	53.3 %	1929	1929
				Arm 16 Right	57.00	46.7 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	10.6 %	1933	1933
				Arm 17 Ahead	62.00	89.4 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	106	88	23	111	91	419
	B	36	0	359	55	268	276	994
	C	68	468	0	71	527	0	1134
	D	2	14	12	0	10	14	52
	E	44	197	307	52	0	427	1027
	F	13	379	0	72	500	0	964
	Tot.	163	1164	766	273	1416	808	4590

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2028 WoD AM
Junction: A50 Junction 1	
1/1 (short)	552
1/2 (with short)	994(In) 442(Out)
2/1	598
2/2	536
3/1	52
4/1	273
5/1	658
5/2	155
6/1	1050
6/2	366
7/1	427
7/2 (with short)	647(In) 149(Out)
7/3 (short)	498
8/1	808
9/1 (short)	392
9/2 (with short)	964(In) 572(Out)
10/1 (with short)	419(In) 194(Out)
10/2 (short)	225
11/1	163
12/1	942
12/2	222
13/1	607
13/2 (with short)	640(In) 433(Out)
13/3 (short)	207
14/1	836
14/2	433
14/3	779
15/1	299
15/2 (with short)	1004(In) 677(Out)
15/3 (short)	327
16/1	715
16/2 (with short)	769(In) 366(Out)

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16/3 (short)	403
17/1	1040
17/2	366
17/3	939
18/1	381
18/2 (with short)	600(In) 458(Out)
18/3 (short)	142
19/1	1164
20/1	1416

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	65.0 %	1950	1950
				Arm 16 Ahead	45.00	35.0 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	11.9 %	1907	1907
				Arm 17 Ahead	39.00	88.1 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	19.2 %	1886	1886
				Arm 18 Ahead	36.00	80.8 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.3 %	1853	1853
				Arm 14 Ahead	45.00	96.7 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	54.6 %	1894	1894
				Arm 15 Ahead	33.00	45.4 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	24.7 %	1944	1944
				Arm 14 Right	80.00	75.3 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	51.3 %	1926	1926
				Arm 15 Right	54.00	48.7 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	22.9 %	1929	1929
				Arm 16 Right	57.00	77.1 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	28.3 %	1933	1933
				Arm 17 Ahead	62.00	71.7 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	66	70	5	63	92	296
	B	80	0	443	15	207	298	1043
	C	123	437	0	43	338	0	941
	D	4	18	17	0	9	16	64
	E	84	282	469	26	0	563	1424
	F	24	380	0	34	480	0	918
	Tot.	315	1183	999	123	1097	969	4686

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Traffic Lane Flows

Lane	Scenario 4: 2028 WoD PM
Junction: A50 Junction 1	
1/1 (short)	557
1/2 (with short)	1043(In) 486(Out)
2/1	381
2/2	560
3/1	64
4/1	123
5/1	890
5/2	109
6/1	821
6/2	276
7/1	563
7/2 (with short)	861(In) 245(Out)
7/3 (short)	616
8/1	969
9/1 (short)	404
9/2 (with short)	918(In) 514(Out)
10/1 (with short)	296(In) 123(Out)
10/2 (short)	173
11/1	315
12/1	889
12/2	294
13/1	734
13/2 (with short)	806(In) 684(Out)
13/3 (short)	122
14/1	823
14/2	684
14/3	636
15/1	447
15/2 (with short)	809(In) 549(Out)
15/3 (short)	260
16/1	554
16/2 (with short)	746(In) 276(Out)

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16/3 (short)	470
17/1	812
17/2	276
17/3	1030
18/1	406
18/2 (with short)	679(In) 489(Out)
18/3 (short)	190
19/1	1183
20/1	1097

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	79.5 %	1950	1950
				Arm 16 Ahead	45.00	20.5 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	11.3 %	1907	1907
				Arm 17 Ahead	39.00	88.7 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	14.1 %	1886	1886
				Arm 18 Ahead	36.00	85.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.9 %	1853	1853
				Arm 14 Ahead	45.00	94.1 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	53.7 %	1894	1894
				Arm 15 Ahead	33.00	46.3 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	39.6 %	1944	1944
				Arm 14 Right	80.00	60.4 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	43.0 %	1926	1926
				Arm 15 Right	54.00	57.0 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	19.9 %	1929	1929
				Arm 16 Right	57.00	80.1 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	14.4 %	1933	1933
				Arm 17 Ahead	62.00	85.6 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2028 WD AM' (FG5: '2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	107	89	25	117	92	430
	B	37	0	361	59	278	279	1014
	C	69	456	0	73	531	0	1129
	D	3	14	12	0	10	13	52
	E	45	194	304	56	0	430	1029
	F	14	389	0	81	534	0	1018
	Tot.	168	1160	766	294	1470	814	4672

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Traffic Lane Flows

Lane	Scenario 5: 2028 WD AM
Junction: A50 Junction 1	
1/1 (short)	570
1/2 (with short)	1014(In) 444(Out)
2/1	604
2/2	525
3/1	52
4/1	294
5/1	675
5/2	91
6/1	1078
6/2	392
7/1	430
7/2 (with short)	599(In) 126(Out)
7/3 (short)	473
8/1	814
9/1 (short)	403
9/2 (with short)	1018(In) 615(Out)
10/1 (with short)	430(In) 196(Out)
10/2 (short)	234
11/1	168
12/1	942
12/2	218
13/1	600
13/2 (with short)	590(In) 443(Out)
13/3 (short)	147
14/1	835
14/2	443
14/3	762
15/1	314
15/2 (with short)	996(In) 640(Out)
15/3 (short)	356
16/1	758
16/2 (with short)	800(In) 392(Out)
16/3 (short)	408

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17/1	1068
17/2	392
17/3	933
18/1	384
18/2 (with short)	591(In) 474(Out)
18/3 (short)	117
19/1	1160
20/1	1470

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	63.3 %	1950	1950
				Arm 16 Ahead	45.00	36.7 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	12.1 %	1907	1907
				Arm 17 Ahead	39.00	87.9 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	19.2 %	1886	1886
				Arm 18 Ahead	36.00	80.8 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.5 %	1853	1853
				Arm 14 Ahead	45.00	96.5 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	54.6 %	1894	1894
				Arm 15 Ahead	33.00	45.4 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	25.7 %	1944	1944
				Arm 14 Right	80.00	74.3 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	49.2 %	1926	1926
				Arm 15 Right	54.00	50.8 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	14.2 %	1929	1929
				Arm 16 Right	57.00	85.8 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	29.2 %	1933	1933
				Arm 17 Ahead	62.00	70.8 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2028 WD PM' (FG6: '2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	67	72	5	62	92	298
	B	81	0	446	15	202	299	1043
	C	124	438	0	45	331	0	938
	D	4	18	17	0	9	16	64
	E	83	287	467	26	0	563	1426
	F	24	382	0	34	469	0	909
	Tot.	316	1192	1002	125	1073	970	4678

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2028 WD PM
Junction: A50 Junction 1	
1/1 (short)	582
1/2 (with short)	1043(In) 461(Out)
2/1	376
2/2	562
3/1	64
4/1	125
5/1	863
5/2	139
6/1	789
6/2	284
7/1	563
7/2 (with short)	863(In) 248(Out)
7/3 (short)	615
8/1	970
9/1 (short)	406
9/2 (with short)	909(In) 503(Out)
10/1 (with short)	298(In) 139(Out)
10/2 (short)	159
11/1	316
12/1	874
12/2	318
13/1	717
13/2 (with short)	828(In) 663(Out)
13/3 (short)	165
14/1	807
14/2	663
14/3	668
15/1	417
15/2 (with short)	827(In) 532(Out)
15/3 (short)	295
16/1	529
16/2 (with short)	756(In) 284(Out)
16/3 (short)	472

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17/1	780
17/2	284
17/3	1034
18/1	407
18/2 (with short)	682(In) 469(Out)
18/3 (short)	213
19/1	1192
20/1	1073

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	76.6 %	1950	1950
				Arm 16 Ahead	45.00	23.4 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	12.0 %	1907	1907
				Arm 17 Ahead	39.00	88.0 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	14.1 %	1886	1886
				Arm 18 Ahead	36.00	85.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.9 %	1853	1853
				Arm 14 Ahead	45.00	94.1 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	48.2 %	1894	1894
				Arm 15 Ahead	33.00	51.8 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	40.7 %	1944	1944
				Arm 14 Right	80.00	59.3 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	48.0 %	1926	1926
				Arm 15 Right	54.00	52.0 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	26.1 %	1929	1929
				Arm 16 Right	57.00	73.9 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	15.1 %	1933	1933
				Arm 17 Ahead	62.00	84.9 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	91	89	29	86	90	385
	B	44	0	444	82	288	324	1182
	C	71	458	0	88	485	0	1102
	D	3	13	14	0	9	13	52
	E	48	197	336	67	0	438	1086
	F	14	394	0	92	480	0	980
	Tot.	180	1153	883	358	1348	865	4787

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2038 WoD AM
Junction: A50 Junction 1	
1/1 (short)	678
1/2 (with short)	1182(In) 504(Out)
2/1	573
2/2	529
3/1	52
4/1	358
5/1	845
5/2	38
6/1	910
6/2	438
7/1	438
7/2 (with short)	648(In) 130(Out)
7/3 (short)	518
8/1	865
9/1 (short)	408
9/2 (with short)	980(In) 572(Out)
10/1 (with short)	385(In) 175(Out)
10/2 (short)	210
11/1	180
12/1	934
12/2	219
13/1	615
13/2 (with short)	636(In) 536(Out)
13/3 (short)	100
14/1	843
14/2	536
14/3	672
15/1	401
15/2 (with short)	882(In) 490(Out)
15/3 (short)	392
16/1	686
16/2 (with short)	896(In) 438(Out)

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16/3 (short)	458
17/1	901
17/2	438
17/3	987
18/1	427
18/2 (with short)	603(In) 485(Out)
18/3 (short)	118
19/1	1153
20/1	1348

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	65.5 %	1950	1950
				Arm 16 Ahead	45.00	34.5 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	15.4 %	1907	1907
				Arm 17 Ahead	39.00	84.6 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	17.3 %	1886	1886
				Arm 18 Ahead	36.00	82.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.4 %	1853	1853
				Arm 14 Ahead	45.00	96.6 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	52.0 %	1894	1894
				Arm 15 Ahead	33.00	48.0 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	27.0 %	1944	1944
				Arm 14 Right	80.00	73.0 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	40.9 %	1926	1926
				Arm 15 Right	54.00	59.1 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	7.8 %	1929	1929
				Arm 16 Right	57.00	92.2 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	39.4 %	1933	1933
				Arm 17 Ahead	62.00	60.6 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	80	85	11	54	98	328
	B	115	0	590	35	239	373	1352
	C	131	448	0	68	297	0	944
	D	7	31	32	0	13	24	107
	E	93	320	508	52	0	548	1521
	F	25	397	0	62	422	0	906
	Tot.	371	1276	1215	228	1025	1043	5158

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2038 WoD PM
Junction: A50 Junction 1	
1/1 (short)	735
1/2 (with short)	1352(In) 617(Out)
2/1	365
2/2	579
3/1	107
4/1	228
5/1	1102
5/2	113
6/1	736
6/2	289
7/1	548
7/2 (with short)	973(In) 272(Out)
7/3 (short)	701
8/1	1043
9/1 (short)	422
9/2 (with short)	906(In) 484(Out)
10/1 (with short)	328(In) 164(Out)
10/2 (short)	164
11/1	371
12/1	928
12/2	348
13/1	797
13/2 (with short)	940(In) 776(Out)
13/3 (short)	164
14/1	848
14/2	776
14/3	648
15/1	512
15/2 (with short)	812(In) 554(Out)
15/3 (short)	258
16/1	586
16/2 (with short)	875(In) 289(Out)

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16/3 (short)	586
17/1	723
17/2	289
17/3	1165
18/1	495
18/2 (with short)	764(In) 525(Out)
18/3 (short)	239
19/1	1276
20/1	1025

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	80.3 %	1950	1950
				Arm 16 Ahead	45.00	19.7 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	18.6 %	1907	1907
				Arm 17 Ahead	39.00	81.4 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	12.1 %	1886	1886
				Arm 18 Ahead	36.00	87.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.9 %	1853	1853
				Arm 14 Ahead	45.00	94.1 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	48.8 %	1894	1894
				Arm 15 Ahead	33.00	51.2 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	43.4 %	1944	1944
				Arm 14 Right	80.00	56.6 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	44.8 %	1926	1926
				Arm 15 Right	54.00	55.2 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	20.4 %	1929	1929
				Arm 16 Right	57.00	79.6 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	27.3 %	1933	1933
				Arm 17 Ahead	62.00	72.7 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2038 WD AM' (FG9: '2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	89	93	28	91	89	390
	B	43	0	453	77	293	313	1179
	C	70	449	0	84	495	0	1098
	D	3	13	15	0	9	13	53
	E	49	203	365	69	0	457	1143
	F	15	396	0	93	509	0	1013
	Tot.	180	1150	926	351	1397	872	4876

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2038 WD AM
Junction: A50 Junction 1	
1/1 (short)	686
1/2 (with short)	1179(In) 493(Out)
2/1	579
2/2	519
3/1	53
4/1	351
5/1	891
5/2	35
6/1	969
6/2	428
7/1	457
7/2 (with short)	686(In) 148(Out)
7/3 (short)	538
8/1	872
9/1 (short)	411
9/2 (with short)	1013(In) 602(Out)
10/1 (with short)	390(In) 179(Out)
10/2 (short)	211
11/1	180
12/1	940
12/2	210
13/1	620
13/2 (with short)	659(In) 558(Out)
13/3 (short)	101
14/1	851
14/2	558
14/3	703
15/1	438
15/2 (with short)	914(In) 534(Out)
15/3 (short)	380
16/1	732
16/2 (with short)	873(In) 428(Out)
16/3 (short)	445

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17/1	960
17/2	428
17/3	964
18/1	415
18/2 (with short)	593(In) 472(Out)
18/3 (short)	121
19/1	1150
20/1	1397

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	66.0 %	1950	1950
				Arm 16 Ahead	45.00	34.0 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	14.5 %	1907	1907
				Arm 17 Ahead	39.00	85.5 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	17.0 %	1886	1886
				Arm 18 Ahead	36.00	83.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.6 %	1853	1853
				Arm 14 Ahead	45.00	96.4 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	49.7 %	1894	1894
				Arm 15 Ahead	33.00	50.3 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	26.6 %	1944	1944
				Arm 14 Right	80.00	73.4 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	37.6 %	1926	1926
				Arm 15 Right	54.00	62.4 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	6.6 %	1929	1929
				Arm 16 Right	57.00	93.4 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	36.5 %	1933	1933
				Arm 17 Ahead	62.00	63.5 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2038 WD PM' (FG10: '2038 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	80	82	12	64	94	332
	B	114	0	661	40	252	370	1437
	C	144	489	0	97	342	0	1072
	D	10	46	46	0	18	35	155
	E	95	341	580	62	0	606	1684
	F	24	401	0	67	441	0	933
	Tot.	387	1357	1369	278	1117	1105	5613

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 10: 2038 WD PM
Junction: A50 Junction 1	
1/1 (short)	744
1/2 (with short)	1437(In) 693(Out)
2/1	439
2/2	633
3/1	155
4/1	278
5/1	1204
5/2	165
6/1	758
6/2	359
7/1	606
7/2 (with short)	1078(In) 281(Out)
7/3 (short)	797
8/1	1105
9/1 (short)	425
9/2 (with short)	933(In) 508(Out)
10/1 (with short)	332(In) 162(Out)
10/2 (short)	170
11/1	387
12/1	984
12/2	373
13/1	866
13/2 (with short)	1061(In) 834(Out)
13/3 (short)	227
14/1	904
14/2	834
14/3	735
15/1	543
15/2 (with short)	905(In) 661(Out)
15/3 (short)	244
16/1	579
16/2 (with short)	937(In) 359(Out)
16/3 (short)	578

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17/1	740
17/2	359
17/3	1211
18/1	499
18/2 (with short)	849(In) 585(Out)
18/3 (short)	264
19/1	1357
20/1	1117

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	88.8 %	1950	1950
				Arm 16 Ahead	45.00	11.2 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	22.1 %	1907	1907
				Arm 17 Ahead	39.00	77.9 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	11.6 %	1886	1886
				Arm 18 Ahead	36.00	88.4 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.6 %	1853	1853
				Arm 14 Ahead	45.00	94.4 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	49.4 %	1894	1894
				Arm 15 Ahead	33.00	50.6 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	41.9 %	1944	1944
				Arm 14 Right	80.00	58.1 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	44.7 %	1926	1926
				Arm 15 Right	54.00	55.3 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	25.0 %	1929	1929
				Arm 16 Right	57.00	75.0 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	31.3 %	1933	1933
				Arm 17 Ahead	62.00	68.7 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 11: '2b 2028 WD AM' (FG11: '2b 2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	98	117	10	98	96	419
	B	35	0	441	23	234	276	1009
	C	73	471	0	32	517	0	1093
	D	2	12	16	0	9	13	52
	E	43	176	370	22	0	427	1038
	F	14	395	0	34	512	0	955
	Tot.	167	1152	944	121	1370	812	4566

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: 2b 2028 WD AM
Junction: A50 Junction 1	
1/1 (short)	589
1/2 (with short)	1009(In) 420(Out)
2/1	549
2/2	544
3/1	52
4/1	121
5/1	838
5/2	106
6/1	1047
6/2	323
7/1	427
7/2 (with short)	611(In) 139(Out)
7/3 (short)	472
8/1	812
9/1 (short)	409
9/2 (with short)	955(In) 546(Out)
10/1 (with short)	419(In) 212(Out)
10/2 (short)	207
11/1	167
12/1	1001
12/2	151
13/1	661
13/2 (with short)	559(In) 434(Out)
13/3 (short)	125
14/1	903
14/2	434
14/3	671
15/1	397
15/2 (with short)	878(In) 568(Out)
15/3 (short)	310
16/1	610
16/2 (with short)	730(In) 323(Out)

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16/3 (short)	407
17/1	1038
17/2	323
17/3	951
18/1	385
18/2 (with short)	609(In) 522(Out)
18/3 (short)	87
19/1	1152
20/1	1370

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	74.9 %	1950	1950
				Arm 16 Ahead	45.00	25.1 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	5.8 %	1907	1907
				Arm 17 Ahead	39.00	94.2 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	17.3 %	1886	1886
				Arm 18 Ahead	36.00	82.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.4 %	1853	1853
				Arm 14 Ahead	45.00	96.6 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	46.2 %	1894	1894
				Arm 15 Ahead	33.00	53.8 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	23.1 %	1944	1944
				Arm 14 Right	80.00	76.9 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

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14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	34.8 %	1926	1926
				Arm 15 Right	54.00	65.2 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	18.7 %	1929	1929
				Arm 16 Right	57.00	81.3 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	14.6 %	1933	1933
				Arm 17 Ahead	62.00	85.4 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 12: '2b 2028 WD PM' (FG12: '2b 2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	65	77	5	62	89	298
	B	82	0	477	14	200	288	1061
	C	123	416	0	43	319	0	901
	D	4	17	18	0	9	14	62
	E	91	295	531	26	0	573	1516
	F	25	384	0	33	476	0	918
	Tot.	325	1177	1103	121	1066	964	4756

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 12: 2b 2028 WD PM
Junction: A50 Junction 1	
1/1 (short)	512
1/2 (with short)	1061(In) 549(Out)
2/1	362
2/2	539
3/1	62
4/1	121
5/1	968
5/2	135
6/1	796
6/2	270
7/1	573
7/2 (with short)	943(In) 375(Out)
7/3 (short)	568
8/1	964
9/1 (short)	409
9/2 (with short)	918(In) 509(Out)
10/1 (with short)	298(In) 114(Out)
10/2 (short)	184
11/1	325
12/1	1034
12/2	143
13/1	885
13/2 (with short)	718(In) 585(Out)
13/3 (short)	133
14/1	969
14/2	585
14/3	642
15/1	491
15/2 (with short)	826(In) 648(Out)
15/3 (short)	178
16/1	548
16/2 (with short)	727(In) 268(Out)

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16/3 (short)	459
17/1	787
17/2	270
17/3	998
18/1	391
18/2 (with short)	660(In) 510(Out)
18/3 (short)	150
19/1	1177
20/1	1066

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	93.2 %	1950	1950
				Arm 16 Ahead	45.00	6.8 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	11.9 %	1907	1907
				Arm 17 Ahead	39.00	88.1 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	14.5 %	1886	1886
				Arm 18 Ahead	36.00	85.5 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	6.1 %	1853	1853
				Arm 14 Ahead	45.00	93.9 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	57.0 %	1894	1894
				Arm 15 Ahead	33.00	43.0 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	33.9 %	1944	1944
				Arm 14 Right	80.00	66.1 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	24.4 %	1926	1926
				Arm 15 Right	54.00	75.6 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	20.8 %	1929	1929
				Arm 16 Right	57.00	79.2 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	14.2 %	1933	1933
				Arm 17 Ahead	62.00	85.8 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 13: '2b 2038 WD AM' (FG13: '2b 2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	90	109	18	82	95	394
	B	43	0	500	48	257	317	1165
	C	72	456	0	54	464	0	1046
	D	2	12	15	0	8	12	49
	E	48	190	383	42	0	447	1110
	F	15	409	0	63	488	0	975
	Tot.	180	1157	1007	225	1299	871	4739

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 13: 2b 2038 WD AM
Junction: A50 Junction 1	
1/1 (short)	695
1/2 (with short)	1165(In) 470(Out)
2/1	518
2/2	528
3/1	49
4/1	225
5/1	940
5/2	67
6/1	936
6/2	363
7/1	447
7/2 (with short)	663(In) 136(Out)
7/3 (short)	527
8/1	871
9/1 (short)	424
9/2 (with short)	975(In) 551(Out)
10/1 (with short)	394(In) 191(Out)
10/2 (short)	203
11/1	180
12/1	960
12/2	197
13/1	626
13/2 (with short)	637(In) 536(Out)
13/3 (short)	101
14/1	870
14/2	536
14/3	652
15/1	440
15/2 (with short)	855(In) 507(Out)
15/3 (short)	348
16/1	635
16/2 (with short)	818(In) 363(Out)

Full Input Data And Results

16/3 (short)	455
17/1	928
17/2	363
17/3	983
18/1	424
18/2 (with short)	600(In) 490(Out)
18/3 (short)	110
19/1	1157
20/1	1299

Full Input Data And Results

Lane Saturation Flows

Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	71.9 %	1950	1950
				Arm 16 Ahead	45.00	28.1 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	10.4 %	1907	1907
				Arm 17 Ahead	39.00	89.6 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	16.3 %	1886	1886
				Arm 18 Ahead	36.00	83.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	3.5 %	1853	1853
				Arm 14 Ahead	45.00	96.5 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	47.1 %	1894	1894
				Arm 15 Ahead	33.00	52.9 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	26.4 %	1944	1944
				Arm 14 Right	80.00	73.6 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	36.8 %	1926	1926
				Arm 15 Right	54.00	63.2 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	13.2 %	1929	1929
				Arm 16 Right	57.00	86.8 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	26.9 %	1933	1933
				Arm 17 Ahead	62.00	73.1 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 14: '2b 2038 WD PM' (FG14: '2b 2038 WD Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	79	85	5	54	94	317
	B	107	0	581	16	225	350	1279
	C	122	423	0	45	281	0	871
	D	11	50	52	0	19	39	171
	E	92	320	529	26	0	545	1512
	F	26	412	0	32	440	0	910
	Tot.	358	1284	1247	124	1019	1028	5060

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 14: 2b 2038 WD PM
Junction: A50 Junction 1	
1/1 (short)	689
1/2 (with short)	1279(In) 590(Out)
2/1	326
2/2	545
3/1	171
4/1	124
5/1	1094
5/2	153
6/1	748
6/2	271
7/1	545
7/2 (with short)	967(In) 269(Out)
7/3 (short)	698
8/1	1028
9/1 (short)	438
9/2 (with short)	910(In) 472(Out)
10/1 (with short)	317(In) 159(Out)
10/2 (short)	158
11/1	358
12/1	948
12/2	336
13/1	789
13/2 (with short)	943(In) 769(Out)
13/3 (short)	174
14/1	869
14/2	769
14/3	646
15/1	513
15/2 (with short)	804(In) 572(Out)
15/3 (short)	232
16/1	527
16/2 (with short)	822(In) 271(Out)

Full Input Data And Results

16/3 (short)	551
17/1	729
17/2	271
17/3	1096
18/1	483
18/2 (with short)	765(In) 520(Out)
18/3 (short)	245
19/1	1284
20/1	1019

Full Input Data And Results

Lane Saturation Flows

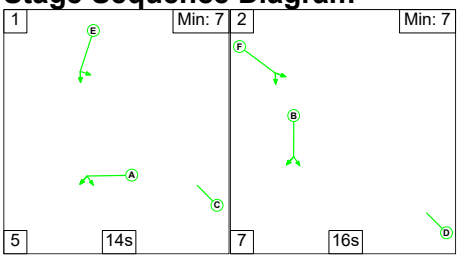
Junction: A50 Junction 1								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (B6540)	4.00	0.00	Y	Arm 5 Left	45.00	84.3 %	1950	1950
				Arm 16 Ahead	45.00	15.7 %		
1/2 (B6540)	4.00	0.00	N	Arm 16 Ahead	47.00	100.0 %	2088	2088
2/1 (A50 Westbound Off-slip)	3.65	0.00	Y	Arm 4 Left	39.00	13.8 %	1907	1907
				Arm 17 Ahead	39.00	86.2 %		
2/2 (A50 Westbound Off-slip)	3.65	0.00	N	Arm 17 Ahead	43.00	100.0 %	2049	2049
3/1 (Ryecroft Road)	3.50	0.00	Y	Arm 6 Left	36.00	11.1 %	1886	1886
				Arm 18 Ahead	36.00	88.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
6/2	3.65	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1980	1980
7/1 (Trent Lane)	3.65	0.00	Y	Arm 8 Left	51.00	100.0 %	1923	1923
7/2 (Trent Lane)	3.65	0.00	N	Arm 13 Ahead	54.00	100.0 %	2063	2063
7/3 (Trent Lane)	4.00	0.00	N	Arm 13 Ahead	58.00	100.0 %	2101	2101
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (A50 Eastbound Off-slip)	3.00	0.00	Y	Arm 11 Left	40.00	5.9 %	1853	1853
				Arm 14 Ahead	45.00	94.1 %		
9/2 (A50 Eastbound Off-slip)	3.00	0.00	N	Arm 14 Ahead	50.00	100.0 %	1995	1995
10/1 (B5010)	3.65	0.00	Y	Arm 12 Left	33.00	49.7 %	1894	1894
				Arm 15 Ahead	33.00	50.3 %		
10/2 (B5010)	3.50	0.00	N	Arm 15 Ahead	43.00	100.0 %	2034	2034
11/1	Infinite Saturation Flow						Inf	Inf
12/1	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
12/2	3.50	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1965	1965
13/1 (West Circ)	3.65	0.00	Y	Arm 11 Ahead	80.00	42.1 %	1944	1944
				Arm 14 Right	80.00	57.9 %		
13/2 (West Circ)	3.65	0.00	Y	Arm 14 Right	77.00	100.0 %	1942	1942
13/3 (West Circ)	3.65	0.00	Y	Arm 14 Right	73.00	100.0 %	1940	1940
14/1 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	58.00	100.0 %	1930	1930

Full Input Data And Results

14/2 (North West Circ)	3.65	0.00	Y	Arm 12 Ahead	54.00	43.7 %	1926	1926
				Arm 15 Right	54.00	56.3 %		
14/3 (North West Circ)	3.65	0.00	Y	Arm 15 Right	51.00	100.0 %	1923	1923
15/1 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	61.00	100.0 %	1932	1932
15/2 (Northeast Circ)	3.65	0.00	Y	Arm 5 Ahead	57.00	26.7 %	1929	1929
				Arm 16 Right	57.00	73.3 %		
15/3 (Northeast Circ)	3.65	0.00	Y	Arm 16 Right	54.00	100.0 %	1926	1926
16/1 (East Circ)	3.65	0.00	Y	Arm 4 Ahead	62.00	15.0 %	1933	1933
				Arm 17 Ahead	62.00	85.0 %		
16/2 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	58.00	100.0 %	1930	1930
16/3 (East Circ)	3.65	0.00	Y	Arm 17 Ahead	55.00	100.0 %	1927	1927
17/1 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	42.00	100.0 %	1912	1912
17/2 (Southeast Circ)	3.65	0.00	Y	Arm 6 Ahead	39.00	100.0 %	1907	1907
17/3 (Southeast Circ)	3.65	0.00	Y	Arm 18 Right	35.00	100.0 %	1899	1899
18/1 (Southwest Circ)	3.65	0.00	Y	Arm 8 Ahead	68.00	100.0 %	1937	1937
18/2 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	64.00	100.0 %	1935	1935
18/3 (Southwest Circ)	3.65	0.00	Y	Arm 13 Right	58.00	100.0 %	1930	1930
19/1	Infinite Saturation Flow						Inf	Inf
20/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2022 Base AM' (FG1: '2023 Base Flows AM', Plan 1: 'Network Control Plan 1')
Controller :C1 - Eastsde E36308

Stage Sequence Diagram

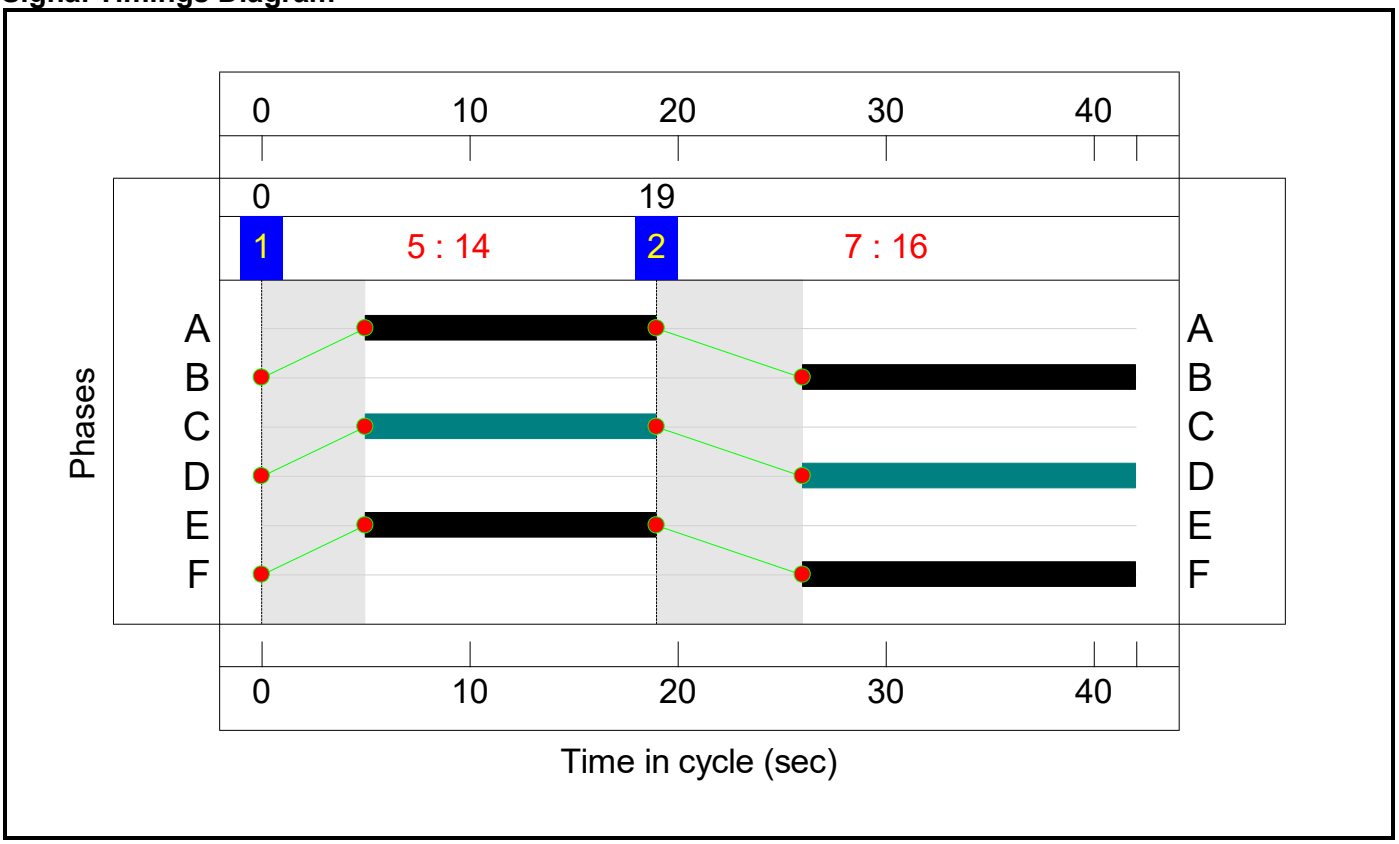


Stage Timings

Stage	1	2
Duration	14	16
Change Point	0	19

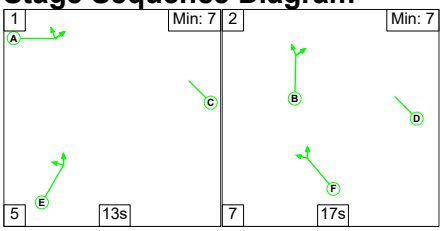
Full Input Data And Results

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

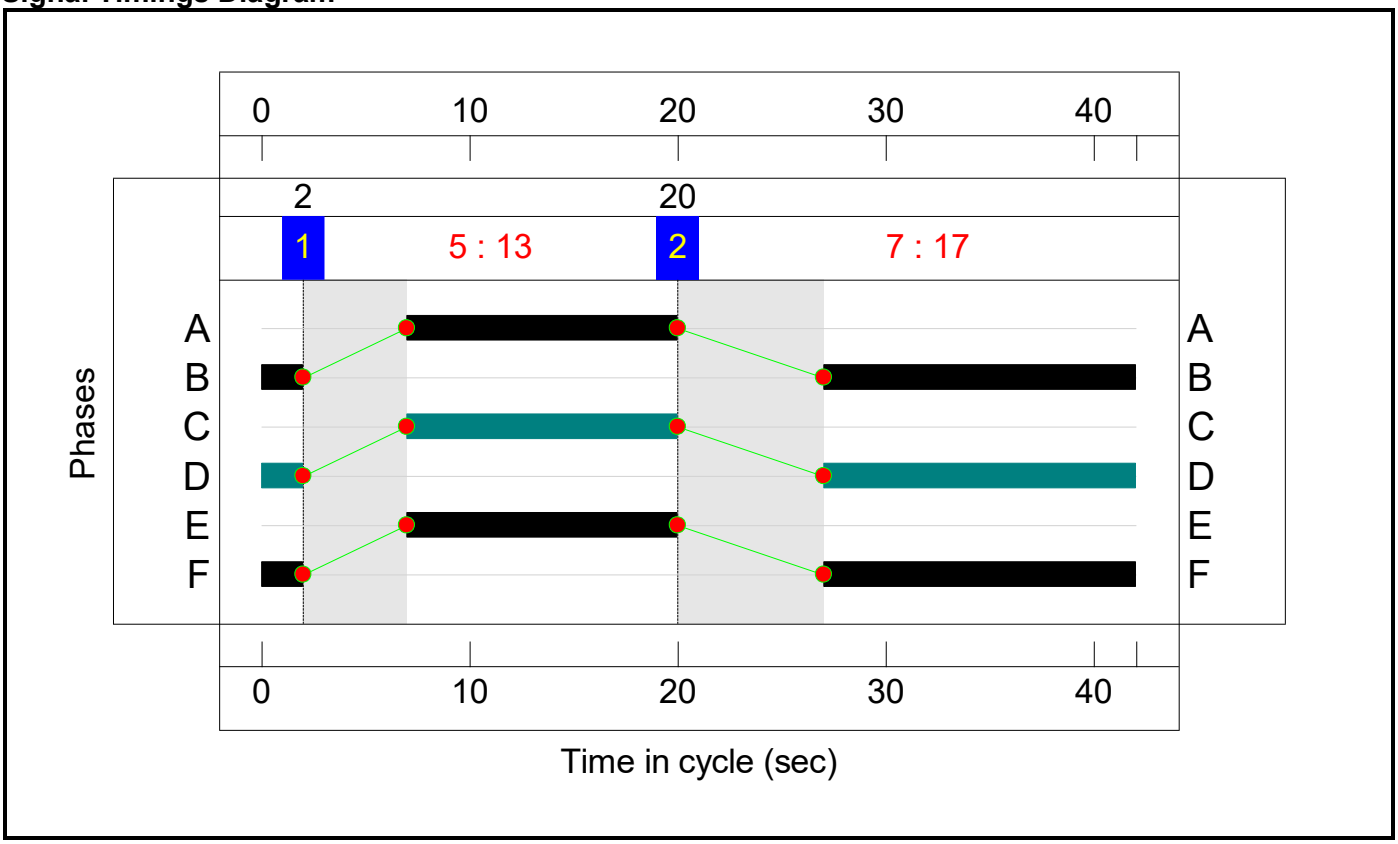


Stage Timings

Stage	1	2
Duration	13	17
Change Point	2	20

Full Input Data And Results

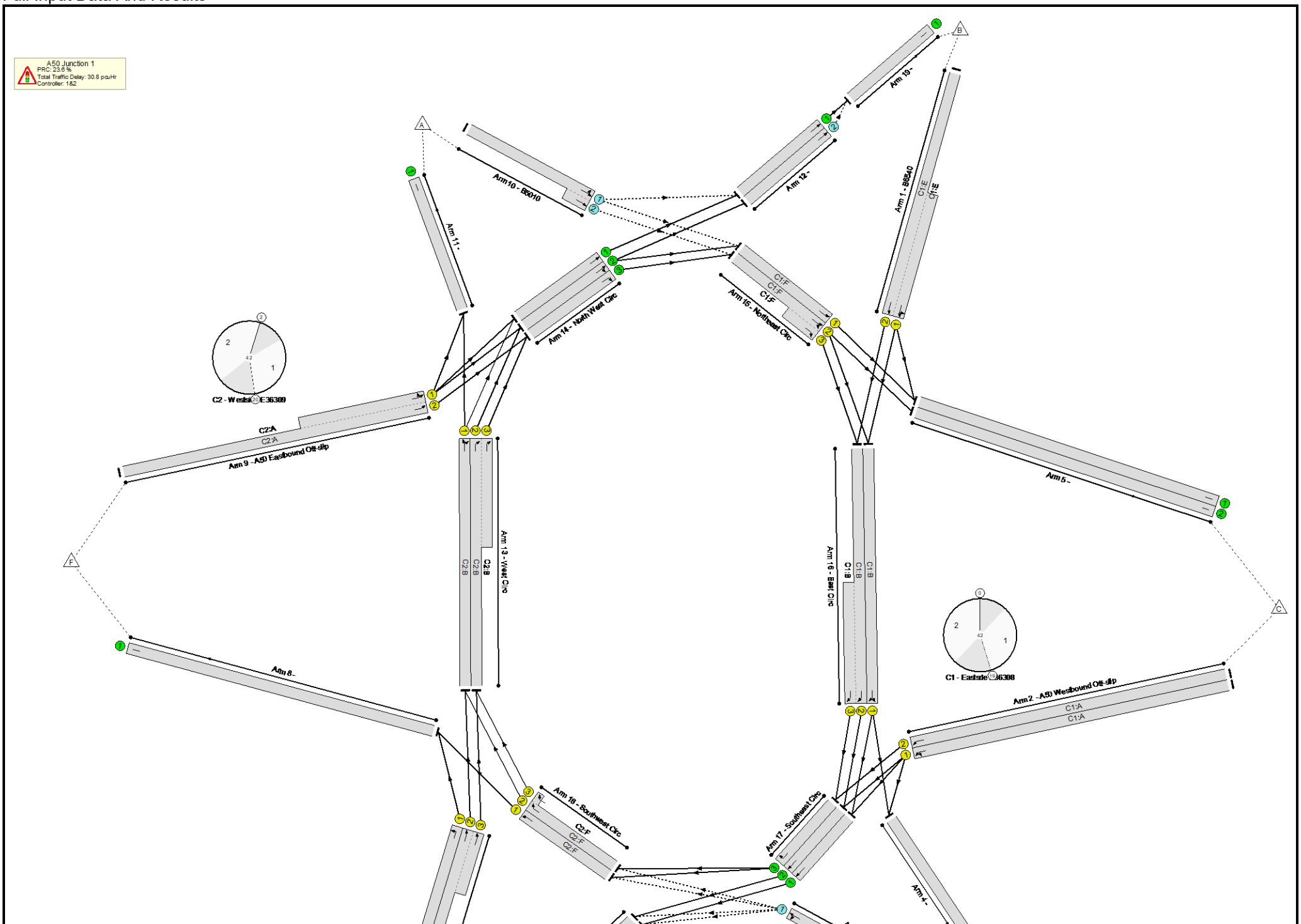
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.8%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**72.8%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	798	2088:1950	658+696	48.2 : 69.1%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	432	1907	681	63.4%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	333	2049	732	45.5%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	50	1886	465	10.7%
4/1		U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	911	1980	1980	46.0%
6/2	Ahead	O	N/A	N/A	-		-	-	-	299	1980	515	58.1%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	347	1923	641	54.1%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	498	2063:2101	132+700	59.8 : 59.8%
8/1		U	N/A	N/A	-		-	-	-	629	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	723	1995:1853	665+618	69.8 : 41.9%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	325	1894:2034	551+551	27.8 : 31.2%
11/1		U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	579	1965	1965	29.5%
12/2	Ahead	O	N/A	N/A	-		-	-	-	155	1965	588	26.4%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	422	1944	833	50.7%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	474	1942:1940	832+360	39.8 : 39.8%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	514	1930	1930	26.6%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	331	1926	1926	17.2%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	607	1923	1923	31.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	264	1932	782	33.8%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	779	1929:1926	673+397	72.8 : 72.8%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	525	1933	782	67.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	606	1930:1927	781+780	38.3 : 39.4%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	901	1912	1912	47.1%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	299	1907	1907	15.7%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	640	1899	1899	33.7%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	282	1937	830	34.0%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	398	1935:1930	721+116	47.6 : 47.6%
19/1		U	N/A	N/A	-		-	-	-	734	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1210	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1154**	**0**	**0**	**19.3**	**11.5**	**0.0**	**30.8**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1154**	**0**	**0**	**19.3**	**11.5**	**0.0**	**30.8**	**-**	**-**	**-**	**-**
1/2+1/1	798	798	-	-	-	2.4	0.7	-	3.2	14.2	4.7	0.7	5.4
2/1	432	432	-	-	-	1.3	0.9	-	2.2	18.4	4.1	0.9	4.9
2/2	333	333	-	-	-	1.0	0.4	-	1.4	14.9	3.0	0.4	3.4
3/1	50	50	50	0	0	0.0	0.1	-	0.1	5.2	0.1	0.1	0.2
4/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	911	911	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
6/2	299	299	299	0	0	0.3	0.7	-	1.0	12.2	3.2	0.7	3.9
7/1	347	347	-	-	-	1.1	0.6	-	1.7	17.5	3.3	0.6	3.9
7/2+7/3	498	498	-	-	-	1.6	0.7	-	2.3	16.7	4.0	0.7	4.7
8/1	629	629	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	723	723	-	-	-	2.4	0.6	-	3.0	14.9	4.6	0.6	5.3
10/1+10/2	325	325	650	0	0	0.1	0.2	-	0.3	3.3	0.4	0.2	0.6
11/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	579	579	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
12/2	155	155	155	0	0	0.0	0.2	-	0.2	4.4	0.9	0.2	1.1
13/1	422	422	-	-	-	1.2	0.5	-	1.7	14.5	2.9	0.5	3.4
13/2+13/3	474	474	-	-	-	0.6	0.3	-	0.9	7.2	14.9	0.3	15.3
14/1	514	514	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
14/2	331	331	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
14/3	607	607	-	-	-	0.0	0.2	-	0.2	1.4	2.2	0.2	2.4
15/1	264	264	-	-	-	0.7	0.3	-	1.0	13.1	1.6	0.3	1.8

Full Input Data And Results

15/2+15/3	779	779	-	-	-	1.4	1.3	-	2.7	12.6	5.2	1.3	6.5
16/1	525	525	-	-	-	2.1	1.0	-	3.1	21.1	5.0	1.0	6.0
16/2+16/3	606	606	-	-	-	1.9	0.3	-	2.2	13.0	16.6	0.3	16.9
17/1	901	901	-	-	-	0.0	0.4	-	0.4	1.8	0.0	0.4	0.4
17/2	299	299	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	640	640	-	-	-	0.0	0.3	-	0.3	1.4	0.5	0.3	0.8
18/1	282	282	-	-	-	0.5	0.3	-	0.7	9.5	1.1	0.3	1.4
18/2+18/3	398	398	-	-	-	0.8	0.5	-	1.3	11.4	3.9	0.5	4.4
19/1	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1210	1210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

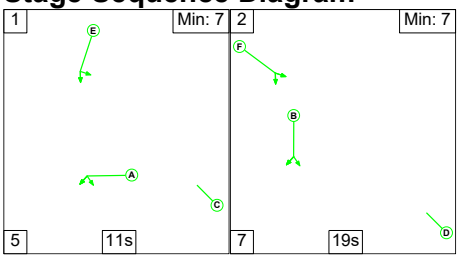
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	23.6	Total Delay for Signalled Lanes (pcuHr):	15.67	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	29.0	Total Delay for Signalled Lanes (pcuHr):	11.65	Cycle Time (s):	42
	PRC Over All Lanes (%):	23.6	Total Delay Over All Lanes(pcuHr):	30.85		

Full Input Data And Results

Scenario 2: '2022 Base PM' (FG2: '2023 Base Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

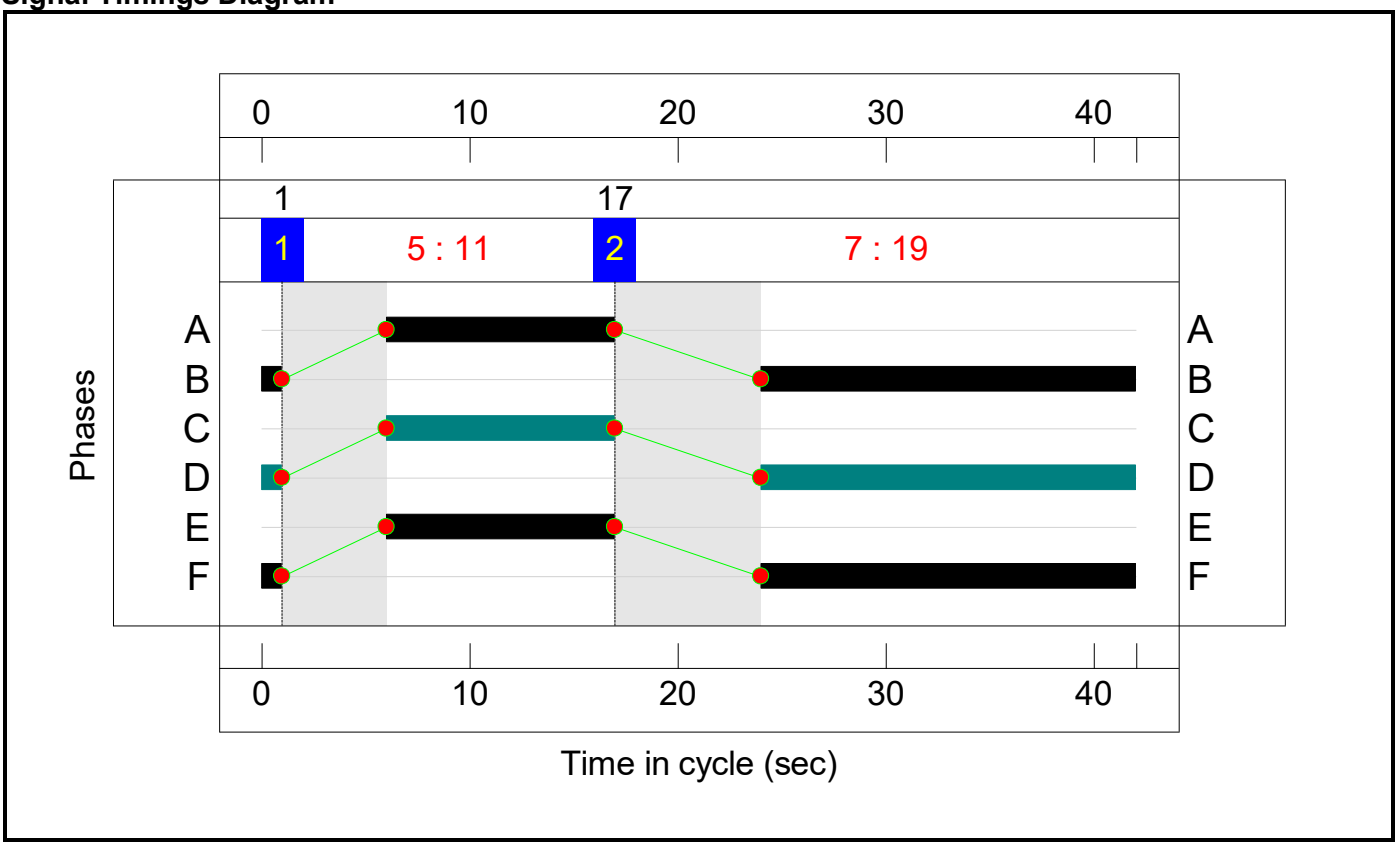
Stage Sequence Diagram



Stage Timings

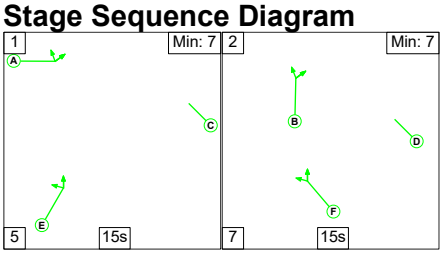
Stage	1	2
Duration	11	19
Change Point	1	17

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

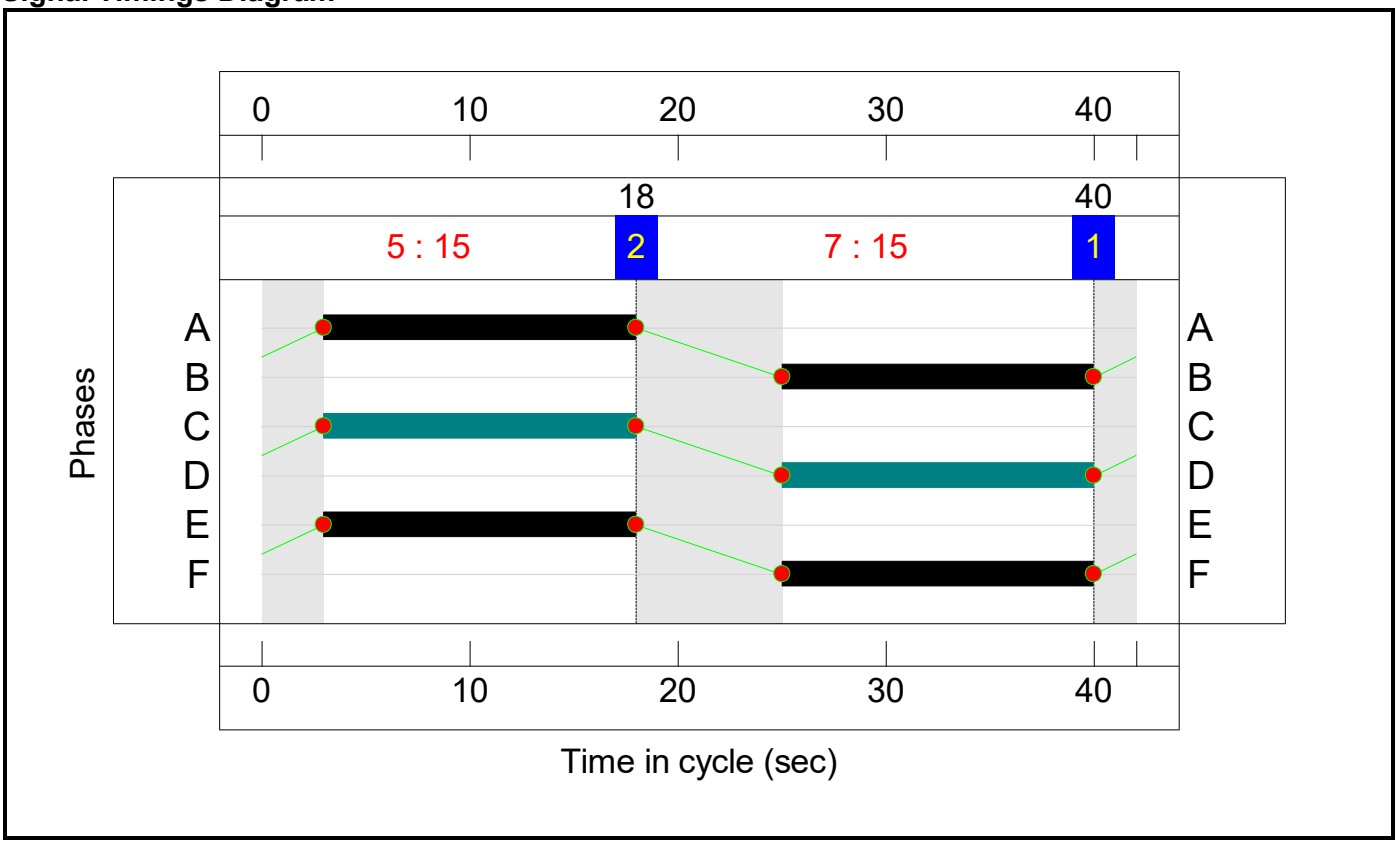


Full Input Data And Results

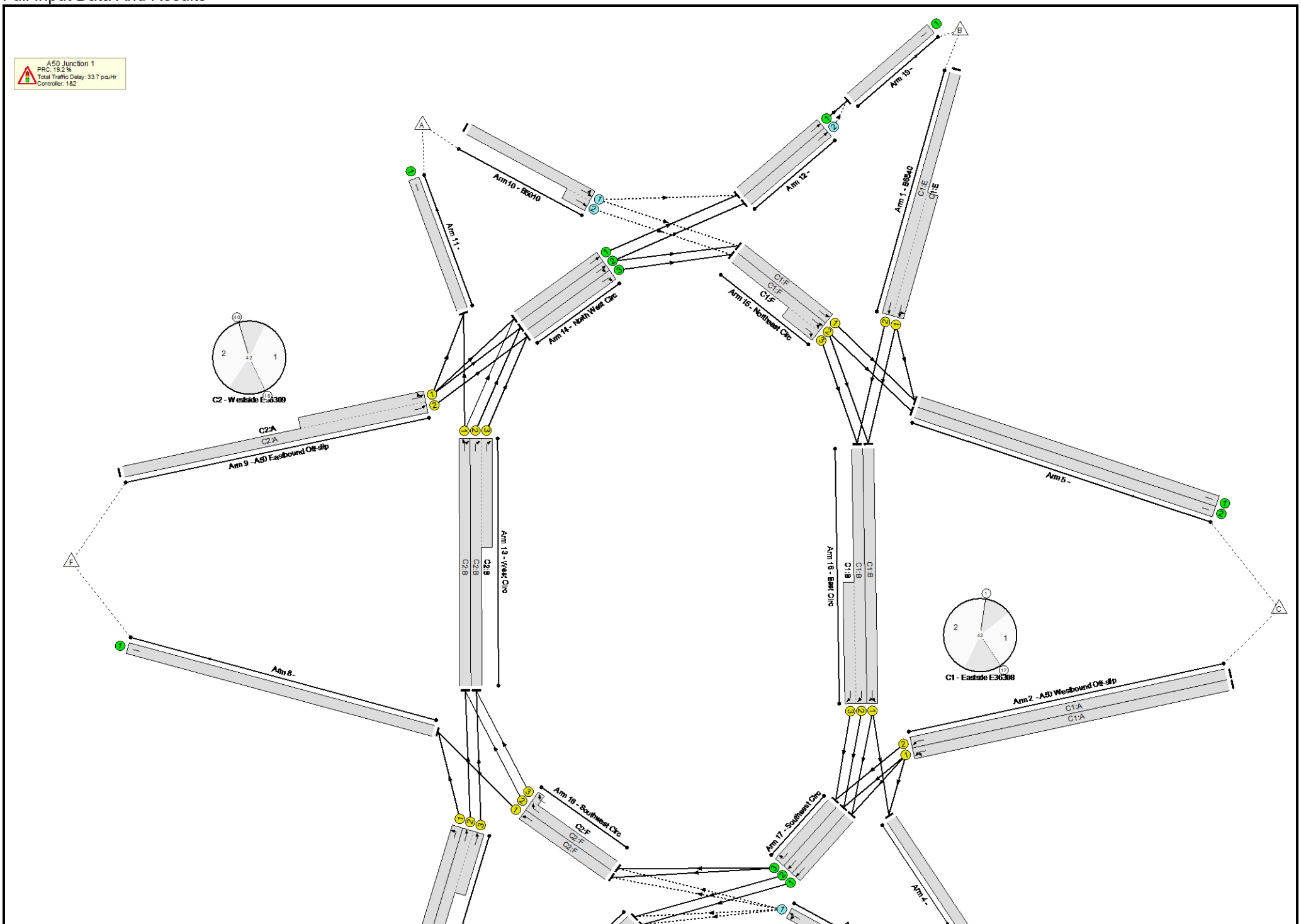
Stage Timings

Stage	1	2
Duration	15	15
Change Point	40	18

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.5%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**75.5%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	11	-	691	2088:1950	597+557	53.5 : 66.8%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	11	-	346	1907	545	63.5%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	11	-	400	2049	585	68.3%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	63	1886	487	12.9%
4/1		U	N/A	N/A	-		-	-	-	56	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	304	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	678	1980	1980	34.2%
6/2	Ahead	O	N/A	N/A	-		-	-	-	284	1980	566	50.2%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	15	-	501	1923	733	68.4%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	15	-	774	2063:2101	226+798	75.5 : 75.5%
8/1		U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	15	-	616	1995:1853	760+583	52.2 : 37.6%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	259	1894:2034	420+551	26.7 : 26.7%
11/1		U	N/A	N/A	-		-	-	-	322	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	505	1965	1965	25.7%
12/2	Ahead	O	N/A	N/A	-		-	-	-	274	1965	604	45.4%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	15	-	557	1944	741	75.2%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	15	-	723	1942:1940	740+739	54.3 : 43.4%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	454	1930	1930	23.5%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	402	1926	1926	20.9%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	718	1923	1923	37.3%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	19	-	189	1932	920	20.5%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	19	-	865	1929:1926	774+401	73.6 : 73.6%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	19	-	377	1933	920	41.0%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	19	-	614	1930:1927	892+918	31.8 : 36.0%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	667	1912	1912	34.9%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	284	1907	1907	14.9%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	730	1899	1899	38.4%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	15	-	276	1937	738	37.4%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	15	-	506	1935:1930	577+180	66.8 : 66.8%
19/1		U	N/A	N/A	-		-	-	-	779	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	962	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1139**	**0**	**0**	**19.8**	**13.9**	**0.0**	**33.7**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1139**	**0**	**0**	**19.8**	**13.9**	**0.0**	**33.7**	**-**	**-**	**-**	**-**
1/2+1/1	691	691	-	-	-	2.5	0.7	-	3.2	16.9	3.8	0.7	4.6
2/1	346	346	-	-	-	1.3	0.9	-	2.1	22.1	3.5	0.9	4.3
2/2	400	400	-	-	-	1.5	1.1	-	2.5	22.9	4.1	1.1	5.2
3/1	63	63	63	0	0	0.0	0.1	-	0.1	5.0	0.1	0.1	0.2
4/1	56	56	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	678	678	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	284	284	284	0	0	0.0	0.5	-	0.5	6.9	1.5	0.5	2.0
7/1	501	501	-	-	-	1.5	1.1	-	2.6	18.6	4.9	1.1	5.9
7/2+7/3	774	774	-	-	-	2.3	1.5	-	3.8	17.8	6.0	1.5	7.6
8/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	616	616	-	-	-	1.7	0.4	-	2.1	12.2	3.5	0.4	4.0
10/1+10/2	259	259	518	0	0	0.1	0.2	-	0.3	3.6	0.4	0.2	0.6
11/1	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	505	505	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
12/2	274	274	274	0	0	0.2	0.4	-	0.6	8.3	2.9	0.4	3.3
13/1	557	557	-	-	-	2.4	1.5	-	3.9	25.3	5.3	1.5	6.8
13/2+13/3	723	723	-	-	-	1.5	0.5	-	2.0	9.7	15.1	0.5	15.6
14/1	454	454	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
14/2	402	402	-	-	-	0.0	0.1	-	0.1	1.2	0.5	0.1	0.7
14/3	718	718	-	-	-	0.0	0.3	-	0.3	1.5	1.1	0.3	1.4
15/1	189	189	-	-	-	0.3	0.1	-	0.5	8.9	0.9	0.1	1.0

Full Input Data And Results

15/2+15/3	865	865	-	-	-	1.4	1.4	-	2.8	11.6	3.1	1.4	4.5
16/1	377	377	-	-	-	0.6	0.3	-	1.0	9.3	2.2	0.3	2.6
16/2+16/3	614	614	-	-	-	0.7	0.3	-	0.9	5.4	16.6	0.3	16.9
17/1	667	667	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
17/2	284	284	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	730	730	-	-	-	0.0	0.3	-	0.3	1.5	1.6	0.3	1.9
18/1	276	276	-	-	-	0.8	0.3	-	1.1	14.4	1.7	0.3	2.0
18/2+18/3	506	506	-	-	-	1.0	1.0	-	2.0	13.9	5.0	1.0	6.0
19/1	779	779	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	962	962	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

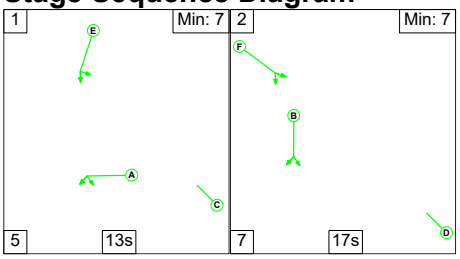
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	22.2	Total Delay for Signalled Lanes (pcuHr):	13.05	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	19.2	Total Delay for Signalled Lanes (pcuHr):	17.43	Cycle Time (s): 42
	PRC Over All Lanes (%):	19.2	Total Delay Over All Lanes(pcuHr):	33.70	

Full Input Data And Results

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

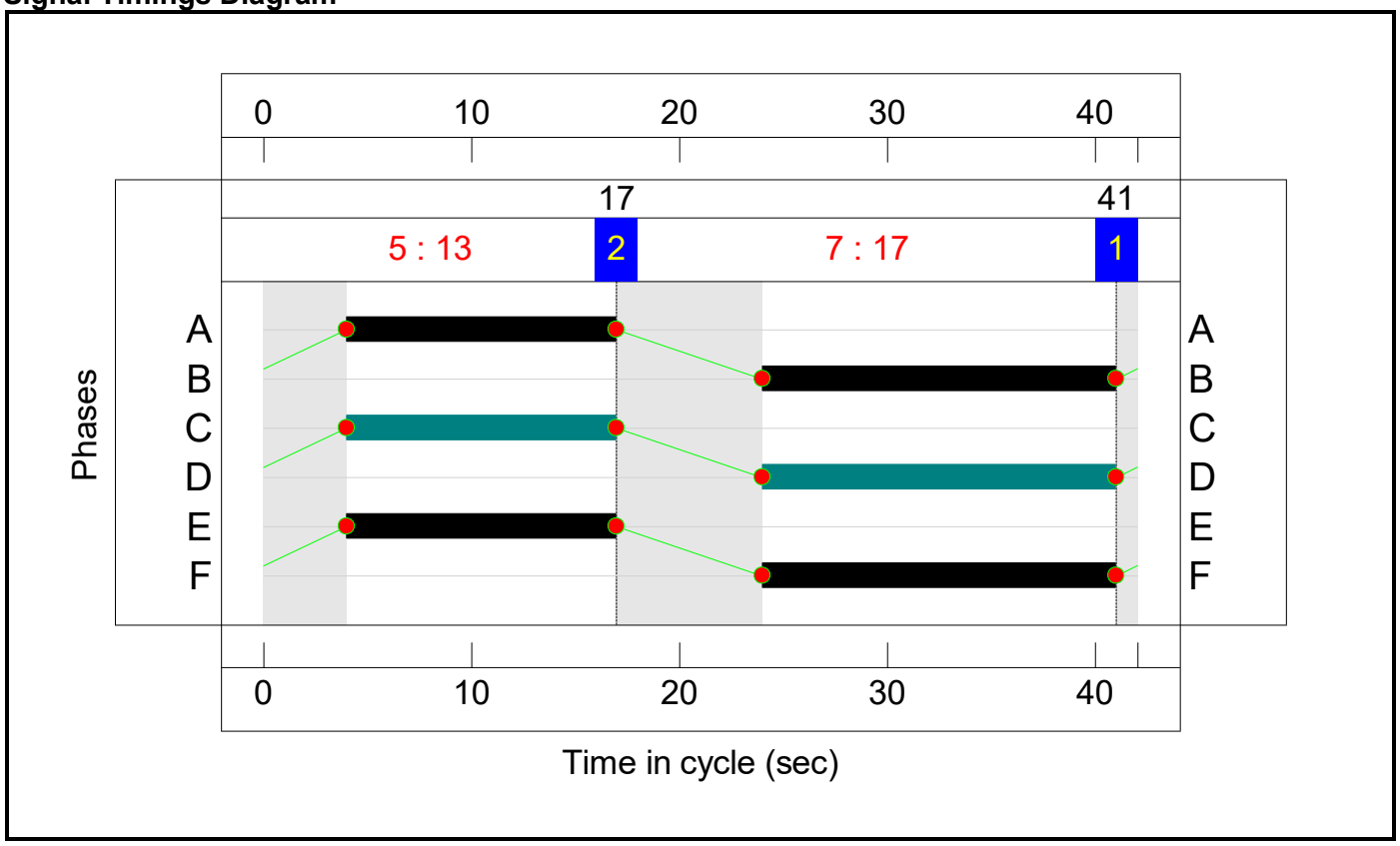
Stage Sequence Diagram



Stage Timings

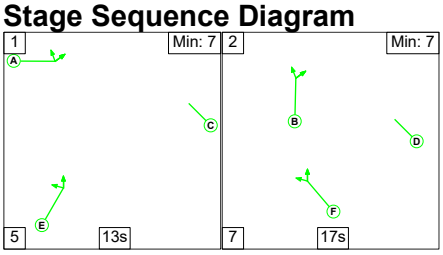
Stage	1	2
Duration	13	17
Change Point	41	17

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

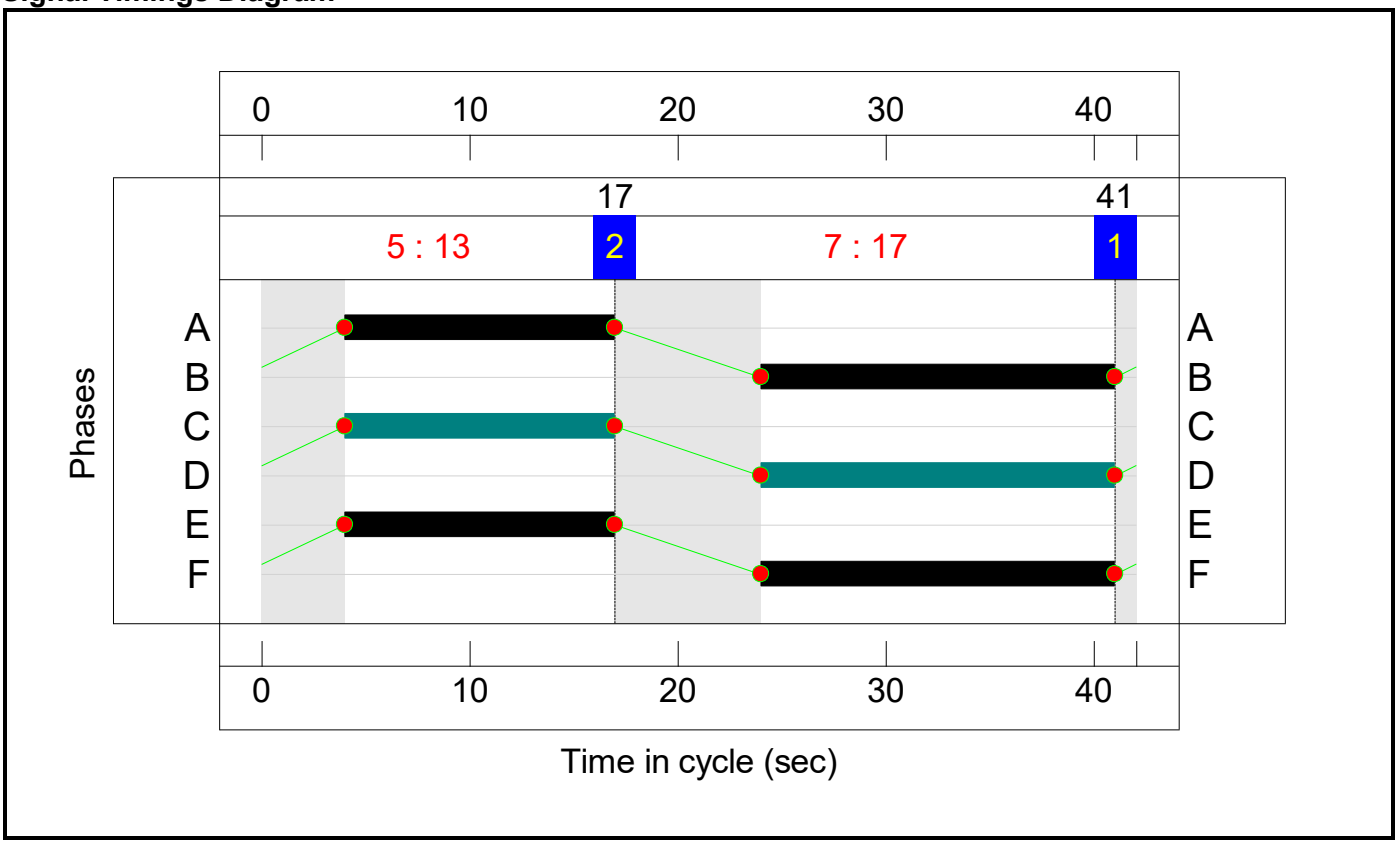


Full Input Data And Results

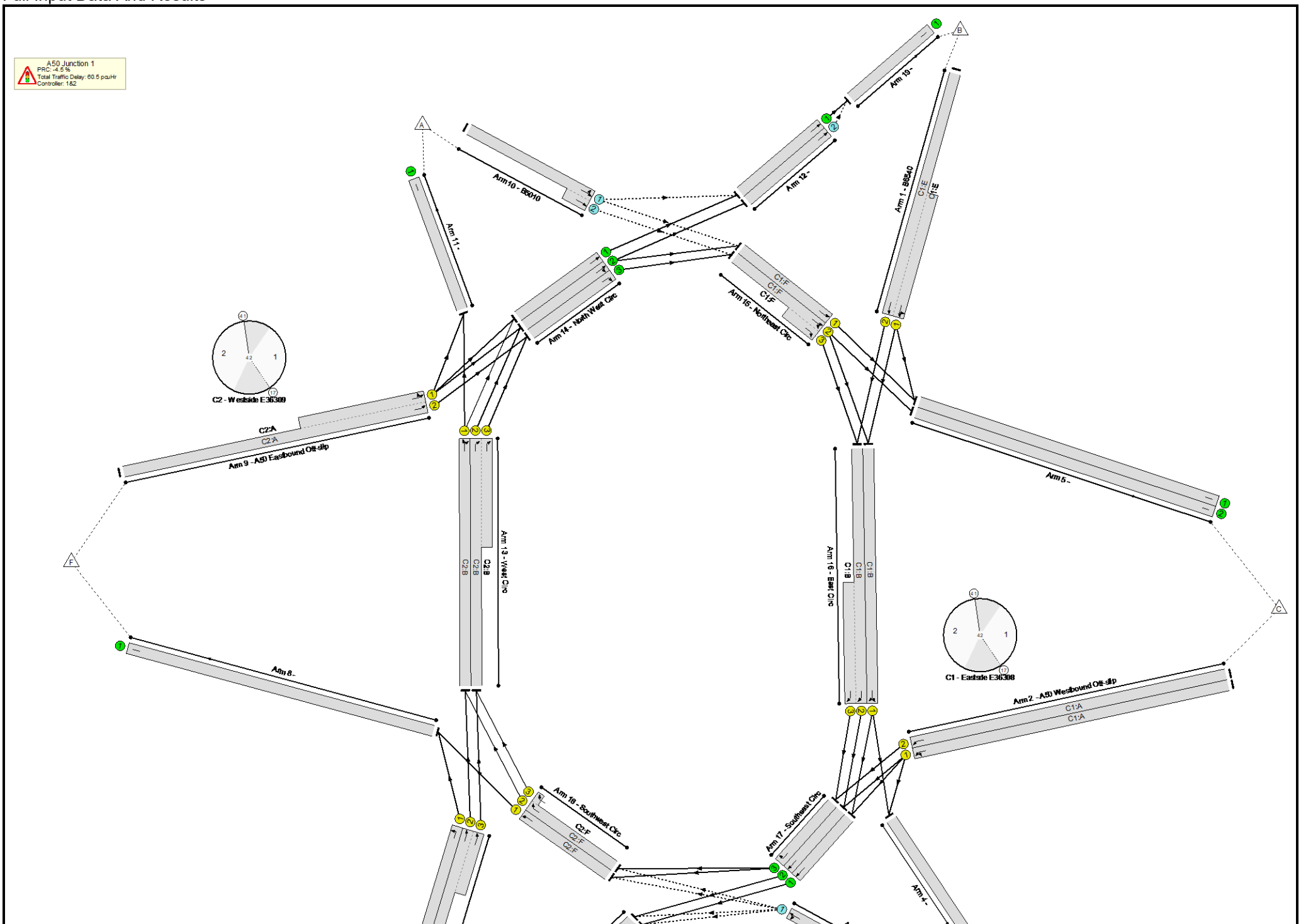
Stage Timings

Stage	1	2
Duration	13	17
Change Point	41	17

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.1%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**94.1%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	994	2088:1950	696+650	63.5 : 84.9%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	598	1907	636	94.1%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	536	2049	683	78.5%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	52	1886	330	15.8%
4/1		U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	155	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	1050	1980	1980	53.0%
6/2	Ahead	O	N/A	N/A	-		-	-	-	366	1980	484	75.6%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	427	1923	641	66.6%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	647	2063:2101	210+700	71.1 : 71.1%
8/1		U	N/A	N/A	-		-	-	-	808	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	964	1995:1853	665+618	86.0 : 63.5%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	419	1894:2034	413+413	46.9 : 54.4%
11/1		U	N/A	N/A	-		-	-	-	163	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	942	1965	1965	47.9%
12/2	Ahead	O	N/A	N/A	-		-	-	-	222	1965	508	43.7%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	607	1944	833	72.9%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	640	1942:1940	832+398	52.0 : 52.0%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	836	1930	1930	43.3%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	433	1926	1926	22.5%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	779	1923	1923	40.5%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	299	1932	828	36.1%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	1004	1929:1926	720+348	94.0 : 94.0%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	715	1933	828	86.3%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	769	1930:1927	827+826	44.2 : 48.8%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	1040	1912	1912	54.4%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	366	1907	1907	19.2%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	939	1899	1899	49.4%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	381	1937	830	45.9%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	600	1935:1930	648+201	70.7 : 70.7%
19/1		U	N/A	N/A	-		-	-	-	1164	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1416	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1478**	**0**	**0**	**28.3**	**32.2**	**0.0**	**60.5**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1478**	**0**	**0**	**28.3**	**32.2**	**0.0**	**60.5**	**-**	**-**	**-**	**-**
1/2+1/1	994	994	-	-	-	3.5	1.4	-	4.9	17.6	6.0	1.4	7.4
2/1	598	598	-	-	-	2.3	6.0	-	8.3	49.8	6.6	6.0	12.7
2/2	536	536	-	-	-	1.9	1.8	-	3.7	24.6	5.5	1.8	7.3
3/1	52	52	52	0	0	0.0	0.1	-	0.1	8.4	0.1	0.1	0.2
4/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	155	155	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1050	1050	-	-	-	0.0	0.6	-	0.6	1.9	0.0	0.6	0.6
6/2	366	366	366	0	0	0.6	1.5	-	2.1	20.4	4.0	1.5	5.6
7/1	427	427	-	-	-	1.4	1.0	-	2.4	20.3	4.2	1.0	5.1
7/2+7/3	647	647	-	-	-	2.1	1.2	-	3.3	18.5	5.0	1.2	6.2
8/1	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	964	964	-	-	-	3.4	1.5	-	4.9	18.2	6.2	1.5	7.7
10/1+10/2	419	419	838	0	0	0.3	0.5	-	0.9	7.4	0.9	0.5	1.4
11/1	163	163	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	942	942	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	222	222	222	0	0	0.1	0.4	-	0.5	7.7	1.9	0.4	2.3
13/1	607	607	-	-	-	2.3	1.3	-	3.6	21.3	5.2	1.3	6.6
13/2+13/3	640	640	-	-	-	1.1	0.5	-	1.7	9.4	15.0	0.5	15.5
14/1	836	836	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	433	433	-	-	-	0.0	0.1	-	0.1	1.2	0.5	0.1	0.7
14/3	779	779	-	-	-	0.0	0.3	-	0.3	1.6	3.8	0.3	4.2
15/1	299	299	-	-	-	0.7	0.3	-	1.0	12.0	1.5	0.3	1.8

Full Input Data And Results

15/2+15/3	1004	1004	-	-	-	1.8	6.6	-	8.4	30.1	6.8	6.6	13.3
16/1	715	715	-	-	-	2.9	3.0	-	5.9	29.7	6.8	3.0	9.8
16/2+16/3	769	769	-	-	-	1.8	0.4	-	2.2	10.4	16.7	0.4	17.1
17/1	1040	1040	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6
17/2	366	366	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	939	939	-	-	-	0.0	0.5	-	0.5	1.9	3.7	0.5	4.2
18/1	381	381	-	-	-	1.0	0.4	-	1.4	13.6	2.1	0.4	2.5
18/2+18/3	600	600	-	-	-	1.1	1.2	-	2.3	13.6	6.3	1.2	7.5
19/1	1164	1164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1416	1416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

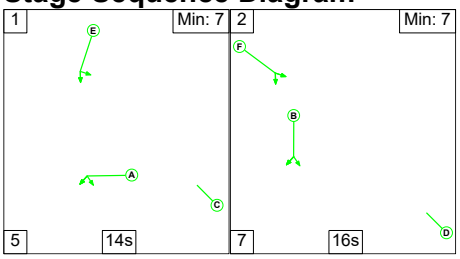
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-4.5	Total Delay for Signalled Lanes (pcuHr):	34.32	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	4.6	Total Delay for Signalled Lanes (pcuHr):	19.57	Cycle Time (s):	42
	PRC Over All Lanes (%):	-4.5	Total Delay Over All Lanes(pcuHr):	60.52		

Full Input Data And Results

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

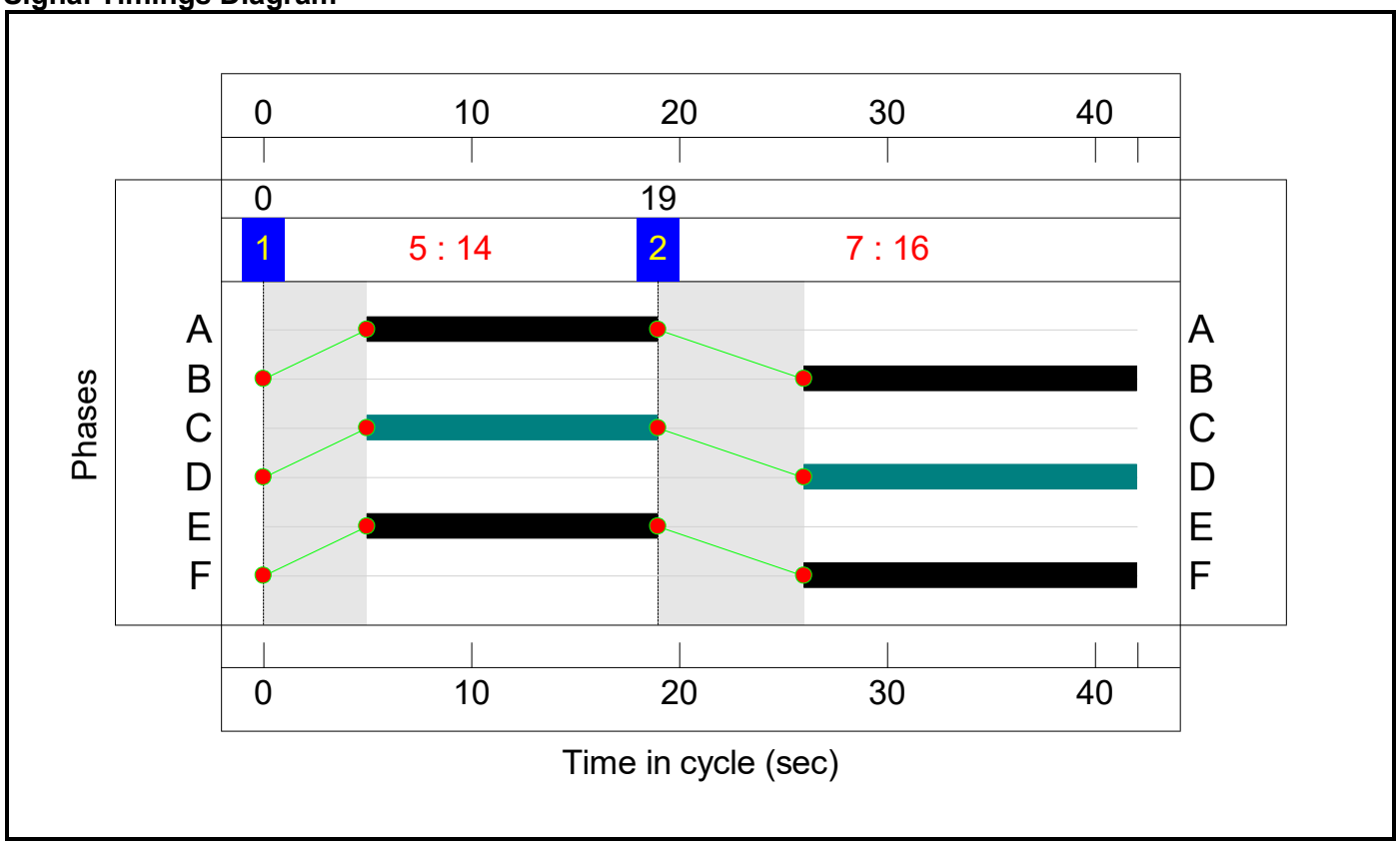
Stage Sequence Diagram



Stage Timings

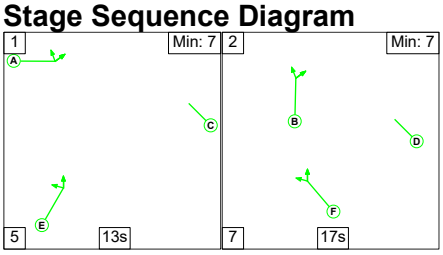
Stage	1	2
Duration	14	16
Change Point	0	19

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

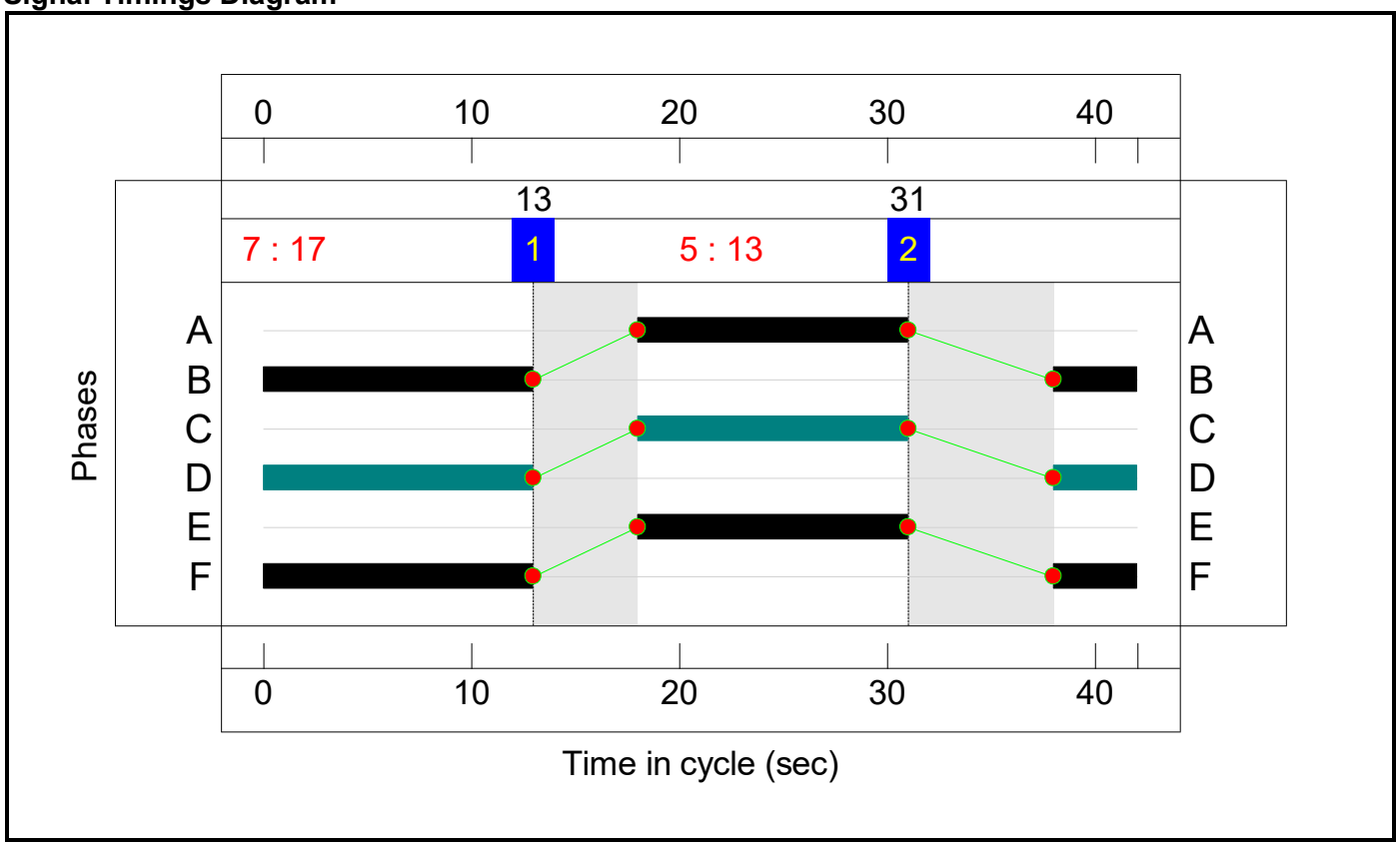


Full Input Data And Results

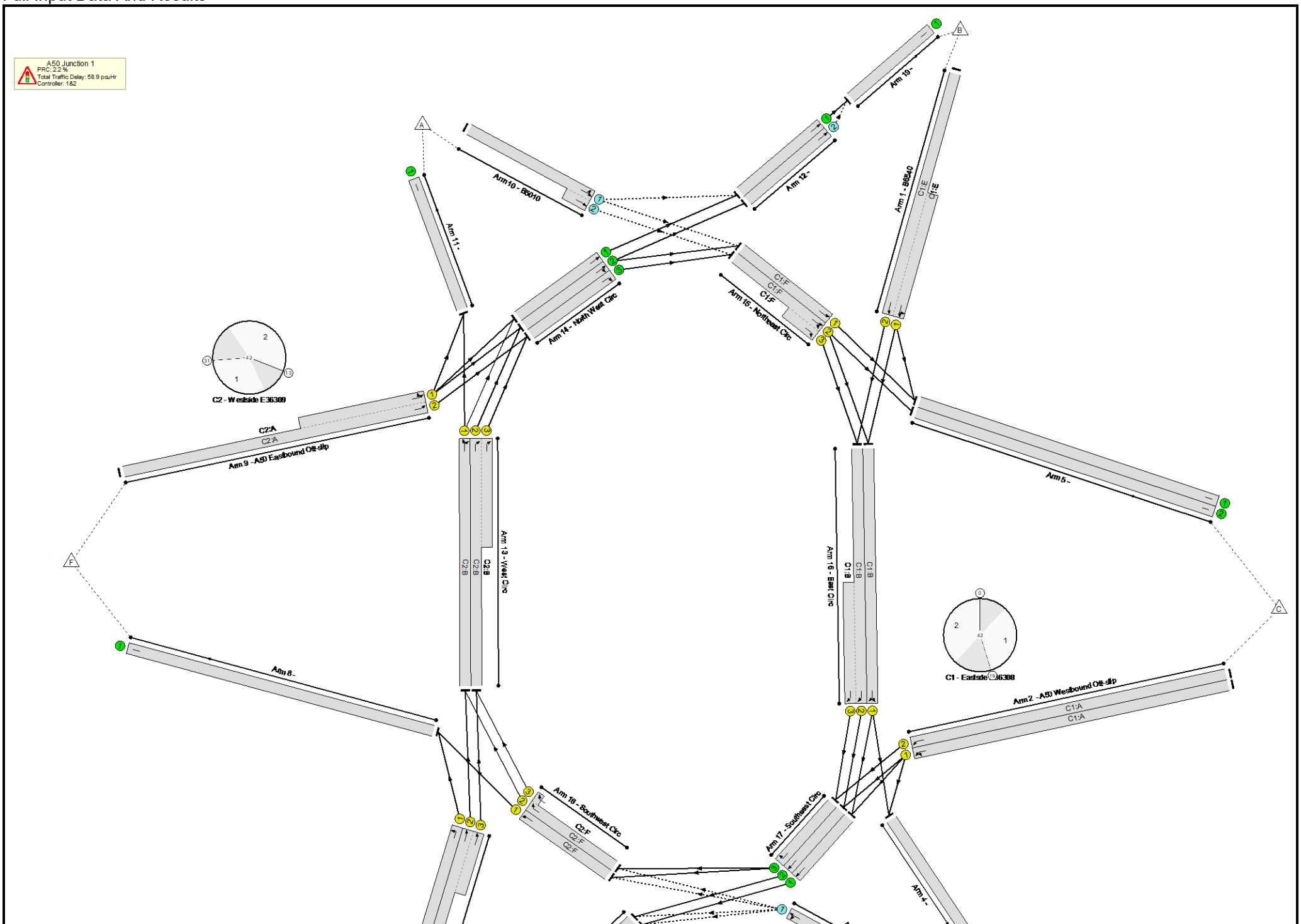
Stage Timings

Stage	1	2
Duration	13	17
Change Point	13	31

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.1%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.1%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1043	2088:1950	746+696	65.2 : 80.0%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	381	1907	681	55.9%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	560	2049	732	76.5%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	64	1886	397	16.1%
4/1		U	N/A	N/A	-		-	-	-	123	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	890	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	821	1980	1980	41.5%
6/2	Ahead	O	N/A	N/A	-		-	-	-	276	1980	534	51.7%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	563	1923	641	87.8%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	861	2063:2101	279+700	88.0 : 88.0%
8/1		U	N/A	N/A	-		-	-	-	969	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	918	1995:1853	665+618	77.3 : 65.4%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	296	1894:2034	240+338	51.2 : 51.2%
11/1		U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	889	1965	1965	45.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	294	1965	519	56.6%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	734	1944	833	88.1%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	806	1942:1940	832+148	82.2 : 82.2%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	823	1930	1930	42.6%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	684	1926	1926	35.5%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	636	1923	1923	33.1%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	447	1932	782	57.2%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	809	1929:1926	690+327	79.5 : 79.5%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	554	1933	782	70.8%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	746	1930:1927	554+780	49.8 : 60.3%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	812	1912	1912	42.5%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	276	1907	1907	14.5%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1030	1899	1899	54.2%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	406	1937	830	48.9%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	679	1935:1930	616+239	79.4 : 79.4%
19/1		U	N/A	N/A	-		-	-	-	1183	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1097	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1226**	**0**	**0**	**30.4**	**28.5**	**0.0**	**58.9**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1226**	**0**	**0**	**30.4**	**28.5**	**0.0**	**58.9**	**-**	**-**	**-**	**-**
1/2+1/1	1043	1043	-	-	-	3.4	1.3	-	4.7	16.2	5.7	1.3	7.0
2/1	381	381	-	-	-	1.1	0.6	-	1.8	16.8	3.5	0.6	4.1
2/2	560	560	-	-	-	1.9	1.6	-	3.5	22.2	5.8	1.6	7.4
3/1	64	64	64	0	0	0.0	0.1	-	0.1	7.4	0.2	0.1	0.3
4/1	123	123	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	890	890	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	821	821	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
6/2	276	276	276	0	0	0.3	0.5	-	0.8	10.4	2.9	0.5	3.4
7/1	563	563	-	-	-	2.1	3.3	-	5.4	34.5	6.1	3.3	9.4
7/2+7/3	861	861	-	-	-	3.0	3.5	-	6.4	26.9	6.7	3.5	10.1
8/1	969	969	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	918	918	-	-	-	3.1	1.3	-	4.4	17.2	5.3	1.3	6.5
10/1+10/2	296	296	592	0	0	0.3	0.5	-	0.9	10.4	0.9	0.5	1.4
11/1	315	315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	889	889	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
12/2	294	294	294	0	0	0.2	0.6	-	0.8	10.0	3.1	0.6	3.7
13/1	734	734	-	-	-	2.8	3.5	-	6.3	30.9	7.1	3.5	10.6
13/2+13/3	806	806	-	-	-	1.8	2.2	-	4.1	18.1	15.1	2.2	17.4
14/1	823	823	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	684	684	-	-	-	0.0	0.3	-	0.3	1.5	3.2	0.3	3.5
14/3	636	636	-	-	-	0.0	0.2	-	0.3	1.4	3.2	0.2	3.5
15/1	447	447	-	-	-	1.7	0.7	-	2.4	19.1	5.1	0.7	5.7

Full Input Data And Results

15/2+15/3	809	809	-	-	-	1.1	1.9	-	3.0	13.3	2.1	1.9	4.1
16/1	554	554	-	-	-	2.6	1.2	-	3.8	24.5	5.9	1.2	7.1
16/2+16/3	746	746	-	-	-	1.7	0.6	-	2.3	11.3	16.8	0.6	17.4
17/1	812	812	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
17/2	276	276	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	1030	1030	-	-	-	0.0	0.6	-	0.6	2.1	3.8	0.6	4.3
18/1	406	406	-	-	-	0.2	0.5	-	0.6	5.6	0.8	0.5	1.2
18/2+18/3	679	679	-	-	-	3.1	1.9	-	5.0	26.3	7.3	1.9	9.1
19/1	1183	1183	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1097	1097	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

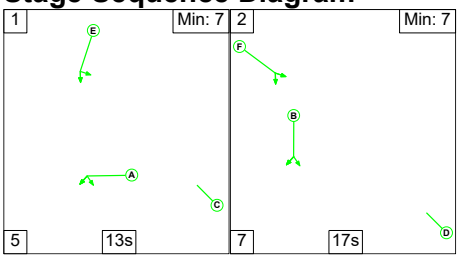
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	12.5	Total Delay for Signalled Lanes (pcuHr):	21.41	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	2.2	Total Delay for Signalled Lanes (pcuHr):	32.17	Cycle Time (s): 42
	PRC Over All Lanes (%):	2.2	Total Delay Over All Lanes(pcuHr):	58.92	

Full Input Data And Results

Scenario 5: '2028 WD AM' (FG5: '2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

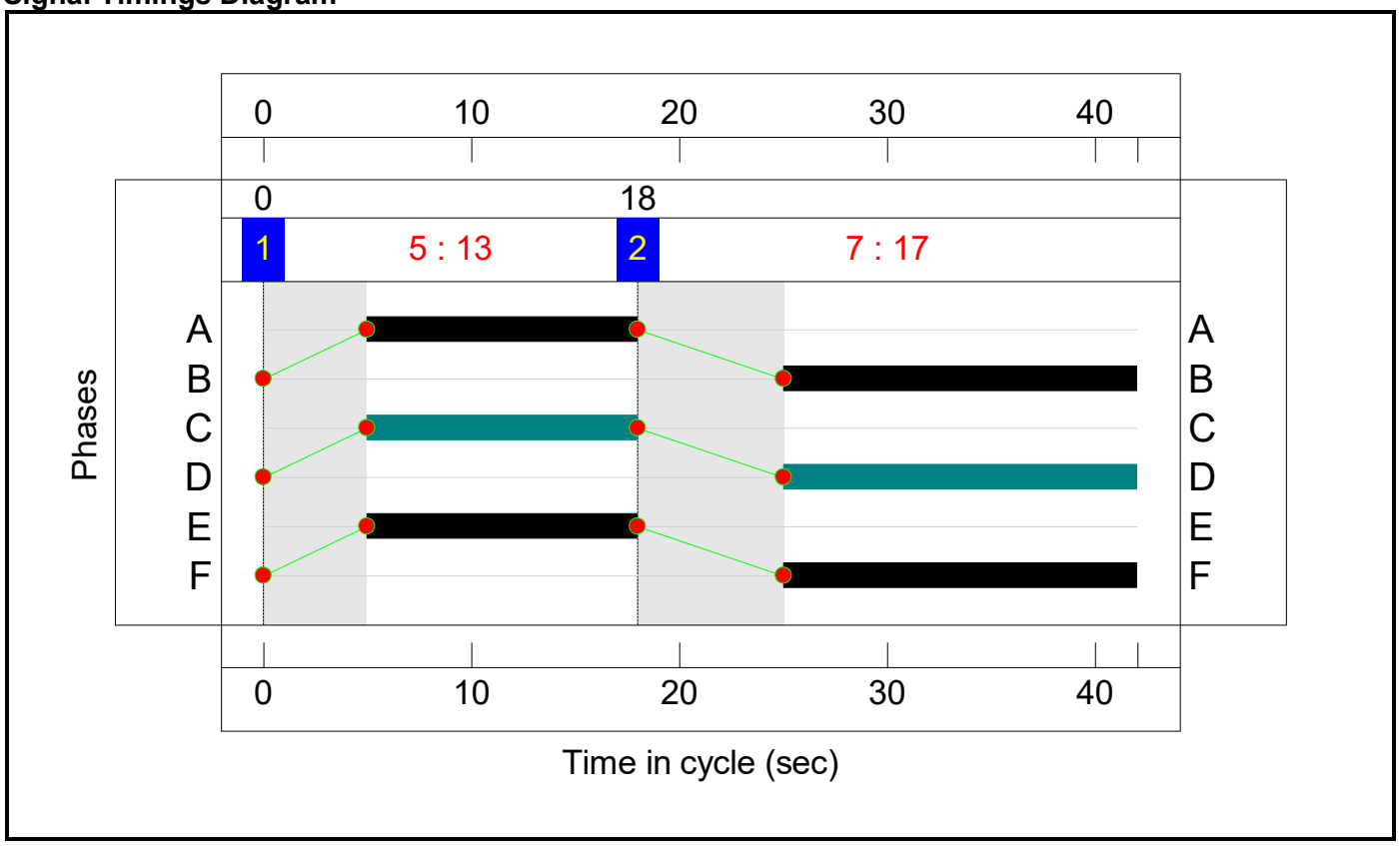
Stage Sequence Diagram



Stage Timings

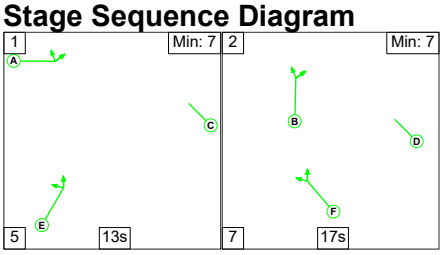
Stage	1	2
Duration	13	17
Change Point	0	18

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

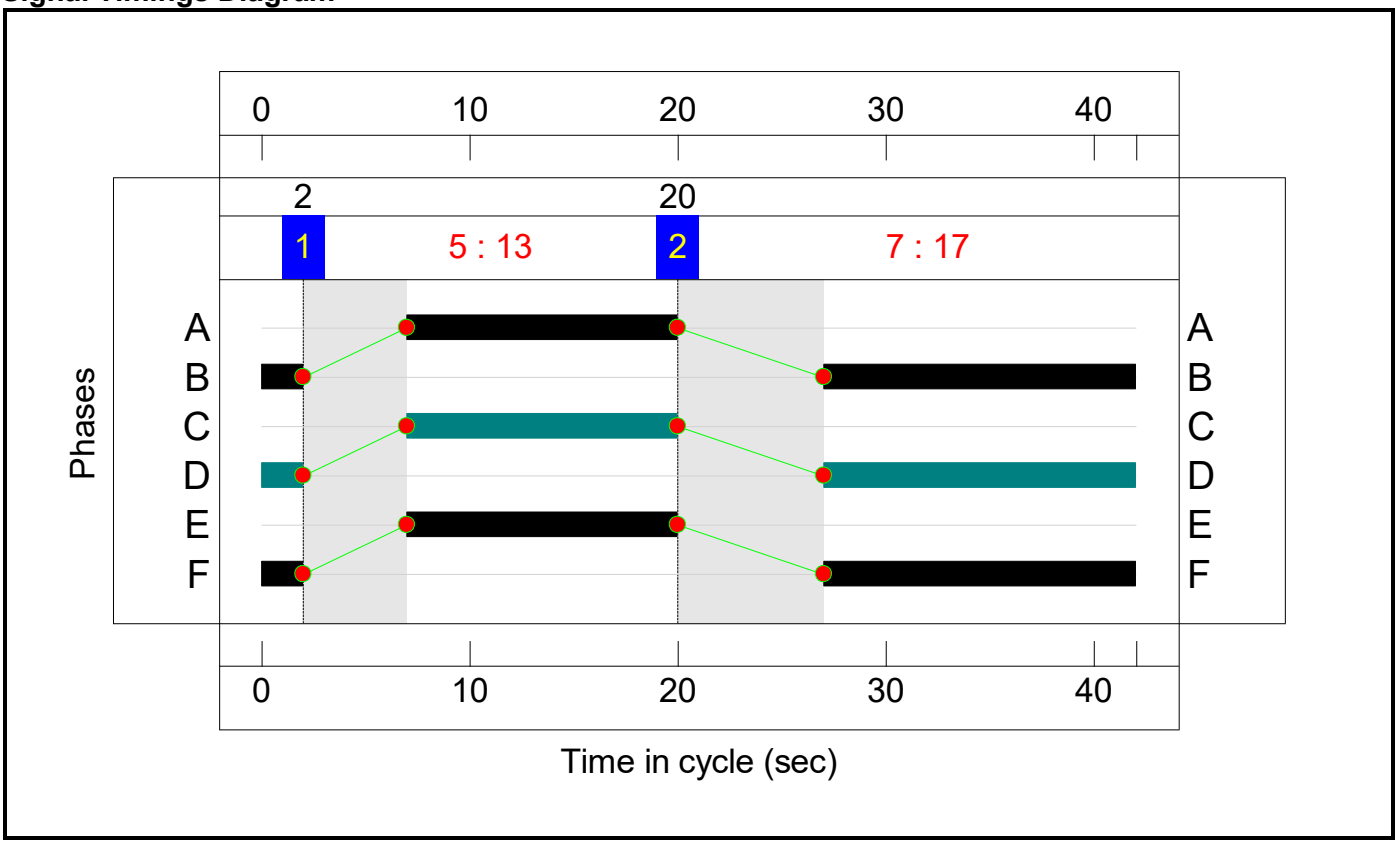


Full Input Data And Results

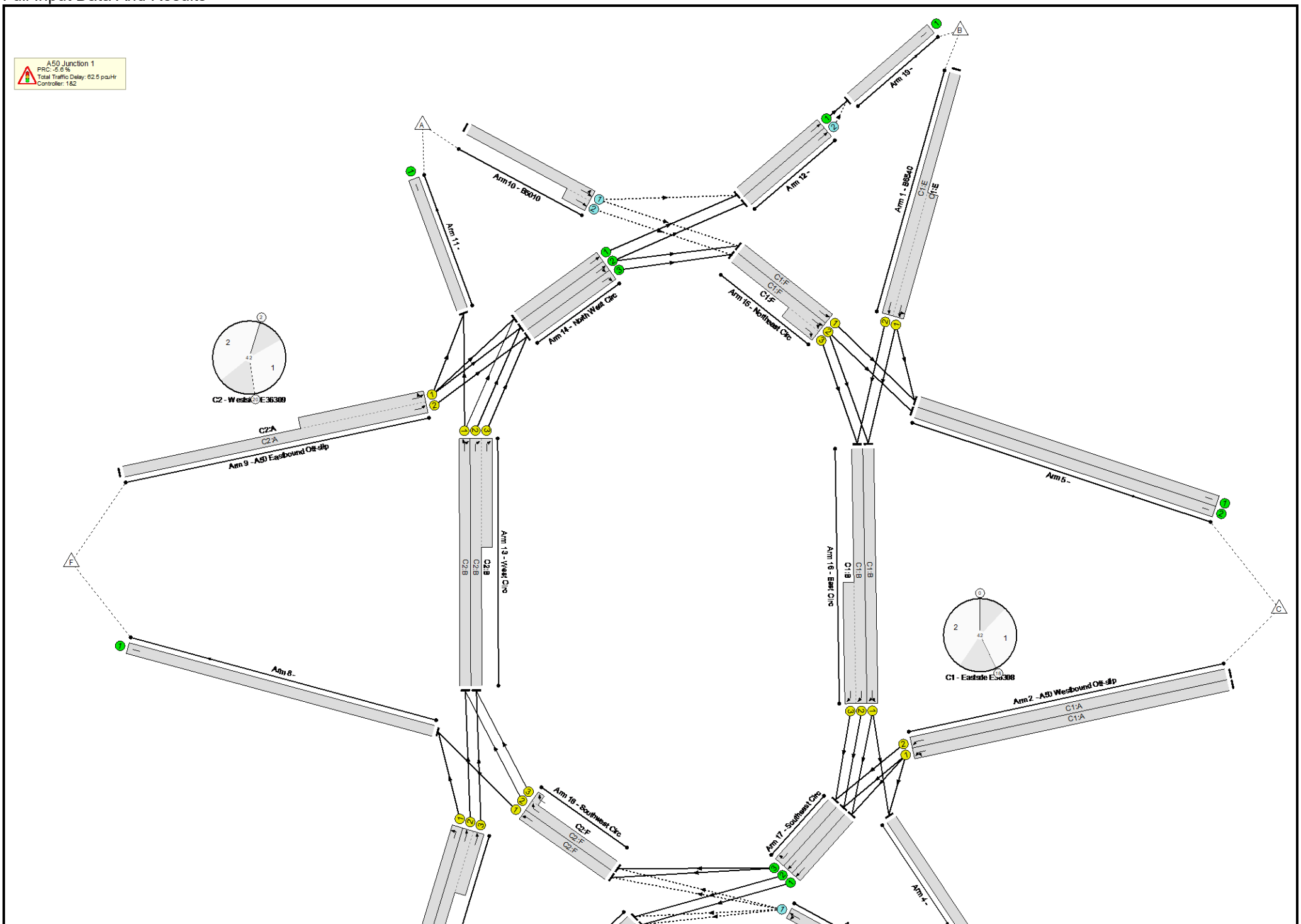
Stage Timings

Stage	1	2
Duration	13	17
Change Point	2	20

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.0%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.0%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	1014	2088:1950	696+650	63.8 : 87.7%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	604	1907	636	95.0%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	525	2049	683	76.9%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	52	1886	318	16.4%
4/1		U	N/A	N/A	-		-	-	-	294	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	675	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	91	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	1078	1980	1980	54.4%
6/2	Ahead	O	N/A	N/A	-		-	-	-	392	1980	478	82.0%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	430	1923	641	67.1%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	599	2063:2101	187+700	67.5 : 67.5%
8/1		U	N/A	N/A	-		-	-	-	814	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	1018	1995:1853	665+618	92.5 : 65.2%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	430	1894:2034	392+398	50.0 : 58.9%
11/1		U	N/A	N/A	-		-	-	-	168	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	942	1965	1965	47.9%
12/2	Ahead	O	N/A	N/A	-		-	-	-	218	1965	508	42.9%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	600	1944	833	72.0%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	590	1942:1940	832+276	53.2 : 53.2%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	835	1930	1930	43.3%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	443	1926	1926	23.0%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	762	1923	1923	39.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	314	1932	828	37.9%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	996	1929:1926	707+393	90.5 : 90.5%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	758	1933	828	91.5%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	800	1930:1927	827+826	47.4 : 49.4%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	1068	1912	1912	55.9%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	392	1907	1907	20.6%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	933	1899	1899	49.1%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	384	1937	830	46.3%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	591	1935:1930	677+167	70.1 : 70.1%
19/1		U	N/A	N/A	-		-	-	-	1160	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1470	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1522**	**0**	**0**	**29.0**	**33.5**	**0.0**	**62.5**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1522**	**0**	**0**	**29.0**	**33.5**	**0.0**	**62.5**	**-**	**-**	**-**	**-**
1/2+1/1	1014	1014	-	-	-	3.6	1.5	-	5.1	18.0	6.2	1.5	7.7
2/1	604	604	-	-	-	2.3	6.7	-	9.0	53.6	6.7	6.7	13.4
2/2	525	525	-	-	-	1.8	1.6	-	3.5	23.7	5.4	1.6	7.0
3/1	52	52	52	0	0	0.0	0.1	-	0.1	8.8	0.1	0.1	0.2
4/1	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	675	675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	91	91	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1078	1078	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
6/2	392	392	392	0	0	0.7	2.2	-	2.9	26.7	4.4	2.2	6.5
7/1	430	430	-	-	-	1.4	1.0	-	2.4	20.5	4.3	1.0	5.3
7/2+7/3	599	599	-	-	-	1.9	1.0	-	3.0	17.8	4.7	1.0	5.8
8/1	814	814	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	1018	1018	-	-	-	3.6	1.9	-	5.5	19.6	6.8	1.9	8.7
10/1+10/2	430	430	860	0	0	0.4	0.6	-	1.0	8.2	1.0	0.6	1.6
11/1	168	168	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	942	942	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	218	218	218	0	0	0.1	0.4	-	0.5	7.6	1.9	0.4	2.3
13/1	600	600	-	-	-	2.3	1.3	-	3.6	21.3	5.1	1.3	6.4
13/2+13/3	590	590	-	-	-	1.0	0.6	-	1.6	9.8	15.0	0.6	15.6
14/1	835	835	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	443	443	-	-	-	0.0	0.1	-	0.1	1.2	0.5	0.1	0.7
14/3	762	762	-	-	-	0.0	0.3	-	0.3	1.6	4.8	0.3	5.2
15/1	314	314	-	-	-	1.1	0.3	-	1.4	15.8	2.2	0.3	2.5

Full Input Data And Results

15/2+15/3	996	996	-	-	-	1.6	4.4	-	5.9	21.5	7.7	4.4	12.1
16/1	758	758	-	-	-	3.2	4.7	-	7.9	37.5	7.6	4.7	12.3
16/2+16/3	800	800	-	-	-	2.0	0.5	-	2.4	11.0	16.7	0.5	17.2
17/1	1068	1068	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6
17/2	392	392	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	933	933	-	-	-	0.0	0.5	-	0.5	1.9	3.3	0.5	3.7
18/1	384	384	-	-	-	0.7	0.4	-	1.1	10.6	1.5	0.4	1.9
18/2+18/3	591	591	-	-	-	1.3	1.2	-	2.5	15.0	6.2	1.2	7.4
19/1	1160	1160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1470	1470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

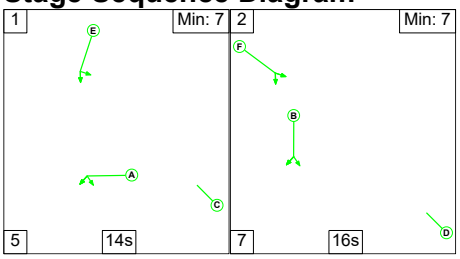
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-5.6	Total Delay for Signalled Lanes (pcuHr):	35.18	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-2.8	Total Delay for Signalled Lanes (pcuHr):	19.68	Cycle Time (s): 42
	PRC Over All Lanes (%):	-5.6	Total Delay Over All Lanes(pcuHr):	62.52	

Full Input Data And Results

Scenario 6: '2028 WD PM' (FG6: '2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

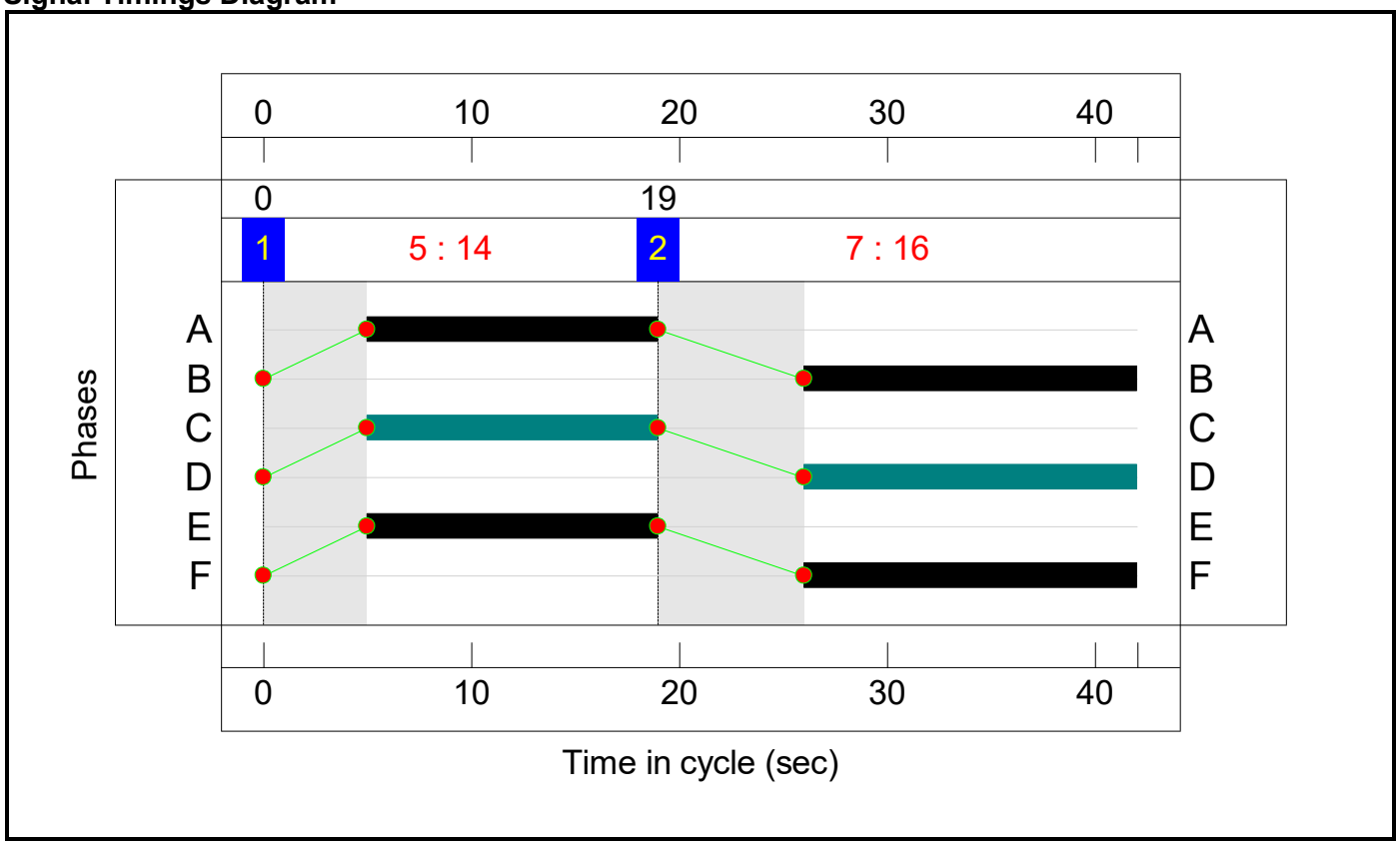
Stage Sequence Diagram



Stage Timings

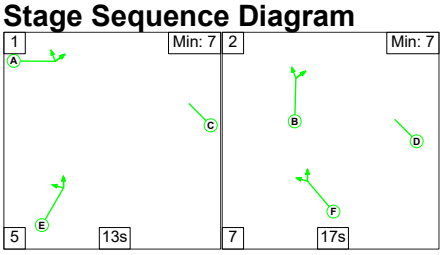
Stage	1	2
Duration	14	16
Change Point	0	19

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

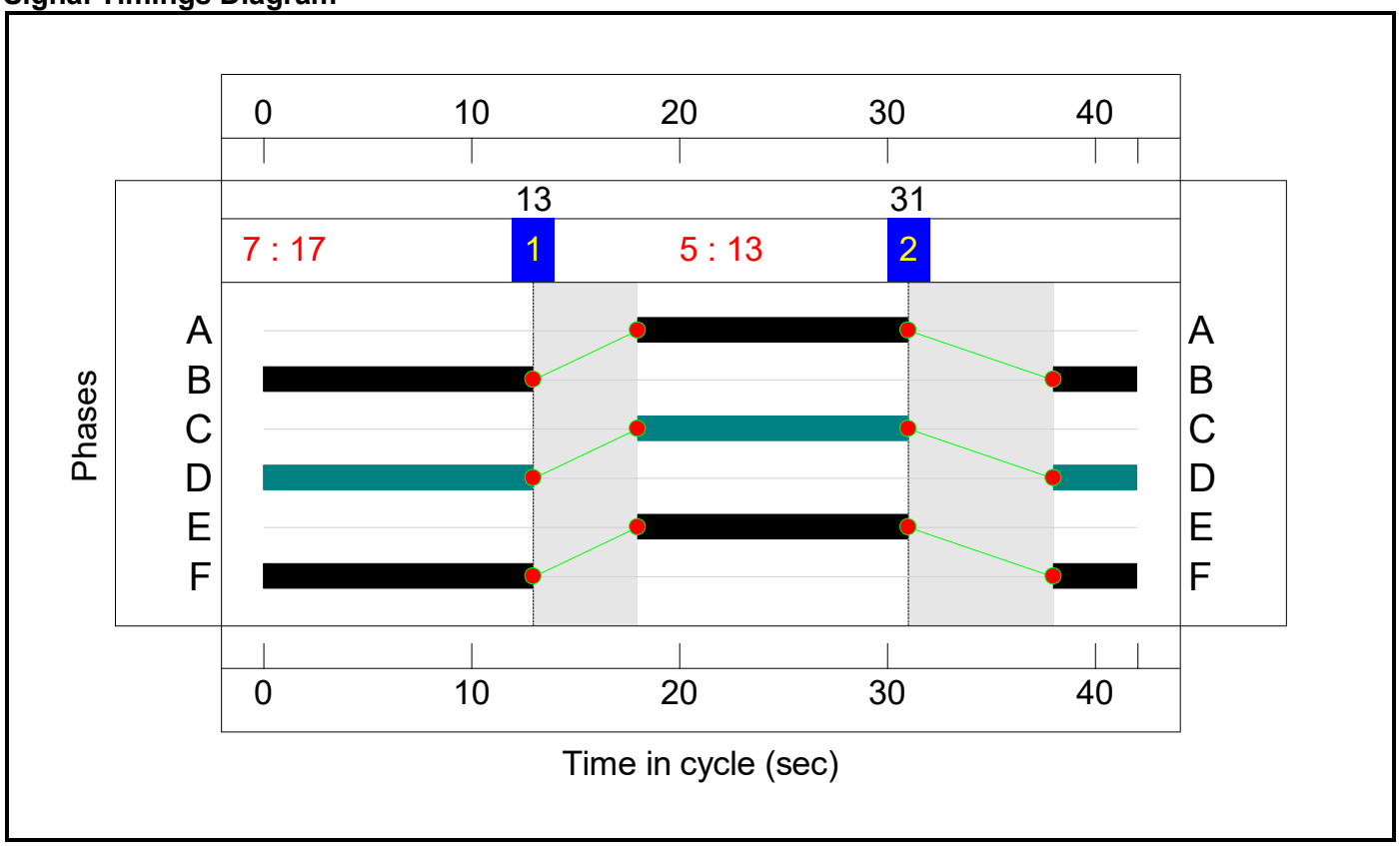


Full Input Data And Results

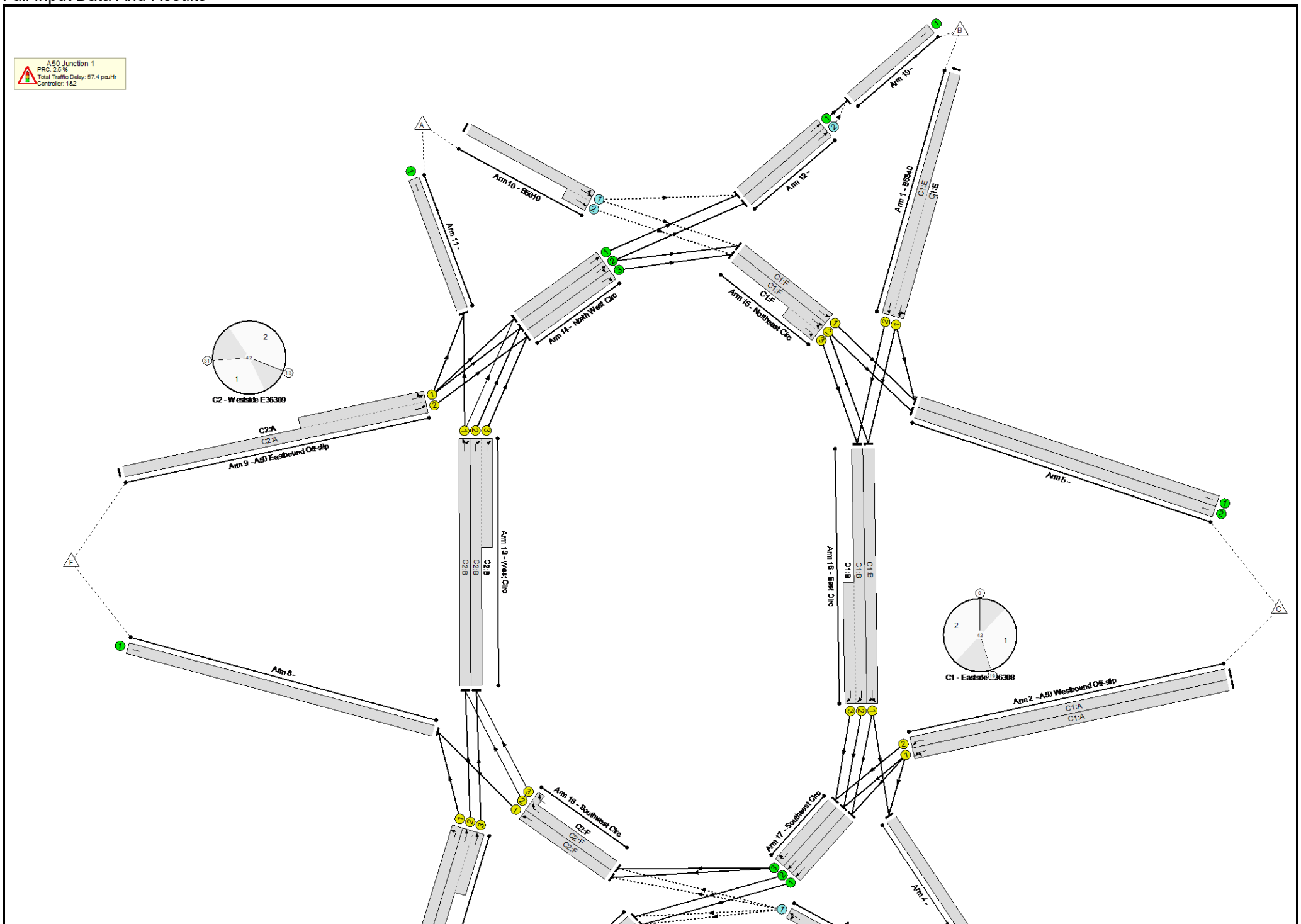
Stage Timings

Stage	1	2
Duration	13	17
Change Point	13	31

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.8%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.8%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1043	2088:1950	746+696	61.8 : 83.6%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	376	1907	681	55.2%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	562	2049	732	76.8%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	64	1886	405	15.8%
4/1		U	N/A	N/A	-		-	-	-	125	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	863	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	139	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	789	1980	1980	39.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	284	1980	541	52.5%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	563	1923	641	87.8%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	863	2063:2101	282+700	87.8 : 87.8%
8/1		U	N/A	N/A	-		-	-	-	970	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	909	1995:1853	665+618	75.6 : 65.7%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	298	1894:2034	353+353	39.4 : 45.1%
11/1		U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	874	1965	1965	44.5%
12/2	Ahead	O	N/A	N/A	-		-	-	-	318	1965	523	60.8%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	717	1944	833	86.1%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	828	1942:1940	832+207	79.7 : 79.7%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	807	1930	1930	41.8%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	663	1926	1926	34.4%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	668	1923	1923	34.7%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	417	1932	782	53.3%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	827	1929:1926	678+376	78.5 : 78.5%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	529	1933	782	67.6%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	756	1930:1927	584+780	48.6 : 60.5%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	780	1912	1912	40.8%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	284	1907	1907	14.9%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1034	1899	1899	54.4%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	407	1937	830	49.0%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	682	1935:1930	592+269	79.2 : 79.2%
19/1		U	N/A	N/A	-		-	-	-	1192	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1073	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1262**	**0**	**0**	**30.3**	**27.1**	**0.0**	**57.4**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1262**	**0**	**0**	**30.3**	**27.1**	**0.0**	**57.4**	**-**	**-**	**-**	**-**
1/2+1/1	1043	1043	-	-	-	3.4	1.3	-	4.7	16.3	6.1	1.3	7.4
2/1	376	376	-	-	-	1.1	0.6	-	1.7	16.7	3.4	0.6	4.1
2/2	562	562	-	-	-	1.9	1.6	-	3.5	22.4	5.8	1.6	7.4
3/1	64	64	64	0	0	0.0	0.1	-	0.1	7.3	0.2	0.1	0.3
4/1	125	125	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	863	863	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	139	139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	789	789	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	284	284	284	0	0	0.3	0.5	-	0.8	10.6	3.0	0.5	3.6
7/1	563	563	-	-	-	2.1	3.3	-	5.4	34.5	6.1	3.3	9.4
7/2+7/3	863	863	-	-	-	3.0	3.4	-	6.4	26.7	6.7	3.4	10.1
8/1	970	970	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	909	909	-	-	-	3.1	1.2	-	4.3	17.0	5.2	1.2	6.4
10/1+10/2	298	298	596	0	0	0.3	0.4	-	0.7	8.1	0.8	0.4	1.1
11/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	874	874	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
12/2	318	318	318	0	0	0.3	0.8	-	1.0	11.6	3.4	0.8	4.2
13/1	717	717	-	-	-	2.7	2.9	-	5.7	28.4	6.8	2.9	9.7
13/2+13/3	828	828	-	-	-	1.8	1.9	-	3.7	16.3	15.1	1.9	17.1
14/1	807	807	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
14/2	663	663	-	-	-	0.0	0.3	-	0.3	1.4	2.7	0.3	3.0
14/3	668	668	-	-	-	0.0	0.3	-	0.3	1.5	2.7	0.3	3.0
15/1	417	417	-	-	-	1.6	0.6	-	2.1	18.3	4.7	0.6	5.2

Full Input Data And Results

15/2+15/3	827	827	-	-	-	1.2	1.8	-	3.0	13.2	2.7	1.8	4.5
16/1	529	529	-	-	-	2.4	1.0	-	3.4	23.1	5.7	1.0	6.7
16/2+16/3	756	756	-	-	-	1.9	0.6	-	2.5	12.0	16.7	0.6	17.3
17/1	780	780	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
17/2	284	284	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	1034	1034	-	-	-	0.0	0.6	-	0.6	2.1	3.8	0.6	4.4
18/1	407	407	-	-	-	0.2	0.5	-	0.6	5.6	0.8	0.5	1.2
18/2+18/3	682	682	-	-	-	3.1	1.9	-	4.9	26.0	7.2	1.9	9.1
19/1	1192	1192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1073	1073	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

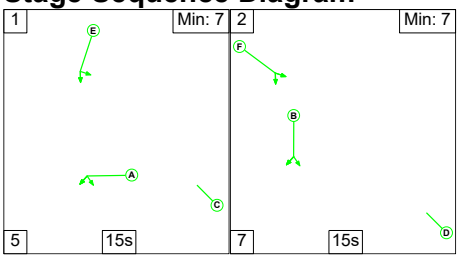
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	7.7	Total Delay for Signalled Lanes (pcuHr):	21.05	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	2.5	Total Delay for Signalled Lanes (pcuHr):	31.06	Cycle Time (s): 42
	PRC Over All Lanes (%):	2.5	Total Delay Over All Lanes(pcuHr):	57.43	

Full Input Data And Results

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

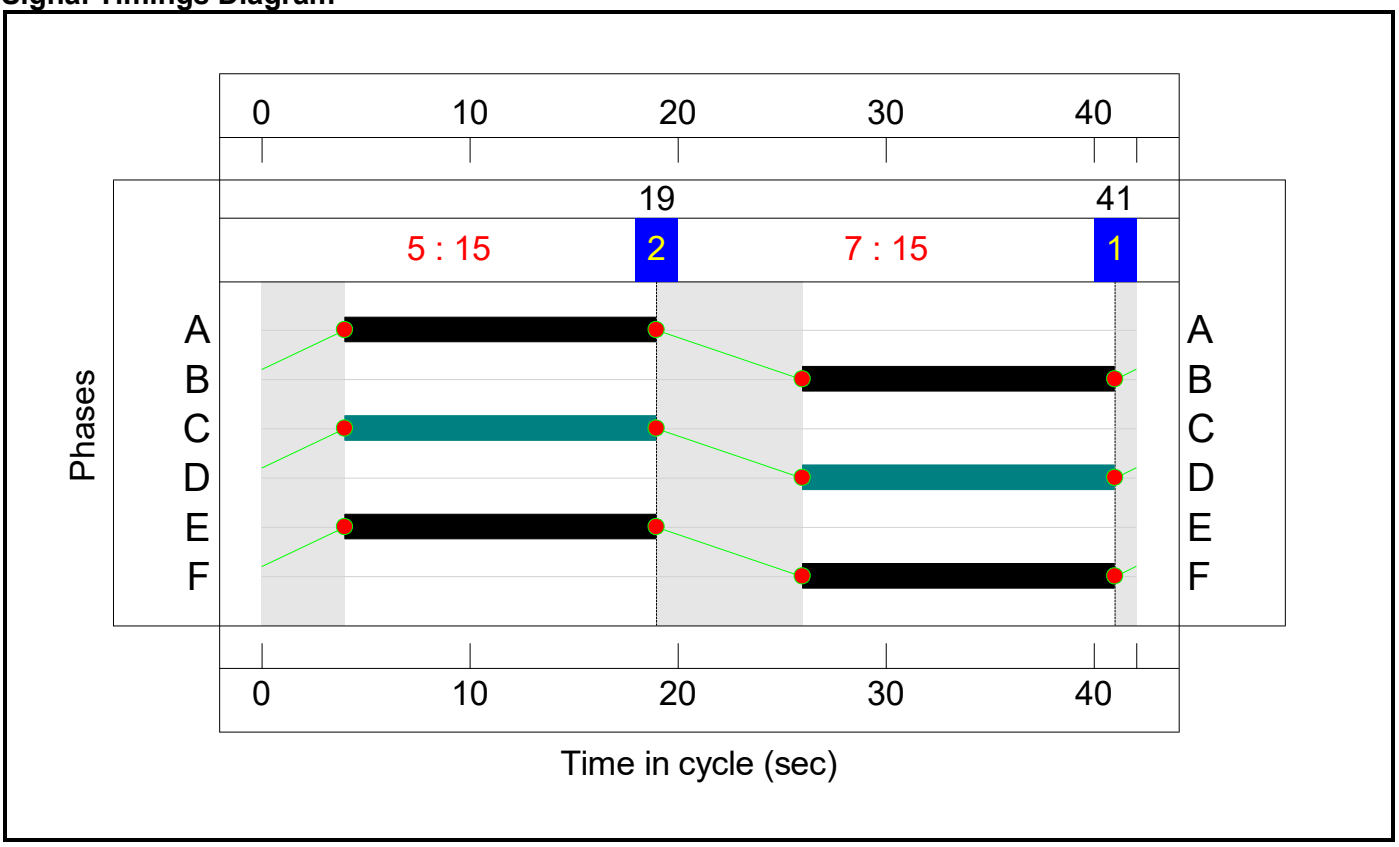
Stage Sequence Diagram



Stage Timings

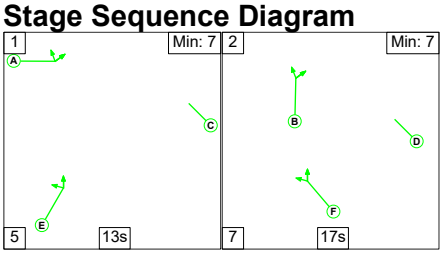
Stage	1	2
Duration	15	15
Change Point	41	19

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

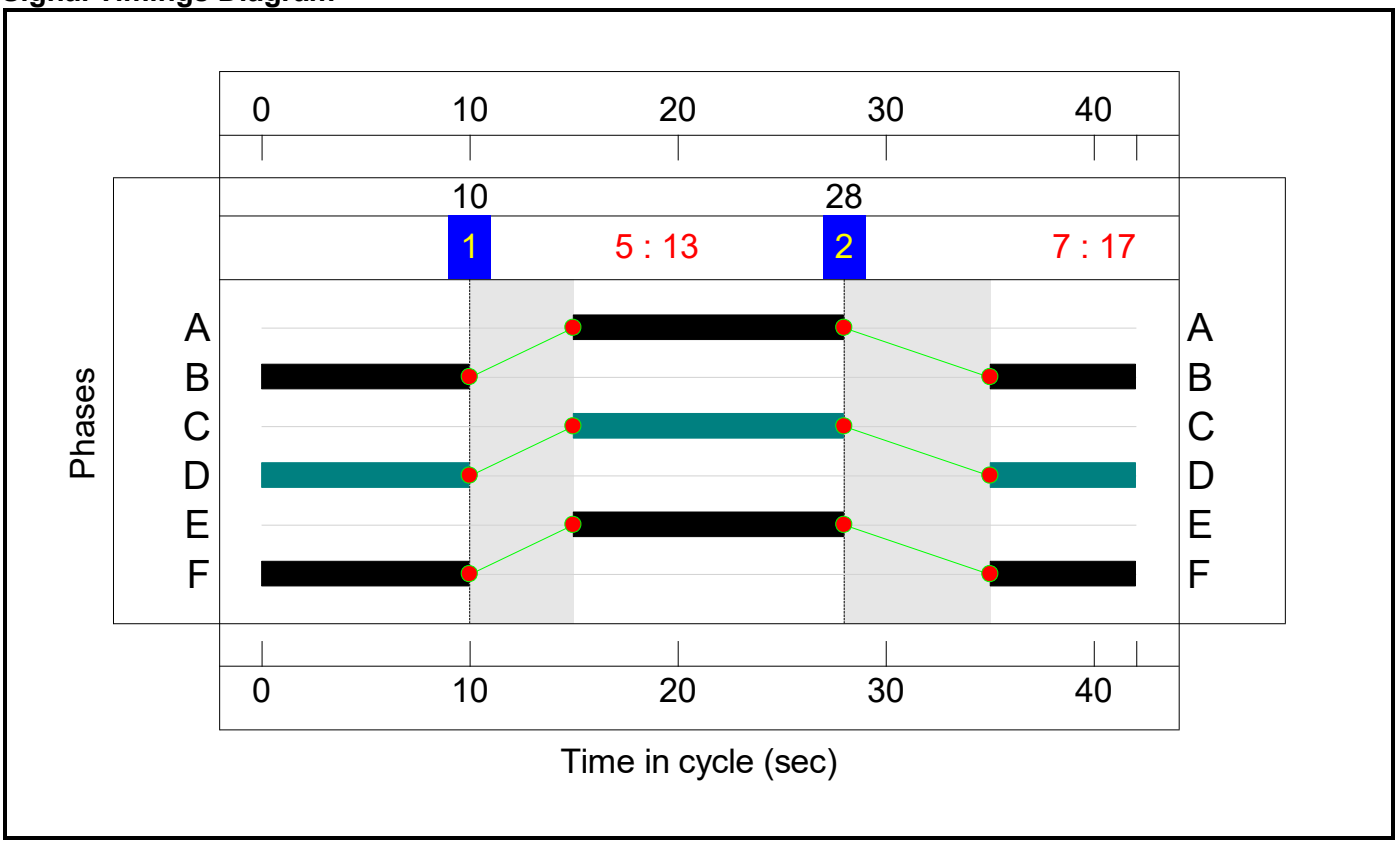


Full Input Data And Results

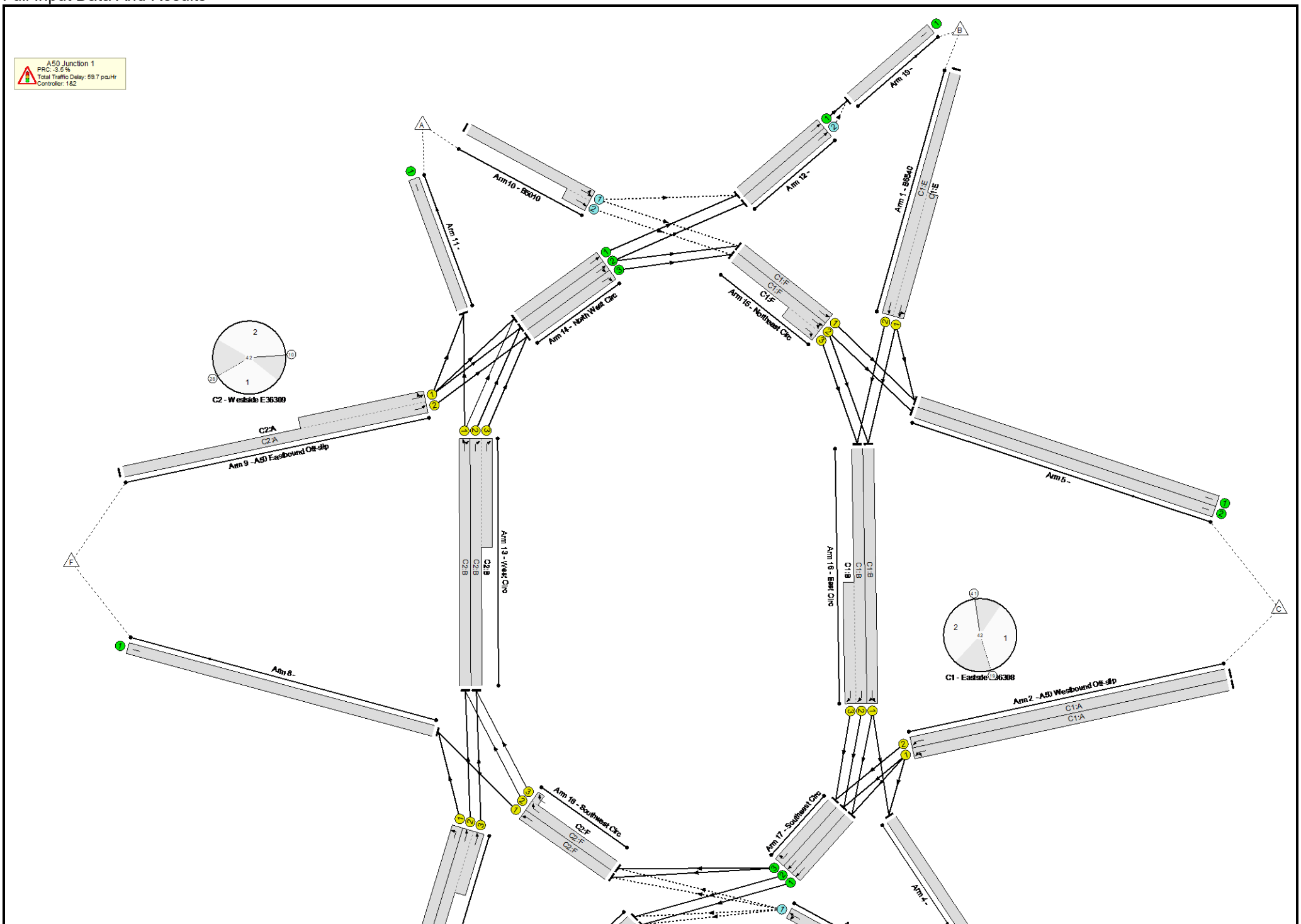
Stage Timings

Stage	1	2
Duration	13	17
Change Point	10	28

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.2%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**93.2%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	15	-	1182	2088:1950	795+743	63.4 : 91.3%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	15	-	573	1907	726	78.9%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	15	-	529	2049	781	67.8%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	52	1886	356	14.6%
4/1		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	38	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	910	1980	1980	46.0%
6/2	Ahead	O	N/A	N/A	-		-	-	-	438	1980	515	85.1%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	438	1923	641	68.3%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	648	2063:2101	176+700	74.0 : 74.0%
8/1		U	N/A	N/A	-		-	-	-	865	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	980	1995:1853	665+618	86.0 : 66.1%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	385	1894:2034	371+378	47.2 : 55.5%
11/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	934	1965	1965	47.5%
12/2	Ahead	O	N/A	N/A	-		-	-	-	219	1965	509	43.0%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	615	1944	833	73.8%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	636	1942:1940	832+155	64.4 : 64.4%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	843	1930	1930	43.7%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	536	1926	1926	27.8%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	672	1923	1923	34.9%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	15	-	401	1932	736	54.5%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	15	-	882	1929:1926	621+497	78.9 : 78.9%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	15	-	686	1933	736	93.2%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	15	-	896	1930:1927	735+734	59.6 : 62.4%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	901	1912	1912	47.1%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	438	1907	1907	23.0%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	987	1899	1899	52.0%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	427	1937	830	51.4%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	603	1935:1930	678+165	71.5 : 71.5%
19/1		U	N/A	N/A	-		-	-	-	1153	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1348	Inf	Inf	0.0%

Full Input Data And Results

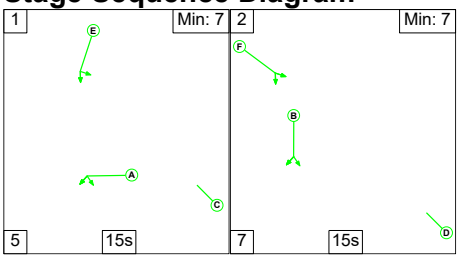
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1479**	**0**	**0**	**31.8**	**28.0**	**0.0**	**59.7**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1479**	**0**	**0**	**31.8**	**28.0**	**0.0**	**59.7**	**-**	**-**	**-**	**-**
1/2+1/1	1182	1182	-	-	-	3.8	1.6	-	5.5	16.6	7.3	1.6	9.0
2/1	573	573	-	-	-	1.8	1.8	-	3.7	23.0	5.9	1.8	7.7
2/2	529	529	-	-	-	1.6	1.0	-	2.6	17.9	5.1	1.0	6.2
3/1	52	52	52	0	0	0.0	0.1	-	0.1	8.0	0.2	0.1	0.2
4/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	845	845	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	38	38	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	910	910	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
6/2	438	438	438	0	0	1.1	2.7	-	3.7	30.6	4.9	2.7	7.6
7/1	438	438	-	-	-	1.5	1.1	-	2.5	20.9	4.4	1.1	5.4
7/2+7/3	648	648	-	-	-	2.1	1.4	-	3.5	19.7	5.3	1.4	6.7
8/1	865	865	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	980	980	-	-	-	3.4	1.6	-	5.0	18.5	6.2	1.6	7.8
10/1+10/2	385	385	770	0	0	0.4	0.5	-	0.9	8.3	0.9	0.5	1.4
11/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	934	934	-	-	-	0.0	0.5	-	0.5	1.7	0.0	0.5	0.5
12/2	219	219	219	0	0	0.0	0.4	-	0.4	7.0	1.9	0.4	2.2
13/1	615	615	-	-	-	2.4	1.4	-	3.8	22.1	5.3	1.4	6.7
13/2+13/3	636	636	-	-	-	1.2	0.9	-	2.1	12.1	15.0	0.9	15.9
14/1	843	843	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	536	536	-	-	-	0.0	0.2	-	0.2	1.3	1.6	0.2	1.8
14/3	672	672	-	-	-	0.0	0.3	-	0.3	1.5	3.8	0.3	4.1
15/1	401	401	-	-	-	1.9	0.6	-	2.5	22.4	4.4	0.6	5.0

Full Input Data And Results

15/2+15/3	882	882	-	-	-	1.3	1.8	-	3.1	12.8	5.7	1.8	7.6
16/1	686	686	-	-	-	3.2	5.6	-	8.8	46.0	7.5	5.6	13.1
16/2+16/3	896	896	-	-	-	3.3	0.8	-	4.0	16.2	16.8	0.8	17.5
17/1	901	901	-	-	-	0.0	0.4	-	0.4	1.8	0.0	0.4	0.4
17/2	438	438	-	-	-	0.0	0.1	-	0.1	1.2	0.5	0.1	0.7
17/3	987	987	-	-	-	0.0	0.5	-	0.5	2.0	2.8	0.5	3.3
18/1	427	427	-	-	-	0.2	0.5	-	0.7	6.0	0.4	0.5	0.9
18/2+18/3	603	603	-	-	-	2.5	1.2	-	3.8	22.5	6.5	1.2	7.8
19/1	1153	1153	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1348	1348	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-3.5	Total Delay for Signalled Lanes (pcuHr):	30.18	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	4.6	Total Delay for Signalled Lanes (pcuHr):	21.50	Cycle Time (s):	42
	PRC Over All Lanes (%):	-3.5	Total Delay Over All Lanes(pcuHr):	59.71		

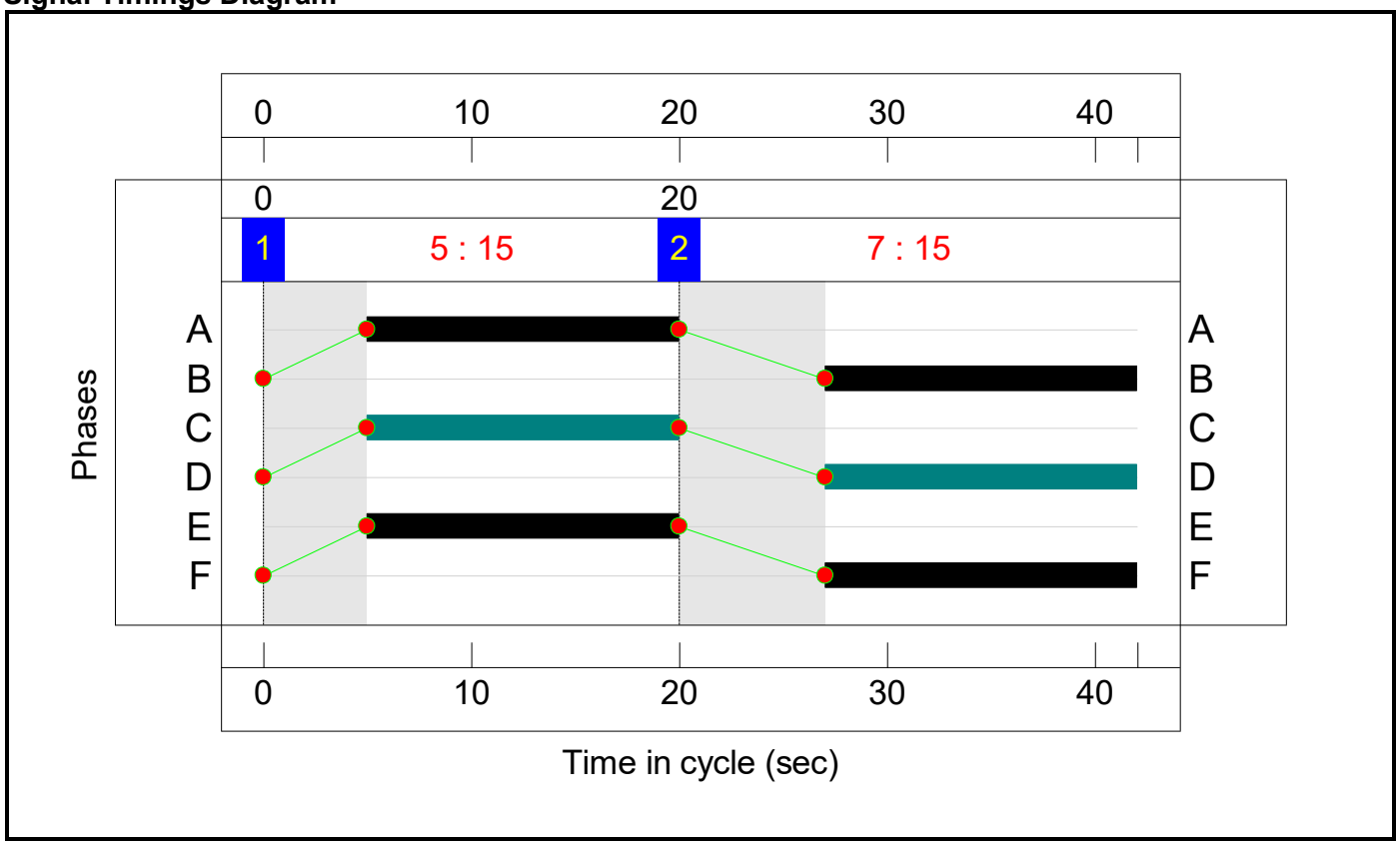
Full Input Data And Results
Scenario 8: '2038 WoD PM' (FG8: '2038 WoD Flows PM', Plan 1: 'Network Control Plan 1')
Controller :C1 - Eastsde E36308
Stage Sequence Diagram



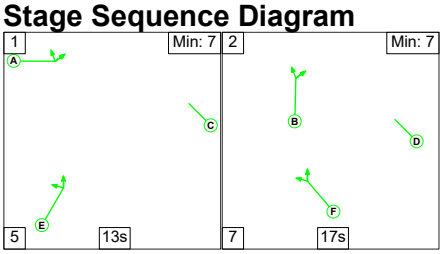
Stage Timings

Stage	1	2
Duration	15	15
Change Point	0	20

Signal Timings Diagram



Controller :C2 - Westside E36309
Stage Sequence Diagram

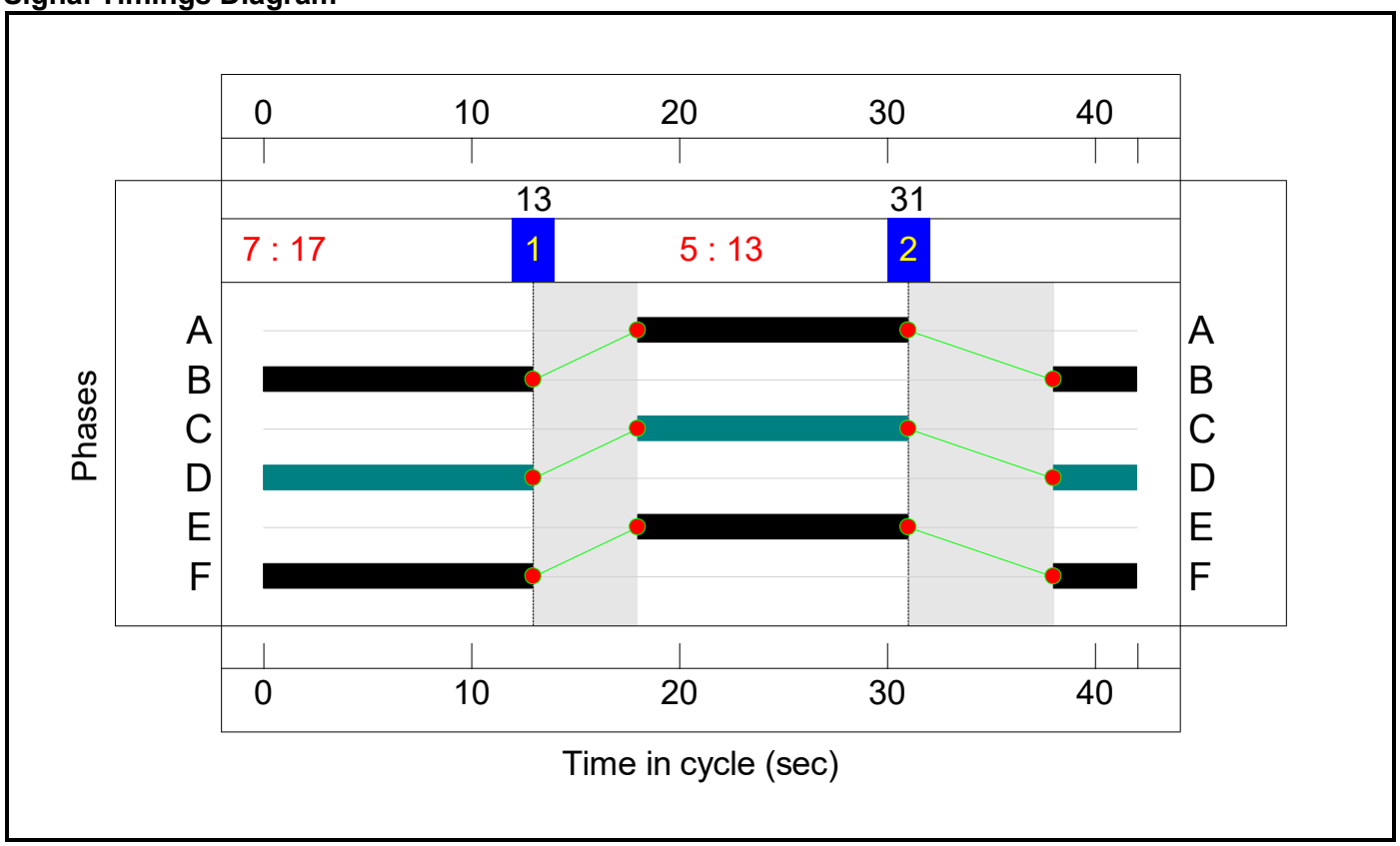


Full Input Data And Results

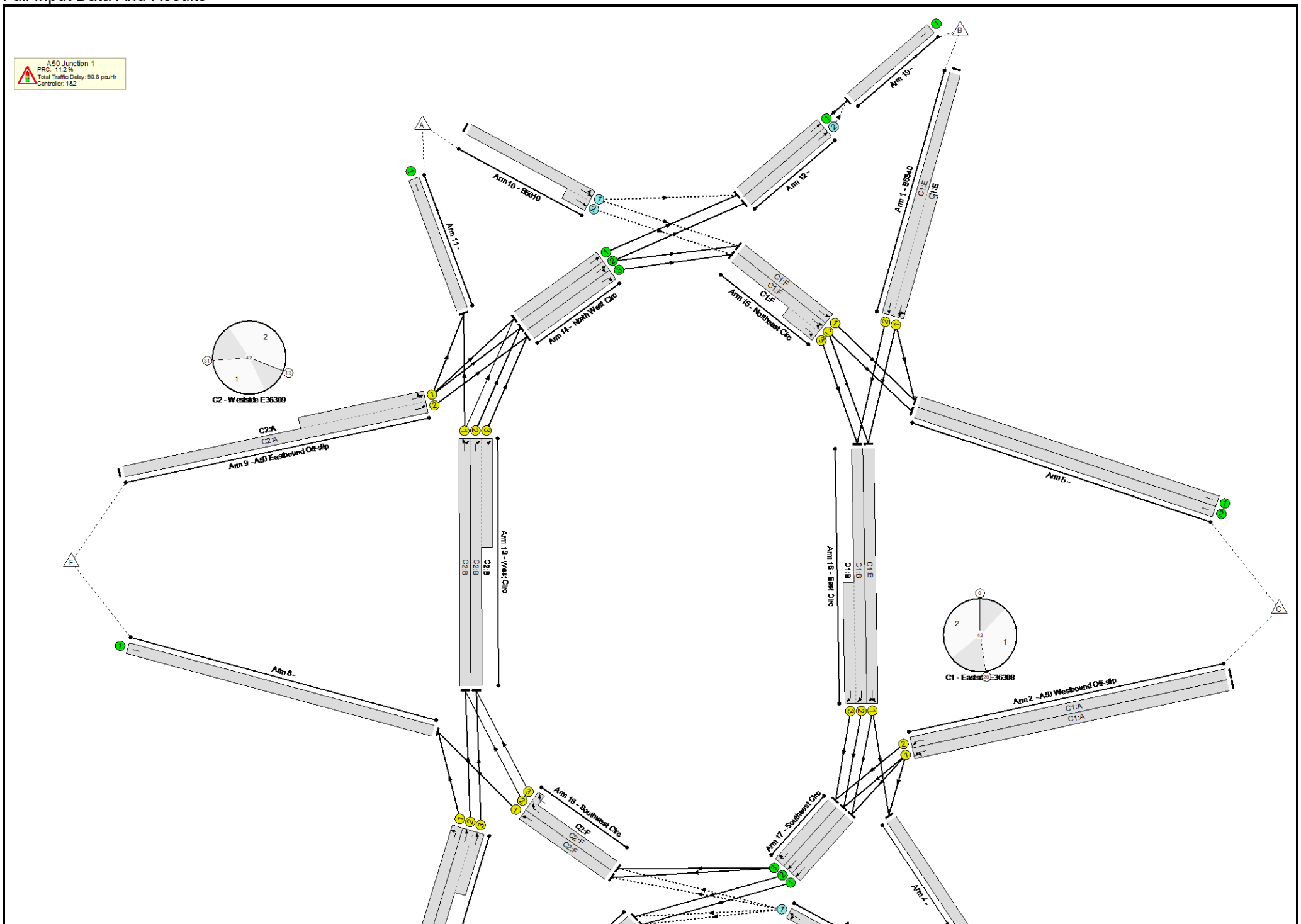
Stage Timings

Stage	1	2
Duration	13	17
Change Point	13	31

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.1%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.1%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	15	-	1352	2088:1950	795+743	77.6 : 98.9%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	15	-	365	1907	726	50.2%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	15	-	579	2049	781	74.2%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	107	1886	379	28.3%
4/1		U	N/A	N/A	-		-	-	-	228	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1102	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	113	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	736	1980	1980	37.2%
6/2	Ahead	O	N/A	N/A	-		-	-	-	289	1980	553	52.3%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	548	1923	641	85.5%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	973	2063:2101	272+700	100.1 : 100.1%
8/1		U	N/A	N/A	-		-	-	-	1043	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	906	1995:1853	665+618	72.8 : 68.3%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	328	1894:2034	306+306	53.5 : 53.5%
11/1		U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	928	1965	1965	47.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	348	1965	511	68.1%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	797	1944	833	95.7%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	940	1942:1940	832+176	93.2 : 93.2%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	848	1930	1930	43.9%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	776	1926	1926	40.3%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	648	1923	1923	33.7%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	15	-	512	1932	736	69.5%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	15	-	812	1929:1926	660+308	83.9 : 83.9%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	15	-	586	1933	736	79.6%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	15	-	875	1930:1927	365+734	79.2 : 79.8%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	723	1912	1912	37.8%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	289	1907	1907	15.2%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1165	1899	1899	61.3%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	495	1937	830	59.6%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	764	1935:1930	592+269	88.7 : 88.7%
19/1		U	N/A	N/A	-		-	-	-	1276	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1025	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1400**	**0**	**0**	**34.9**	**55.9**	**0.0**	**90.8**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1400**	**0**	**0**	**34.9**	**55.9**	**0.0**	**90.8**	**-**	**-**	**-**	**-**
1/2+1/1	1352	1352	-	-	-	4.6	3.5	-	8.1	21.6	8.4	3.5	11.9
2/1	365	365	-	-	-	1.0	0.5	-	1.5	14.9	3.2	0.5	3.7
2/2	579	579	-	-	-	1.8	1.4	-	3.2	20.0	5.8	1.4	7.2
3/1	107	107	107	0	0	0.1	0.2	-	0.3	9.3	0.4	0.2	0.6
4/1	228	228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1102	1102	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	113	113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	736	736	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	289	289	289	0	0	0.3	0.5	-	0.9	11.0	3.1	0.5	3.7
7/1	548	548	-	-	-	2.0	2.8	-	4.8	31.3	5.9	2.8	8.7
7/2+7/3	973	972	-	-	-	3.6	15.8	-	19.4	71.7	8.2	15.8	24.0
8/1	1043	1043	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	906	906	-	-	-	3.1	1.2	-	4.3	17.0	4.8	1.2	6.0
10/1+10/2	328	328	656	0	0	0.5	0.6	-	1.0	11.4	0.9	0.6	1.5
11/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	928	928	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
12/2	348	348	348	0	0	0.3	1.1	-	1.4	14.4	3.8	1.1	4.8
13/1	797	797	-	-	-	3.2	7.7	-	11.0	49.5	8.7	7.7	16.4
13/2+13/3	939	939	-	-	-	2.2	5.8	-	8.0	30.8	15.3	5.8	21.1
14/1	848	848	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	775	775	-	-	-	0.0	0.3	-	0.3	1.6	4.8	0.3	5.2
14/3	648	648	-	-	-	0.0	0.3	-	0.3	1.4	2.7	0.3	3.0
15/1	512	512	-	-	-	2.0	1.1	-	3.1	21.9	5.8	1.1	6.9

Full Input Data And Results

15/2+15/3	812	812	-	-	-	1.3	2.5	-	3.8	16.9	4.4	2.5	6.9
16/1	586	586	-	-	-	2.9	1.9	-	4.8	29.5	6.4	1.9	8.3
16/2+16/3	875	875	-	-	-	2.5	1.9	-	4.4	18.0	16.9	1.9	18.8
17/1	723	723	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
17/2	289	289	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	1165	1165	-	-	-	0.0	0.8	-	0.8	2.5	3.8	0.8	4.6
18/1	495	495	-	-	-	0.2	0.7	-	0.9	6.8	0.7	0.7	1.4
18/2+18/3	764	764	-	-	-	3.4	3.7	-	7.0	33.2	8.1	3.7	11.7
19/1	1276	1276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1025	1025	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

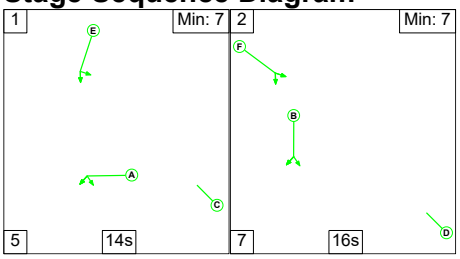
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-9.9	Total Delay for Signalled Lanes (pcuHr):	28.94	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-11.2	Total Delay for Signalled Lanes (pcuHr):	55.38	Cycle Time (s): 42
	PRC Over All Lanes (%):	-11.2	Total Delay Over All Lanes(pcuHr):	90.84	

Full Input Data And Results

Scenario 9: '2038 WD AM' (FG9: '2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

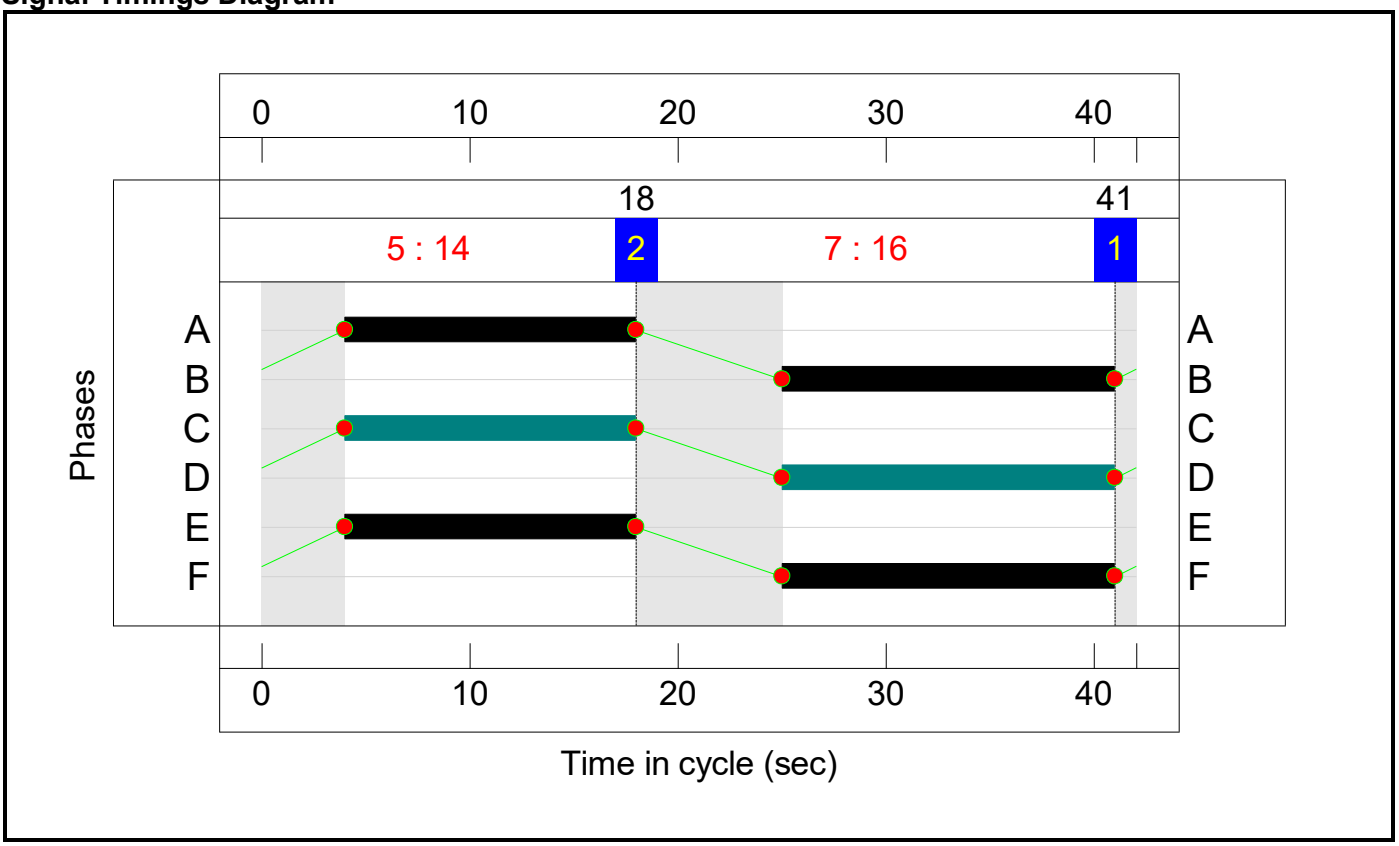
Stage Sequence Diagram



Stage Timings

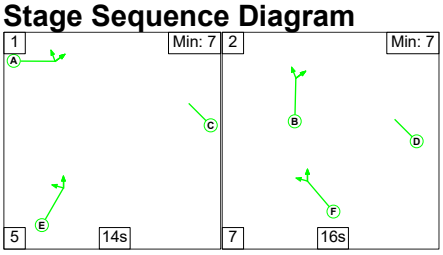
Stage	1	2
Duration	14	16
Change Point	41	18

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

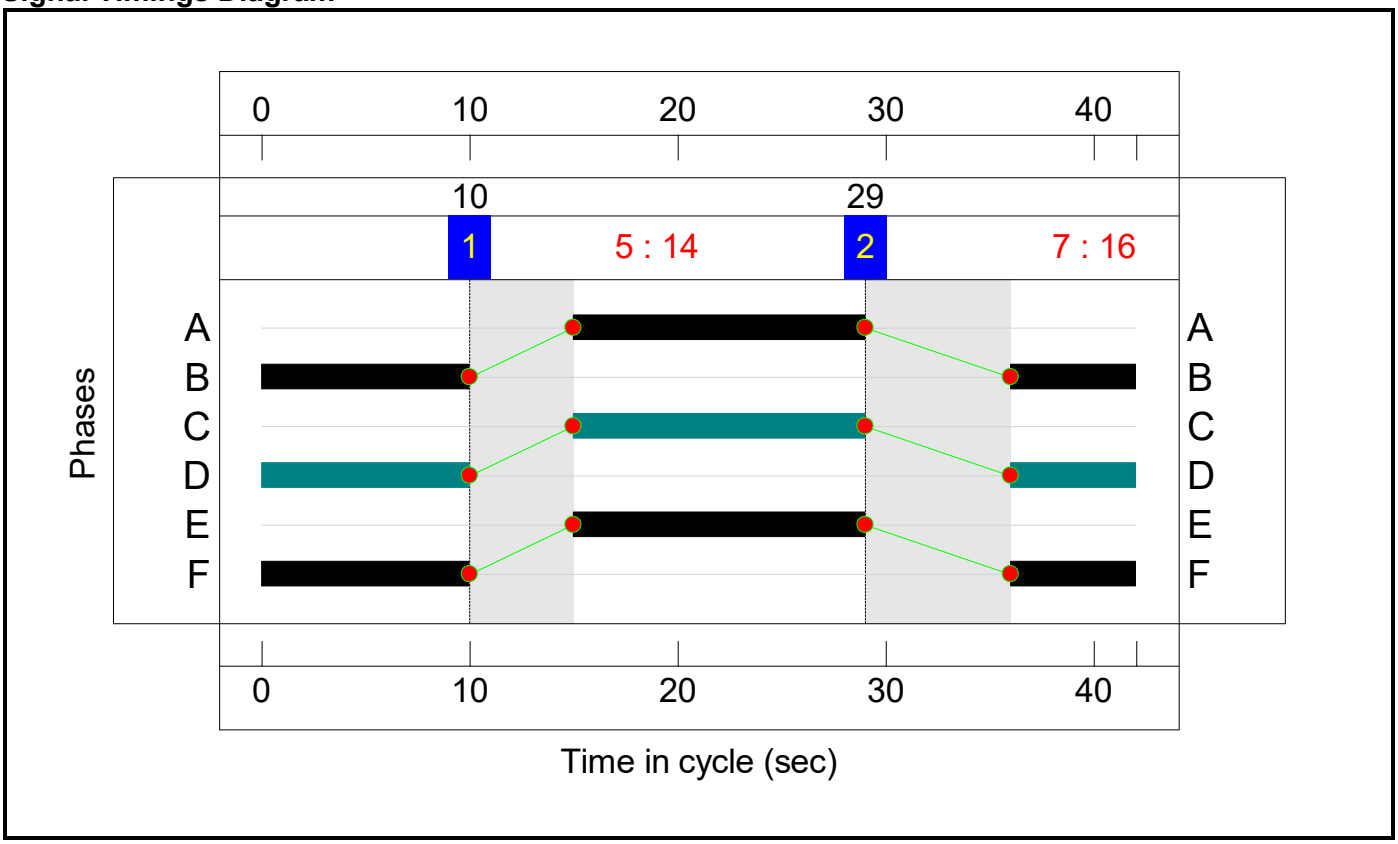


Full Input Data And Results

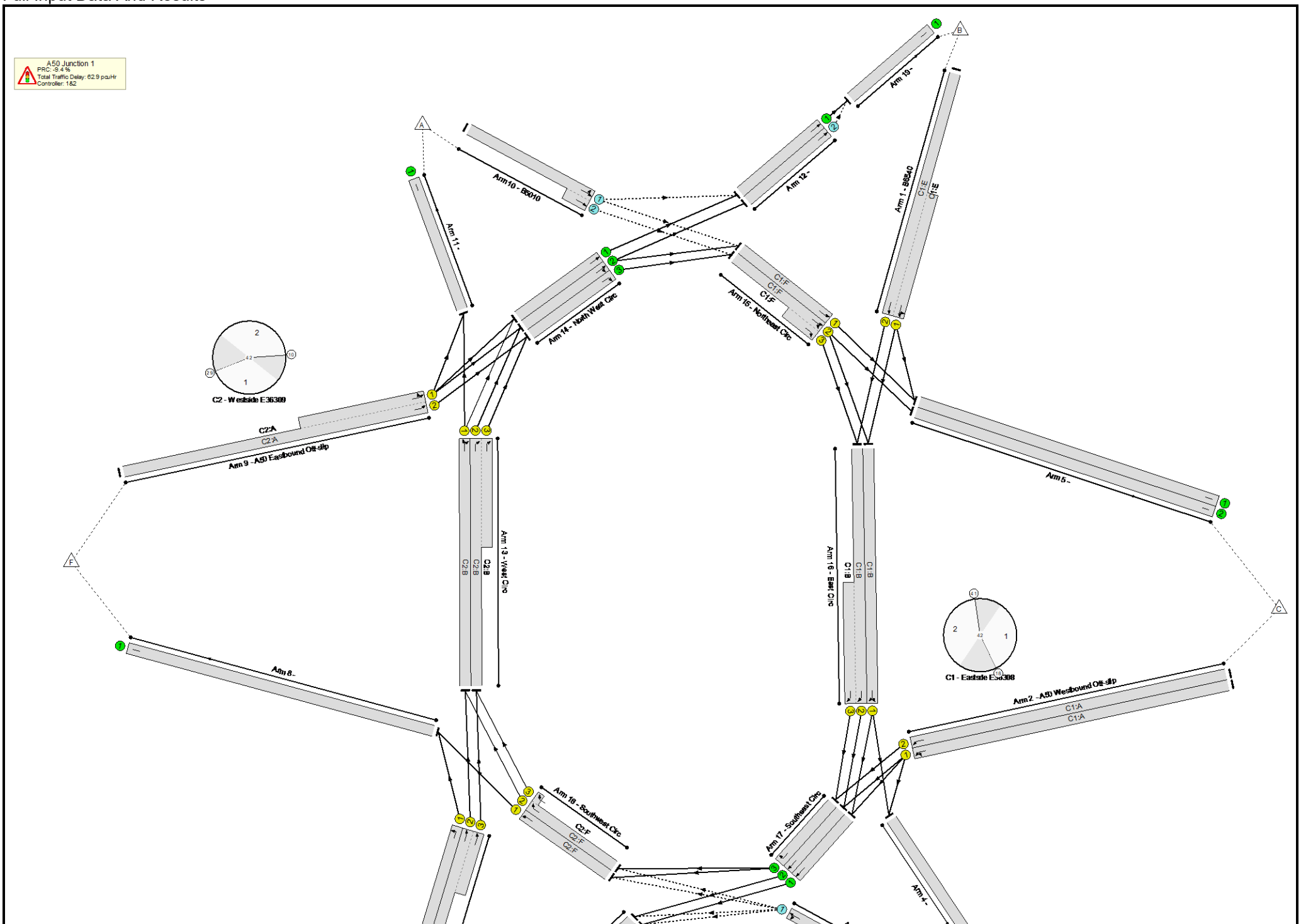
Stage Timings

Stage	1	2
Duration	14	16
Change Point	10	29

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.5%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.5%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1179	2088:1950	746+696	66.1 : 98.5%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	579	1907	681	85.0%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	519	2049	732	70.9%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	53	1886	341	15.5%
4/1		U	N/A	N/A	-		-	-	-	351	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	891	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	35	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	969	1980	1980	48.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	428	1980	502	85.3%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	457	1923	687	66.5%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	686	2063:2101	206+750	71.7 : 71.7%
8/1		U	N/A	N/A	-		-	-	-	872	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	1013	1995:1853	713+662	84.5 : 62.1%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	390	1894:2034	360+360	49.7 : 58.6%
11/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	940	1965	1965	47.8%
12/2	Ahead	O	N/A	N/A	-		-	-	-	210	1965	508	41.3%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	620	1944	787	78.8%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	659	1942:1940	786+142	71.0 : 71.0%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	851	1930	1930	44.1%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	558	1926	1926	29.0%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	703	1923	1923	36.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	438	1932	782	56.0%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	914	1929:1926	657+467	81.3 : 81.3%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	732	1933	782	93.6%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	873	1930:1927	781+780	54.8 : 57.1%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	960	1912	1912	50.2%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	428	1907	1907	22.4%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	964	1899	1899	50.8%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	415	1937	784	52.9%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	593	1935:1930	635+163	74.3 : 74.3%
19/1		U	N/A	N/A	-		-	-	-	1150	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1397	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1471**	**0**	**0**	**32.1**	**30.8**	**0.0**	**62.9**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1471**	**0**	**0**	**32.1**	**30.8**	**0.0**	**62.9**	**-**	**-**	**-**	**-**
1/2+1/1	1179	1179	-	-	-	4.1	2.2	-	6.3	19.3	7.8	2.2	10.0
2/1	579	579	-	-	-	2.0	2.7	-	4.7	29.2	6.1	2.7	8.8
2/2	519	519	-	-	-	1.7	1.2	-	2.9	20.0	5.2	1.2	6.4
3/1	53	53	53	0	0	0.0	0.1	-	0.1	8.3	0.2	0.1	0.3
4/1	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	891	891	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	35	35	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	969	969	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
6/2	428	428	428	0	0	1.0	2.7	-	3.7	31.2	4.8	2.7	7.5
7/1	457	457	-	-	-	1.4	1.0	-	2.4	19.2	4.4	1.0	5.4
7/2+7/3	686	686	-	-	-	2.1	1.3	-	3.4	17.8	5.4	1.3	6.6
8/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	1013	1013	-	-	-	3.4	1.4	-	4.7	16.9	6.4	1.4	7.7
10/1+10/2	390	390	780	0	0	0.4	0.6	-	1.0	9.3	1.0	0.6	1.6
11/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	940	940	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	210	210	210	0	0	0.0	0.4	-	0.4	6.7	1.8	0.4	2.2
13/1	620	620	-	-	-	2.7	1.8	-	4.5	26.1	5.7	1.8	7.5
13/2+13/3	659	659	-	-	-	1.5	1.2	-	2.7	14.8	15.0	1.2	16.3
14/1	851	851	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	558	558	-	-	-	0.0	0.2	-	0.2	1.3	2.2	0.2	2.4
14/3	703	703	-	-	-	0.0	0.3	-	0.3	1.5	4.3	0.3	4.6
15/1	438	438	-	-	-	1.9	0.6	-	2.5	20.6	4.9	0.6	5.5

Full Input Data And Results

15/2+15/3	914	914	-	-	-	1.2	2.1	-	3.4	13.2	6.3	2.1	8.4
16/1	732	732	-	-	-	3.1	5.9	-	9.0	44.4	7.7	5.9	13.6
16/2+16/3	873	873	-	-	-	2.6	0.6	-	3.2	13.2	16.8	0.6	17.4
17/1	960	960	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
17/2	428	428	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	964	964	-	-	-	0.0	0.5	-	0.5	2.0	3.2	0.5	3.7
18/1	415	415	-	-	-	0.3	0.6	-	0.8	7.0	0.7	0.6	1.3
18/2+18/3	593	593	-	-	-	2.7	1.4	-	4.1	24.7	6.5	1.4	7.9
19/1	1150	1150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1397	1397	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

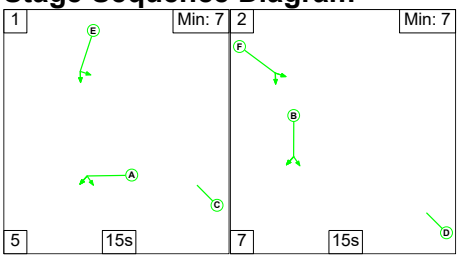
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-9.4	Total Delay for Signalled Lanes (pcuHr):	31.99	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	6.5	Total Delay for Signalled Lanes (pcuHr):	22.65	Cycle Time (s): 42
	PRC Over All Lanes (%):	-9.4	Total Delay Over All Lanes(pcuHr):	62.87	

Full Input Data And Results

Scenario 10: '2038 WD PM' (FG10: '2038 WD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

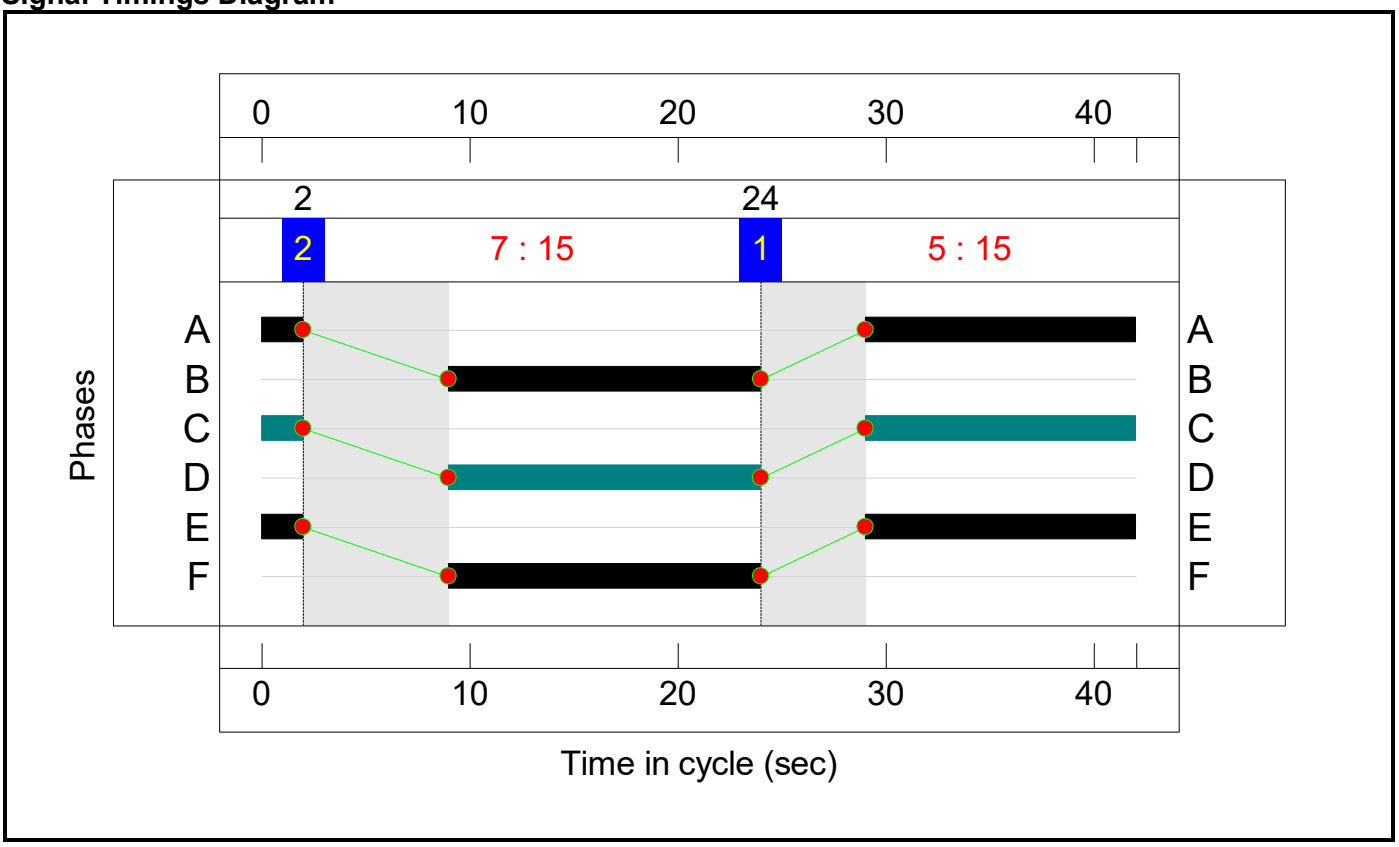
Stage Sequence Diagram



Stage Timings

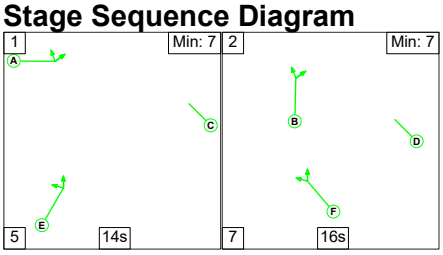
Stage	1	2
Duration	15	15
Change Point	24	2

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

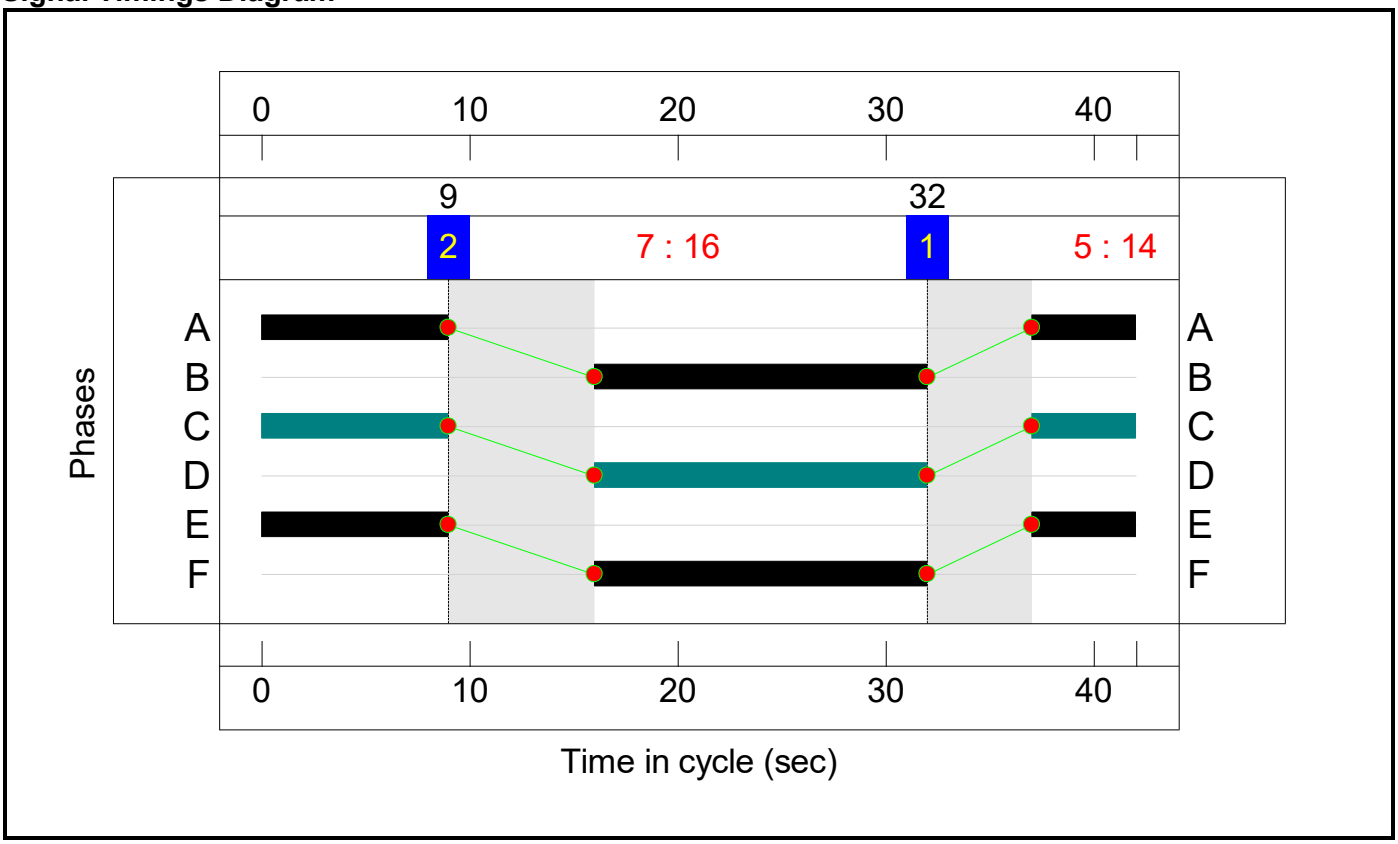


Full Input Data And Results

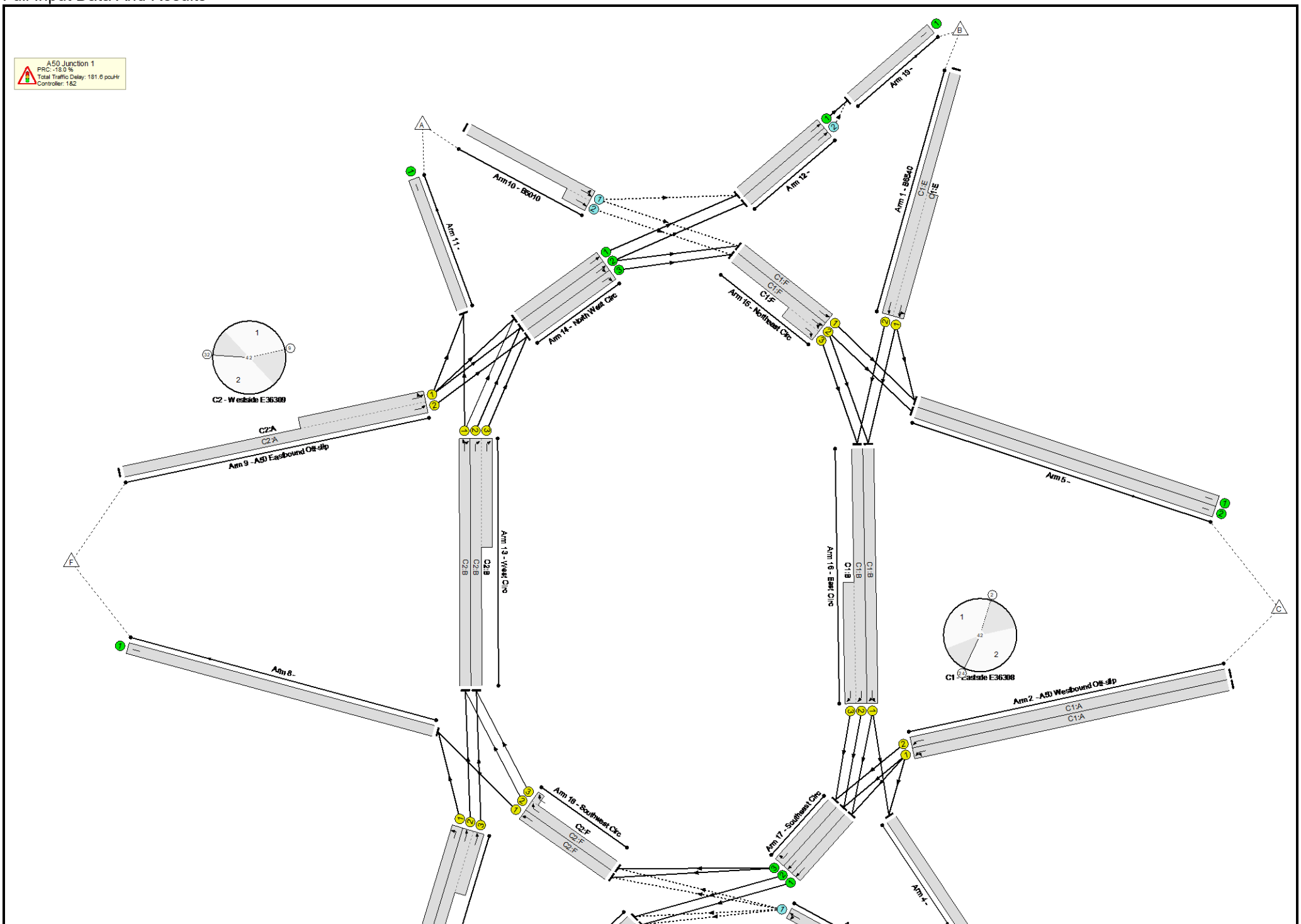
Stage Timings

Stage	1	2
Duration	14	16
Change Point	32	9

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.2%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**106.2%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	15	-	1437	2088:1950	795+743	87.1 : 100.2%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	15	-	439	1907	726	60.4%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	15	-	633	2049	781	81.1%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	155	1886	357	43.4%
4/1		U	N/A	N/A	-		-	-	-	278	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1204	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	758	1980	1980	38.3%
6/2	Ahead	O	N/A	N/A	-		-	-	-	359	1980	548	65.5%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	14	-	606	1923	687	88.2%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	14	-	1078	2063:2101	265+750	106.2 : 106.2%
8/1		U	N/A	N/A	-		-	-	-	1105	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	14	-	933	1995:1853	713+662	71.3 : 64.2%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	332	1894:2034	300+300	54.1 : 56.7%
11/1		U	N/A	N/A	-		-	-	-	387	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	984	1965	1965	48.8%
12/2	Ahead	O	N/A	N/A	-		-	-	-	373	1965	504	70.6%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	16	-	866	1944	787	103.1%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	16	-	1061	1942:1940	786+214	101.6 : 100.2%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	904	1930	1930	45.6%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	834	1926	1926	40.8%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	735	1923	1923	37.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	15	-	543	1932	736	69.6%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	15	-	905	1929:1926	675+249	96.0 : 97.9%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	15	-	579	1933	736	78.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	15	-	937	1930:1927	599+734	59.9 : 78.7%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	740	1912	1912	38.7%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	359	1907	1907	18.8%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1211	1899	1899	63.8%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	16	-	499	1937	784	63.6%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	16	-	849	1935:1930	562+253	104.2 : 104.2%
19/1		U	N/A	N/A	-		-	-	-	1357	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1117	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1534**	**0**	**0**	**42.1**	**139.5**	**0.0**	**181.6**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1534**	**0**	**0**	**42.1**	**139.5**	**0.0**	**181.6**	**-**	**-**	**-**	**-**
1/2+1/1	1437	1436	-	-	-	5.0	6.9	-	11.9	29.8	8.7	6.9	15.6
2/1	439	439	-	-	-	1.3	0.8	-	2.0	16.7	4.0	0.8	4.8
2/2	633	633	-	-	-	2.0	2.1	-	4.1	23.5	6.5	2.1	8.6
3/1	155	155	155	0	0	0.1	0.4	-	0.5	12.2	0.6	0.4	1.0
4/1	274	274	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1172	1172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	758	758	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	359	359	359	0	0	0.6	0.9	-	1.6	15.6	4.0	0.9	4.9
7/1	606	606	-	-	-	2.1	3.5	-	5.6	33.2	6.6	3.5	10.0
7/2+7/3	1078	1015	-	-	-	5.1	38.5	-	43.6	145.7	11.7	38.5	50.2
8/1	1105	1105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	933	933	-	-	-	3.0	1.1	-	4.0	15.5	5.1	1.1	6.1
10/1+10/2	332	332	664	0	0	0.5	0.6	-	1.1	12.1	1.6	0.6	2.2
11/1	333	333	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	959	959	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	356	356	356	0	0	0.6	1.2	-	1.8	17.8	3.9	1.2	5.1
13/1	811	787	-	-	-	4.1	21.6	-	25.7	114.0	9.7	21.6	31.3
13/2+13/3	1013	1000	-	-	-	3.0	19.6	-	22.5	80.0	15.3	19.6	34.9
14/1	879	879	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	786	786	-	-	-	0.0	0.3	-	0.3	1.6	5.4	0.3	5.7
14/3	722	722	-	-	-	0.0	0.3	-	0.3	1.5	2.7	0.3	3.0
15/1	512	512	-	-	-	2.3	1.1	-	3.4	24.0	5.8	1.1	6.9

Full Input Data And Results

15/2+15/3	892	892	-	-	-	2.4	8.9	-	11.3	45.5	8.8	8.9	17.7
16/1	575	575	-	-	-	3.1	1.7	-	4.8	30.2	6.4	1.7	8.1
16/2+16/3	937	937	-	-	-	2.3	1.2	-	3.5	13.5	17.0	1.2	18.1
17/1	740	740	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
17/2	359	359	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	1211	1211	-	-	-	0.0	0.9	-	0.9	2.7	4.8	0.9	5.7
18/1	499	499	-	-	-	0.7	0.9	-	1.6	11.3	1.4	0.9	2.3
18/2+18/3	849	810	-	-	-	3.9	25.4	-	29.3	124.2	9.9	25.4	35.3
19/1	1315	1315	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1117	1117	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

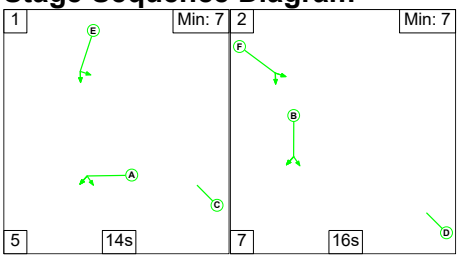
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-11.3	Total Delay for Signalled Lanes (pcuHr):	41.11	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-18.0	Total Delay for Signalled Lanes (pcuHr):	132.34	Cycle Time (s):	42
	PRC Over All Lanes (%):	-18.0	Total Delay Over All Lanes(pcuHr):	181.59		

Full Input Data And Results

Scenario 11: '2b 2028 WD AM' (FG11: '2b 2028 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

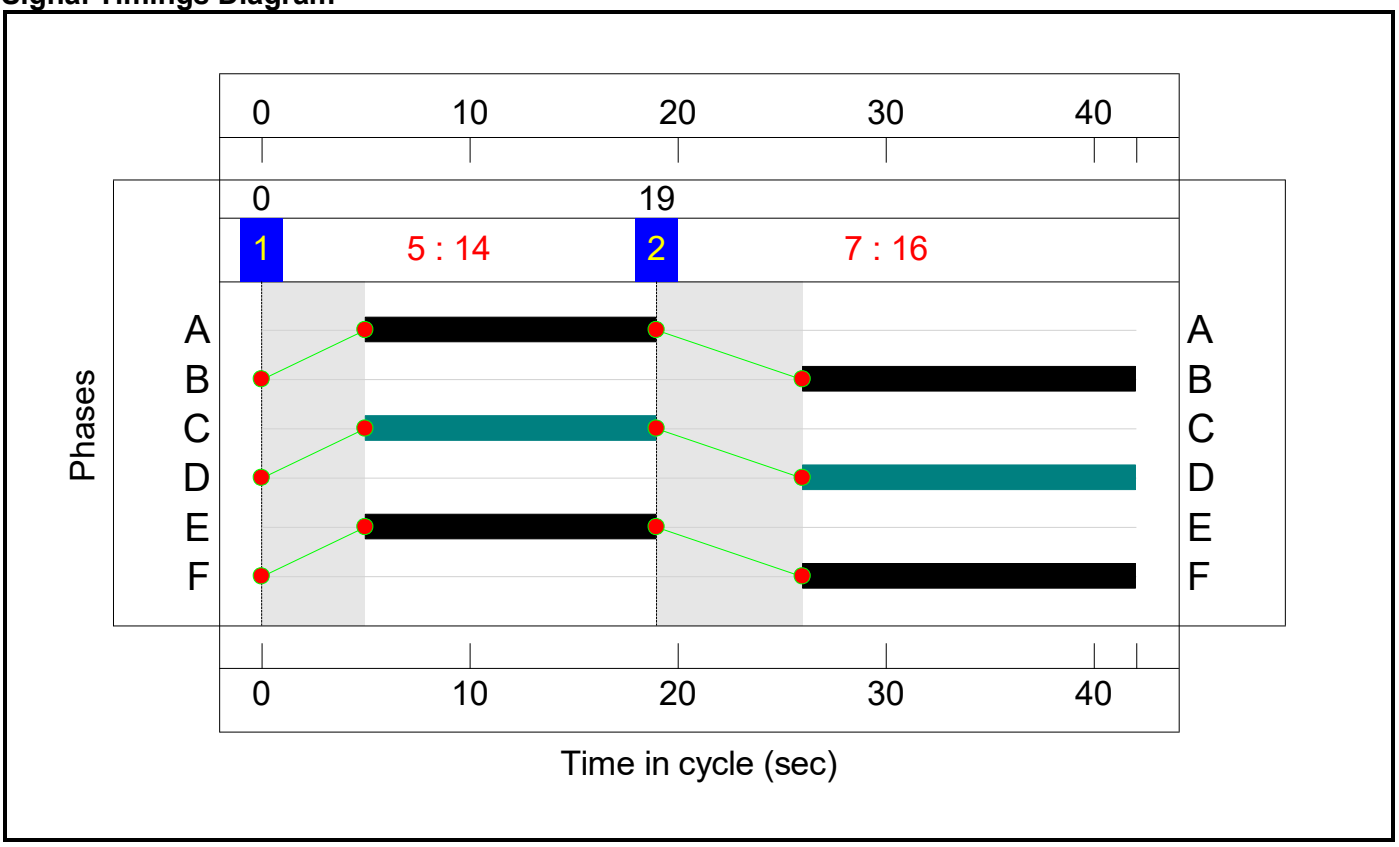
Stage Sequence Diagram



Stage Timings

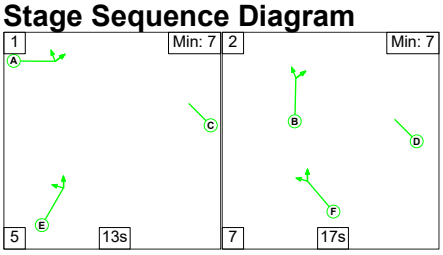
Stage	1	2
Duration	14	16
Change Point	0	19

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

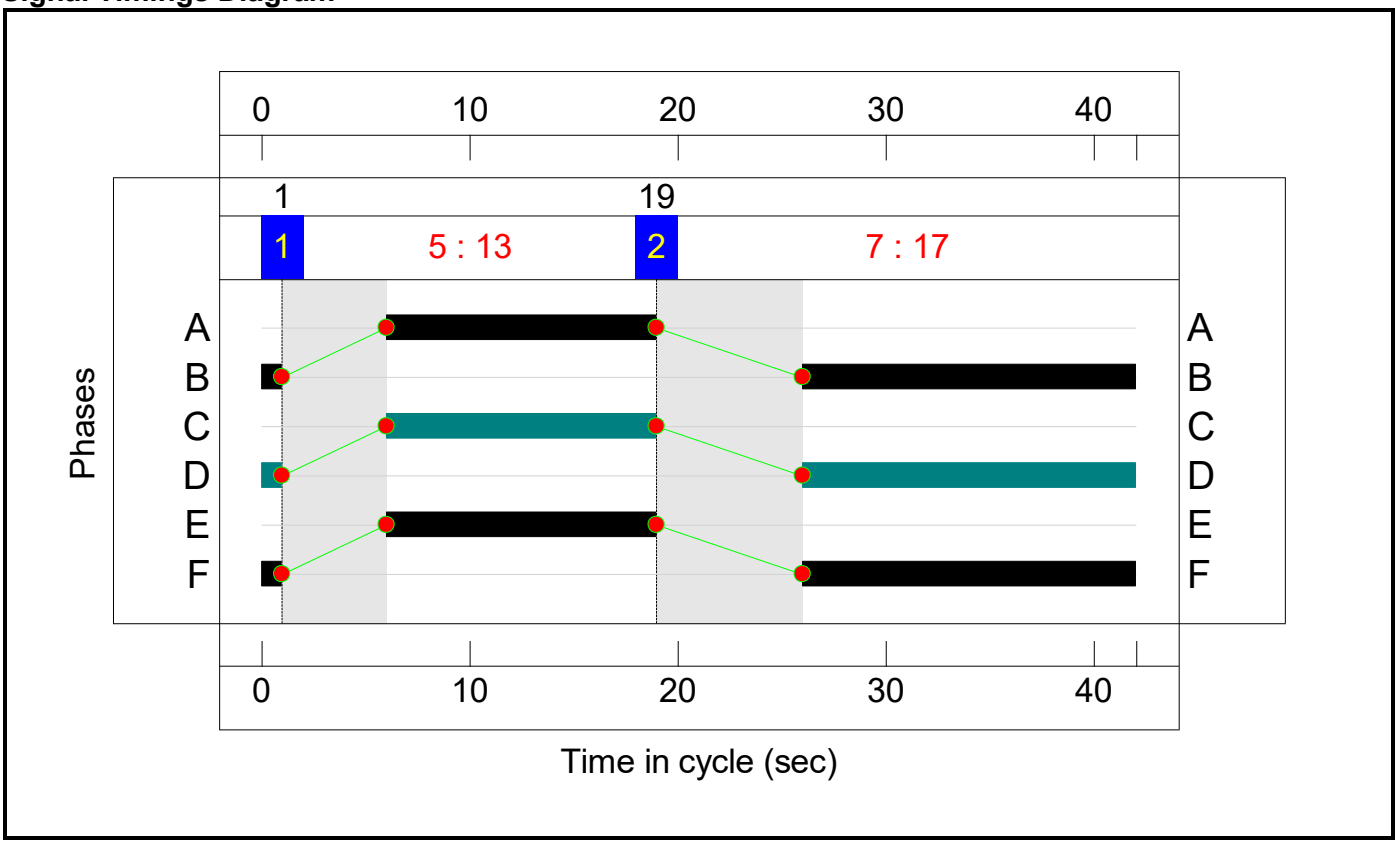


Full Input Data And Results

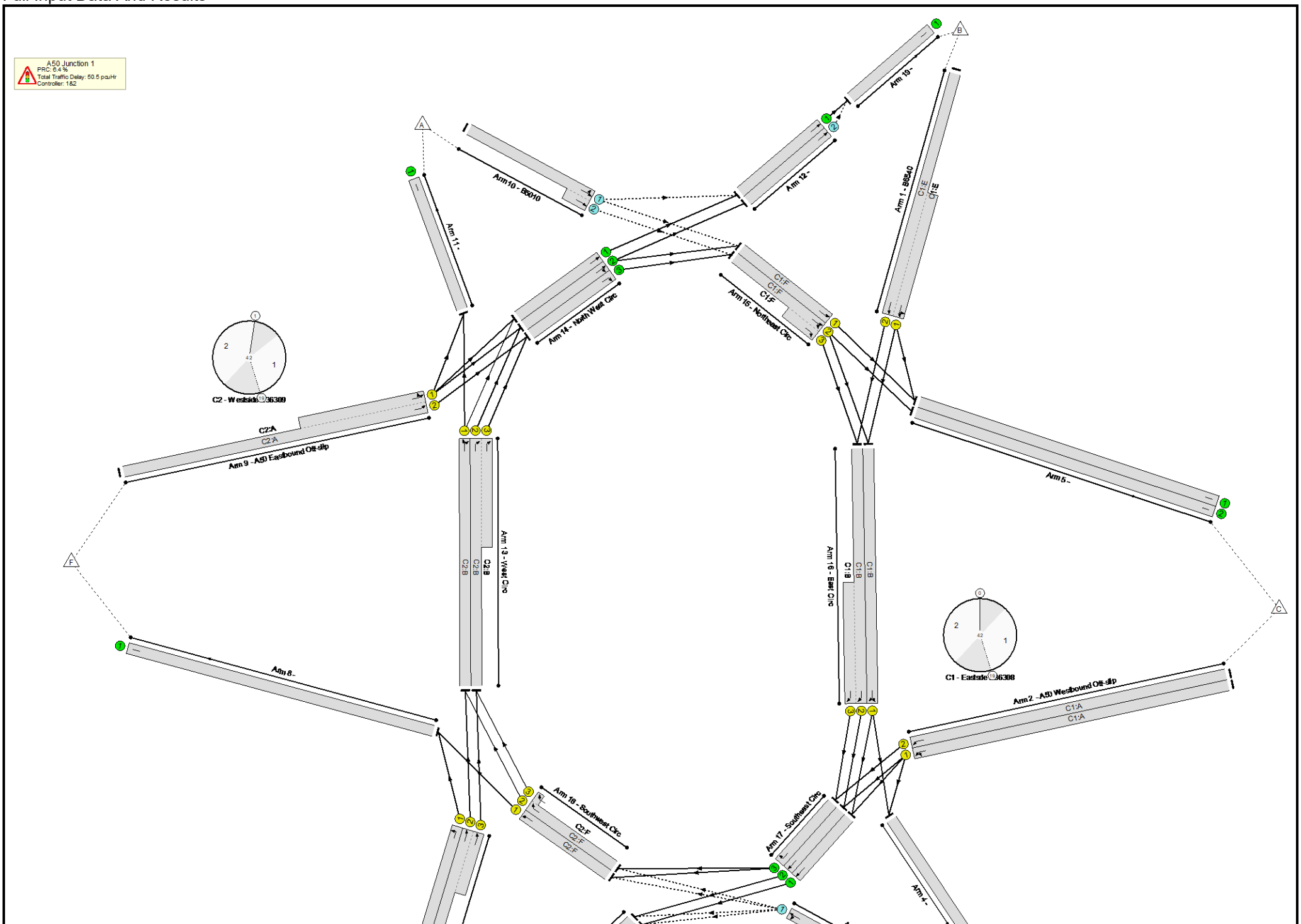
Stage Timings

Stage	1	2
Duration	13	17
Change Point	1	19

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.6%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**84.6%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1009	2088:1950	746+696	56.3 : 84.6%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	549	1907	681	80.6%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	544	2049	732	74.3%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	52	1886	356	14.6%
4/1		U	N/A	N/A	-		-	-	-	121	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	838	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	106	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	1047	1980	1980	52.9%
6/2	Ahead	O	N/A	N/A	-		-	-	-	323	1980	485	66.7%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	427	1923	641	66.6%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	611	2063:2101	206+700	67.4 : 67.4%
8/1		U	N/A	N/A	-		-	-	-	812	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	955	1995:1853	665+618	82.1 : 66.2%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	419	1894:2034	408+408	51.9 : 50.7%
11/1		U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1001	1965	1965	50.9%
12/2	Ahead	O	N/A	N/A	-		-	-	-	151	1965	495	30.5%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	661	1944	833	79.3%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	559	1942:1940	832+240	52.1 : 52.1%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	903	1930	1930	46.8%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	434	1926	1926	22.5%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	671	1923	1923	34.9%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	397	1932	782	50.8%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	878	1929:1926	679+371	83.6 : 83.6%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	610	1933	782	78.0%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	730	1930:1927	781+780	41.3 : 52.2%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	1038	1912	1912	54.3%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	323	1907	1907	16.9%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	951	1899	1899	50.1%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	385	1937	830	46.4%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	609	1935:1930	717+120	72.8 : 72.8%
19/1		U	N/A	N/A	-		-	-	-	1152	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1370	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1364**	**0**	**0**	**28.1**	**22.4**	**0.0**	**50.5**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1364**	**0**	**0**	**28.1**	**22.4**	**0.0**	**50.5**	**-**	**-**	**-**	**-**
1/2+1/1	1009	1009	-	-	-	3.3	1.2	-	4.5	15.9	6.2	1.2	7.4
2/1	549	549	-	-	-	1.9	2.0	-	3.9	25.4	5.6	2.0	7.7
2/2	544	544	-	-	-	1.8	1.4	-	3.2	21.3	5.4	1.4	6.9
3/1	52	52	52	0	0	0.0	0.1	-	0.1	8.0	0.1	0.1	0.2
4/1	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	838	838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	106	106	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	1047	1047	-	-	-	0.0	0.6	-	0.6	1.9	0.0	0.6	0.6
6/2	323	323	323	0	0	0.5	1.0	-	1.5	16.3	3.5	1.0	4.5
7/1	427	427	-	-	-	1.4	1.0	-	2.4	20.3	4.2	1.0	5.1
7/2+7/3	611	611	-	-	-	2.0	1.0	-	3.0	17.6	4.7	1.0	5.7
8/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	955	955	-	-	-	3.3	1.4	-	4.8	17.9	5.8	1.4	7.2
10/1+10/2	419	419	838	0	0	0.4	0.5	-	0.9	7.6	0.8	0.5	1.4
11/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1001	1001	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
12/2	151	151	151	0	0	0.0	0.2	-	0.2	5.3	0.9	0.2	1.1
13/1	661	661	-	-	-	2.6	1.9	-	4.5	24.6	5.8	1.9	7.7
13/2+13/3	559	559	-	-	-	0.9	0.5	-	1.5	9.4	15.0	0.5	15.5
14/1	903	903	-	-	-	0.0	0.4	-	0.4	1.8	0.0	0.4	0.4
14/2	434	434	-	-	-	0.0	0.1	-	0.1	1.2	0.5	0.1	0.7
14/3	671	671	-	-	-	0.0	0.3	-	0.3	1.5	3.8	0.3	4.0
15/1	397	397	-	-	-	1.2	0.5	-	1.7	15.6	2.4	0.5	3.0

Full Input Data And Results

15/2+15/3	878	878	-	-	-	1.7	2.5	-	4.1	17.0	5.8	2.5	8.2
16/1	610	610	-	-	-	2.7	1.7	-	4.4	26.1	6.0	1.7	7.7
16/2+16/3	730	730	-	-	-	2.2	0.4	-	2.6	12.8	16.7	0.4	17.1
17/1	1038	1038	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6
17/2	323	323	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	951	951	-	-	-	0.0	0.5	-	0.5	1.9	3.3	0.5	3.8
18/1	385	385	-	-	-	1.0	0.4	-	1.5	13.8	2.1	0.4	2.6
18/2+18/3	609	609	-	-	-	1.3	1.3	-	2.6	15.3	6.6	1.3	7.9
19/1	1152	1152	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1370	1370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

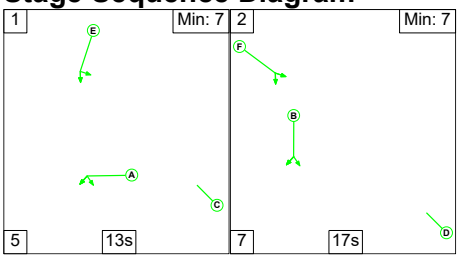
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	6.4	Total Delay for Signalled Lanes (pcuHr):	24.44	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	9.6	Total Delay for Signalled Lanes (pcuHr):	20.19	Cycle Time (s): 42
	PRC Over All Lanes (%):	6.4	Total Delay Over All Lanes(pcuHr):	50.47	

Full Input Data And Results

Scenario 12: '2b 2028 WD PM' (FG12: '2b 2028 WD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

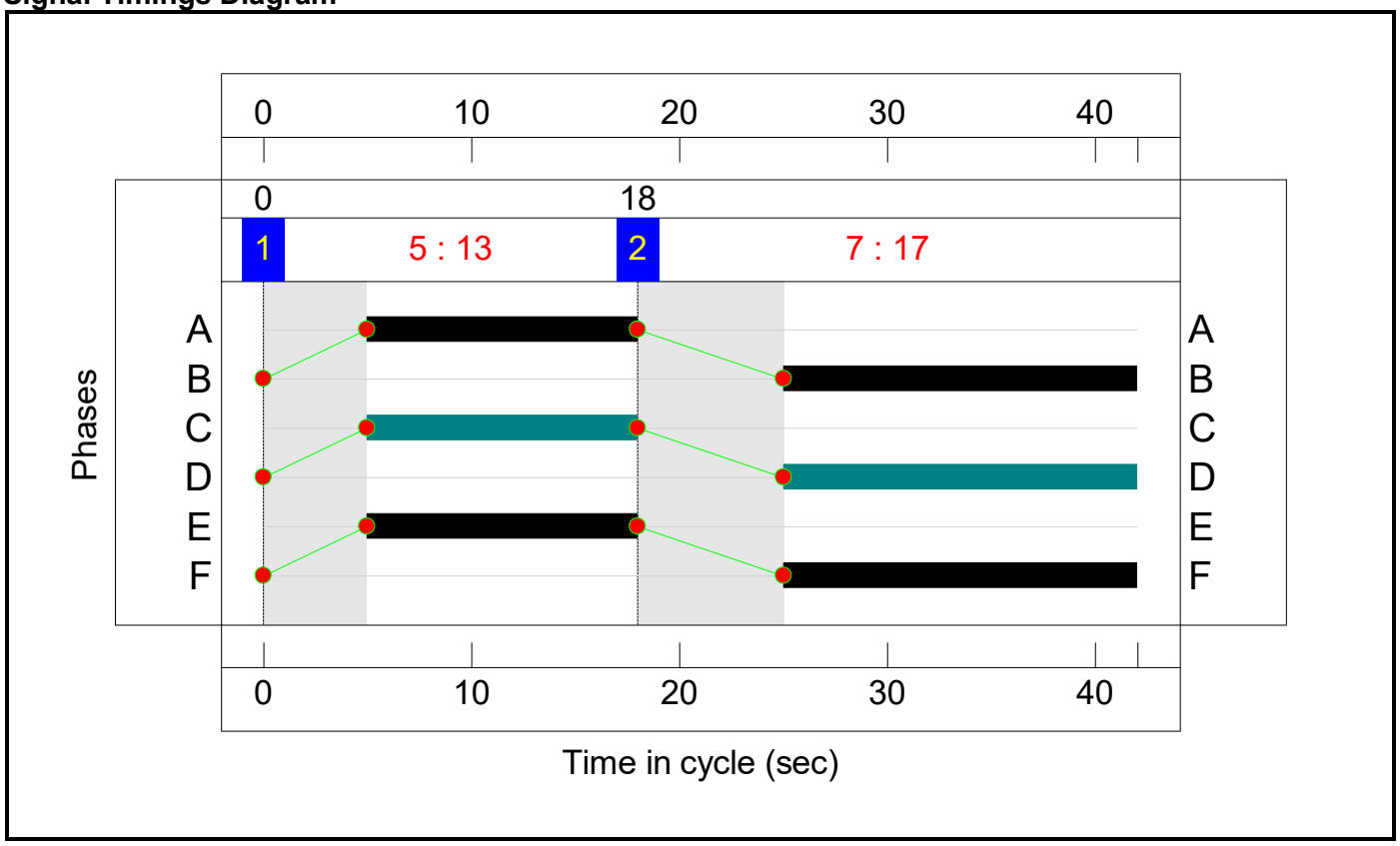
Stage Sequence Diagram



Stage Timings

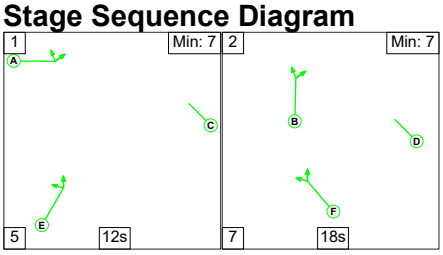
Stage	1	2
Duration	13	17
Change Point	0	18

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

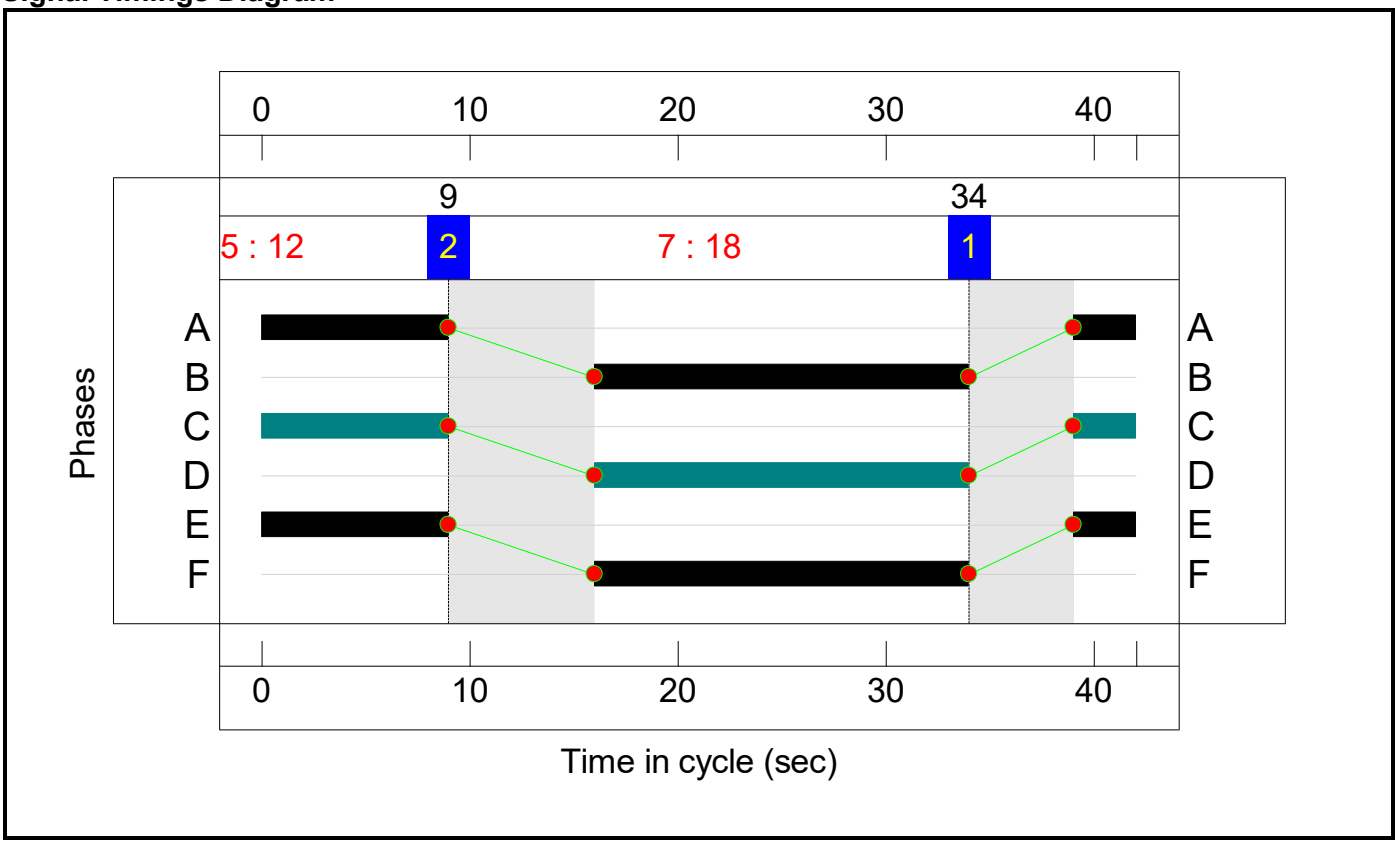


Full Input Data And Results

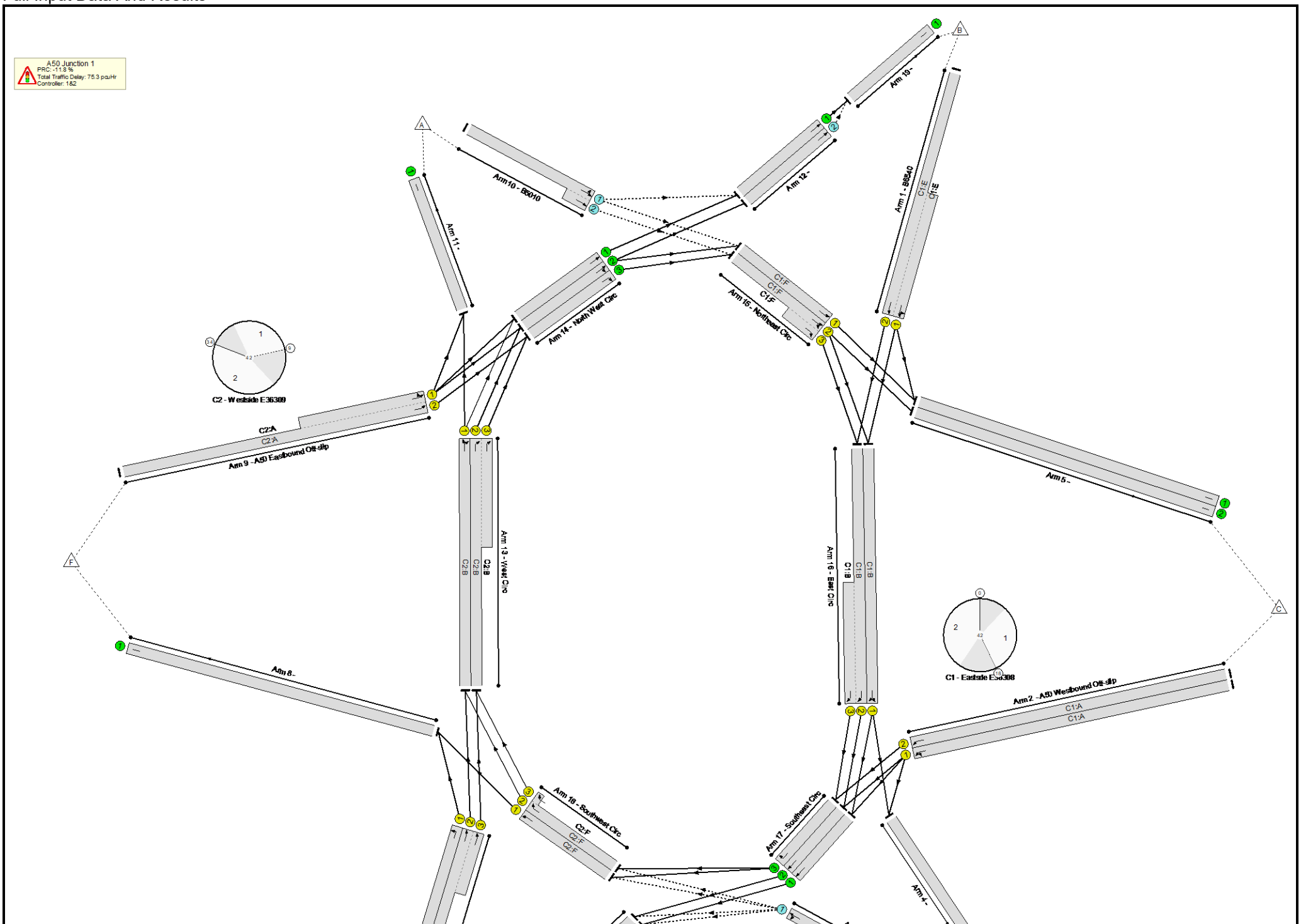
Stage Timings

Stage	1	2
Duration	12	18
Change Point	34	9

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.6%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**100.6%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	13	-	1061	2088:1950	696+650	78.9 : 78.8%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	13	-	362	1907	636	56.9%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	13	-	539	2049	683	78.9%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	62	1886	407	15.2%
4/1		U	N/A	N/A	-		-	-	-	121	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	968	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	135	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	796	1980	1980	40.2%
6/2	Ahead	O	N/A	N/A	-		-	-	-	270	1980	540	50.0%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	12	-	573	1923	595	96.3%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	12	-	943	2063:2101	429+650	87.3 : 87.3%
8/1		U	N/A	N/A	-		-	-	-	964	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	12	-	918	1995:1853	618+574	82.4 : 71.3%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	298	1894:2034	214+346	53.2 : 53.2%
11/1		U	N/A	N/A	-		-	-	-	325	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	1034	1965	1965	52.4%
12/2	Ahead	O	N/A	N/A	-		-	-	-	143	1965	488	29.3%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	18	-	885	1944	879	100.6%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	18	-	718	1942:1940	879+200	66.6 : 66.6%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	969	1930	1930	50.0%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	585	1926	1926	30.4%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	642	1923	1923	33.4%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	17	-	491	1932	828	59.3%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	17	-	826	1929:1926	764+210	84.8 : 84.8%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	17	-	548	1933	828	66.1%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	17	-	727	1930:1927	574+826	46.7 : 55.6%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	787	1912	1912	41.2%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	270	1907	1907	14.2%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	998	1899	1899	52.6%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	18	-	391	1937	876	44.6%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	18	-	660	1935:1930	691+203	73.9 : 73.9%
19/1		U	N/A	N/A	-		-	-	-	1177	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1066	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1071**	**0**	**0**	**30.2**	**45.2**	**0.0**	**75.3**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1071**	**0**	**0**	**30.2**	**45.2**	**0.0**	**75.3**	**-**	**-**	**-**	**-**
1/2+1/1	1061	1061	-	-	-	3.7	1.8	-	5.6	18.9	5.6	1.8	7.5
2/1	362	362	-	-	-	1.2	0.7	-	1.8	18.1	3.4	0.7	4.1
2/2	539	539	-	-	-	1.9	1.8	-	3.7	24.9	5.5	1.8	7.4
3/1	62	62	62	0	0	0.0	0.1	-	0.1	6.9	0.2	0.1	0.3
4/1	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	968	968	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	135	135	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	796	796	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	270	270	270	0	0	0.1	0.5	-	0.6	8.5	2.5	0.5	3.0
7/1	573	573	-	-	-	2.3	7.6	-	9.9	62.3	6.5	7.6	14.2
7/2+7/3	943	943	-	-	-	3.4	3.3	-	6.7	25.7	6.2	3.3	9.4
8/1	964	964	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	918	918	-	-	-	3.4	1.7	-	5.0	19.7	5.4	1.7	7.0
10/1+10/2	298	298	596	0	0	0.3	0.6	-	0.9	10.5	1.0	0.6	1.5
11/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1031	1031	-	-	-	0.0	0.6	-	0.6	1.9	0.0	0.6	0.6
12/2	143	143	143	0	0	0.0	0.2	-	0.2	5.3	0.7	0.2	0.9
13/1	885	879	-	-	-	3.3	16.3	-	19.6	79.7	10.4	16.3	26.7
13/2+13/3	718	718	-	-	-	1.3	1.0	-	2.3	11.4	15.1	1.0	16.1
14/1	966	966	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
14/2	585	585	-	-	-	0.0	0.2	-	0.2	1.3	2.2	0.2	2.4
14/3	642	642	-	-	-	0.0	0.3	-	0.3	1.4	3.3	0.3	3.5
15/1	491	491	-	-	-	0.3	0.7	-	1.0	7.2	0.7	0.7	1.4

Full Input Data And Results

15/2+15/3	826	826	-	-	-	3.3	2.7	-	6.0	26.1	8.2	2.7	10.9
16/1	548	548	-	-	-	2.4	1.0	-	3.4	22.3	4.9	1.0	5.9
16/2+16/3	727	727	-	-	-	0.9	0.5	-	1.4	7.1	16.8	0.5	17.4
17/1	787	787	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
17/2	270	270	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	998	998	-	-	-	0.0	0.6	-	0.6	2.0	3.7	0.6	4.3
18/1	391	391	-	-	-	1.9	0.4	-	2.3	21.3	4.5	0.4	4.9
18/2+18/3	660	660	-	-	-	0.5	1.4	-	1.9	10.4	2.2	1.4	3.6
19/1	1174	1174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1066	1066	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

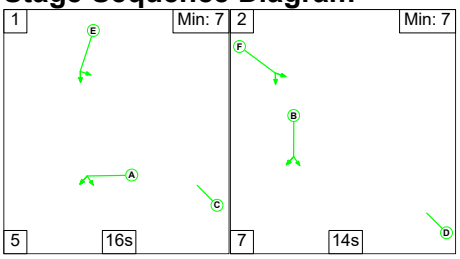
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	6.1	Total Delay for Signalled Lanes (pcuHr):	22.90	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-11.8	Total Delay for Signalled Lanes (pcuHr):	47.74	Cycle Time (s):	42
	PRC Over All Lanes (%):	-11.8	Total Delay Over All Lanes(pcuHr):	75.33		

Full Input Data And Results

Scenario 13: '2b 2038 WD AM' (FG13: '2b 2038 WD Flows AM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

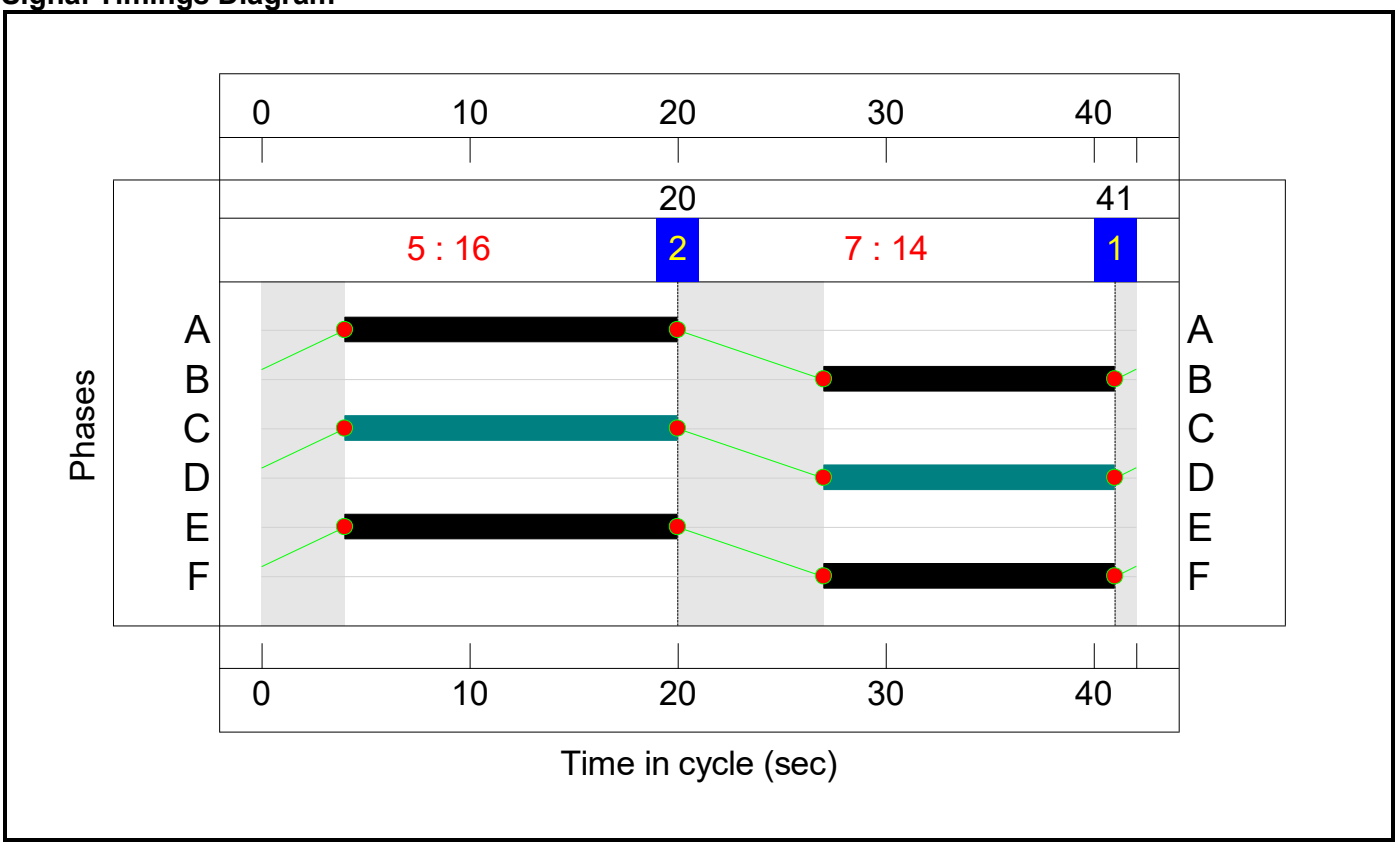
Stage Sequence Diagram



Stage Timings

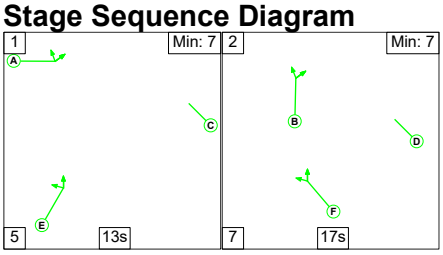
Stage	1	2
Duration	16	14
Change Point	41	20

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

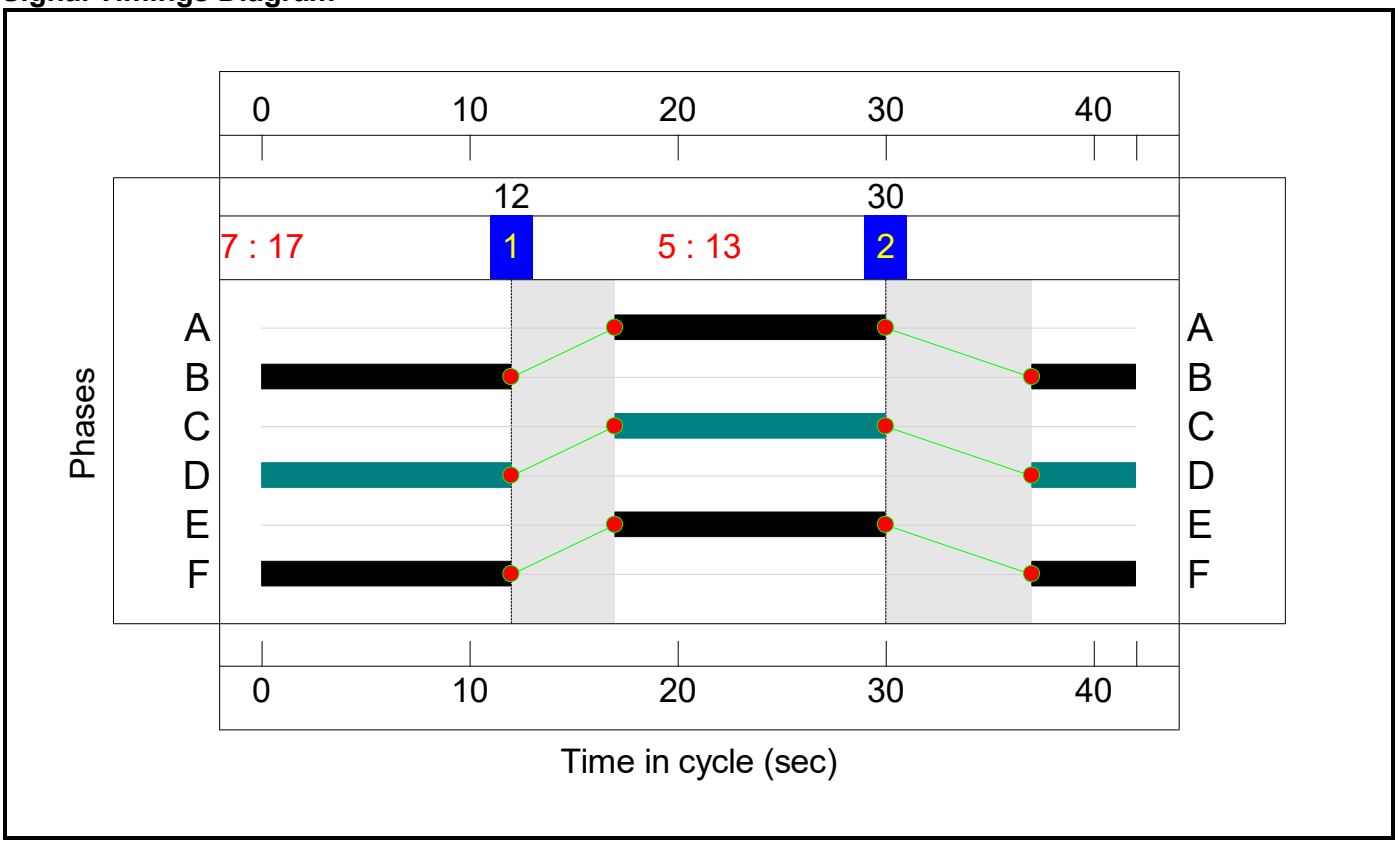


Full Input Data And Results

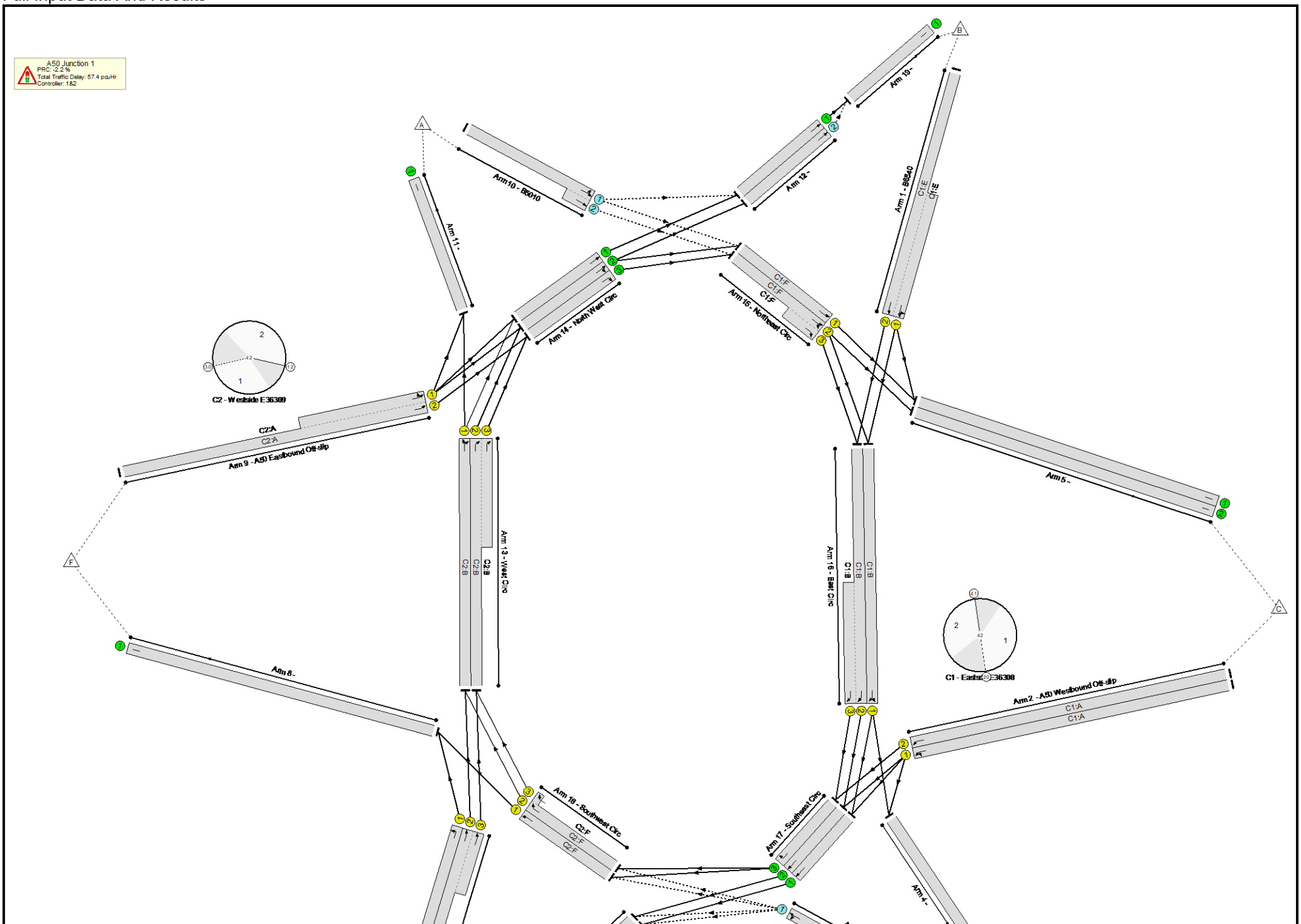
Stage Timings

Stage	1	2
Duration	13	17
Change Point	12	30

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.0%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.0%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	16	-	1165	2088:1950	696+789	67.6 : 88.1%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	16	-	518	1907	772	67.1%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	16	-	528	2049	829	63.7%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	49	1886	376	13.0%
4/1		U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	940	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	936	1980	1980	47.3%
6/2	Ahead	O	N/A	N/A	-		-	-	-	363	1980	509	71.3%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	447	1923	641	69.7%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	663	2063:2101	181+700	75.2 : 75.2%
8/1		U	N/A	N/A	-		-	-	-	871	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	975	1995:1853	665+618	82.9 : 68.6%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	394	1894:2034	380+380	50.3 : 53.4%
11/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	960	1965	1965	48.9%
12/2	Ahead	O	N/A	N/A	-		-	-	-	197	1965	504	39.1%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	626	1944	833	75.1%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	637	1942:1940	832+157	64.4 : 64.4%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	870	1930	1930	45.1%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	536	1926	1926	27.8%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	652	1923	1923	33.9%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	14	-	440	1932	690	63.8%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	14	-	855	1929:1926	606+416	83.7 : 83.7%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	14	-	635	1933	690	92.0%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	14	-	818	1930:1927	689+688	52.7 : 66.1%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	928	1912	1912	48.5%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	363	1907	1907	19.0%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	983	1899	1899	51.8%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	424	1937	830	51.1%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	600	1935:1930	687+154	71.3 : 71.3%
19/1		U	N/A	N/A	-		-	-	-	1157	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1299	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1397**	**0**	**0**	**31.4**	**26.1**	**0.0**	**57.4**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1397**	**0**	**0**	**31.4**	**26.1**	**0.0**	**57.4**	**-**	**-**	**-**	**-**
1/2+1/1	1165	1165	-	-	-	3.5	1.8	-	5.3	16.3	7.3	1.8	9.1
2/1	518	518	-	-	-	1.5	1.0	-	2.5	17.3	4.9	1.0	5.9
2/2	528	528	-	-	-	1.5	0.9	-	2.3	16.0	4.8	0.9	5.7
3/1	49	49	49	0	0	0.0	0.1	-	0.1	7.6	0.1	0.1	0.2
4/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	940	940	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	936	936	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
6/2	363	363	363	0	0	0.7	1.2	-	1.9	19.2	4.0	1.2	5.3
7/1	447	447	-	-	-	1.5	1.1	-	2.6	21.3	4.5	1.1	5.6
7/2+7/3	663	663	-	-	-	2.2	1.5	-	3.7	20.1	5.4	1.5	6.9
8/1	871	871	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	975	975	-	-	-	3.4	1.6	-	5.0	18.3	5.8	1.6	7.4
10/1+10/2	394	394	788	0	0	0.4	0.5	-	0.9	8.3	0.8	0.5	1.4
11/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	960	960	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	197	197	197	0	0	0.0	0.3	-	0.3	6.2	1.4	0.3	1.7
13/1	626	626	-	-	-	2.4	1.5	-	3.9	22.5	5.4	1.5	6.9
13/2+13/3	637	637	-	-	-	1.2	0.9	-	2.1	11.9	15.0	0.9	15.9
14/1	870	870	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	536	536	-	-	-	0.0	0.2	-	0.2	1.3	1.6	0.2	1.8
14/3	652	652	-	-	-	0.0	0.3	-	0.3	1.4	3.8	0.3	4.0
15/1	440	440	-	-	-	2.1	0.9	-	3.0	24.4	5.0	0.9	5.9

Full Input Data And Results

15/2+15/3	855	855	-	-	-	1.5	2.5	-	4.0	16.9	3.8	2.5	6.3
16/1	635	635	-	-	-	3.2	4.9	-	8.1	46.0	7.1	4.9	12.0
16/2+16/3	818	818	-	-	-	3.3	0.7	-	4.0	17.8	16.7	0.7	17.4
17/1	928	928	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
17/2	363	363	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
17/3	983	983	-	-	-	0.0	0.5	-	0.5	2.0	2.7	0.5	3.2
18/1	424	424	-	-	-	0.1	0.5	-	0.6	5.1	0.2	0.5	0.7
18/2+18/3	600	600	-	-	-	2.8	1.2	-	4.0	24.1	6.5	1.2	7.8
19/1	1157	1157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1299	1299	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

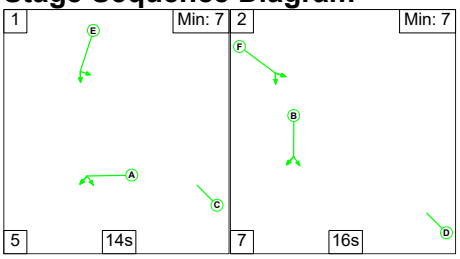
C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-2.2	Total Delay for Signalled Lanes (pcuHr):	29.27	Cycle Time (s):	42
C2 - Westside E36309	PRC for Signalled Lanes (%):	8.6	Total Delay for Signalled Lanes (pcuHr):	21.96	Cycle Time (s):	42
	PRC Over All Lanes (%):	-2.2	Total Delay Over All Lanes(pcuHr):	57.44		

Full Input Data And Results

Scenario 14: '2b 2038 WD PM' (FG14: '2b 2038 WD Flows PM', Plan 1: 'Network Control Plan 1')

Controller :C1 - Eastsde E36308

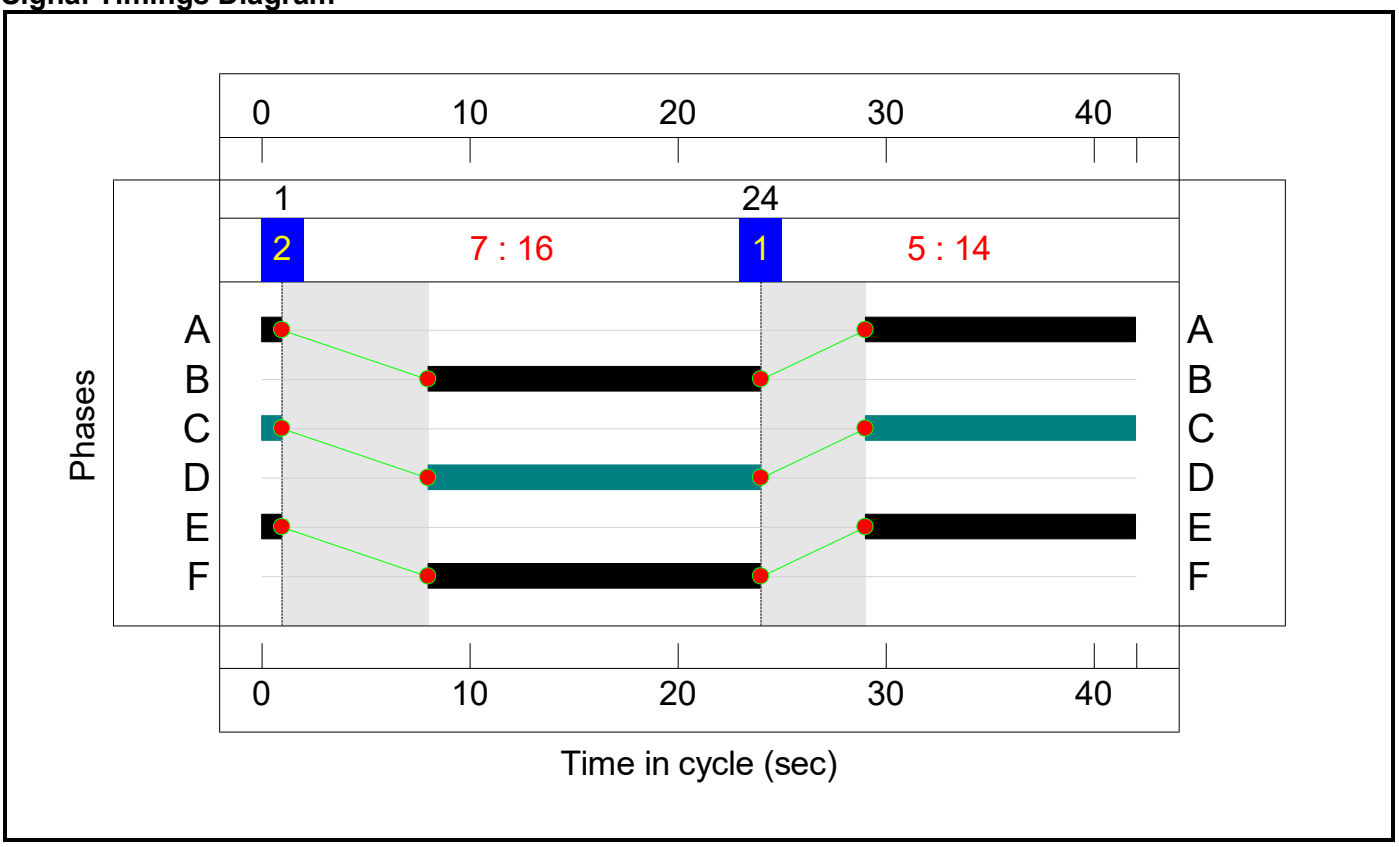
Stage Sequence Diagram



Stage Timings

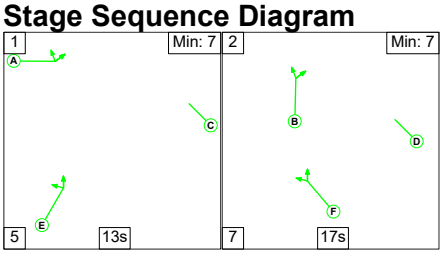
Stage	1	2
Duration	14	16
Change Point	24	1

Signal Timings Diagram



Controller :C2 - Westside E36309

Stage Sequence Diagram

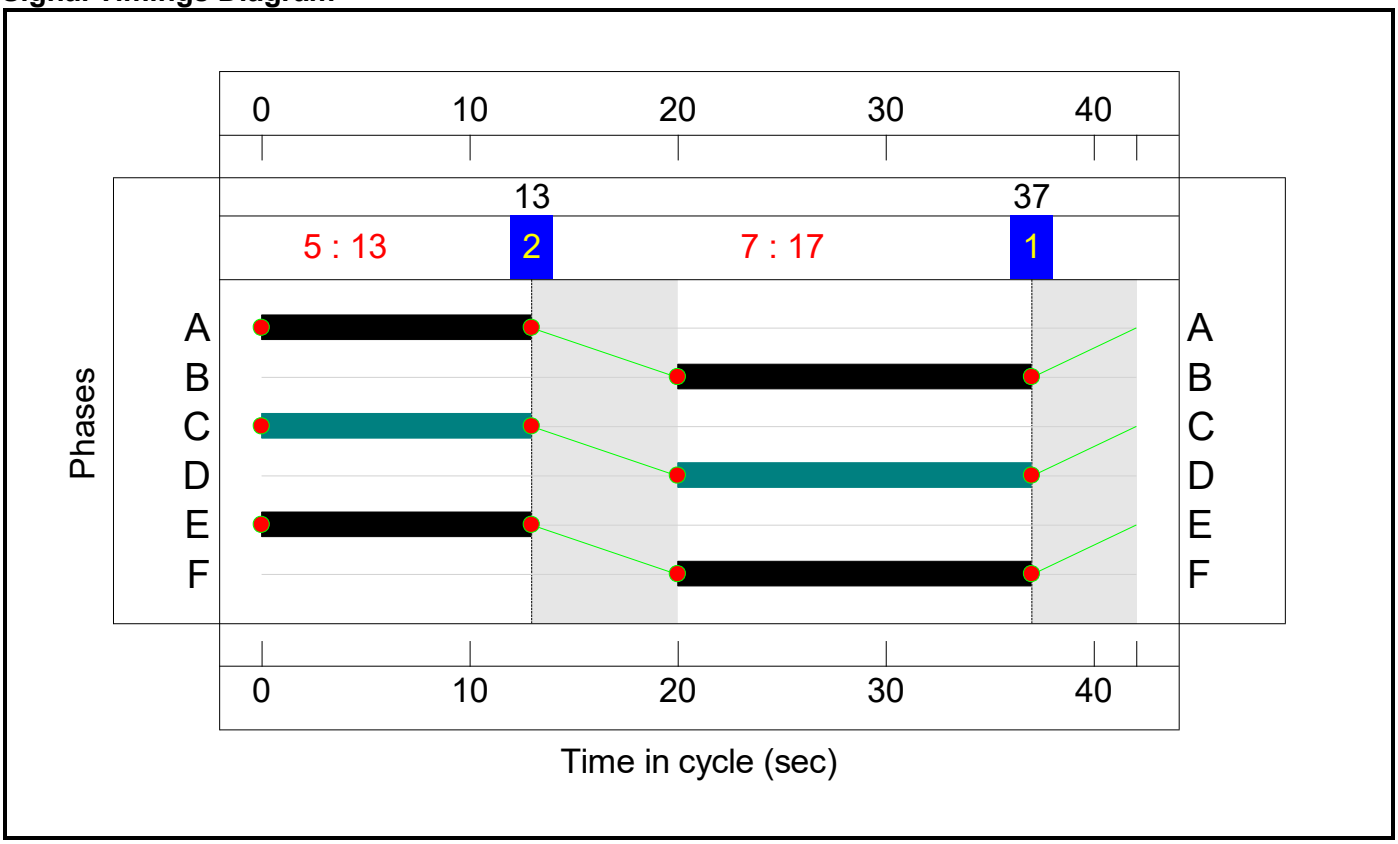


Full Input Data And Results

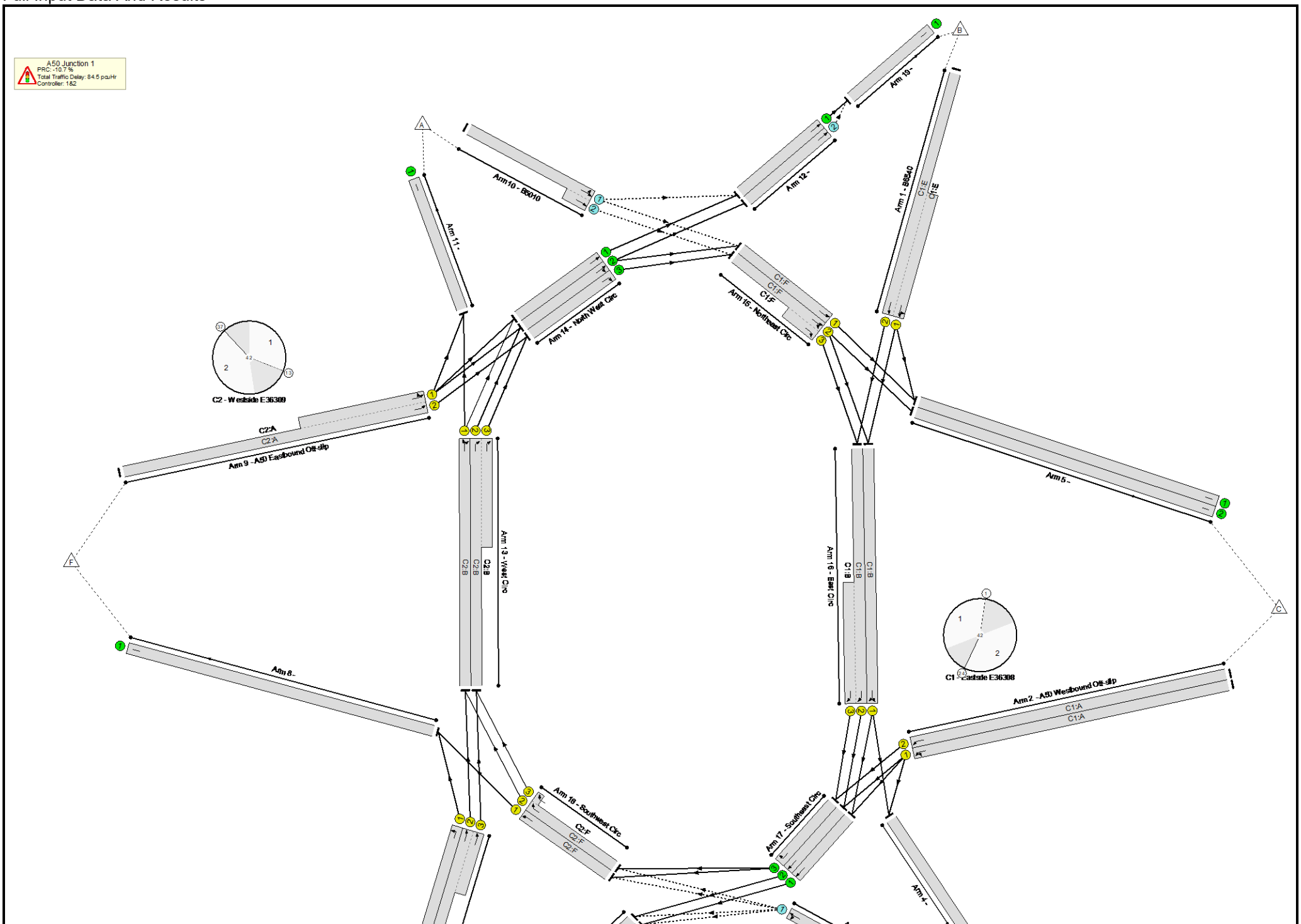
Stage Timings

Stage	1	2
Duration	13	17
Change Point	37	13

Signal Timings Diagram



Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.7%**
A50 Junction 1	-	-	**N/A**	-	-		-	-	-	-	-	-	**99.7%**
1/2+1/1	B6540 Left Ahead	U	N/A	N/A	C1:E		1	14	-	1279	2088:1950	746+696	79.1 : 98.9%
2/1	A50 Westbound Off-slip Left Ahead	U	N/A	N/A	C1:A		1	14	-	326	1907	681	47.9%
2/2	A50 Westbound Off-slip Ahead	U	N/A	N/A	C1:A		1	14	-	545	2049	732	74.5%
3/1	Ryecroft Road Left Ahead	O	N/A	N/A	-		-	-	-	171	1886	408	41.9%
4/1		U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1094	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	153	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	748	1980	1980	37.8%
6/2	Ahead	O	N/A	N/A	-		-	-	-	271	1980	550	49.2%
7/1	Trent Lane Left	U	N/A	N/A	C2:E		1	13	-	545	1923	641	85.0%
7/2+7/3	Trent Lane Ahead	U	N/A	N/A	C2:E		1	13	-	967	2063:2101	270+700	99.7 : 99.7%
8/1		U	N/A	N/A	-		-	-	-	1028	Inf	Inf	0.0%
9/2+9/1	A50 Eastbound Off-slip Left Ahead	U	N/A	N/A	C2:A		1	13	-	910	1995:1853	665+618	71.0 : 70.9%
10/1+10/2	B5010 Left Ahead	O	N/A	N/A	-		-	-	-	317	1894:2034	310+310	51.3 : 51.0%
11/1		U	N/A	N/A	-		-	-	-	358	Inf	Inf	0.0%
12/1	Ahead	U	N/A	N/A	-		-	-	-	948	1965	1965	48.2%
12/2	Ahead	O	N/A	N/A	-		-	-	-	336	1965	506	66.4%
13/1	West Circ Ahead Right	U	N/A	N/A	C2:B		1	17	-	789	1944	833	94.7%

Full Input Data And Results

13/2+13/3	West Circ Right	U	N/A	N/A	C2:B		1	17	-	943	1942:1940	832+188	92.4 : 92.4%
14/1	North West Circ Ahead	U	N/A	N/A	-		-	-	-	869	1930	1930	45.0%
14/2	North West Circ Ahead Right	U	N/A	N/A	-		-	-	-	769	1926	1926	39.9%
14/3	North West Circ Right	U	N/A	N/A	-		-	-	-	646	1923	1923	33.6%
15/1	Northeast Circ Ahead	U	N/A	N/A	C1:F		1	16	-	513	1932	782	65.6%
15/2+15/3	Northeast Circ Ahead Right	U	N/A	N/A	C1:F		1	16	-	804	1929:1926	702+285	81.5 : 81.5%
16/1	East Circ Ahead Ahead2	U	N/A	N/A	C1:B		1	16	-	527	1933	782	67.4%
16/2+16/3	East Circ Ahead	U	N/A	N/A	C1:B		1	16	-	822	1930:1927	444+780	61.1 : 70.6%
17/1	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	729	1912	1912	38.1%
17/2	Southeast Circ Ahead	U	N/A	N/A	-		-	-	-	271	1907	1907	14.2%
17/3	Southeast Circ Right	U	N/A	N/A	-		-	-	-	1096	1899	1899	57.7%
18/1	Southwest Circ Ahead	U	N/A	N/A	C2:F		1	17	-	483	1937	830	58.2%
18/2+18/3	Southwest Circ Right	U	N/A	N/A	C2:F		1	17	-	765	1935:1930	586+276	88.7 : 88.7%
19/1		U	N/A	N/A	-		-	-	-	1284	Inf	Inf	0.0%
20/1		U	N/A	N/A	-		-	-	-	1019	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A50 Junction 1	**-**	**-**	**1412**	**0**	**0**	**33.4**	**51.1**	**0.0**	**84.5**	**-**	**-**	**-**	**-**
A50 Junction 1	**-**	**-**	**1412**	**0**	**0**	**33.4**	**51.1**	**0.0**	**84.5**	**-**	**-**	**-**	**-**
1/2+1/1	1279	1279	-	-	-	4.6	3.7	-	8.3	23.4	7.8	3.7	11.6
2/1	326	326	-	-	-	0.9	0.5	-	1.4	15.5	2.9	0.5	3.4
2/2	545	545	-	-	-	1.8	1.4	-	3.2	21.3	5.5	1.4	6.9
3/1	171	171	171	0	0	0.1	0.4	-	0.5	10.3	0.7	0.4	1.0
4/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1094	1094	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	153	153	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	748	748	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	271	271	271	0	0	0.3	0.5	-	0.8	10.0	2.9	0.5	3.4
7/1	545	545	-	-	-	2.0	2.7	-	4.7	30.8	5.9	2.7	8.6
7/2+7/3	967	967	-	-	-	3.5	14.8	-	18.3	68.0	7.9	14.8	22.7
8/1	1028	1028	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2+9/1	910	910	-	-	-	3.1	1.2	-	4.3	17.0	4.7	1.2	5.9
10/1+10/2	317	317	634	0	0	0.4	0.5	-	1.0	10.9	0.9	0.5	1.4
11/1	358	358	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	948	948	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
12/2	336	336	336	0	0	0.3	1.0	-	1.3	13.6	3.6	1.0	4.6
13/1	789	789	-	-	-	3.2	6.8	-	10.0	45.6	8.3	6.8	15.1
13/2+13/3	943	943	-	-	-	2.2	5.3	-	7.5	28.7	15.2	5.3	20.6
14/1	869	869	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
14/2	769	769	-	-	-	0.0	0.3	-	0.3	1.6	4.8	0.3	5.2
14/3	646	646	-	-	-	0.0	0.3	-	0.3	1.4	2.2	0.3	2.4
15/1	513	513	-	-	-	1.9	0.9	-	2.8	19.9	5.8	0.9	6.7

Full Input Data And Results

15/2+15/3	804	804	-	-	-	1.2	2.1	-	3.3	15.0	3.4	2.1	5.5
16/1	527	527	-	-	-	2.5	1.0	-	3.5	24.1	5.7	1.0	6.7
16/2+16/3	822	822	-	-	-	1.8	1.0	-	2.8	12.3	16.8	1.0	17.9
17/1	729	729	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
17/2	271	271	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
17/3	1096	1096	-	-	-	0.0	0.7	-	0.7	2.3	3.3	0.7	4.0
18/1	483	483	-	-	-	0.2	0.7	-	0.9	6.8	1.2	0.7	1.9
18/2+18/3	765	765	-	-	-	3.4	3.6	-	7.0	33.1	8.0	3.6	11.6
19/1	1284	1284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/1	1019	1019	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 - Eastsde E36308	PRC for Signalled Lanes (%):	-9.9	Total Delay for Signalled Lanes (pcuHr):	25.46	Cycle Time (s): 42
C2 - Westside E36309	PRC for Signalled Lanes (%):	-10.7	Total Delay for Signalled Lanes (pcuHr):	52.70	Cycle Time (s): 42
	PRC Over All Lanes (%):	-10.7	Total Delay Over All Lanes(pcuHr):	84.49	

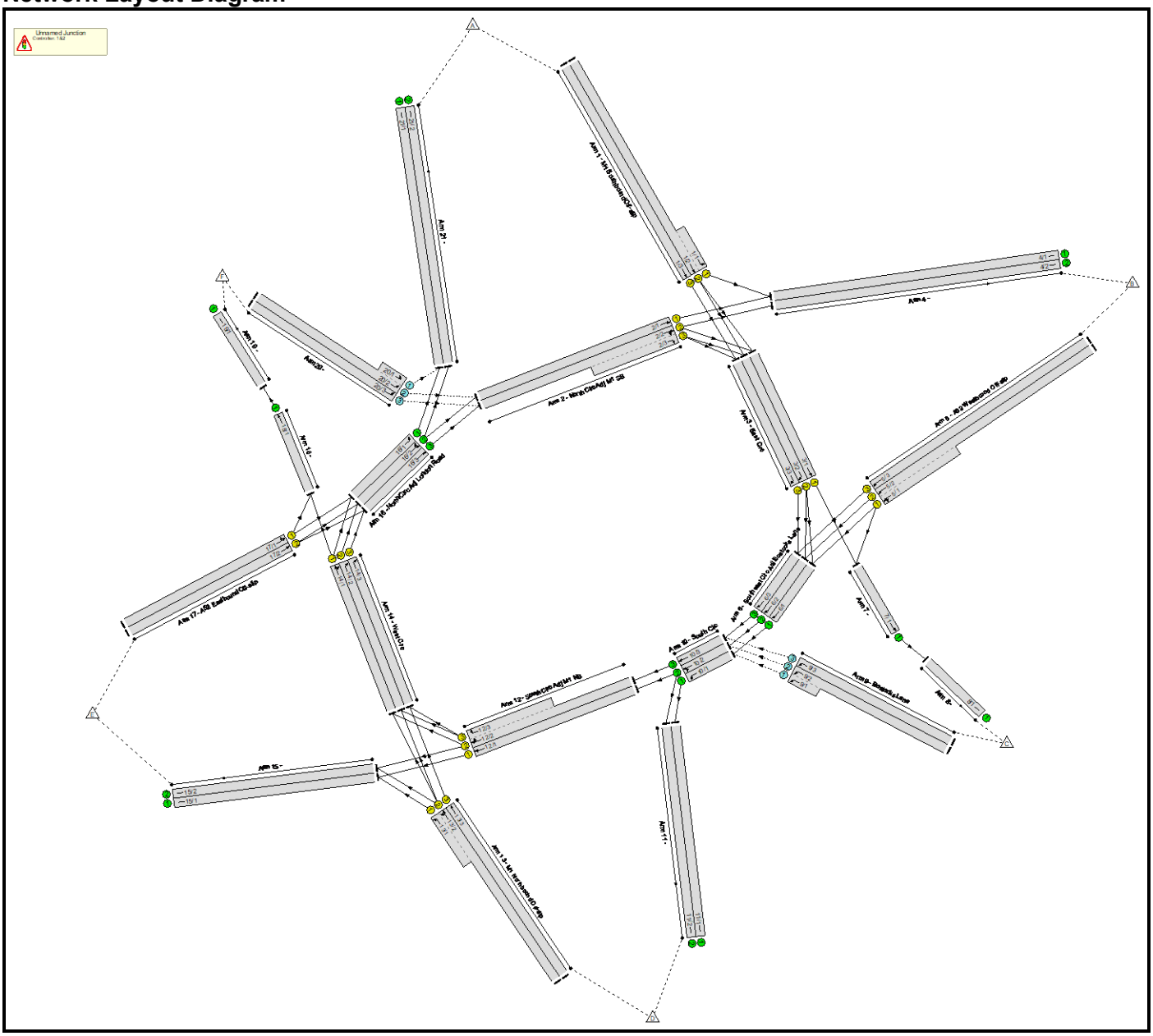
APPENDIX 68: Junction 14: M1 Junction 25 Stage 1B/2B Modelling Results

Detailed Input Data And Results

User and Project Details

Project:	**M1 Junction 25**
Title:	**EMG2**
Location:	
Client:	SERGO
Date Completed:	27/03/24
Checked By:	Vibeeshan Devaharan
Additional detail:	
File name:	250625 M1 Junction 25 Stage 1b+2b.lsg3x
Author:	Charlie Cresswell
Company:	BWB
Address:	
Linsig Version:	3, 3, 0, 6

Network Layout Diagram



Scenarios

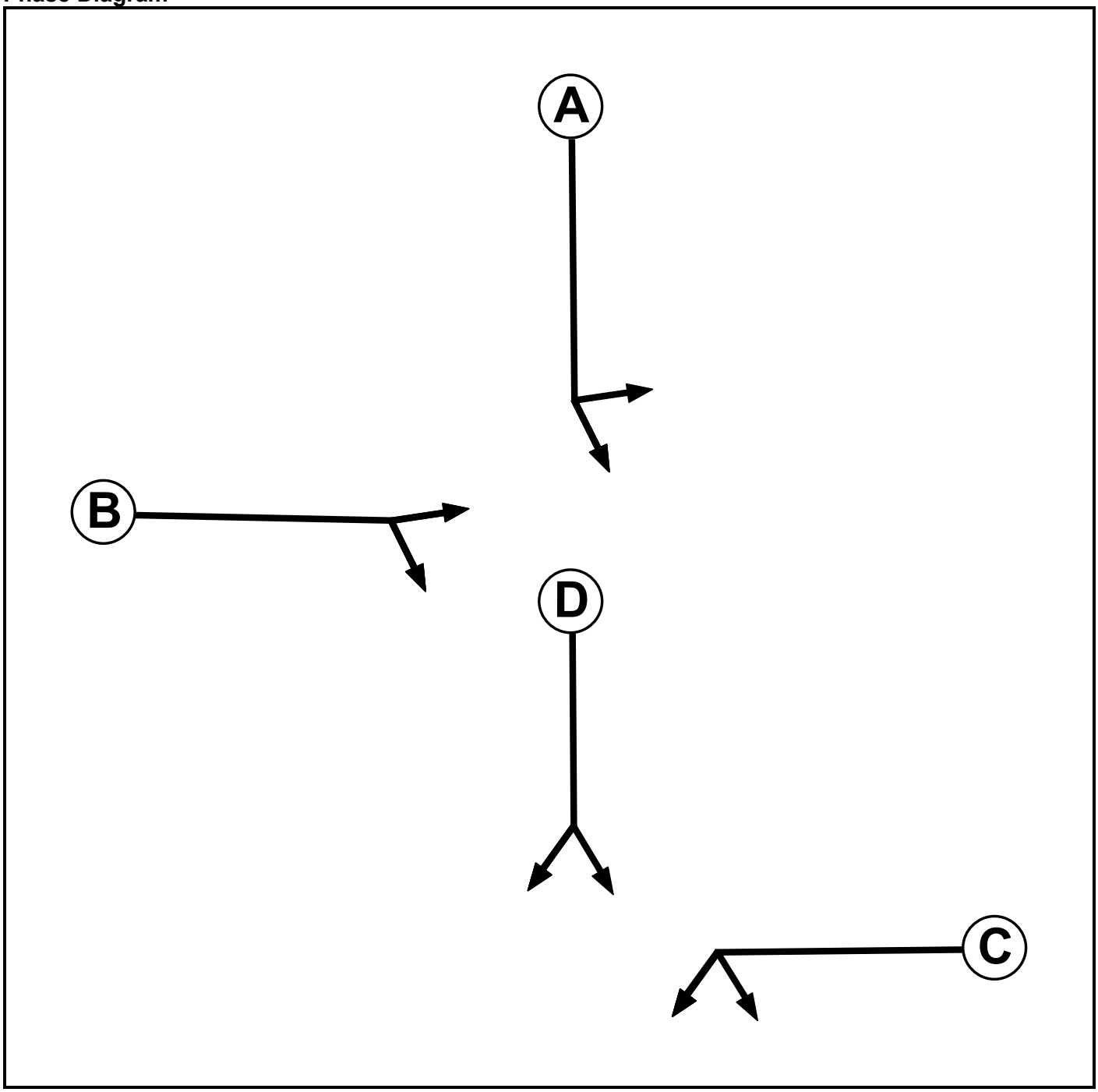
Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2022 AM	2022 AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-44.3	432.10
2	2022 PM	2022 PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-10.4	90.78
3	2028 WoD AM	2028 WoD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-71.5	718.14
4	2028 WoD PM	2028 WoD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-30.5	273.89
5	2028 WD AM	2028 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-54.0	639.45
6	2028 WD PM	2028 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-30.5	284.11
7	2038 WoD AM	2038 WoD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-70.3	936.81
8	2038 WoD PM	2038 WoD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-75.6	1257.51
9	2038 WD AM	2038 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-52.2	643.48
10	2038 WD PM	2038 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-82.9	875.61
11	2b 2028 WD AM	2b 2028 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-86.3	494.82
12	2b 2028 WD PM	2b 2028 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-29.1	269.58
13	2b 2038 WD AM	2b 2038 WD AM Base	Network Control Plan 1 AM	07:45 - 08:45	60/75	-84.0	743.68
14	2b 2038 WD PM	2b 2038 WD PM Base	Network Control Plan 2 PM	17:00 - 18:00	60/75	-40.9	463.99

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1 - East Side T7772E06	Gen		Stage Stream 1	4	4	Unnamed Junction	
C2 - West Side T7771W07	Gen		Stage Stream 1	4	4	Unnamed Junction	

Controller :C1 - East Side T7772E06

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

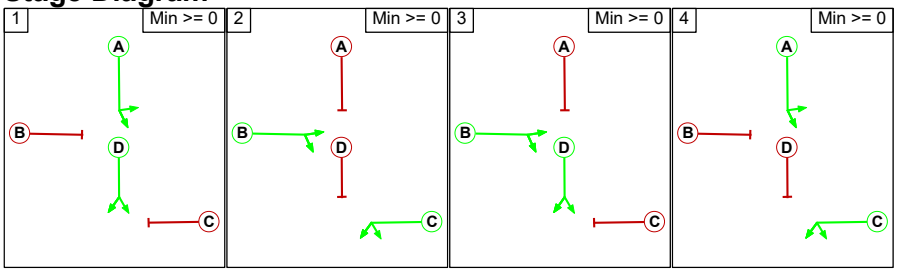
Phase Intergreens Matrix

Terminating Phase	Starting Phase			
	A	B	C	D
A		6	-	-
B	6		-	-
C	-	-		6
D	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A D
2	B C
3	B D
4	A C

Stage Diagram



Phase Delays

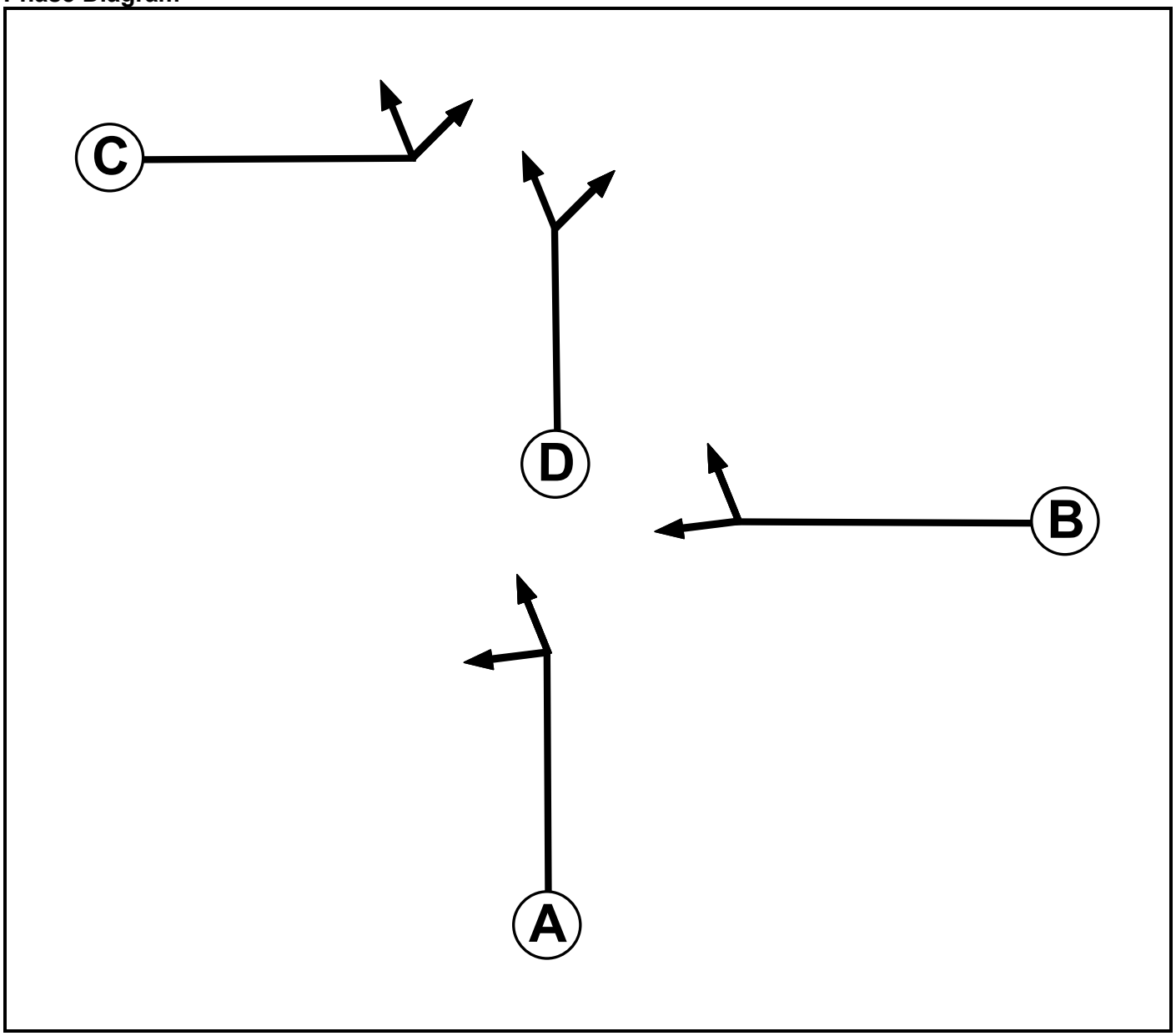
Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	D	Losing	11	11
3	4	D	Losing	11	11

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		16	6	5
	2	6		6	6
	3	6	5		16
	4	6	6	6	

Controller :C2 - West Side T7771W07

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

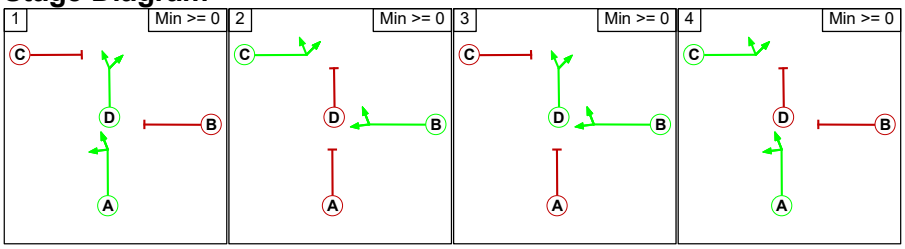
Phase Intergreens Matrix

Terminating Phase	Starting Phase A	B	C	D
A		6	-	-
B	6		-	-
C	-	-		6
D	-	-	5	

Phases in Stage

Stage No.	Phases in Stage
1	A D
2	B C
3	B D
4	A C

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	D	Losing	11	11
3	4	D	Losing	11	11

Prohibited Stage Change

From Stage	To Stage 1	2	3	4
1		16	6	5
2	6		6	6
3	6	5		16
4	6	6	6	

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (M1 Southbound Off-slip)	U	A	2	3	7.5	Geom	-	3.65	0.00	Y	Arm 4 Left	44.00
1/2 (M1 Southbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 3 Ahead	48.00
1/3 (M1 Southbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 3 Ahead	51.00
2/1 (North Circ Adj M1 SB)	U	B	2	3	23.5	Geom	-	3.30	0.00	Y	Arm 4 Ahead	77.00
2/2 (North Circ Adj M1 SB)	U	B	2	3	23.5	Geom	-	3.30	0.00	Y	Arm 3 Right	74.00
											Arm 4 Ahead	74.00
2/3 (North Circ Adj M1 SB)	U	B	2	3	14.8	Geom	-	3.30	0.00	Y	Arm 3 Right	70.00
3/1 (East Circ)	U	D	2	3	17.4	Geom	-	3.65	0.00	Y	Arm 7 Ahead	86.00
3/2 (East Circ)	U	D	2	3	17.4	Geom	-	3.65	0.00	Y	Arm 6 Right	83.00
3/3 (East Circ)	U	D	2	3	17.4	Geom	-	3.65	0.00	Y	Arm 6 Right	79.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A52 Westbound Off-slip)	U	C	2	3	14.8	Geom	-	3.50	0.00	Y	Arm 6 Ahead	68.00
											Arm 7 Left	68.00
5/2 (A52 Westbound Off-slip)	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 6 Ahead	71.00
5/3 (A52 Westbound Off-slip)	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 6 Ahead	75.00
6/1 (Southeast Circ Adj Bostocks Lane)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 10 Ahead	107.00

6/2 (Southeast Circ Adj Bostocks Lane)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 10 Ahead	104.00
6/3 (Southeast Circ Adj Bostocks Lane)	U		2	3	8.7	Geom	-	3.65	0.00	Y	Arm 10 Ahead	100.00
7/1	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 8 Ahead	Inf
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Bostocks Lane)	O		2	3	5.2	Geom	-	3.65	0.00	Y	Arm 10 Left	47.00
9/2 (Bostocks Lane)	O		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 10 Left	51.00
9/3 (Bostocks Lane)	O		2	3	29.6	Geom	-	3.65	0.00	Y	Arm 10 Left	54.00
10/1 (South Circ)	U		2	3	4.3	Geom	-	3.65	0.00	Y	Arm 11 Left	Inf
10/2 (South Circ)	U		2	3	4.3	Geom	-	3.65	0.00	Y	Arm 11 Left	Inf
											Arm 12 Ahead	Inf
10/3 (South Circ)	U		2	3	4.3	Geom	-	3.65	0.00	Y	Arm 12 Ahead	Inf
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/2	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1 (South Circ Adj M1 NB)	U	B	2	3	20.9	Geom	-	3.65	0.00	Y	Arm 15 Ahead	66.00
12/2 (South Circ Adj M1 NB)	U	B	2	3	20.9	Geom	-	3.65	0.00	Y	Arm 14 Right	58.00
											Arm 15 Ahead	62.00
12/3 (South Circ Adj M1 NB)	U	B	2	3	14.8	Geom	-	3.65	0.00	Y	Arm 14 Right	59.00
13/1 (M1 Northbound Off-slip)	U	A	2	3	9.6	Geom	-	3.65	0.00	Y	Arm 15 Left	42.00
13/2 (M1 Northbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 14 Ahead	46.00
											Arm 15 Left	46.00
13/3 (M1 Northbound Off-slip)	U	A	2	3	60.0	Geom	-	3.65	0.00	N	Arm 14 Ahead	49.00

14/1 (West Circ)	U	D	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 16 Right	68.00
											Arm 18 Ahead	68.00
14/2 (West Circ)	U	D	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 16 Right	65.00
14/3 (West Circ)	U	D	2	3	13.0	Geom	-	3.65	0.00	Y	Arm 16 Right	61.00
15/1	U		2	3	60.0	Inf	-	-	-	-	-	-
15/2	U		2	3	60.0	Inf	-	-	-	-	-	-
16/1 (North Circ Adj London Road)	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 21 Left	103.00
16/2 (North Circ Adj London Road)	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 2 Ahead	99.00
											Arm 21 Left	99.00
16/3 (North Circ Adj London Road)	U		2	3	7.8	Geom	-	3.65	0.00	Y	Arm 2 Ahead	96.00
17/1 (A52 Eastbound Off-slip)	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	56.00
											Arm 18 Left	56.00
17/2 (A52 Eastbound Off-slip)	U	C	2	3	60.0	Geom	-	3.65	0.00	N	Arm 16 Ahead	59.00
18/1	U		2	3	9.6	Geom	-	3.65	0.00	Y	Arm 19 Ahead	Inf
19/1	U		2	3	60.0	Inf	-	-	-	-	-	-
20/1	O		2	3	4.7	Geom	-	3.65	0.00	Y	Arm 21 Left	49.00
20/2	O		2	3	60.0	Geom	-	3.65	0.00	N	Arm 2 Left	52.00
20/3	O		2	3	9.6	Geom	-	3.65	0.00	Y	Arm 2 Left	56.00
21/1	U		2	3	60.0	Inf	-	-	-	-	-	-
21/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: Unnamed Junction

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
9/1 (Bostocks Lane)	10/1 (Left)	1000	0	6/1	0.33	All	-	-	-	-	-
				6/2	0.33	All					
				6/3	0.33	All					
9/2 (Bostocks Lane)	10/2 (Left)	1000	0	6/1	0.33	All	-	-	-	-	-
				6/2	0.33	All					
				6/3	0.33	All					
9/3 (Bostocks Lane)	10/3 (Left)	1000	0	6/1	0.33	All	-	-	-	-	-
				6/2	0.33	All					
				6/3	0.33	All					
20/1	21/1 (Left)	1000	0	16/1	0.33	All	-	-	-	-	-
				16/2	0.33	All					
				16/3	0.33	All					
20/2	2/1 (Left)	1000	0	16/1	0.33	All	-	-	-	-	-
				16/2	0.33	All					
				16/3	0.33	All					
20/3	2/2 (Left)	1000	0	16/1	0.33	All	-	-	-	-	-
				16/2	0.33	All					
				16/3	0.33	All					

Lane Connector Input Data

Junction: Unnamed Junction				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	4/1	Internal	5	35
1/2	3/1	Internal	10	35
1/2	3/2	Internal	10	35
1/3	3/3	Internal	10	35
2/1	4/1	Internal	5	35
2/2	3/1	Internal	10	35
2/2	4/2	Internal	5	35
2/3	3/2	Internal	10	35
2/3	3/3	Internal	10	35
3/1	7/1	Internal	5	35
3/2	6/1	Internal	5	35
3/2	6/2	Internal	5	35
3/3	6/3	Internal	5	35
5/1	6/1	Internal	5	35
5/1	7/1	Internal	5	35
5/2	6/2	Internal	5	35
5/3	6/3	Internal	5	35
6/1	10/1	Internal	3	35
6/2	10/2	Internal	3	35
6/3	10/3	Internal	3	35
7/1	8/1	Internal	5	35
9/1	10/1	Internal	3	35
9/2	10/2	Internal	3	35
9/3	10/3	Internal	3	35
10/1	11/1	Internal	5	35
10/2	11/2	Internal	5	35
10/2	12/1	Internal	12	35
10/3	12/2	Internal	12	35
12/1	15/1	Internal	5	35
12/2	14/1	Internal	8	35
12/2	15/2	Internal	5	35
12/3	14/2	Internal	8	35
12/3	14/3	Internal	8	35
13/1	15/1	Internal	5	35
13/2	14/1	Internal	8	35
13/2	14/2	Internal	8	35
13/2	15/2	Internal	5	35

13/3	14/3	Internal	8	35
14/1	16/1	Internal	5	35
14/1	18/1	Internal	6	35
14/2	16/2	Internal	5	35
14/3	16/3	Internal	5	35
16/1	21/1	Internal	5	35
16/2	2/1	Internal	14	35
16/2	21/2	Internal	5	35
16/3	2/2	Internal	14	35
17/1	16/1	Internal	5	35
17/1	18/1	Internal	6	35
17/2	16/2	Internal	5	35
17/2	16/3	Internal	5	35
18/1	19/1	Internal	5	35
20/1	21/1	Internal	5	35
20/2	2/1	Internal	14	35
20/3	2/2	Internal	14	35

Scenario 1: '2022 AM' (FG1: '2022 AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	68.9 %	1906	1906
				Arm 4 Ahead	74.00	31.1 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	40.3 %	1923	1923
				Arm 7 Left	68.00	59.7 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923
9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926

10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	39.1 %	1980	1980
				Arm 12 Ahead	Inf	60.9 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	53.7 %	1932	1932
				Arm 15 Ahead	62.00	46.3 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	89.8 %	2053	2053
				Arm 15 Left	46.00	10.2 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	29.5 %	1937	1937
				Arm 18 Ahead	68.00	70.5 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	54.2 %	1950	1950
				Arm 21 Left	99.00	45.8 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	70.2 %	1928	1928
				Arm 18 Left	56.00	29.8 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf
20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921

20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 1

Scenario 2: '2022 PM' (FG2: '2022 PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	57.8 %	1906	1906
				Arm 4 Ahead	74.00	42.2 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	12.9 %	1923	1923
				Arm 7 Left	68.00	87.1 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	52.5 %	1980	1980
				Arm 12 Ahead	Inf	47.5 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	67.1 %	1931	1931
				Arm 15 Ahead	62.00	32.9 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	13.8 %	1937	1937
				Arm 18 Ahead	68.00	86.2 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	34.1 %	1950	1950
				Arm 21 Left	99.00	65.9 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	78.5 %	1928	1928
				Arm 18 Left	56.00	21.5 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 2

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	62.3 %	1906	1906
				Arm 4 Ahead	74.00	37.7 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	44.1 %	1923	1923
				Arm 7 Left	68.00	55.9 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	49.3 %	1980	1980
				Arm 12 Ahead	Inf	50.7 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	50.3 %	1932	1932
				Arm 15 Ahead	62.00	49.7 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	96.4 %	2053	2053
				Arm 15 Left	46.00	3.6 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	37.6 %	1937	1937
				Arm 18 Ahead	68.00	62.4 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	45.5 %	1950	1950
				Arm 21 Left	99.00	54.5 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	74.5 %	1928	1928
				Arm 18 Left	56.00	25.5 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 3

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	44.3 %	1906	1906
				Arm 4 Ahead	74.00	55.7 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	41.8 %	1923	1923
				Arm 7 Left	68.00	58.2 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	50.9 %	1980	1980
				Arm 12 Ahead	Inf	49.1 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	61.1 %	1931	1931
				Arm 15 Ahead	62.00	38.9 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	26.8 %	1937	1937
				Arm 18 Ahead	68.00	73.2 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	33.7 %	1950	1950
				Arm 21 Left	99.00	66.3 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	86.3 %	1928	1928
				Arm 18 Left	56.00	13.7 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 4

Scenario 5: '2028 WD AM' (FG5: '2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	61.6 %	1906	1906
				Arm 4 Ahead	74.00	38.4 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	43.9 %	1923	1923
				Arm 7 Left	68.00	56.1 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	46.3 %	1980	1980
				Arm 12 Ahead	Inf	53.7 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	60.8 %	1931	1931
				Arm 15 Ahead	62.00	39.2 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	99.5 %	2053	2053
				Arm 15 Left	46.00	0.5 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	43.3 %	1937	1937
				Arm 18 Ahead	68.00	56.7 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	47.9 %	1950	1950
				Arm 21 Left	99.00	52.1 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	75.6 %	1928	1928
				Arm 18 Left	56.00	24.4 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 5

Scenario 6: '2028 WD PM' (FG6: '2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	43.7 %	1906	1906
				Arm 4 Ahead	74.00	56.3 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	46.8 %	1923	1923
				Arm 7 Left	68.00	53.2 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	50.5 %	1980	1980
				Arm 12 Ahead	Inf	49.5 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	60.1 %	1931	1931
				Arm 15 Ahead	62.00	39.9 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	25.6 %	1937	1937
				Arm 18 Ahead	68.00	74.4 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	34.2 %	1950	1950
				Arm 21 Left	99.00	65.8 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	86.3 %	1928	1928
				Arm 18 Left	56.00	13.7 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 6

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	49.4 %	1906	1906
				Arm 4 Ahead	74.00	50.6 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	54.0 %	1923	1923
				Arm 7 Left	68.00	46.0 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	44.0 %	1980	1980
				Arm 12 Ahead	Inf	56.0 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	59.6 %	1931	1931
				Arm 15 Ahead	62.00	40.4 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	80.7 %	2053	2053
				Arm 15 Left	46.00	19.3 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	39.1 %	1937	1937
				Arm 18 Ahead	68.00	60.9 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	56.3 %	1950	1950
				Arm 21 Left	99.00	43.7 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	78.4 %	1928	1928
				Arm 18 Left	56.00	21.6 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 7

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	44.6 %	1906	1906
				Arm 4 Ahead	74.00	55.4 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	30.8 %	1923	1923
				Arm 7 Left	68.00	69.2 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	48.4 %	1980	1980
				Arm 12 Ahead	Inf	51.6 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	52.7 %	1932	1932
				Arm 15 Ahead	62.00	47.3 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	61.6 %	1937	1937
				Arm 18 Ahead	68.00	38.4 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	43.5 %	1950	1950
				Arm 21 Left	99.00	56.5 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	93.9 %	1928	1928
				Arm 18 Left	56.00	6.1 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 8

Scenario 9: '2038 WD AM' (FG9: '2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right Arm 4 Ahead	74.00 74.00	50.3 % 49.7 %	1906	1906
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead Arm 7 Left	68.00 68.00	56.5 % 43.5 %	1923	1923
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	41.3 %	1980	1980
				Arm 12 Ahead	Inf	58.7 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	55.8 %	1931	1931
				Arm 15 Ahead	62.00	44.2 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	81.9 %	2053	2053
				Arm 15 Left	46.00	18.1 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	33.9 %	1937	1937
				Arm 18 Ahead	68.00	66.1 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	59.8 %	1950	1950
				Arm 21 Left	99.00	40.2 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	77.9 %	1928	1928
				Arm 18 Left	56.00	22.1 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 9

Scenario 10: '2038 WD PM' (FG10: '2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	46.4 %	1906	1906
				Arm 4 Ahead	74.00	53.6 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	19.2 %	1923	1923
				Arm 7 Left	68.00	80.8 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	49.9 %	1980	1980
				Arm 12 Ahead	Inf	50.1 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	56.0 %	1931	1931
				Arm 15 Ahead	62.00	44.0 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	99.2 %	2053	2053
				Arm 15 Left	46.00	0.8 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	65.2 %	1937	1937
				Arm 18 Ahead	68.00	34.8 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	48.5 %	1950	1950
				Arm 21 Left	99.00	51.5 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	94.1 %	1928	1928
				Arm 18 Left	56.00	5.9 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 10

Scenario 11: '2b 2028 WD AM' (FG11: '2b 2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	63.9 %	1906	1906
				Arm 4 Ahead	74.00	36.1 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	44.1 %	1923	1923
				Arm 7 Left	68.00	55.9 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	47.0 %	1980	1980
				Arm 12 Ahead	Inf	53.0 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	58.9 %	1931	1931
				Arm 15 Ahead	62.00	41.1 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	41.4 %	1937	1937
				Arm 18 Ahead	68.00	58.6 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	47.1 %	1950	1950
				Arm 21 Left	99.00	52.9 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	75.4 %	1928	1928
				Arm 18 Left	56.00	24.6 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 11

Scenario 12: '2b 2028 WD PM' (FG12: '2b 2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	45.3 %	1906	1906
				Arm 4 Ahead	74.00	54.7 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	40.5 %	1923	1923
				Arm 7 Left	68.00	59.5 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	49.7 %	1980	1980
				Arm 12 Ahead	Inf	50.3 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	61.6 %	1931	1931
				Arm 15 Ahead	62.00	38.4 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	100.0 %	2053	2053
				Arm 15 Left	46.00	0.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	28.1 %	1937	1937
				Arm 18 Ahead	68.00	71.9 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	34.8 %	1950	1950
				Arm 21 Left	99.00	65.2 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	86.6 %	1928	1928
				Arm 18 Left	56.00	13.4 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 12

Scenario 13: '2b 2038 WD AM' (FG13: '2b 2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	74.00	50.9 %	1906	1906
				Arm 4 Ahead	74.00	49.1 %		
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead	68.00	54.5 %	1923	1923
				Arm 7 Left	68.00	45.5 %		
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	44.1 %	1980	1980
				Arm 12 Ahead	Inf	55.9 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	50.8 %	1932	1932
				Arm 15 Ahead	62.00	49.2 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	80.0 %	2053	2053
				Arm 15 Left	46.00	20.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	36.5 %	1937	1937
				Arm 18 Ahead	68.00	63.5 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	58.4 %	1950	1950
				Arm 21 Left	99.00	41.6 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	79.7 %	1928	1928
				Arm 18 Left	56.00	20.3 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 13

Scenario 14: '2b 2038 WD PM' (FG14: '2b 2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient (%)**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (M1 Southbound Off-slip)	3.65	0.00	Y	Arm 4 Left	44.00	100.0 %	1915	1915
1/2 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	48.00	100.0 %	2056	2056
1/3 (M1 Southbound Off-slip)	3.65	0.00	N	Arm 3 Ahead	51.00	100.0 %	2059	2059
2/1 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 4 Ahead	77.00	100.0 %	1908	1908
2/2 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right Arm 4 Ahead	74.00 74.00	41.9 % 58.1 %	1906	1906
2/3 (North Circ Adj M1 SB)	3.30	0.00	Y	Arm 3 Right	70.00	100.0 %	1904	1904
3/1 (East Circ)	3.65	0.00	Y	Arm 7 Ahead	86.00	100.0 %	1946	1946
3/2 (East Circ)	3.65	0.00	Y	Arm 6 Right	83.00	100.0 %	1945	1945
3/3 (East Circ)	3.65	0.00	Y	Arm 6 Right	79.00	100.0 %	1943	1943
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1 (A52 Westbound Off-slip)	3.50	0.00	Y	Arm 6 Ahead Arm 7 Left	68.00 68.00	42.2 % 57.8 %	1923	1923
5/2 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	71.00	100.0 %	2061	2061
5/3 (A52 Westbound Off-slip)	3.50	0.00	N	Arm 6 Ahead	75.00	100.0 %	2064	2064
6/1 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	107.00	100.0 %	1953	1953
6/2 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	104.00	100.0 %	1952	1952
6/3 (Southeast Circ Adj Bostocks Lane)	3.65	0.00	Y	Arm 10 Ahead	100.00	100.0 %	1951	1951
7/1	3.65	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1980	1980
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	47.00	100.0 %	1919	1919
9/2 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	51.00	100.0 %	1923	1923

9/3 (Bostocks Lane)	3.65	0.00	Y	Arm 10 Left	54.00	100.0 %	1926	1926
10/1 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	100.0 %	1980	1980
10/2 (South Circ)	3.65	0.00	Y	Arm 11 Left	Inf	49.6 %	1980	1980
				Arm 12 Ahead	Inf	50.4 %		
10/3 (South Circ)	3.65	0.00	Y	Arm 12 Ahead	Inf	100.0 %	1980	1980
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 15 Ahead	66.00	100.0 %	1936	1936
12/2 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	58.00	51.3 %	1932	1932
				Arm 15 Ahead	62.00	48.7 %		
12/3 (South Circ Adj M1 NB)	3.65	0.00	Y	Arm 14 Right	59.00	100.0 %	1931	1931
13/1 (M1 Northbound Off-slip)	3.65	0.00	Y	Arm 15 Left	42.00	100.0 %	1912	1912
13/2 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	46.00	95.0 %	2053	2053
				Arm 15 Left	46.00	5.0 %		
13/3 (M1 Northbound Off-slip)	3.65	0.00	N	Arm 14 Ahead	49.00	100.0 %	2057	2057
14/1 (West Circ)	3.65	0.00	Y	Arm 16 Right	68.00	24.3 %	1937	1937
				Arm 18 Ahead	68.00	75.7 %		
14/2 (West Circ)	3.65	0.00	Y	Arm 16 Right	65.00	100.0 %	1935	1935
14/3 (West Circ)	3.65	0.00	Y	Arm 16 Right	61.00	100.0 %	1932	1932
15/1	Infinite Saturation Flow						Inf	Inf
15/2	Infinite Saturation Flow						Inf	Inf
16/1 (North Circ Adj London Road)	3.65	0.00	Y	Arm 21 Left	103.00	100.0 %	1952	1952
16/2 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	99.00	38.9 %	1950	1950
				Arm 21 Left	99.00	61.1 %		
16/3 (North Circ Adj London Road)	3.65	0.00	Y	Arm 2 Ahead	96.00	100.0 %	1950	1950
17/1 (A52 Eastbound Off-slip)	3.65	0.00	Y	Arm 16 Ahead	56.00	88.9 %	1928	1928
				Arm 18 Left	56.00	11.1 %		
17/2 (A52 Eastbound Off-slip)	3.65	0.00	N	Arm 16 Ahead	59.00	100.0 %	2067	2067
18/1	3.65	0.00	Y	Arm 19 Ahead	Inf	100.0 %	1980	1980
19/1	Infinite Saturation Flow						Inf	Inf

20/1	3.65	0.00	Y	Arm 21 Left	49.00	100.0 %	1921	1921
20/2	3.65	0.00	N	Arm 2 Left	52.00	100.0 %	2061	2061
20/3	3.65	0.00	Y	Arm 2 Left	56.00	100.0 %	1928	1928
21/1	Infinite Saturation Flow						Inf	Inf
21/2	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

No Bonus Greens are defined For Scenario 14

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 AM Base'	07:45	08:45	01:00	
2: '2022 PM Base'	17:00	18:00	01:00	
3: '2028 WoD AM Base'	07:45	08:45	01:00	
4: '2028 WoD PM Base'	17:00	18:00	01:00	
5: '2028 WD AM Base'	07:45	08:45	01:00	
6: '2028 WD PM Base'	17:00	18:00	01:00	
7: '2038 WoD AM Base'	07:45	08:45	01:00	
8: '2038 WoD PM Base'	17:00	18:00	01:00	
9: '2038 WD AM Base'	07:45	08:45	01:00	
10: '2038 WD PM Base'	17:00	18:00	01:00	
11: '2b 2028 WD AM Base'	07:45	08:45	01:00	
12: '2b 2028 WD PM Base'	17:00	18:00	01:00	
13: '2b 2038 WD AM Base'	07:45	08:45	01:00	
14: '2b 2038 WD PM Base'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2022 AM Base'

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	357	308	0	642	160	1467
	B	342	0	197	480	0	100	1119
	C	208	167	0	239	223	57	894
	D	0	457	220	0	313	200	1190
	E	373	0	142	377	0	148	1040
	F	215	163	83	280	195	0	936
	Tot.	1138	1144	950	1376	1373	665	6646

FG2: '2022 PM Base'

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	262	242	0	338	158	1000
	B	368	0	373	387	0	133	1261
	C	219	132	0	101	177	76	705
	D	0	494	203	0	177	313	1187
	E	563	0	131	244	0	108	1046
	F	170	136	66	126	88	0	586
	Tot.	1320	1024	1015	858	780	788	5785

FG3: '2028 WoD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	337	280	0	678	141	1436
	B	573	0	251	653	0	123	1600
	C	215	134	0	197	205	42	793
	D	0	580	265	0	444	229	1518
	E	422	0	123	354	0	126	1025
	F	270	164	79	288	219	0	1020
	Tot.	1480	1215	998	1492	1546	661	7392

FG4: '2028 WoD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	316	233	0	612	159	1320
	B	598	0	318	731	0	124	1771
	C	208	84	0	106	172	41	611
	D	0	620	197	0	332	328	1477
	E	366	0	46	180	0	42	634
	F	215	116	46	187	117	0	681
	Tot.	1387	1136	840	1204	1233	694	6494

FG5: '2028 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	334	277	0	695	132	1438
	B	591	0	250	673	0	118	1632
	C	209	127	0	192	202	37	767
	D	0	593	271	0	470	226	1560
	E	419	0	119	347	0	117	1002
	F	272	159	78	290	222	0	1021
	Tot.	1491	1213	995	1502	1589	630	7420

FG6: '2028 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	311	226	0	623	154	1314
	B	595	0	312	751	0	126	1784
	C	203	82	0	108	172	40	605
	D	0	643	206	0	357	341	1547
	E	350	0	44	182	0	41	617
	F	214	113	45	191	119	0	682
	Tot.	1362	1149	833	1232	1271	702	6549

FG7: '2038 WoD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	353	247	0	667	126	1393
	B	478	0	179	627	0	88	1372
	C	217	132	0	234	203	37	823
	D	0	853	326	0	619	289	2087
	E	366	0	88	347	0	92	893
	F	265	158	68	338	201	0	1030
	Tot.	1326	1496	908	1546	1690	632	7598

FG8: '2038 WoD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	667	439	0	825	121	2052
	B	729	0	406	605	0	54	1794
	C	440	205	0	153	288	30	1116
	D	0	835	240	0	284	147	1506
	E	516	0	70	171	0	23	780
	F	212	138	50	117	89	0	606
	Tot.	1897	1845	1205	1046	1486	375	7854

FG9: '2038 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	352	241	0	679	123	1395
	B	432	0	186	669	0	92	1379
	C	192	137	0	244	211	38	822
	D	0	868	324	0	639	283	2114
	E	347	0	95	381	0	96	919
	F	205	135	58	302	175	0	875
	Tot.	1176	1492	904	1596	1704	632	7504

FG10: '2038 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	661	422	0	852	113	2048
	B	716	0	396	617	0	54	1783
	C	426	200	0	151	296	29	1102
	D	0	858	244	0	307	148	1557
	E	557	0	75	192	0	24	848
	F	208	135	49	121	94	0	607
	Tot.	1907	1854	1186	1081	1549	368	7945

FG11: '2b 2028 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	328	280	0	692	135	1435
	B	587	0	254	687	0	117	1645
	C	204	122	0	192	195	37	750
	D	0	570	265	0	453	223	1511
	E	420	0	121	357	0	120	1018
	F	271	159	78	297	220	0	1025
	Tot.	1482	1179	998	1533	1560	632	7384

FG12: '2b 2028 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	293	225	0	610	147	1275
	B	601	0	329	734	0	122	1786
	C	212	84	0	109	185	41	631
	D	0	644	214	0	372	339	1569
	E	373	0	49	185	0	42	649
	F	214	114	47	184	124	0	683
	Tot.	1400	1135	864	1212	1291	691	6593

FG13: '2b 2038 WD AM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	349	251	0	675	124	1399
	B	436	0	166	596	0	80	1278
	C	220	136	0	249	210	38	853
	D	0	885	349	0	651	291	2176
	E	389	0	97	382	0	93	961
	F	262	155	68	344	202	0	1031
	Tot.	1307	1525	931	1571	1738	626	7698

FG14: '2b 2038 WD PM Base'
Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	420	281	0	779	170	1650
	B	579	0	308	792	0	100	1779
	C	220	94	0	126	198	37	675
	D	0	829	261	0	447	360	1897
	E	376	0	49	210	0	36	671
	F	205	110	46	193	119	0	673
	Tot.	1380	1453	945	1321	1543	703	7345

Scenario 1: '2022 AM' (FG1: '2022 AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	357	308	0	642	160	1467
	B	342	0	197	480	0	100	1119
	C	208	167	0	239	223	57	894
	D	0	457	220	0	313	200	1190
	E	373	0	142	377	0	148	1040
	F	215	163	83	280	195	0	936
	Tot.	1138	1144	950	1376	1373	665	6646

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 2: '2022 PM' (FG2: '2022 PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	262	242	0	338	158	1000
	B	368	0	373	387	0	133	1261
	C	219	132	0	101	177	76	705
	D	0	494	203	0	177	313	1187
	E	563	0	131	244	0	108	1046
	F	170	136	66	126	88	0	586
	Tot.	1320	1024	1015	858	780	788	5785

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	337	280	0	678	141	1436
	B	573	0	251	653	0	123	1600
	C	215	134	0	197	205	42	793
	D	0	580	265	0	444	229	1518
	E	422	0	123	354	0	126	1025
	F	270	164	79	288	219	0	1020
	Tot.	1480	1215	998	1492	1546	661	7392

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	316	233	0	612	159	1320
	B	598	0	318	731	0	124	1771
	C	208	84	0	106	172	41	611
	D	0	620	197	0	332	328	1477
	E	366	0	46	180	0	42	634
	F	215	116	46	187	117	0	681
	Tot.	1387	1136	840	1204	1233	694	6494

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 5: '2028 WD AM' (FG5: '2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	334	277	0	695	132	1438
	B	591	0	250	673	0	118	1632
	C	209	127	0	192	202	37	767
	D	0	593	271	0	470	226	1560
	E	419	0	119	347	0	117	1002
	F	272	159	78	290	222	0	1021
	Tot.	1491	1213	995	1502	1589	630	7420

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 6: '2028 WD PM' (FG6: '2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	311	226	0	623	154	1314
	B	595	0	312	751	0	126	1784
	C	203	82	0	108	172	40	605
	D	0	643	206	0	357	341	1547
	E	350	0	44	182	0	41	617
	F	214	113	45	191	119	0	682
	Tot.	1362	1149	833	1232	1271	702	6549

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	F	Tot.
A	0	353	247	0	667	126	1393
B	478	0	179	627	0	88	1372
C	217	132	0	234	203	37	823
D	0	853	326	0	619	289	2087
E	366	0	88	347	0	92	893
F	265	158	68	338	201	0	1030
Tot.	1326	1496	908	1546	1690	632	7598

Traffic Flows, Difference

Difference :

Origin \ Destination	A	B	C	D	E	F	Tot.
A	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0
Tot.	0	0	0	0	0	0	0

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	F	Tot.
A	0	667	439	0	825	121	2052
B	729	0	406	605	0	54	1794
C	440	205	0	153	288	30	1116
D	0	835	240	0	284	147	1506
E	516	0	70	171	0	23	780
F	212	138	50	117	89	0	606
Tot.	1897	1845	1205	1046	1486	375	7854

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 9: '2038 WD AM' (FG9: '2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	352	241	0	679	123	1395
	B	432	0	186	669	0	92	1379
	C	192	137	0	244	211	38	822
	D	0	868	324	0	639	283	2114
	E	347	0	95	381	0	96	919
	F	205	135	58	302	175	0	875
	Tot.	1176	1492	904	1596	1704	632	7504

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 10: '2038 WD PM' (FG10: '2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	661	422	0	852	113	2048
	B	716	0	396	617	0	54	1783
	C	426	200	0	151	296	29	1102
	D	0	858	244	0	307	148	1557
	E	557	0	75	192	0	24	848
	F	208	135	49	121	94	0	607
	Tot.	1907	1854	1186	1081	1549	368	7945

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 11: '2b 2028 WD AM' (FG11: '2b 2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	328	280	0	692	135	1435
	B	587	0	254	687	0	117	1645
	C	204	122	0	192	195	37	750
	D	0	570	265	0	453	223	1511
	E	420	0	121	357	0	120	1018
	F	271	159	78	297	220	0	1025
	Tot.	1482	1179	998	1533	1560	632	7384

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 12: '2b 2028 WD PM' (FG12: '2b 2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	293	225	0	610	147	1275
	B	601	0	329	734	0	122	1786
	C	212	84	0	109	185	41	631
	D	0	644	214	0	372	339	1569
	E	373	0	49	185	0	42	649
	F	214	114	47	184	124	0	683
	Tot.	1400	1135	864	1212	1291	691	6593

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 13: '2b 2038 WD AM' (FG13: '2b 2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	349	251	0	675	124	1399
	B	436	0	166	596	0	80	1278
	C	220	136	0	249	210	38	853
	D	0	885	349	0	651	291	2176
	E	389	0	97	382	0	93	961
	F	262	155	68	344	202	0	1031
	Tot.	1307	1525	931	1571	1738	626	7698

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Scenario 14: '2b 2038 WD PM' (FG14: '2b 2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')

Traffic Flows, Actual

Actual Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	420	281	0	779	170	1650
	B	579	0	308	792	0	100	1779
	C	220	94	0	126	198	37	675
	D	0	829	261	0	447	360	1897
	E	376	0	49	210	0	36	671
	F	205	110	46	193	119	0	673
	Tot.	1380	1453	945	1321	1543	703	7345

Traffic Flows, Difference

Difference :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	0	0	0	0	0	0	0

Traffic Lane Flows

Lane	Scenario 1: 2022 AM	Scenario 2: 2022 PM	Scenario 3: 2028 WoD AM	Scenario 4: 2028 WoD PM	Scenario 5: 2028 WD AM	Scenario 6: 2028 WD PM
Junction: Unnamed Junction						
1/1 (short)	357	262	337	316	334	311
1/2 (with short)	878(In) 521(Out)	649(In) 387(Out)	862(In) 525(Out)	804(In) 488(Out)	869(In) 535(Out)	798(In) 487(Out)
1/3	589	351	574	516	569	516
2/1	586	470	596	456	587	458
2/2 (with short)	1498(In) 646(Out)	1150(In) 692(Out)	1610(In) 749(Out)	1137(In) 653(Out)	1619(In) 760(Out)	1167(In) 675(Out)
2/3 (short)	852	458	861	484	859	492
3/1	753	642	747	522	745	521
3/2	1034	563	917	738	1117	752
3/3	620	391	763	517	569	517
4/1	943	732	933	772	921	769
4/2	201	292	282	364	292	380
5/1 (short)	330	428	449	546	446	587
5/2 (with short)	677(In) 347(Out)	760(In) 332(Out)	904(In) 455(Out)	1049(In) 503(Out)	923(In) 477(Out)	1063(In) 476(Out)
5/3	442	501	696	722	709	721
6/1	766	348	829	535	722	563
6/2	748	602	741	934	1068	940
6/3	1062	892	1459	1239	1278	1238
7/1	950	1015	998	840	995	833
8/1	950	1015	998	840	995	833
9/1 (short)	224	101	196	106	192	107
9/2 (with short)	462(In) 238(Out)	278(In) 177(Out)	402(In) 206(Out)	278(In) 172(Out)	394(In) 202(Out)	280(In) 173(Out)
9/3	432	427	391	333	373	325
10/1	990	449	1025	641	914	670
10/2	986	779	947	1106	1270	1113
10/3	1494	1319	1850	1572	1651	1563
11/1	990	449	1025	641	914	670
11/2	386	409	467	563	588	562
12/1	600	370	480	543	682	551
12/2 (with short)	1494(In) 993(Out)	1319(In) 709(Out)	1850(In) 1251(Out)	1572(In) 921(Out)	1651(In) 1116(Out)	1563(In) 910(Out)
12/3 (short)	501	610	599	651	535	653
13/1 (short)	261	177	424	332	467	357
13/2 (with short)	769(In) 508(Out)	696(In) 519(Out)	972(In) 548(Out)	923(In) 591(Out)	1036(In) 569(Out)	963(In) 606(Out)

13/3	421	491	546	554	524	584
14/1	733	789	858	891	905	888
14/2	757	812	897	907	836	916
14/3	421	495	547	561	563	586
15/1	861	547	904	875	1149	908
15/2	512	233	642	358	440	363
16/1	565	504	692	503	754	485
16/2	781	980	950	1009	893	1008
16/3	940	870	1024	787	1029	812
17/1	497	503	495	306	479	299
17/2	543	543	530	328	523	318
18/1	665	788	661	694	630	702
19/1	665	788	661	694	630	702
20/1 (short)	215	170	270	215	272	214
20/2 (with short)	378(In) 163(Out)	306(In) 136(Out)	434(In) 164(Out)	331(In) 116(Out)	431(In) 159(Out)	327(In) 113(Out)
20/3	558	280	586	350	590	355
21/1	780	674	962	718	1026	699
21/2	358	646	518	669	465	663

Lane	Scenario 7: 2038 WoD AM	Scenario 8: 2038 WoD PM	Scenario 9: 2038 WD AM	Scenario 10: 2038 WD PM	Scenario 11: 2b 2028 WD AM	Scenario 12: 2b 2028 WD PM
Junction: Unnamed Junction						
1/1 (short)	353	667	352	661	328	293
1/2 (with short)	862(In) 509(Out)	1242(In) 575(Out)	872(In) 520(Out)	1275(In) 614(Out)	848(In) 520(Out)	776(In) 483(Out)
1/3	531	810	523	773	587	499
2/1	649	730	668	768	589	467
2/2 (with short)	1862(In) 976(Out)	1185(In) 808(Out)	1807(In) 949(Out)	1200(In) 793(Out)	1600(In) 726(Out)	1178(In) 685(Out)
2/3 (short)	886	377	858	407	874	493
3/1	729	799	718	790	744	535
3/2	1148	513	1119	599	1112	751
3/3	531	810	541	773	589	499
4/1	1002	1397	1020	1429	917	760
4/2	494	448	472	425	262	375
5/1 (short)	389	587	428	490	454	553
5/2 (with short)	806(In) 417(Out)	1011(In) 424(Out)	855(In) 427(Out)	1013(In) 523(Out)	941(In) 487(Out)	1063(In) 510(Out)
5/3	566	783	524	770	704	723
6/1	803	411	912	351	764	542
6/2	972	707	876	865	1035	943
6/3	1097	1593	1065	1543	1293	1222
7/1	908	1205	904	1186	998	864
8/1	908	1205	904	1186	998	864
9/1 (short)	220	153	228	151	190	109
9/2 (with short)	437(In) 217(Out)	441(In) 288(Out)	455(In) 227(Out)	447(In) 296(Out)	387(In) 197(Out)	294(In) 185(Out)
9/3	386	675	367	655	363	337
10/1	1023	564	1140	502	954	651
10/2	1189	995	1103	1161	1232	1128
10/3	1483	2268	1432	2198	1656	1559
11/1	1023	564	1140	502	954	651
11/2	523	482	456	579	579	561
12/1	666	513	647	582	653	567
12/2 (with short)	1483(In) 1002(Out)	2268(In) 1458(Out)	1432(In) 946(Out)	2198(In) 1501(Out)	1656(In) 1105(Out)	1559(In) 916(Out)
12/3 (short)	481	810	486	697	551	643
13/1 (short)	464	284	489	302	453	372
13/2 (with short)	1267(In) 803(Out)	894(In) 610(Out)	1318(In) 829(Out)	926(In) 624(Out)	984(In) 531(Out)	982(In) 610(Out)

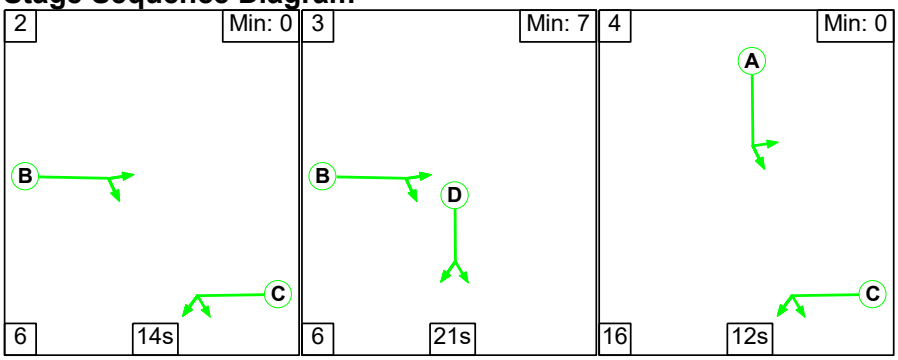
13/3	820	612	796	631	527	587
14/1	886	916	811	989	874	903
14/2	840	1197	882	1130	859	912
14/3	820	688	796	669	527	589
15/1	1130	797	1136	884	1106	939
15/2	560	689	568	665	454	352
16/1	680	916	613	1028	729	526
16/2	872	1361	891	1304	912	1013
16/3	1255	929	1272	936	1005	823
17/1	426	375	434	407	487	314
17/2	467	405	485	441	531	335
18/1	632	375	632	368	632	691
19/1	632	375	632	368	632	691
20/1 (short)	265	212	205	208	271	214
20/2 (with short)	423(In) 158(Out)	350(In) 138(Out)	340(In) 135(Out)	343(In) 135(Out)	430(In) 159(Out)	328(In) 114(Out)
20/3	607	256	535	264	595	355
21/1	945	1128	818	1236	1000	740
21/2	381	769	358	671	482	660

Lane	Scenario 13: 2b 2038 WD AM	Scenario 14: 2b 2038 WD PM
Junction: Unnamed Junction		
1/1 (short)	349	420
1/2 (with short)	841(In) 492(Out)	1007(In) 587(Out)
1/3	558	643
2/1	680	540
2/2 (with short)	1938(In) 1010(Out)	1371(In) 849(Out)
2/3 (short)	928	522
3/1	765	637
3/2	1073	807
3/3	654	664
4/1	1029	960
4/2	496	493
5/1 (short)	365	533
5/2 (with short)	762(In) 397(Out)	1100(In) 567(Out)
5/3	516	679
6/1	902	602
6/2	767	997
6/3	1170	1343
7/1	931	945
8/1	931	945
9/1 (short)	229	126
9/2 (with short)	459(In) 230(Out)	324(In) 198(Out)
9/3	394	351
10/1	1131	728
10/2	997	1195
10/3	1564	1694
11/1	1131	728
11/2	440	593
12/1	557	602
12/2 (with short)	1564(In) 1078(Out)	1694(In) 1015(Out)
12/3 (short)	486	679
13/1 (short)	481	410
13/2 (with short)	1331(In) 850(Out)	1143(In) 733(Out)

13/3	845	754
14/1	839	881
14/2	875	1015
14/3	845	754
15/1	1038	1012
15/2	700	531
16/1	671	501
16/2	899	1104
16/3	1324	1013
17/1	458	323
17/2	503	348
18/1	626	703
19/1	626	703
20/1 (short)	262	205
20/2 (with short)	417(In) 155(Out)	315(In) 110(Out)
20/3	614	358
21/1	933	706
21/2	374	674

Scenario 1: '2022 AM' (FG1: '2022 AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



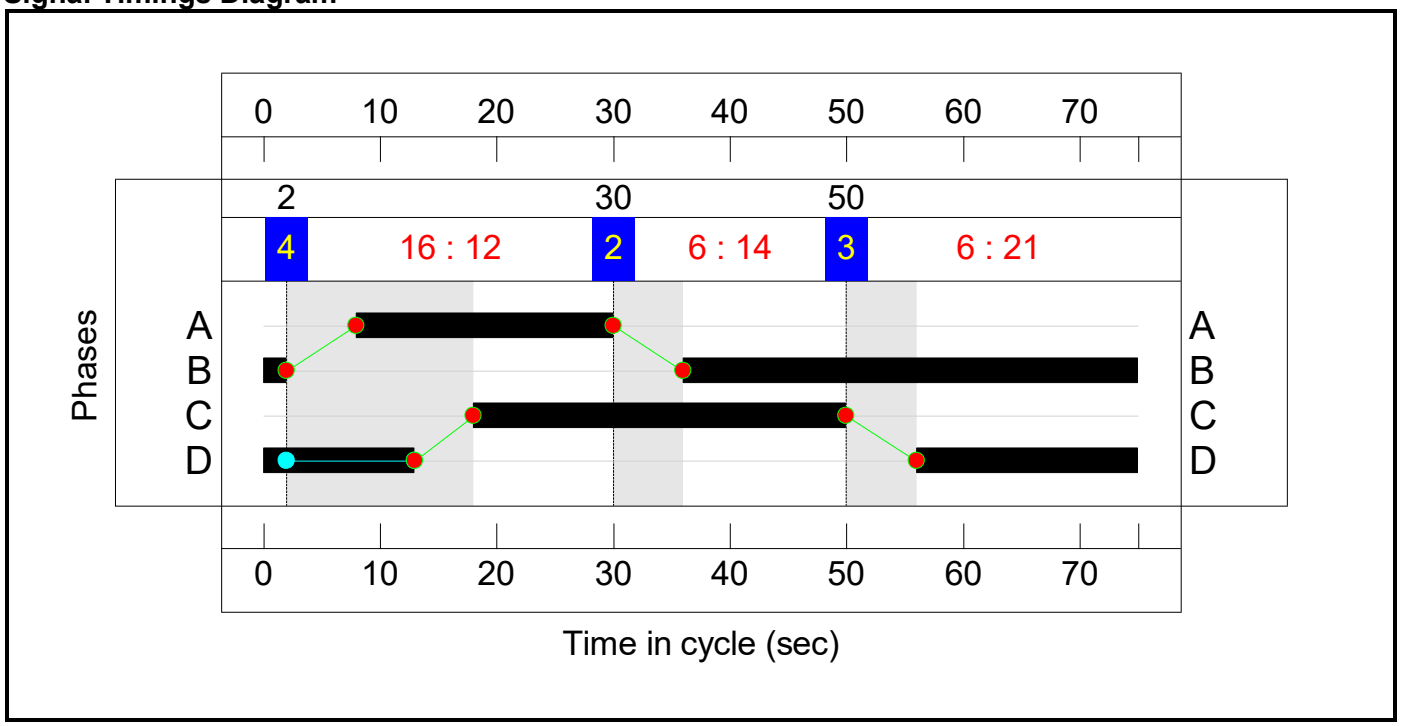
Stage Timings

Stage	2	3	4
Duration	14	21	12
Change Point	30	50	2

Phase Timings

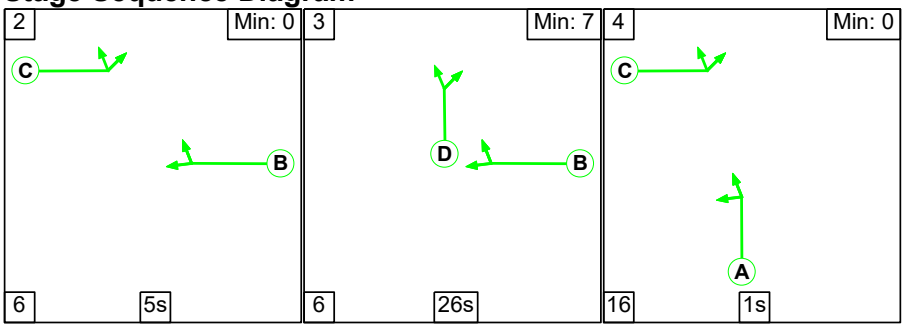
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	22	8	30
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	41	36	2
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	32	18	50
D	East Circ Right Ahead East Circ	Traffic	32	56	13

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



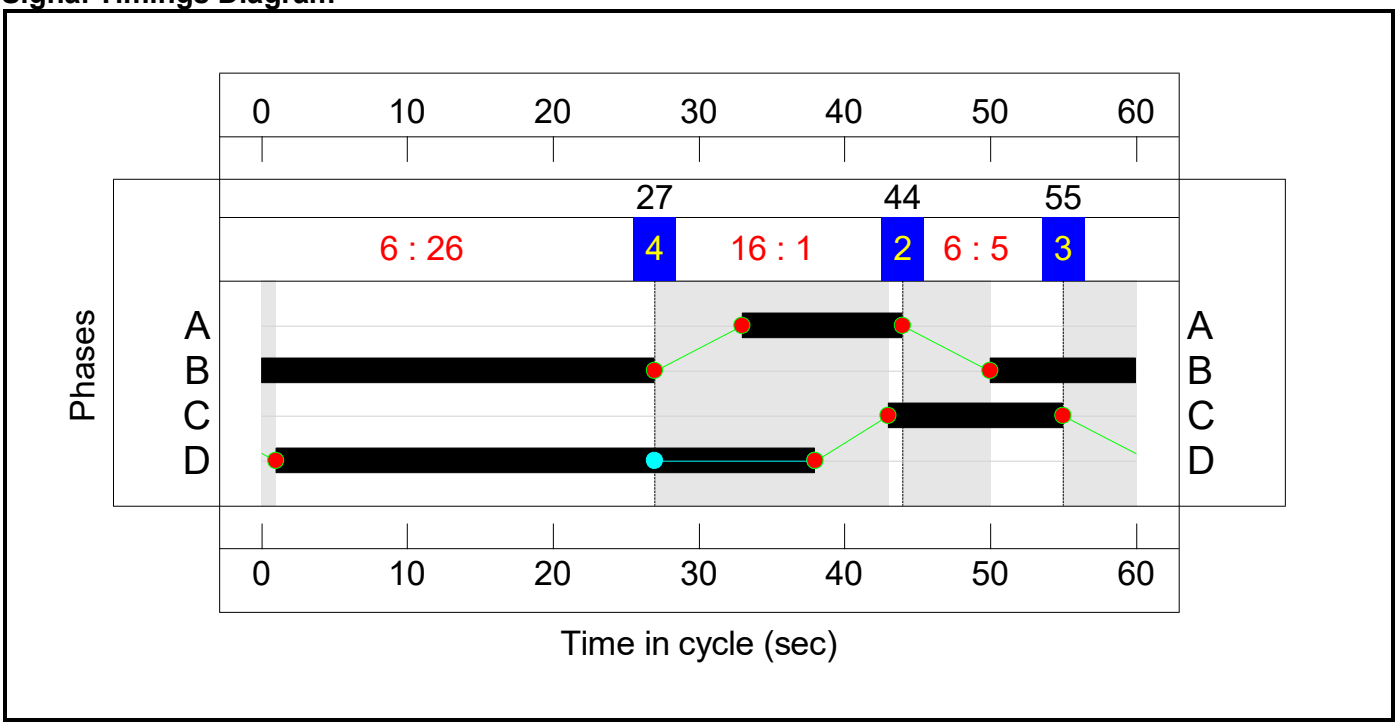
Stage Timings

Stage	2	3	4
Duration	5	26	1
Change Point	44	55	27

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	11	33	44
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	37	50	27
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	12	43	55
D	West Circ Right Ahead West Circ	Traffic	37	1	38

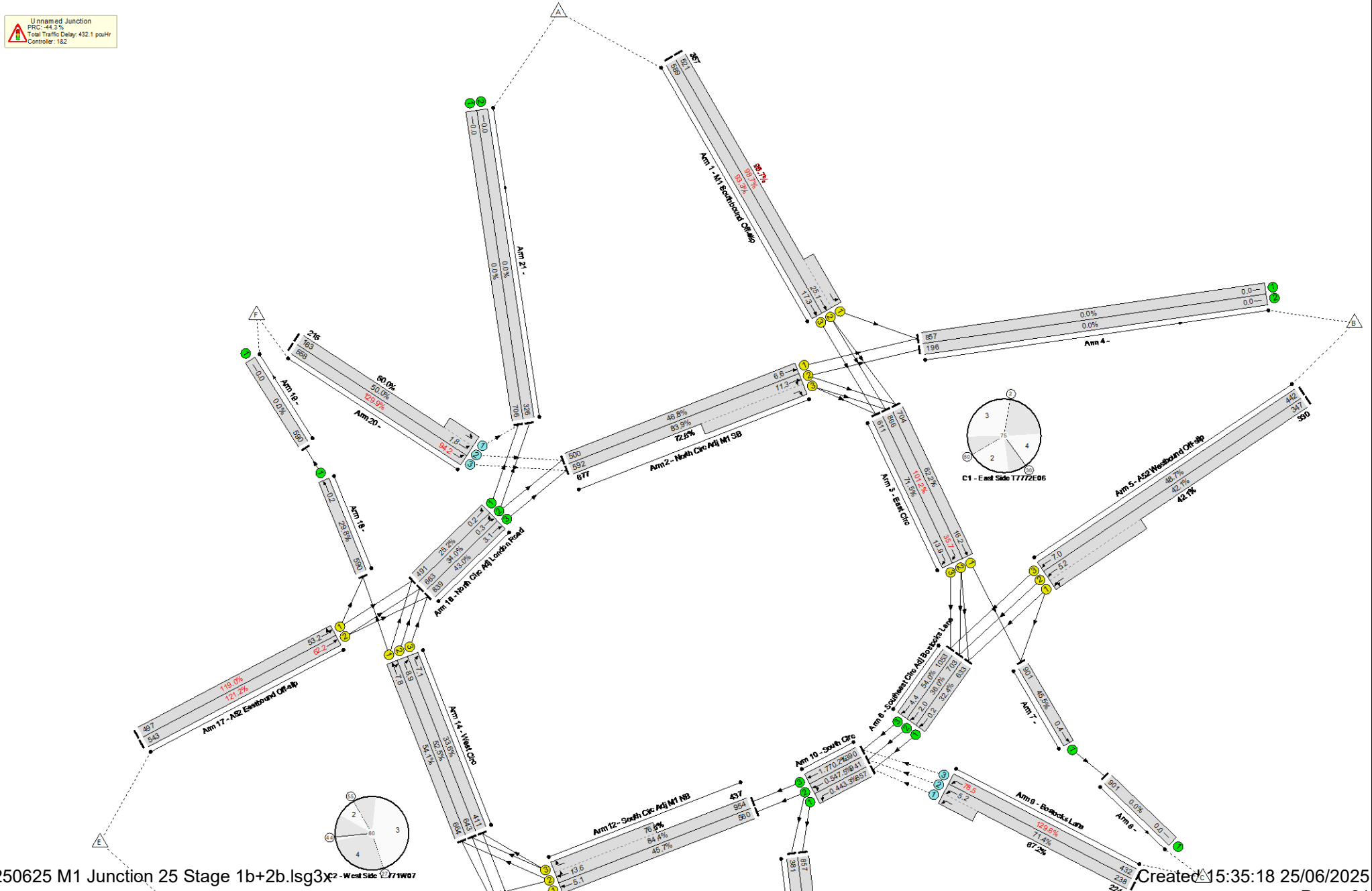
Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	8	30
1/2	M1 Southbound Off-slip Ahead	U	A	8	30
1/3	M1 Southbound Off-slip Ahead	U	A	8	30
2/1	North Circ Adj M1 SB Ahead	U	B	36	2
2/2	North Circ Adj M1 SB Right Ahead	U	B	36	2
2/3	North Circ Adj M1 SB Right	U	B	36	2
3/1	East Circ Ahead	U	D	56	13
3/2	East Circ Right	U	D	56	13
3/3	East Circ Right	U	D	56	13
5/1	A52 Westbound Off-slip Ahead Left	U	C	18	50
5/2	A52 Westbound Off-slip Ahead	U	C	18	50
5/3	A52 Westbound Off-slip Ahead	U	C	18	50
12/1	South Circ Adj M1 NB Ahead	U	B	50	27
12/2	South Circ Adj M1 NB Right Ahead	U	B	50	27
12/3	South Circ Adj M1 NB Right	U	B	50	27
13/1	M1 Northbound Off-slip Left	U	A	33	44
13/2	M1 Northbound Off-slip Ahead Left	U	A	33	44
13/3	M1 Northbound Off-slip Ahead	U	A	33	44
14/1	West Circ Right Ahead	U	D	1	38
14/2	West Circ Right	U	D	1	38
14/3	West Circ Right	U	D	1	38
17/1	A52 Eastbound Off-slip Ahead Left	U	C	43	55
17/2	A52 Eastbound Off-slip Ahead	U	C	43	55

Network Layout Diagram


Unnamed Junction
PRC: -44.3 %
Total Traffic Delay: 432.1 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777ZE06
C2 - West Side T771W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**129.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**129.9%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	22	-	-	878	2056:1915	528+362	98.7 : 98.7%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	22	-	-	589	2059	631	93.3%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	41	-	-	586	1908	1068	46.8%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	41	-	-	1498	1906:1904	706+931	83.9 : 72.6%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	32	-	-	753	1946	856	82.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	32	-	-	1034	1945	856	101.2%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	32	-	-	620	1943	855	71.5%
4/1		U	N/A	N/A	-		-	-	-	-	943	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	201	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	32	-	-	677	2061:1923	824+783	42.1 : 42.1%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	32	-	-	442	2064	908	48.7%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	766	1953	1953	32.4%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	748	1952	1952	36.0%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1062	1951	1951	54.0%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	950	1980	1980	45.5%
8/1		U	N/A	N/A	-		-	-	-	-	950	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	462	1923:1919	333+333	71.4 : 67.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	432	1926	333	129.6%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	990	1980	1980	43.3%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	986	1980	1980	47.5%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1494	1980	1980	70.2%
11/1		U	N/A	N/A	-		-	-	-	-	990	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	386	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	37	-	-	600	1936	1226	45.7%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	37	-	-	1494	1932:1931	1129+570	84.4 : 76.6%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	11	-	-	769	2053:1912	411+211	123.7 : 123.7%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	11	-	-	421	2057	411	102.3%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	37	-	-	733	1937	1227	54.1%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	37	-	-	757	1935	1226	52.5%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	37	-	-	421	1932	1224	33.6%
15/1		U	N/A	N/A	-		-	-	-	-	861	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	512	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	565	1952	1952	25.2%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	781	1950	1950	34.0%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	940	1950	1950	43.0%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	12	-	-	497	1928	418	119.0%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	12	-	-	543	2067	448	121.2%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	665	1980	1980	29.8%
19/1		U	N/A	N/A	-		-	-	-	-	665	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	378	2061:1921	326+430	50.0 : 50.0%
20/3	Left	O	N/A	N/A	-		-	-	-	-	558	1928	430	129.9%
21/1		U	N/A	N/A	-		-	-	-	-	780	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	358	Inf	Inf	0.0%

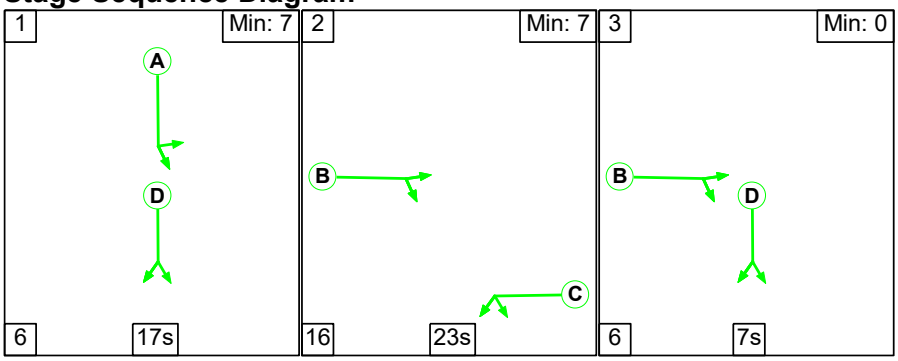
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2443**	**0**	**0**	**80.6**	**351.6**	**0.0**	**432.1**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2443**	**0**	**0**	**80.6**	**351.6**	**0.0**	**432.1**	**-**	**-**	**-**	**-**	
1/2+1/1	878	878	-	-	-	5.9	12.2	-	18.0	74.0	12.9	12.2	25.1	
1/3	589	589	-	-	-	4.1	5.5	-	9.6	58.9	11.8	5.5	17.3	
2/1	500	500	-	-	-	1.4	0.4	-	1.8	13.0	6.1	0.4	6.6	
2/2+2/3	1269	1269	-	-	-	3.9	1.7	-	5.6	15.8	9.6	1.7	11.3	
3/1	704	704	-	-	-	4.5	2.2	-	6.7	34.4	13.9	2.2	16.2	
3/2	866	856	-	-	-	5.0	17.4	-	22.4	93.3	18.2	17.4	35.7	
3/3	611	611	-	-	-	6.3	1.2	-	7.5	44.4	12.7	1.2	13.9	
4/1	857	857	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	196	196	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	677	677	-	-	-	2.7	0.4	-	3.0	16.1	4.8	0.4	5.2	
5/3	442	442	-	-	-	1.8	0.5	-	2.3	18.8	6.5	0.5	7.0	
6/1	633	633	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
6/2	703	703	-	-	-	0.0	0.3	-	0.3	1.4	1.7	0.3	2.0	
6/3	1053	1053	-	-	-	0.0	0.6	-	0.6	2.0	3.9	0.6	4.4	
7/1	901	901	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
8/1	901	901	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	462	462	924	0	0	1.5	1.1	-	2.6	20.1	4.0	1.1	5.2	
9/3	432	333	333	0	0	5.9	51.5	-	57.4	478.0	27.0	51.5	78.5	
10/1	857	857	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
10/2	941	941	-	-	-	0.0	0.5	-	0.5	1.7	0.0	0.5	0.5	
10/3	1390	1390	-	-	-	0.0	1.2	-	1.2	3.0	0.6	1.2	1.7	
11/1	857	857	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	560	560	-	-	-	0.9	0.4	-	1.3	8.4	4.7	0.4	5.1	
12/2+12/3	1390	1390	-	-	-	2.7	2.2	-	5.0	12.8	11.4	2.2	13.6	
13/2+13/1	769	661	-	-	-	7.2	76.2	-	83.4	390.6	11.9	76.2	88.2	
13/3	421	411	-	-	-	3.0	12.9	-	16.0	136.4	7.2	12.9	20.1	
14/1	664	664	-	-	-	1.1	0.6	-	1.7	9.1	7.2	0.6	7.8	
14/2	643	643	-	-	-	1.7	0.6	-	2.2	12.4	8.3	0.6	8.9	
14/3	411	411	-	-	-	2.3	0.3	-	2.6	22.5	6.9	0.3	7.1	
15/1	811	811	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	491	491	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	663	663	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	839	839	-	-	-	0.0	0.4	-	0.4	1.6	2.7	0.4	3.1	
17/1	497	418	-	-	-	5.8	42.6	-	48.4	350.3	10.6	42.6	53.2	
17/2	543	448	-	-	-	6.7	50.3	-	56.9	377.4	11.9	50.3	62.2	
18/1	590	590	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
19/1	590	590	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	378	378	756	0	0	0.4	0.5	-	0.9	8.7	1.3	0.5	1.8	
20/3	558	430	430	0	0	5.9	66.3	-	72.2	465.7	27.9	66.3	94.2	
21/1	706	706	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-12.4	Total Delay for Signalled Lanes (pcuHr):	77.10	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-37.5	Total Delay for Signalled Lanes (pcuHr):	217.40	Cycle Time (s): 60
	PRC Over All Lanes (%):	-44.3	Total Delay Over All Lanes(pcuHr):	432.10	

Scenario 2: '2022 PM' (FG2: '2022 PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



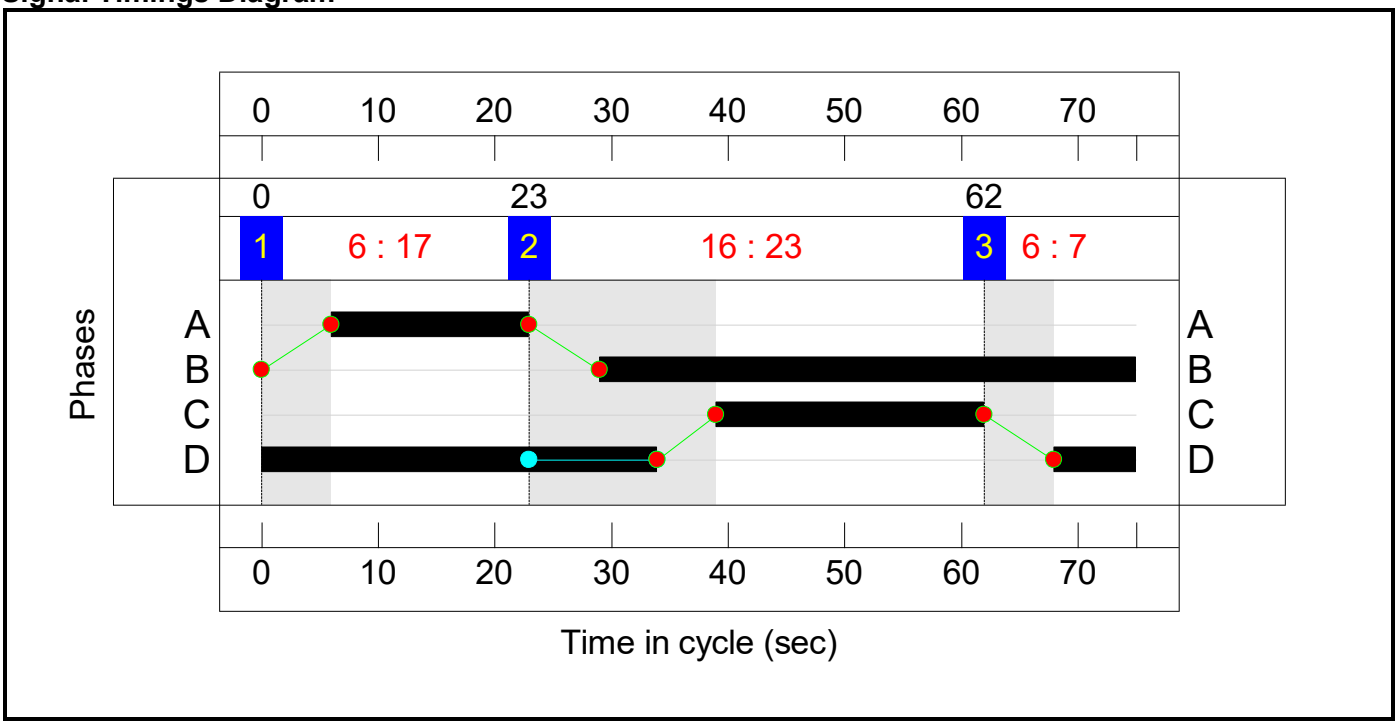
Stage Timings

Stage	1	2	3
Duration	17	23	7
Change Point	0	23	62

Phase Timings

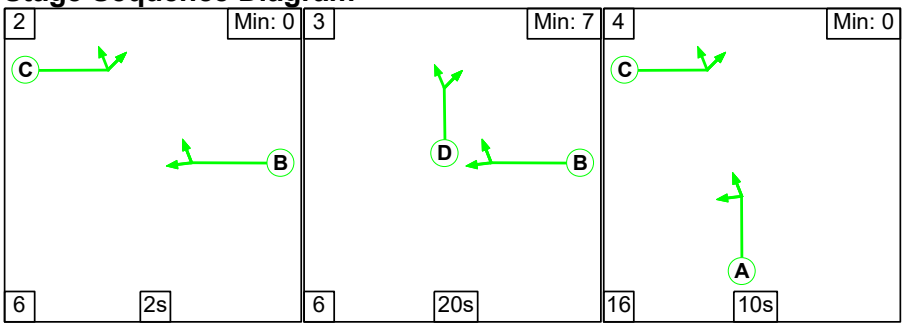
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	17	6	23
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	46	29	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	23	39	62
D	East Circ Right Ahead East Circ	Traffic	41	68	34

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



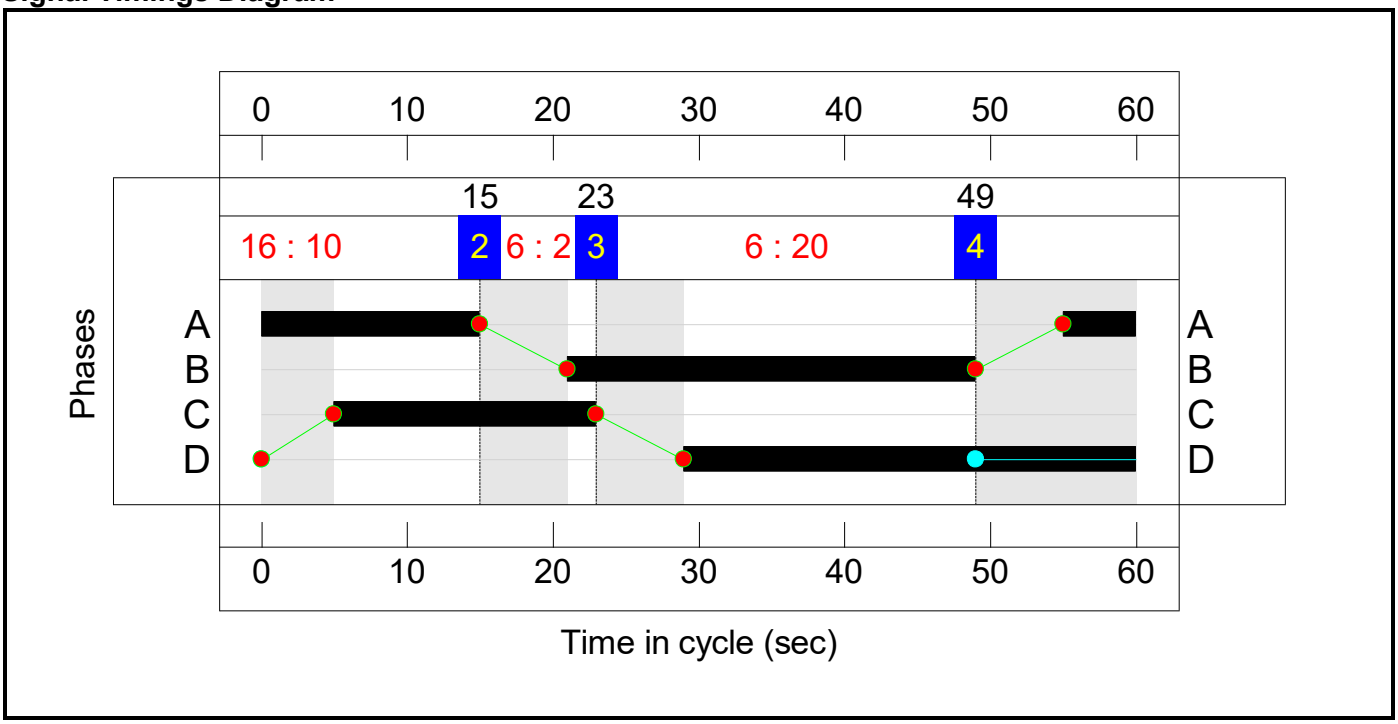
Stage Timings

Stage	2	3	4
Duration	2	20	10
Change Point	15	23	49

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	20	55	15
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	28	21	49
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	5	23
D	West Circ Right Ahead West Circ	Traffic	31	29	0

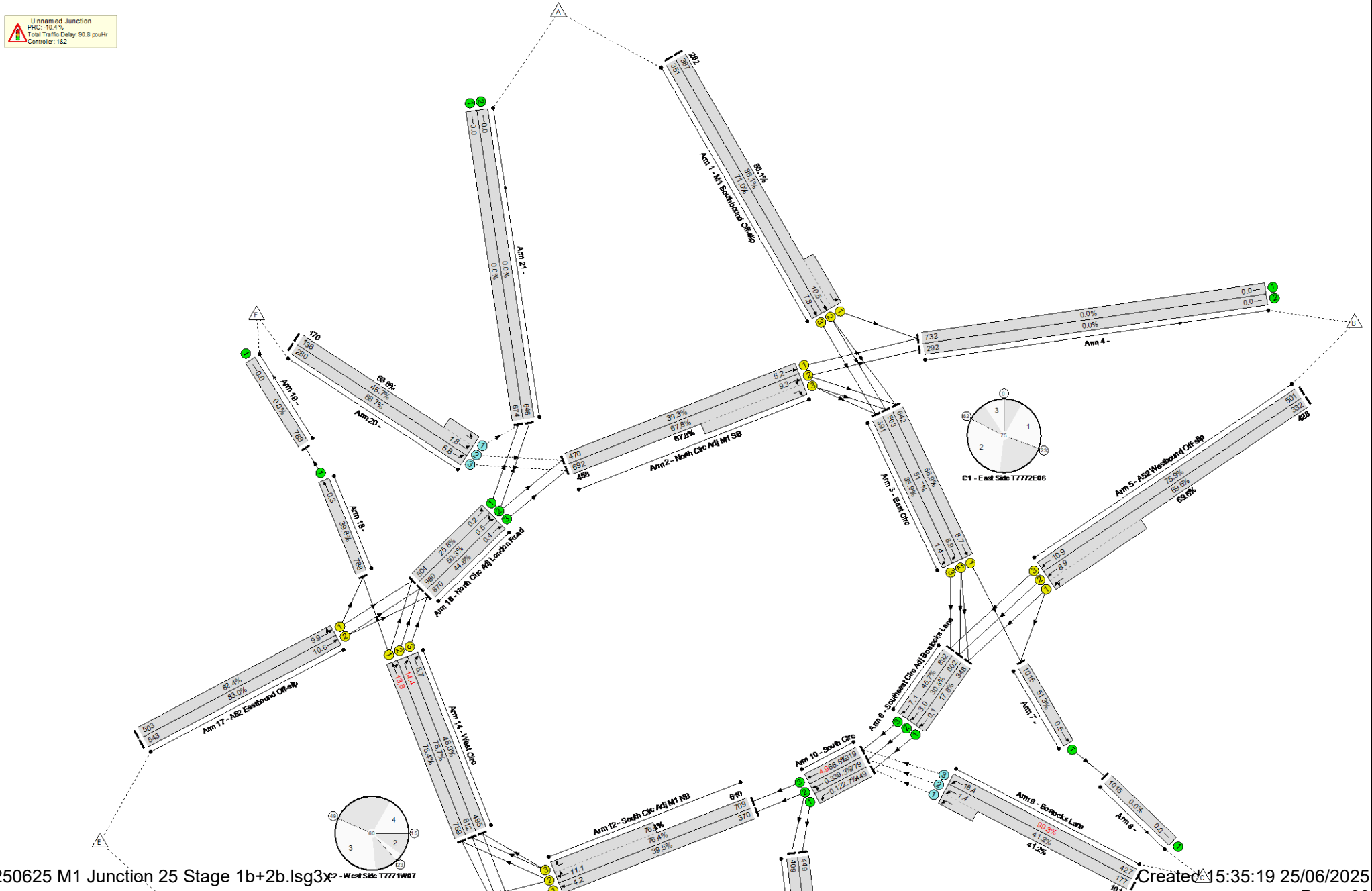
Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	23
1/2	M1 Southbound Off-slip Ahead	U	A	6	23
1/3	M1 Southbound Off-slip Ahead	U	A	6	23
2/1	North Circ Adj M1 SB Ahead	U	B	29	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	29	0
2/3	North Circ Adj M1 SB Right	U	B	29	0
3/1	East Circ Ahead	U	D	68	34
3/2	East Circ Right	U	D	68	34
3/3	East Circ Right	U	D	68	34
5/1	A52 Westbound Off-slip Ahead Left	U	C	39	62
5/2	A52 Westbound Off-slip Ahead	U	C	39	62
5/3	A52 Westbound Off-slip Ahead	U	C	39	62
12/1	South Circ Adj M1 NB Ahead	U	B	21	49
12/2	South Circ Adj M1 NB Right Ahead	U	B	21	49
12/3	South Circ Adj M1 NB Right	U	B	21	49
13/1	M1 Northbound Off-slip Left	U	A	55	15
13/2	M1 Northbound Off-slip Ahead Left	U	A	55	15
13/3	M1 Northbound Off-slip Ahead	U	A	55	15
14/1	West Circ Right Ahead	U	D	29	0
14/2	West Circ Right	U	D	29	0
14/3	West Circ Right	U	D	29	0
17/1	A52 Eastbound Off-slip Ahead Left	U	C	5	23
17/2	A52 Eastbound Off-slip Ahead	U	C	5	23

Network Layout Diagram


Unnamed Junction
PRC: -10.4 %
Total Traffic Delay: 90.8 pcuHr
Controller: 1&2
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**99.3%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	17	-	-	649	2056:1915	449+304	86.1 : 86.1%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	17	-	-	351	2059	494	71.0%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	46	-	-	470	1908	1196	39.3%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	46	-	-	1150	1906:1904	1021+675	67.8 : 67.8%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	41	-	-	642	1946	1090	58.9%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	563	1945	1089	51.7%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	41	-	-	391	1943	1088	35.9%
4/1		U	N/A	N/A	-		-	-	-	-	732	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	292	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	23	-	-	760	2061:1923	477+615	69.6 : 69.6%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	23	-	-	501	2064	660	75.9%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	348	1953	1953	17.8%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	602	1952	1952	30.8%

6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	892	1951	1951	45.7%
7/1	Ahead	U	N/A	N/A	-		-	-	-	-	1015	1980	1980	51.3%
8/1		U	N/A	N/A	-		-	-	-	-	1015	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	278	1923:1919	430+245	41.2 : 41.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	427	1926	430	99.3%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	449	1980	1980	22.7%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	779	1980	1980	39.3%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1319	1980	1980	66.6%
11/1		U	N/A	N/A	-		-	-	-	-	449	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	409	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	28	-	-	370	1936	936	39.5%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	28	-	-	1319	1931:1931	928+798	76.4 : 76.4%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	20	-	-	696	2053:1912	688+235	75.4 : 75.4%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	20	-	-	491	2057	720	68.2%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	789	1937	1033	76.4%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	812	1935	1032	78.7%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	495	1932	1030	48.0%
15/1		U	N/A	N/A	-		-	-	-	-	547	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	233	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	504	1952	1952	25.8%

16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	980	1950	1950	50.3%
16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	870	1950	1950	44.6%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	503	1928	611	82.4%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	543	2067	655	83.0%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	788	1980	1980	39.8%
19/1		U	N/A	N/A	-		-	-	-	-	788	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	306	2061:1921	298+316	45.7 : 53.8%
20/3	Left	O	N/A	N/A	-		-	-	-	-	280	1928	316	88.7%
21/1		U	N/A	N/A	-		-	-	-	-	674	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	646	Inf	Inf	0.0%

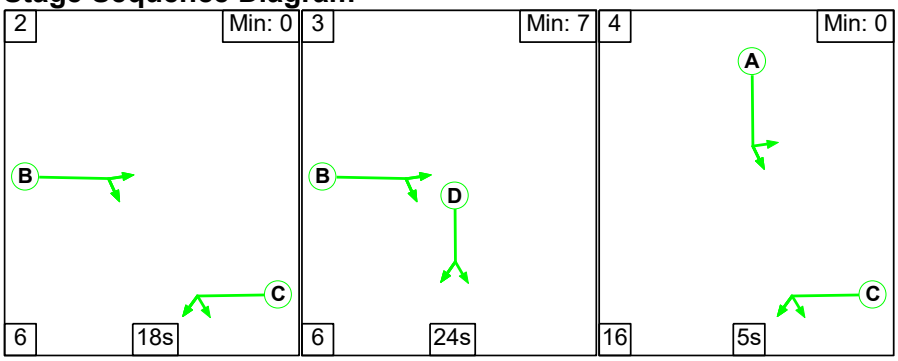
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1875**	**0**	**0**	**50.1**	**40.6**	**0.0**	**90.8**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1875**	**0**	**0**	**50.1**	**40.6**	**0.0**	**90.8**	**-**	**-**	**-**	**-**	
1/2+1/1	649	649	-	-	-	4.7	2.9	-	7.6	42.3	7.5	2.9	10.5	
1/3	351	351	-	-	-	2.5	1.2	-	3.8	38.5	6.6	1.2	7.8	
2/1	470	470	-	-	-	0.9	0.3	-	1.2	9.4	4.8	0.3	5.2	
2/2+2/3	1150	1150	-	-	-	2.5	1.0	-	3.5	11.0	8.3	1.0	9.3	
3/1	642	642	-	-	-	2.1	0.7	-	2.8	16.0	7.9	0.7	8.7	
3/2	563	563	-	-	-	2.4	0.5	-	2.9	18.6	8.4	0.5	8.9	
3/3	391	391	-	-	-	0.2	0.3	-	0.5	4.8	1.1	0.3	1.4	
4/1	732	732	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	292	292	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	760	760	-	-	-	4.6	1.1	-	5.7	27.0	7.7	1.1	8.9	
5/3	501	501	-	-	-	3.2	1.5	-	4.7	34.0	9.3	1.5	10.9	
6/1	348	348	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1	
6/2	602	602	-	-	-	0.0	0.2	-	0.2	1.3	2.8	0.2	3.0	
6/3	892	892	-	-	-	0.0	0.4	-	0.4	1.8	6.7	0.4	7.1	
7/1	1015	1015	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
8/1	1015	1015	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	278	278	556	0	0	0.1	0.3	-	0.5	6.5	1.0	0.3	1.4	
9/3	427	427	427	0	0	0.8	9.6	-	10.5	88.4	8.8	9.6	18.4	
10/1	449	449	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1	
10/2	779	779	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/3	1319	1319	-	-	-	0.0	1.0	-	1.0	2.7	3.9	1.0	4.9	
11/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	370	370	-	-	-	1.0	0.3	-	1.3	13.1	3.9	0.3	4.2	
12/2+12/3	1319	1319	-	-	-	4.5	1.6	-	6.1	16.6	9.5	1.6	11.1	
13/2+13/1	696	696	-	-	-	3.1	1.5	-	4.6	24.0	7.5	1.5	9.0	
13/3	491	491	-	-	-	2.3	1.1	-	3.3	24.4	7.0	1.1	8.0	
14/1	789	789	-	-	-	2.8	1.6	-	4.4	19.9	12.2	1.6	13.8	
14/2	812	812	-	-	-	2.1	1.8	-	3.9	17.5	12.5	1.8	14.4	
14/3	495	495	-	-	-	3.5	0.5	-	4.0	29.1	8.2	0.5	8.7	
15/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	504	504	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	980	980	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
16/3	870	870	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
17/1	503	503	-	-	-	2.6	2.2	-	4.9	35.0	7.7	2.2	9.9	
17/2	543	543	-	-	-	2.9	2.3	-	5.2	34.5	8.3	2.3	10.6	
18/1	788	788	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
19/1	788	788	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	306	306	612	0	0	0.5	0.5	-	1.0	12.1	1.3	0.5	1.8	
20/3	280	280	280	0	0	0.7	3.3	-	4.0	50.9	2.5	3.3	5.8	
21/1	674	674	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	4.5	Total Delay for Signalled Lanes (pcuHr):	32.81	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	8.5	Total Delay for Signalled Lanes (pcuHr):	37.80	Cycle Time (s):	60
	PRC Over All Lanes (%):	-10.4	Total Delay Over All Lanes(pcuHr):	90.78		

Scenario 3: '2028 WoD AM' (FG3: '2028 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



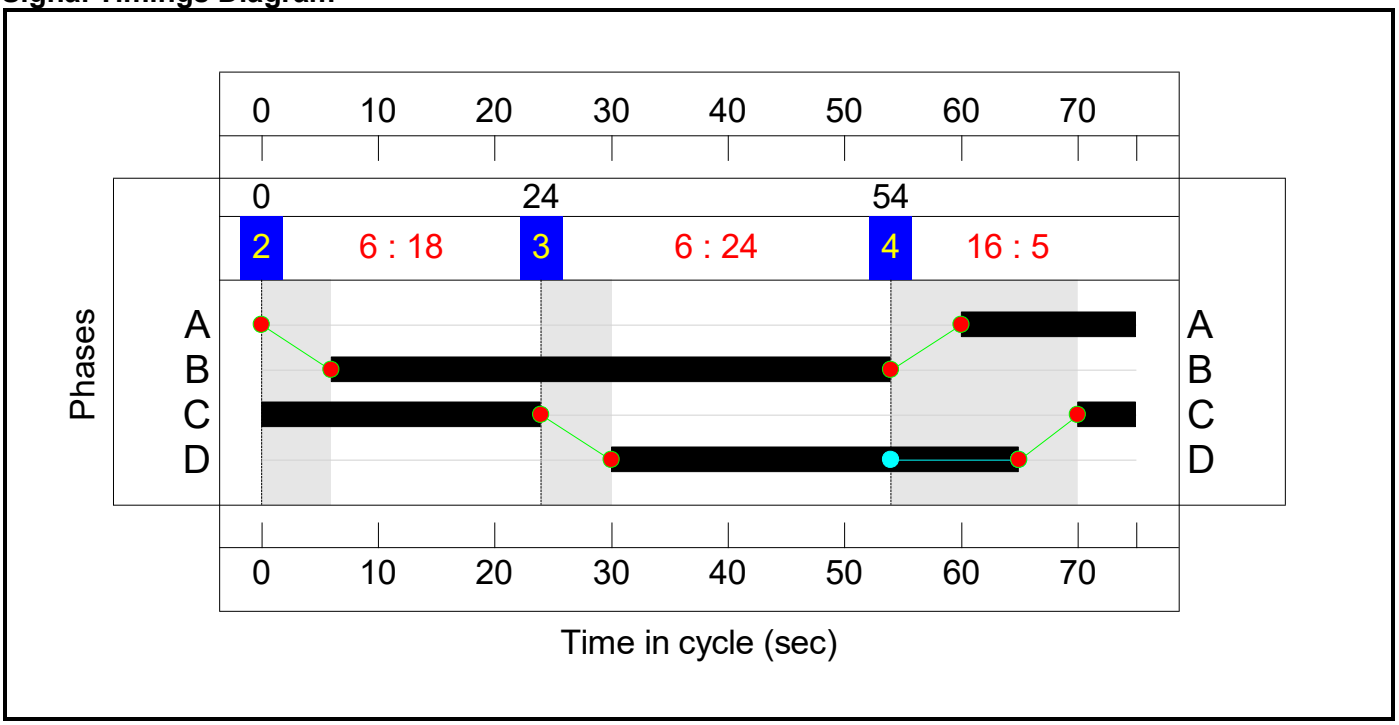
Stage Timings

Stage	2	3	4
Duration	18	24	5
Change Point	0	24	54

Phase Timings

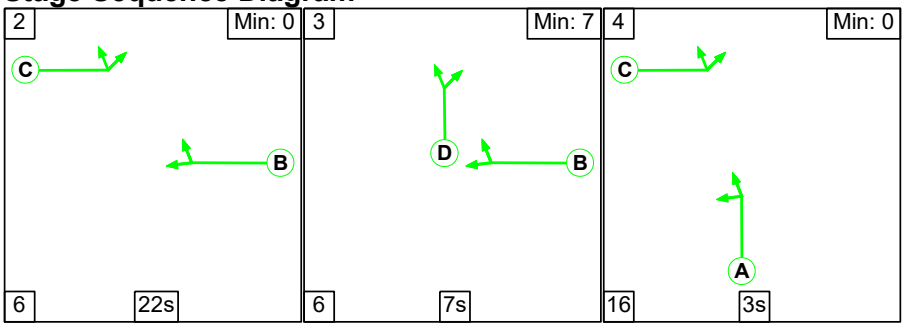
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	15	60	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	48	6	54
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	29	70	24
D	East Circ Right Ahead East Circ	Traffic	35	30	65

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



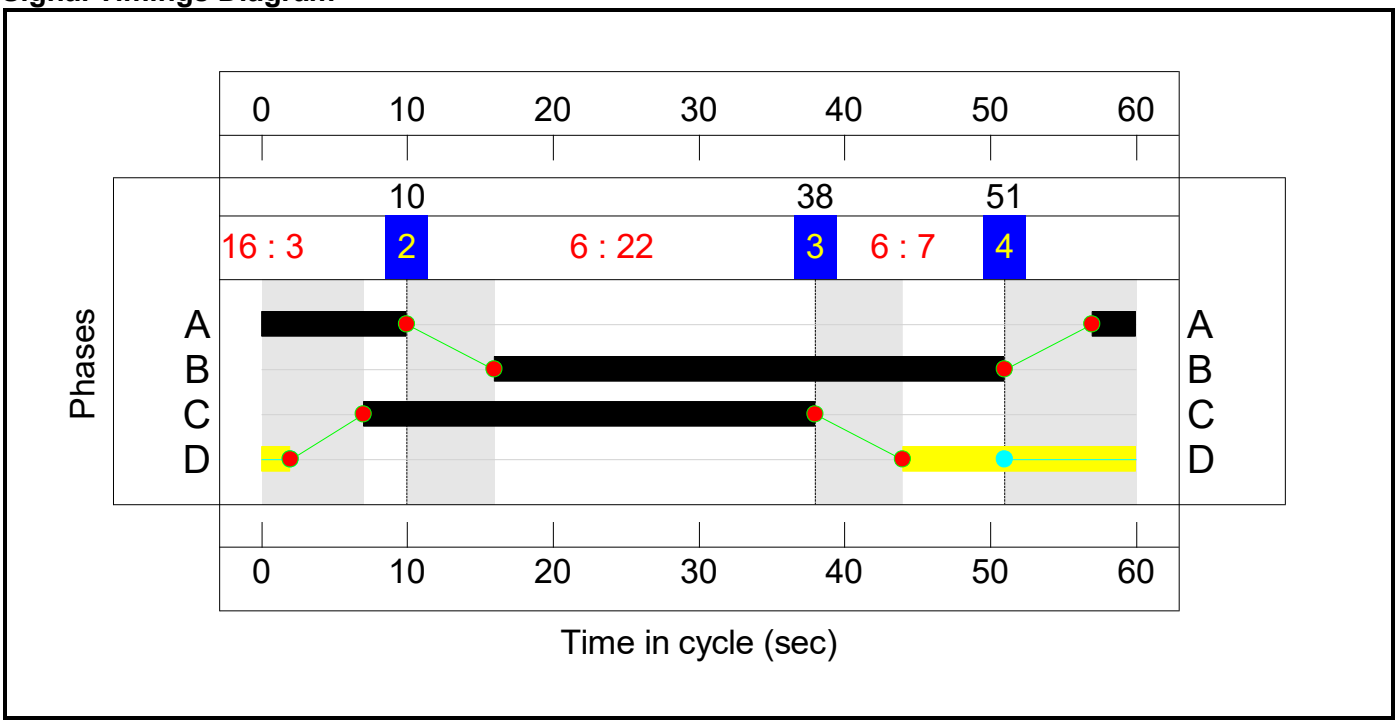
Stage Timings

Stage	2	3	4
Duration	22	7	3
Change Point	10	38	51

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	13	57	10
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	35	16	51
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	31	7	38
D	West Circ Right Ahead West Circ	Traffic	18	44	2

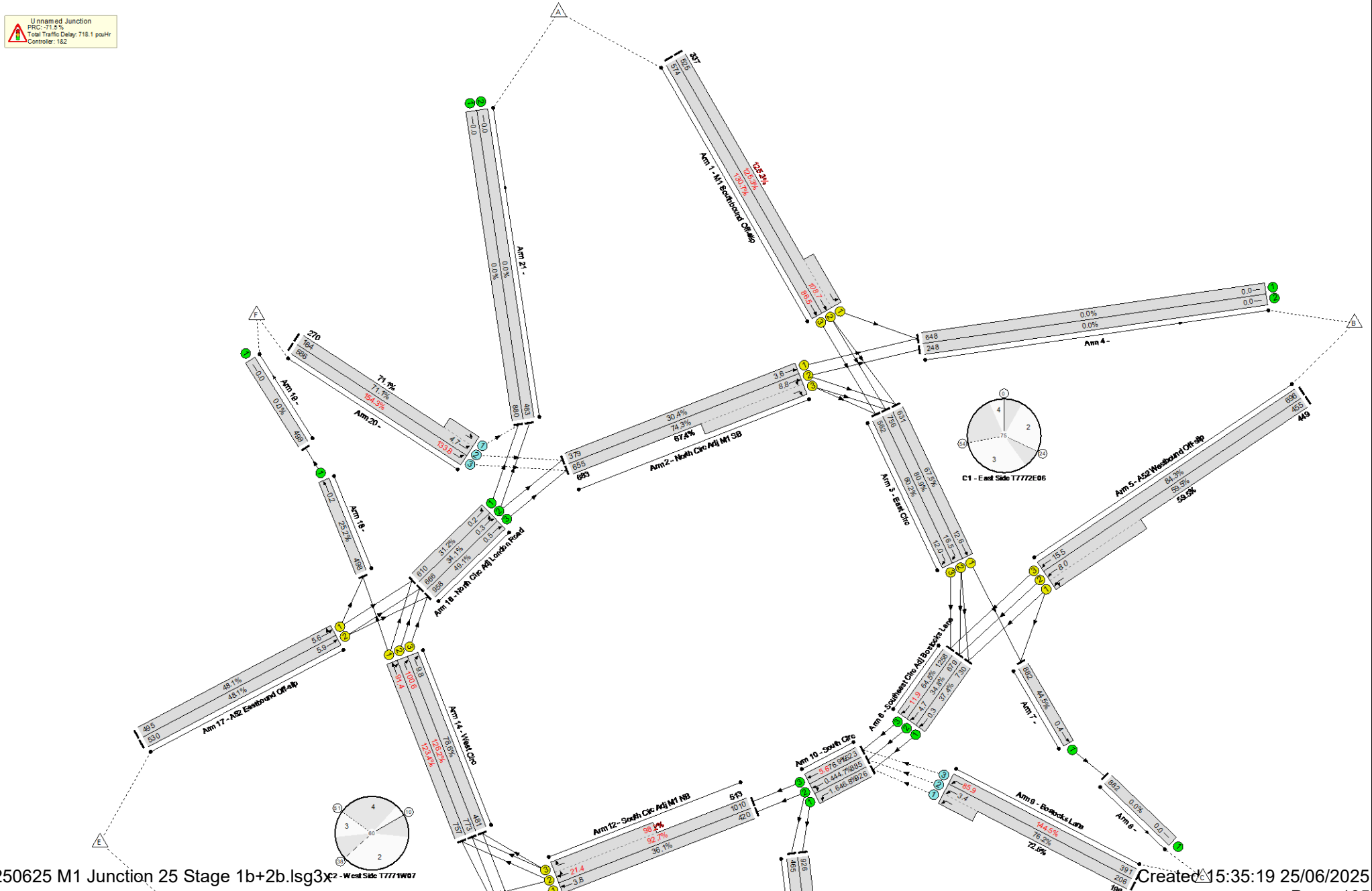
Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	60	0
1/2	M1 Southbound Off-slip Ahead	U	A	60	0
1/3	M1 Southbound Off-slip Ahead	U	A	60	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	54
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	54
2/3	North Circ Adj M1 SB Right	U	B	6	54
3/1	East Circ Ahead	U	D	30	65
3/2	East Circ Right	U	D	30	65
3/3	East Circ Right	U	D	30	65
5/1	A52 Westbound Off-slip Ahead Left	U	C	70	24
5/2	A52 Westbound Off-slip Ahead	U	C	70	24
5/3	A52 Westbound Off-slip Ahead	U	C	70	24
12/1	South Circ Adj M1 NB Ahead	U	B	16	51
12/2	South Circ Adj M1 NB Right Ahead	U	B	16	51
12/3	South Circ Adj M1 NB Right	U	B	16	51
13/1	M1 Northbound Off-slip Left	U	A	57	10
13/2	M1 Northbound Off-slip Ahead Left	U	A	57	10
13/3	M1 Northbound Off-slip Ahead	U	A	57	10
14/1	West Circ Right Ahead	U	D	44	2
14/2	West Circ Right	U	D	44	2
14/3	West Circ Right	U	D	44	2
17/1	A52 Eastbound Off-slip Ahead Left	U	C	7	38
17/2	A52 Eastbound Off-slip Ahead	U	C	7	38

Network Layout Diagram


Unnamed Junction
PRC: -71.5 %
Total Traffic Delay: 718.1 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**154.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**154.3%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	15	-	-	862	2056:1915	419+269	125.3 : 125.3%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	15	-	-	574	2059	439	130.7%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	48	-	-	596	1908	1247	30.4%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	48	-	-	1610	1906:1904	881+1013	74.3 : 67.4%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	35	-	-	747	1946	934	67.5%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	35	-	-	917	1945	934	80.9%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	35	-	-	763	1943	933	60.2%
4/1		U	N/A	N/A	-		-	-	-	-	933	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	282	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	29	-	-	904	2061:1923	764+754	59.5 : 59.5%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	29	-	-	696	2064	826	84.3%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	829	1953	1953	37.4%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	741	1952	1952	34.8%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1459	1951	1951	64.5%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	998	1980	1980	44.5%
8/1		U	N/A	N/A	-		-	-	-	-	998	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	402	1923:1919	270+270	76.2 : 72.5%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	391	1926	270	144.5%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1025	1980	1980	46.8%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	947	1980	1980	44.7%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1850	1980	1980	76.9%
11/1		U	N/A	N/A	-		-	-	-	-	1025	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	467	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	35	-	-	480	1936	1162	36.1%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	35	-	-	1850	1932:1931	1090+522	92.7 : 98.2%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	13	-	-	972	2053:1912	479+385	114.4 : 110.2%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	13	-	-	546	2057	480	113.8%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	18	-	-	858	1937	613	123.4%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	18	-	-	897	1935	613	126.2%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	18	-	-	547	1932	612	78.6%
15/1		U	N/A	N/A	-		-	-	-	-	904	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	642	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	692	1952	1952	31.2%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	950	1950	1950	34.1%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1024	1950	1950	49.1%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	31	-	-	495	1928	1028	48.1%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	31	-	-	530	2067	1102	48.1%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	661	1980	1980	25.2%
19/1		U	N/A	N/A	-		-	-	-	-	661	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	434	2061:1921	231+380	71.1 : 71.1%
20/3	Left	O	N/A	N/A	-		-	-	-	-	586	1928	380	154.3%
21/1		U	N/A	N/A	-		-	-	-	-	962	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	518	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2322**	**0**	**0**	**113.7**	**604.5**	**0.0**	**718.1**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2322**	**0**	**0**	**113.7**	**604.5**	**0.0**	**718.1**	**-**	**-**	**-**	**-**	
1/2+1/1	862	688	-	-	-	14.0	89.5	-	103.6	432.5	19.2	89.5	108.7	
1/3	574	439	-	-	-	10.5	69.4	-	80.0	501.5	17.1	69.4	86.5	
2/1	379	379	-	-	-	0.6	0.2	-	0.8	7.7	3.4	0.2	3.6	
2/2+2/3	1337	1337	-	-	-	2.6	1.2	-	3.8	10.2	7.6	1.2	8.8	
3/1	631	631	-	-	-	3.4	1.0	-	4.5	25.4	11.6	1.0	12.6	
3/2	756	756	-	-	-	3.9	2.1	-	6.0	28.4	14.4	2.1	16.5	
3/3	562	562	-	-	-	4.8	0.8	-	5.5	35.5	11.2	0.8	12.0	
4/1	648	648	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	248	248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	904	904	-	-	-	4.4	0.7	-	5.1	20.4	7.2	0.7	8.0	
5/3	696	696	-	-	-	3.9	2.6	-	6.5	33.7	13.0	2.6	15.5	
6/1	730	730	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
6/2	679	679	-	-	-	0.0	0.3	-	0.3	1.5	4.5	0.3	4.7	
6/3	1258	1258	-	-	-	0.1	0.9	-	1.0	2.8	11.0	0.9	11.9	
7/1	882	882	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
8/1	882	882	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	402	402	804	0	0	1.1	1.4	-	2.5	22.8	1.9	1.4	3.4	
9/3	391	270	270	0	0	7.2	61.8	-	69.1	635.8	24.1	61.8	85.9	
10/1	926	926	-	-	-	0.0	0.4	-	0.4	1.7	1.1	0.4	1.6	
10/2	885	885	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
10/3	1523	1523	-	-	-	0.0	1.7	-	1.7	3.9	3.9	1.7	5.6	
11/1	926	926	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	465	465	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	420	420	-	-	-	0.7	0.3	-	1.0	8.6	3.5	0.3	3.8	
12/2+12/3	1523	1523	-	-	-	3.8	7.4	-	11.1	26.3	14.0	7.4	21.4	
13/2+13/1	972	878	-	-	-	8.7	58.3	-	67.0	248.3	12.8	58.3	71.2	
13/3	546	480	-	-	-	5.6	36.7	-	42.3	279.0	10.2	36.7	46.9	
14/1	757	613	-	-	-	9.4	74.3	-	83.7	398.1	17.1	74.3	91.4	
14/2	773	613	-	-	-	11.0	82.6	-	93.7	436.0	18.0	82.6	100.6	
14/3	481	481	-	-	-	5.3	1.8	-	7.0	52.7	8.0	1.8	9.8	
15/1	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	610	610	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	666	666	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	958	958	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
17/1	495	495	-	-	-	1.2	0.5	-	1.7	12.2	5.1	0.5	5.6	
17/2	530	530	-	-	-	1.3	0.5	-	1.8	11.9	5.4	0.5	5.9	
18/1	498	498	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	498	498	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	434	434	868	0	0	0.9	1.2	-	2.1	17.5	3.5	1.2	4.7	
20/3	586	380	380	0	0	9.3	104.5	-	113.8	699.2	29.3	104.5	133.8	
21/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	483	483	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06
C2 - West Side T7771W07

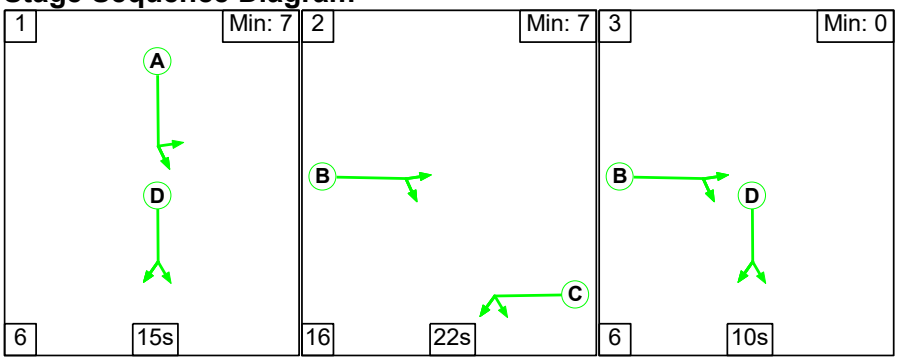
PRC for Signalled Lanes (%): -45.2
PRC for Signalled Lanes (%): -40.2
PRC Over All Lanes (%): -71.5

Total Delay for Signalled Lanes (pcuHr): 215.71
Total Delay for Signalled Lanes (pcuHr): 309.32
Total Delay Over All Lanes(pcuHr): 718.14

Cycle Time (s): 75
Cycle Time (s): 60

Scenario 4: '2028 WoD PM' (FG4: '2028 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



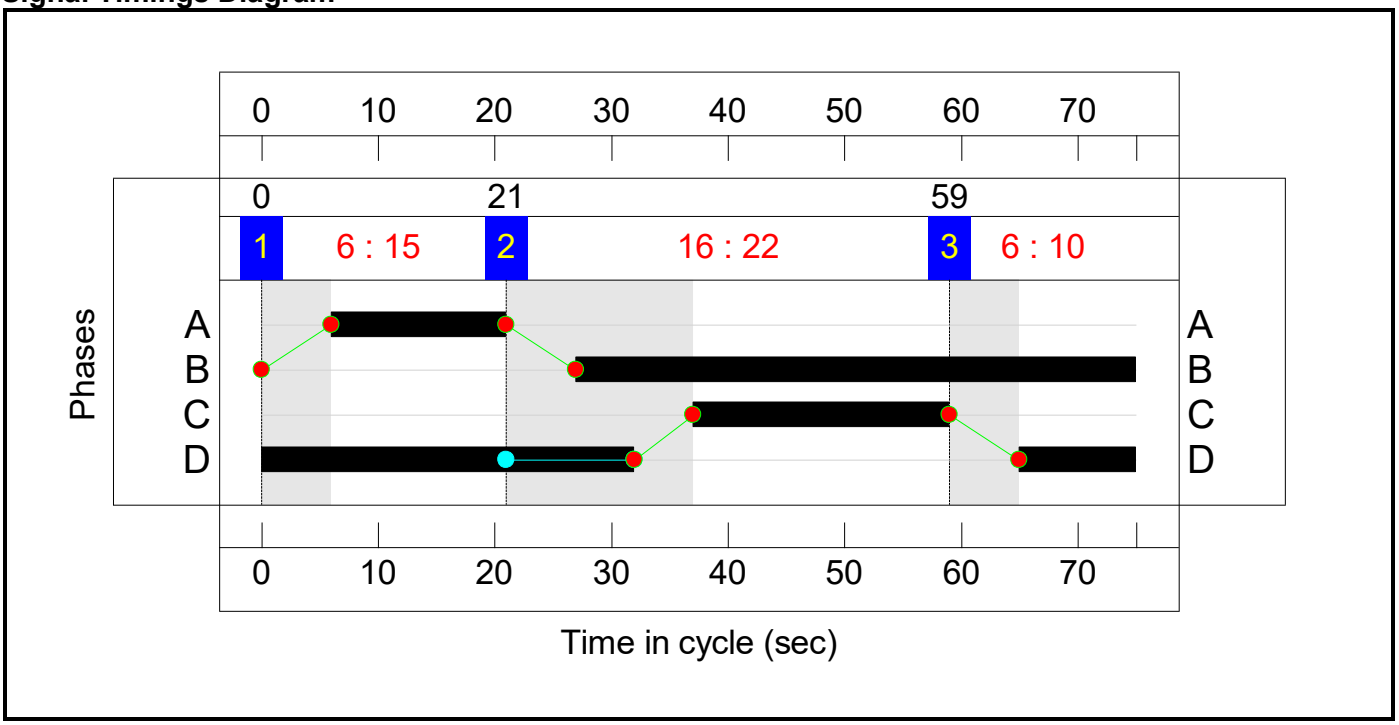
Stage Timings

Stage	1	2	3
Duration	15	22	10
Change Point	0	21	59

Phase Timings

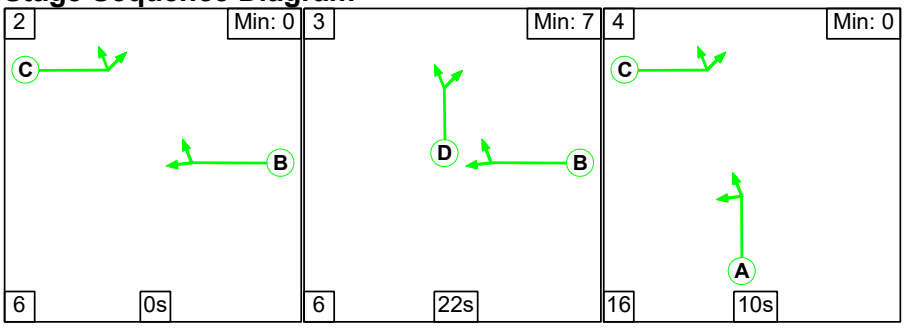
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	15	6	21
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	48	27	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	22	37	59
D	East Circ Right Ahead East Circ	Traffic	42	65	32

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



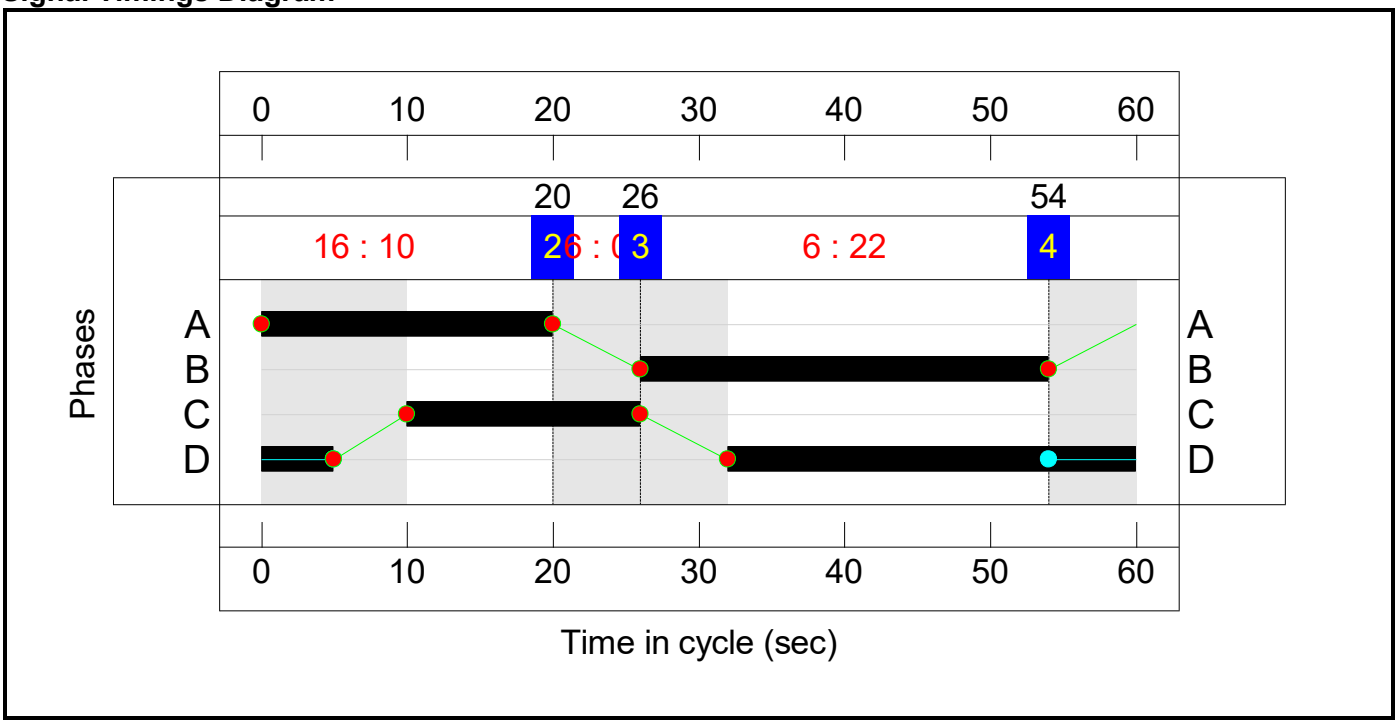
Stage Timings

Stage	2	3	4
Duration	0	22	10
Change Point	20	26	54

Phase Timings

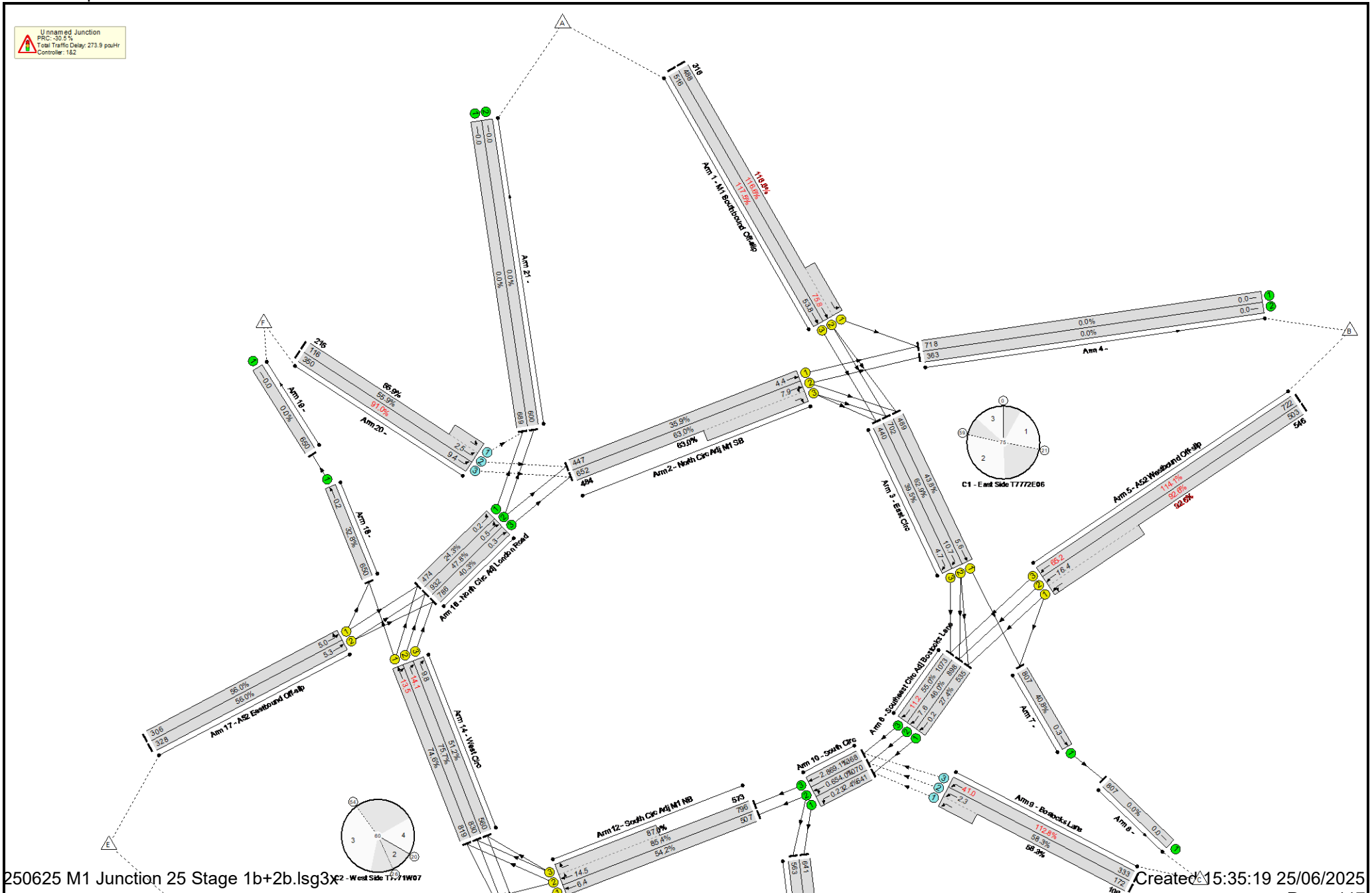
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	20	0	20
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	28	26	54
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	16	10	26
D	West Circ Right Ahead West Circ	Traffic	33	32	5

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	21
1/2	M1 Southbound Off-slip Ahead	U	A	6	21
1/3	M1 Southbound Off-slip Ahead	U	A	6	21
2/1	North Circ Adj M1 SB Ahead	U	B	27	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	27	0
2/3	North Circ Adj M1 SB Right	U	B	27	0
3/1	East Circ Ahead	U	D	65	32
3/2	East Circ Right	U	D	65	32
3/3	East Circ Right	U	D	65	32
5/1	A52 Westbound Off-slip Ahead Left	U	C	37	59
5/2	A52 Westbound Off-slip Ahead	U	C	37	59
5/3	A52 Westbound Off-slip Ahead	U	C	37	59
12/1	South Circ Adj M1 NB Ahead	U	B	26	54
12/2	South Circ Adj M1 NB Right Ahead	U	B	26	54
12/3	South Circ Adj M1 NB Right	U	B	26	54
13/1	M1 Northbound Off-slip Left	U	A	0	20
13/2	M1 Northbound Off-slip Ahead Left	U	A	0	20
13/3	M1 Northbound Off-slip Ahead	U	A	0	20
14/1	West Circ Right Ahead	U	D	32	5
14/2	West Circ Right	U	D	32	5
14/3	West Circ Right	U	D	32	5
17/1	A52 Eastbound Off-slip Ahead Left	U	C	10	26
17/2	A52 Eastbound Off-slip Ahead	U	C	10	26


Unnamed Junction
PRC: -30.5%
Total Traffic Delay: 273.9 pcuHr
Controller: 1&2
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**117.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**117.5%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	15	-	-	804	2056:1915	419+271	116.6 : 116.6%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	15	-	-	516	2059	439	117.5%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	48	-	-	456	1908	1247	35.9%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	48	-	-	1137	1906:1904	1036+768	63.0 : 63.0%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	42	-	-	522	1946	1116	43.8%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	738	1945	1115	62.9%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	517	1943	1114	39.5%
4/1		U	N/A	N/A	-		-	-	-	-	772	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	364	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	22	-	-	1049	2061:1923	543+590	92.6 : 92.6%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	22	-	-	722	2064	633	114.1%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	535	1953	1953	27.4%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	934	1952	1952	46.0%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1239	1951	1951	55.0%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	840	1980	1980	40.8%
8/1		U	N/A	N/A	-		-	-	-	-	840	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	278	1923:1919	295+182	58.3 : 58.3%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	333	1926	295	112.8%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	641	1980	1980	32.4%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1106	1980	1980	54.0%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1572	1980	1980	69.1%
11/1		U	N/A	N/A	-		-	-	-	-	641	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	563	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	28	-	-	543	1936	936	54.2%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	28	-	-	1572	1931:1931	931+658	85.4 : 87.0%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	20	-	-	923	2053:1912	672+378	87.9 : 87.9%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	20	-	-	554	2057	720	76.9%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	33	-	-	891	1937	1098	74.6%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	33	-	-	907	1935	1096	75.7%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	33	-	-	561	1932	1095	51.2%
15/1		U	N/A	N/A	-		-	-	-	-	875	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	358	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	503	1952	1952	24.3%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1009	1950	1950	47.8%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	787	1950	1950	40.3%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	16	-	-	306	1928	546	56.0%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	16	-	-	328	2067	586	56.0%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	694	1980	1980	32.8%
19/1		U	N/A	N/A	-		-	-	-	-	694	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	331	2061:1921	208+385	55.9 : 55.9%
20/3	Left	O	N/A	N/A	-		-	-	-	-	350	1928	385	91.0%
21/1		U	N/A	N/A	-		-	-	-	-	718	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	669	Inf	Inf	0.0%

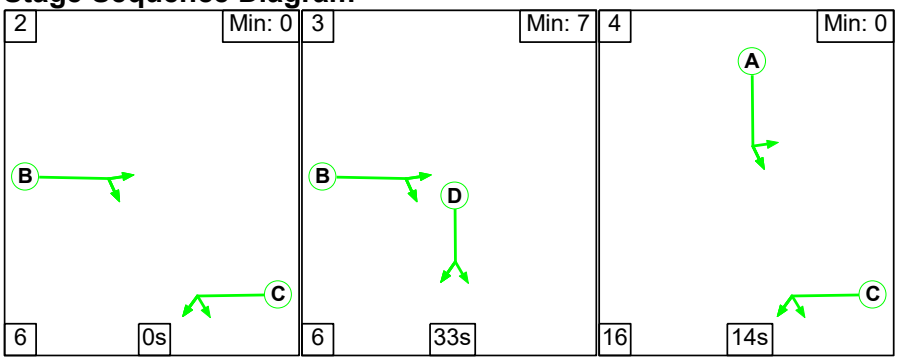
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1863**	**0**	**0**	**69.3**	**204.5**	**0.0**	**273.9**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1863**	**0**	**0**	**69.3**	**204.5**	**0.0**	**273.9**	**-**	**-**	**-**	**-**	
1/2+1/1	804	690	-	-	-	10.8	60.4	-	71.2	318.8	15.4	60.4	75.8	
1/3	516	439	-	-	-	7.1	41.5	-	48.6	338.9	12.3	41.5	53.8	
2/1	447	447	-	-	-	0.7	0.3	-	1.0	8.1	4.1	0.3	4.4	
2/2+2/3	1136	1136	-	-	-	2.1	0.8	-	2.9	9.2	7.1	0.8	7.9	
3/1	489	489	-	-	-	1.4	0.4	-	1.8	12.9	5.2	0.4	5.6	
3/2	702	702	-	-	-	2.7	0.8	-	3.6	18.4	9.8	0.8	10.7	
3/3	440	440	-	-	-	0.3	0.3	-	0.6	4.8	4.3	0.3	4.7	
4/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1049	1049	-	-	-	7.2	5.5	-	12.7	43.5	10.9	5.5	16.4	
5/3	722	633	-	-	-	7.7	48.3	-	55.9	279.0	16.9	48.3	65.2	
6/1	535	535	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
6/2	898	898	-	-	-	0.0	0.4	-	0.5	1.8	7.1	0.4	7.6	
6/3	1073	1073	-	-	-	0.1	0.6	-	0.7	2.3	10.6	0.6	11.2	
7/1	807	807	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	807	807	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	278	278	556	0	0	0.4	0.7	-	1.1	14.1	1.6	0.7	2.3	
9/3	333	295	295	0	0	2.6	22.6	-	25.2	272.5	18.4	22.6	41.0	
10/1	641	641	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
10/2	1070	1070	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/3	1368	1368	-	-	-	0.0	1.1	-	1.1	2.9	1.7	1.1	2.8	
11/1	641	641	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	563	563	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	507	507	-	-	-	1.5	0.6	-	2.1	15.0	5.8	0.6	6.4	
12/2+12/3	1368	1368	-	-	-	4.8	3.0	-	7.8	20.6	11.5	3.0	14.5	
13/2+13/1	923	923	-	-	-	4.3	3.4	-	7.8	30.4	8.9	3.4	12.3	
13/3	554	554	-	-	-	2.7	1.6	-	4.3	28.0	8.2	1.6	9.8	
14/1	819	819	-	-	-	2.4	1.5	-	3.8	16.7	12.1	1.5	13.5	
14/2	830	830	-	-	-	2.2	1.5	-	3.7	16.2	12.6	1.5	14.1	
14/3	560	560	-	-	-	3.7	0.5	-	4.3	27.3	9.3	0.5	9.8	
15/1	839	839	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	305	305	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	474	474	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	932	932	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
16/3	786	786	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
17/1	306	306	-	-	-	1.6	0.6	-	2.2	25.8	4.3	0.6	5.0	
17/2	328	328	-	-	-	1.7	0.6	-	2.3	25.3	4.6	0.6	5.3	
18/1	650	650	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
19/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	331	331	662	0	0	0.6	0.6	-	1.2	13.0	1.9	0.6	2.5	
20/3	350	350	350	0	0	0.9	4.1	-	5.0	51.7	5.3	4.1	9.4	
21/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	600	600	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-30.5	Total Delay for Signalled Lanes (pcuHr):	198.24	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	38.33	Cycle Time (s):	60
	PRC Over All Lanes (%):	-30.5	Total Delay Over All Lanes(pcuHr):	273.89		

Scenario 5: '2028 WD AM' (FG5: '2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



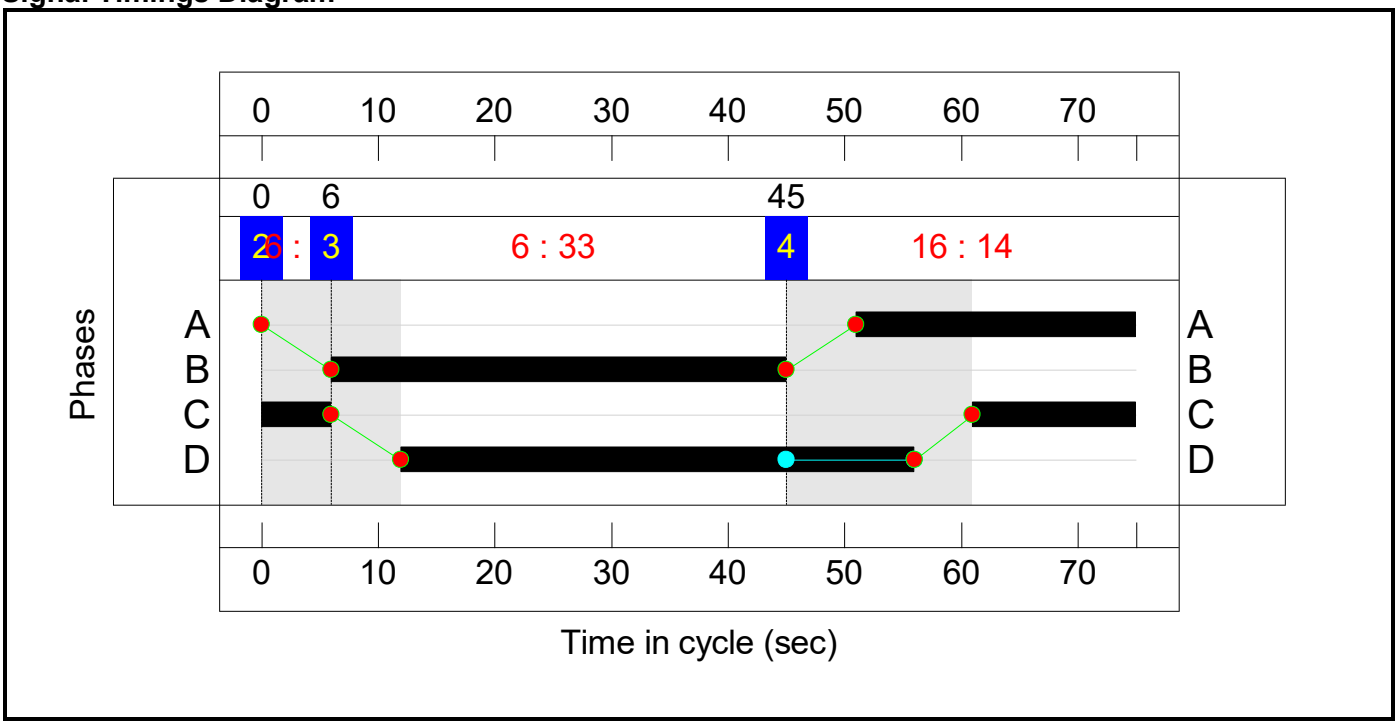
Stage Timings

Stage	2	3	4
Duration	0	33	14
Change Point	0	6	45

Phase Timings

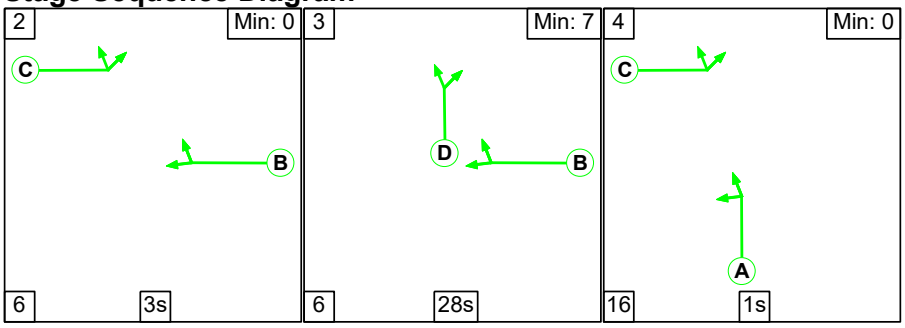
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	24	51	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	39	6	45
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	20	61	6
D	East Circ Right Ahead East Circ	Traffic	44	12	56

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



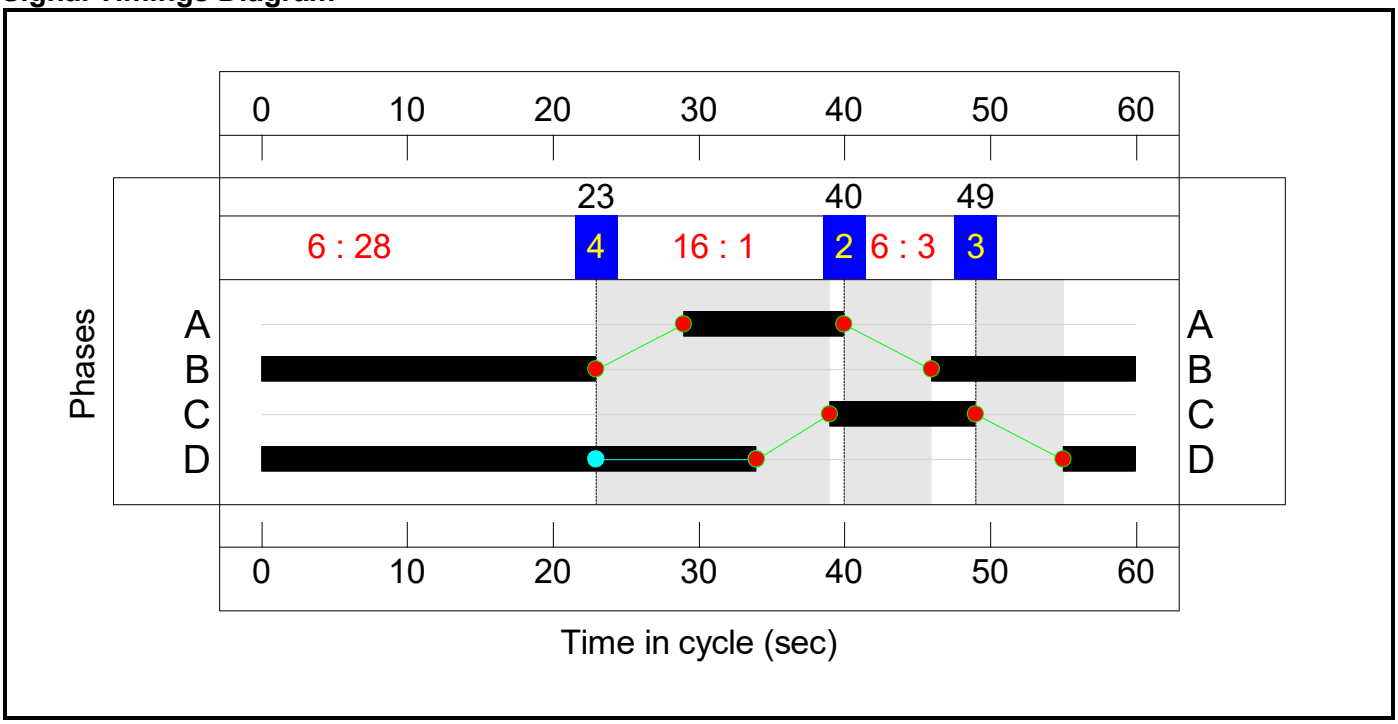
Stage Timings

Stage	2	3	4
Duration	3	28	1
Change Point	40	49	23

Phase Timings

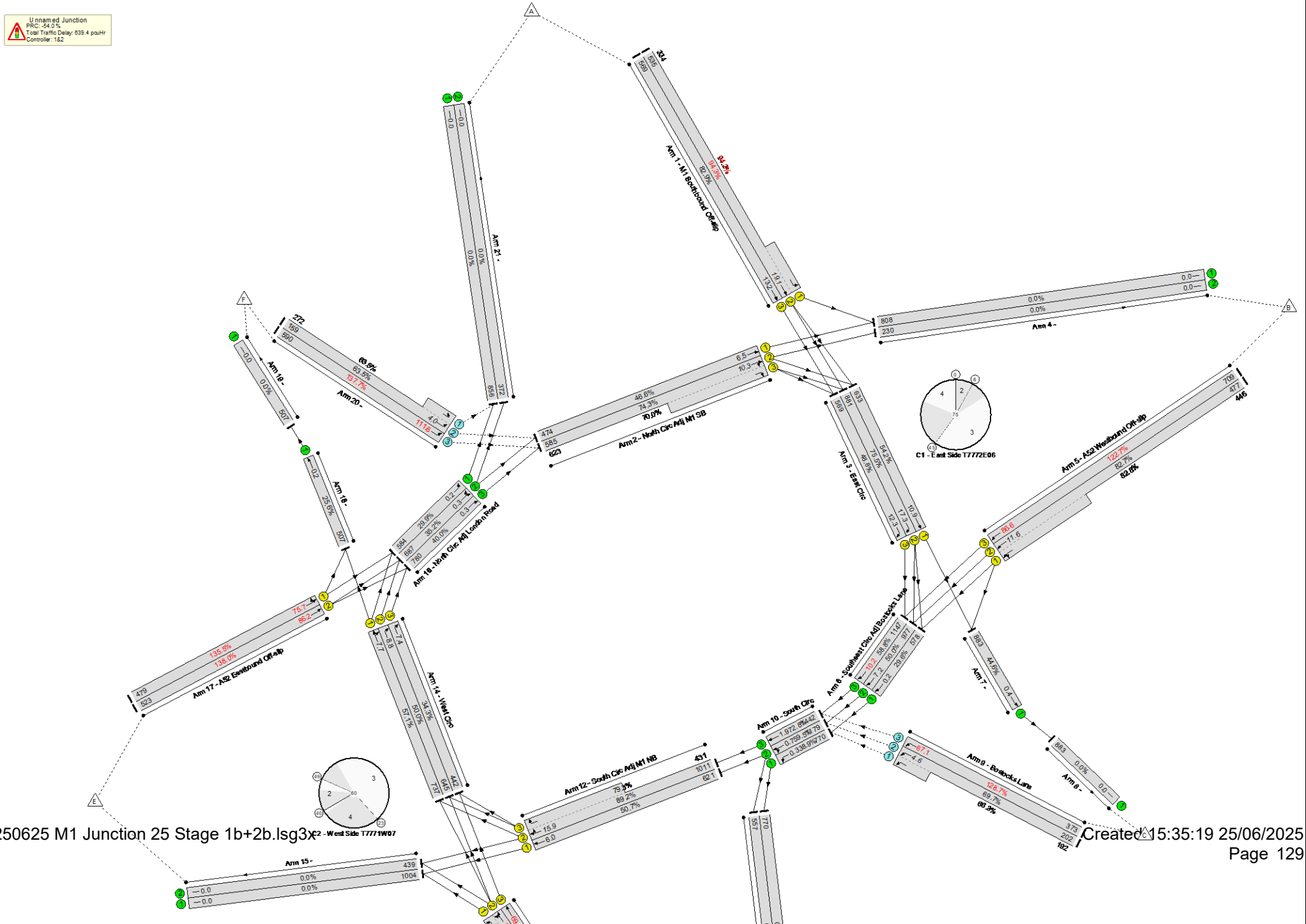
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	11	29	40
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	37	46	23
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	10	39	49
D	West Circ Right Ahead West Circ	Traffic	39	55	34

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	51	0
1/2	M1 Southbound Off-slip Ahead	U	A	51	0
1/3	M1 Southbound Off-slip Ahead	U	A	51	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	45
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	45
2/3	North Circ Adj M1 SB Right	U	B	6	45
3/1	East Circ Ahead	U	D	12	56
3/2	East Circ Right	U	D	12	56
3/3	East Circ Right	U	D	12	56
5/1	A52 Westbound Off-slip Ahead Left	U	C	61	6
5/2	A52 Westbound Off-slip Ahead	U	C	61	6
5/3	A52 Westbound Off-slip Ahead	U	C	61	6
12/1	South Circ Adj M1 NB Ahead	U	B	46	23
12/2	South Circ Adj M1 NB Right Ahead	U	B	46	23
12/3	South Circ Adj M1 NB Right	U	B	46	23
13/1	M1 Northbound Off-slip Left	U	A	29	40
13/2	M1 Northbound Off-slip Ahead Left	U	A	29	40
13/3	M1 Northbound Off-slip Ahead	U	A	29	40
14/1	West Circ Right Ahead	U	D	55	34
14/2	West Circ Right	U	D	55	34
14/3	West Circ Right	U	D	55	34
17/1	A52 Eastbound Off-slip Ahead Left	U	C	39	49
17/2	A52 Eastbound Off-slip Ahead	U	C	39	49


Unnamed Junction
PRC: -54.0 %
Total Traffic Delay: 639.4 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**138.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**138.6%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	24	-	-	869	2056:1915	567+354	94.3 : 94.3%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	24	-	-	569	2059	686	82.9%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	39	-	-	587	1908	1018	46.6%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	39	-	-	1619	1906:1904	787+890	74.3 : 70.0%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	44	-	-	745	1946	1168	54.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	44	-	-	1117	1945	1167	75.5%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	44	-	-	569	1943	1166	48.8%
4/1		U	N/A	N/A	-		-	-	-	-	921	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	292	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	20	-	-	923	2061:1923	577+538	82.7 : 82.8%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	20	-	-	709	2064	578	122.7%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	722	1953	1953	29.6%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1068	1952	1952	50.0%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1278	1951	1951	58.8%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	995	1980	1980	44.6%
8/1		U	N/A	N/A	-		-	-	-	-	995	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	394	1923:1919	290+290	69.7 : 66.3%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	373	1926	290	128.7%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	914	1980	1980	38.9%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1270	1980	1980	59.5%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1651	1980	1980	72.8%
11/1		U	N/A	N/A	-		-	-	-	-	914	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	588	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	37	-	-	682	1936	1226	50.7%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	37	-	-	1651	1931:1931	1133+543	89.2 : 79.3%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	11	-	-	1036	2053:1912	411+382	138.6 : 122.3%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	11	-	-	524	2057	411	127.4%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	39	-	-	905	1937	1291	57.1%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	836	1935	1290	50.0%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	39	-	-	563	1932	1288	34.3%
15/1		U	N/A	N/A	-		-	-	-	-	1149	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	440	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	754	1952	1952	29.9%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	893	1950	1950	35.2%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1029	1950	1950	40.0%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	10	-	-	479	1928	353	135.5%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	10	-	-	523	2067	379	138.0%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	630	1980	1980	25.6%
19/1		U	N/A	N/A	-		-	-	-	-	630	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	431	2061:1921	250+428	63.5 : 63.5%
20/3	Left	O	N/A	N/A	-		-	-	-	-	590	1928	428	137.7%
21/1		U	N/A	N/A	-		-	-	-	-	1026	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	465	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2368**	**0**	**0**	**96.6**	**542.9**	**0.0**	**639.4**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2368**	**0**	**0**	**96.6**	**542.9**	**0.0**	**639.4**	**-**	**-**	**-**	**-**	
1/2+1/1	869	869	-	-	-	5.4	6.6	-	12.0	49.7	12.5	6.6	19.1	
1/3	569	569	-	-	-	3.6	2.3	-	6.0	37.8	10.9	2.3	13.2	
2/1	474	474	-	-	-	1.4	0.4	-	1.9	14.2	6.1	0.4	6.5	
2/2+2/3	1208	1208	-	-	-	4.0	1.3	-	5.3	15.8	9.0	1.3	10.3	
3/1	633	633	-	-	-	1.8	0.6	-	2.4	13.8	10.3	0.6	10.9	
3/2	881	881	-	-	-	2.2	1.5	-	3.7	15.3	15.8	1.5	17.3	
3/3	569	569	-	-	-	4.1	0.5	-	4.5	28.7	11.9	0.5	12.3	
4/1	808	808	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	230	230	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	923	923	-	-	-	6.5	2.3	-	8.8	34.4	9.3	2.3	11.6	
5/3	709	578	-	-	-	10.9	68.1	-	79.0	401.1	18.5	68.1	86.6	
6/1	578	578	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
6/2	977	977	-	-	-	0.0	0.5	-	0.5	1.9	6.7	0.5	7.2	
6/3	1147	1147	-	-	-	0.0	0.7	-	0.8	2.4	9.5	0.7	10.2	
7/1	883	883	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
8/1	883	883	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	394	394	788	0	0	1.4	1.0	-	2.5	22.6	3.6	1.0	4.6	
9/3	373	290	290	0	0	5.5	43.7	-	49.2	475.1	23.3	43.7	67.1	
10/1	770	770	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
10/2	1179	1179	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7	
10/3	1442	1442	-	-	-	0.0	1.3	-	1.3	3.3	0.6	1.3	1.9	
11/1	770	770	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	557	557	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	621	621	-	-	-	1.0	0.5	-	1.5	8.9	5.5	0.5	6.0	
12/2+12/3	1442	1442	-	-	-	3.0	3.0	-	6.0	15.0	12.9	3.0	15.9	
13/2+13/1	1036	793	-	-	-	12.5	123.8	-	136.4	473.9	16.2	123.8	140.0	
13/3	524	411	-	-	-	6.1	58.5	-	64.6	444.1	10.6	58.5	69.1	
14/1	737	737	-	-	-	0.9	0.7	-	1.6	7.6	7.0	0.7	7.7	
14/2	645	645	-	-	-	1.6	0.5	-	2.1	11.7	8.3	0.5	8.8	
14/3	442	442	-	-	-	2.1	0.3	-	2.4	19.6	7.2	0.3	7.4	
15/1	1004	1004	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	584	584	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	687	687	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	780	780	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
17/1	479	353	-	-	-	6.9	64.6	-	71.5	537.3	11.1	64.6	75.7	
17/2	523	379	-	-	-	7.8	73.8	-	81.6	561.4	12.4	73.8	86.2	
18/1	507	507	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	431	431	862	0	0	0.5	0.9	-	1.4	11.5	3.2	0.9	4.0	
20/3	590	428	428	0	0	7.2	82.6	-	89.8	547.8	29.0	82.6	111.6	
21/1	856	856	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06
C2 - West Side T7771W07

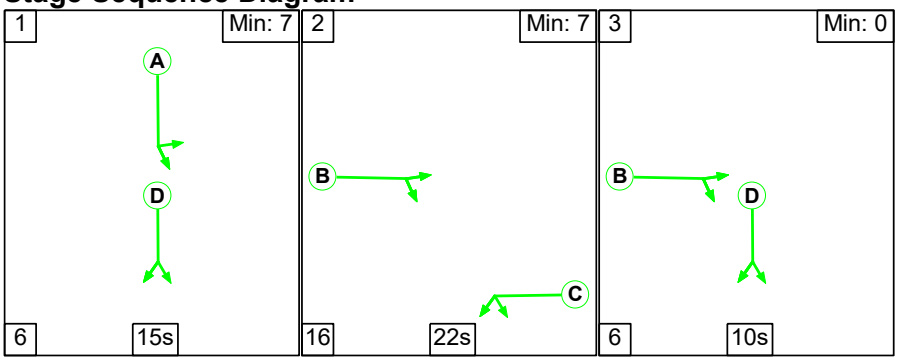
PRC for Signalled Lanes (%): -36.3
PRC for Signalled Lanes (%): -54.0
PRC Over All Lanes (%): -54.0

Total Delay for Signalled Lanes (pcuHr): 123.65
Total Delay for Signalled Lanes (pcuHr): 367.67
Total Delay Over All Lanes(pcuHr): 639.45

Cycle Time (s): 75
Cycle Time (s): 60

Scenario 6: '2028 WD PM' (FG6: '2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



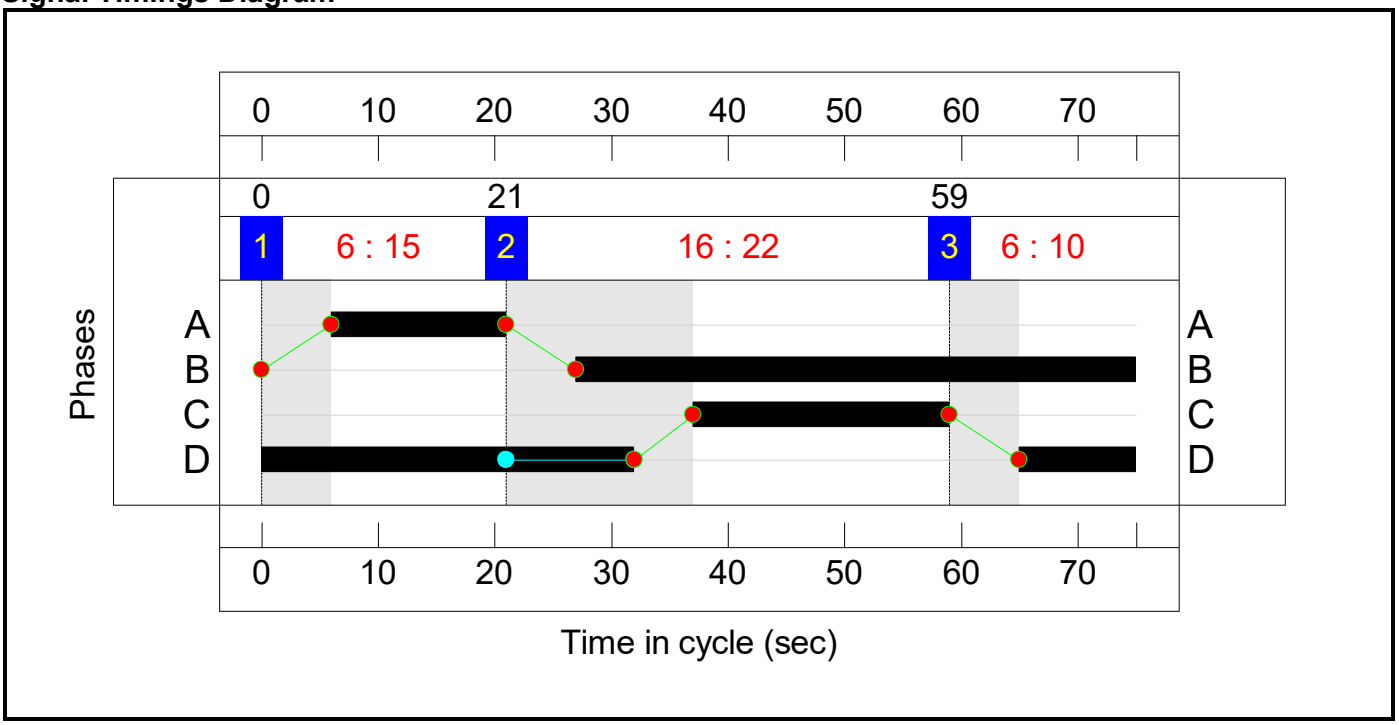
Stage Timings

Stage	1	2	3
Duration	15	22	10
Change Point	0	21	59

Phase Timings

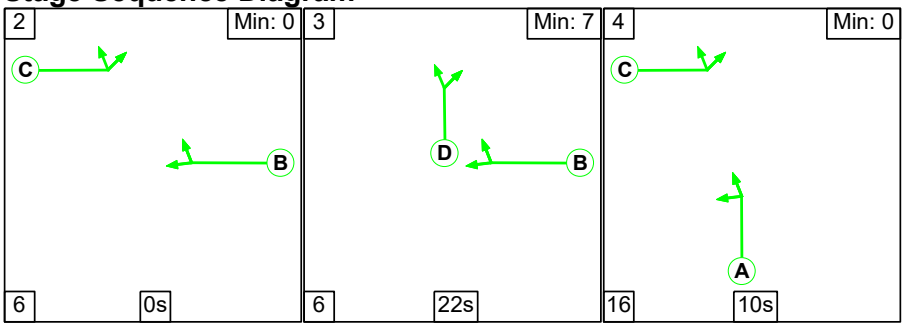
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	15	6	21
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	48	27	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	22	37	59
D	East Circ Right Ahead East Circ	Traffic	42	65	32

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



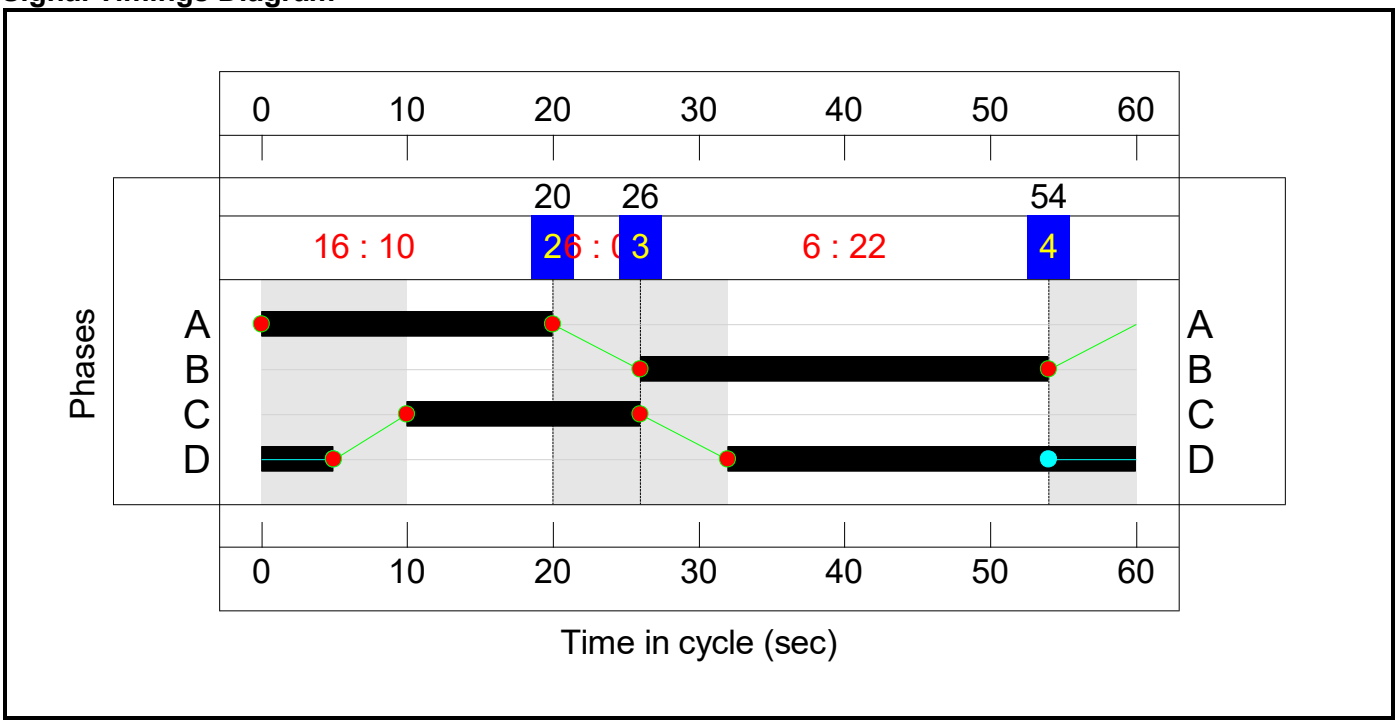
Stage Timings

Stage	2	3	4
Duration	0	22	10
Change Point	20	26	54

Phase Timings

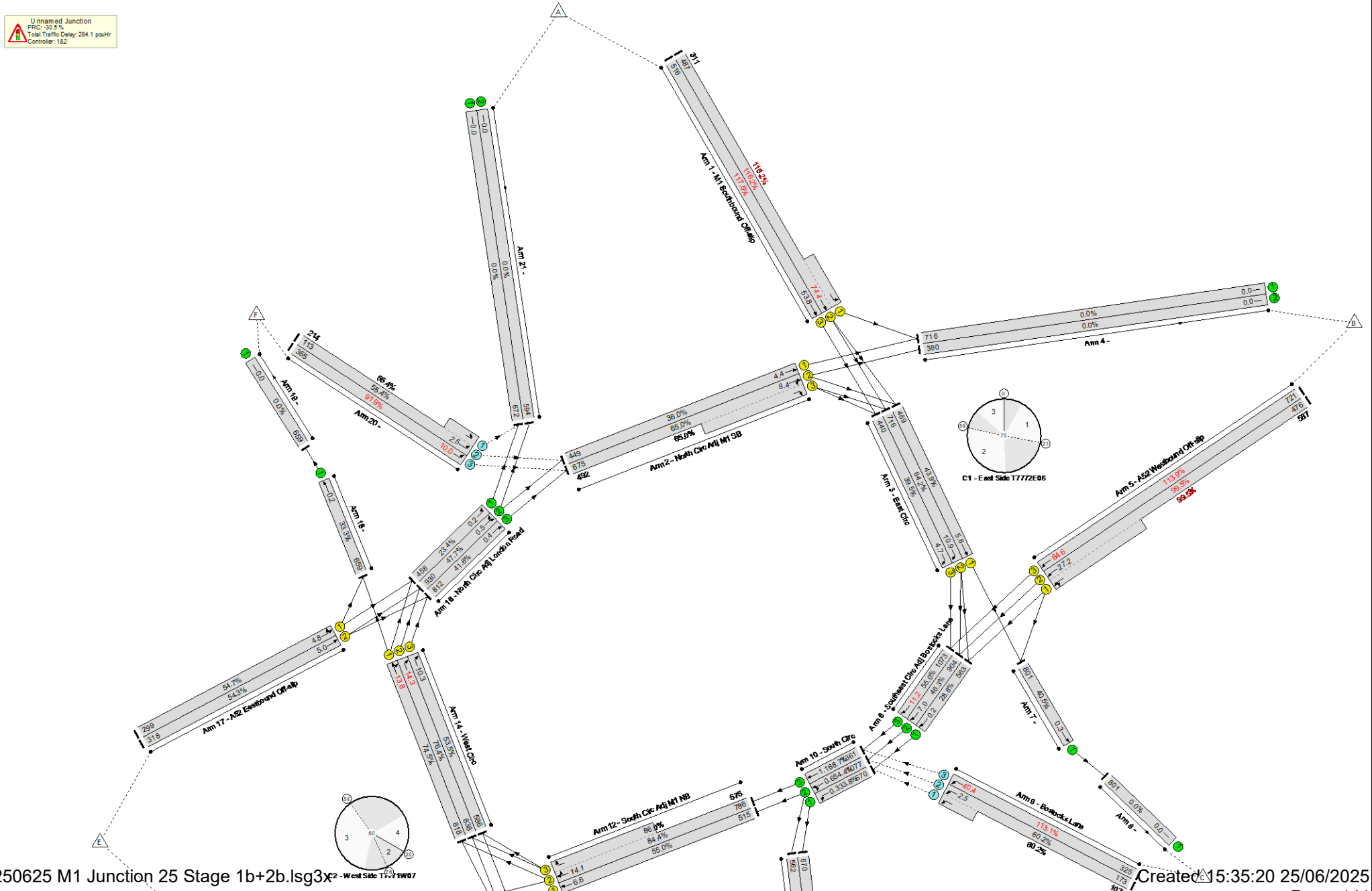
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	20	0	20
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	28	26	54
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	16	10	26
D	West Circ Right Ahead West Circ	Traffic	33	32	5

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	21
1/2	M1 Southbound Off-slip Ahead	U	A	6	21
1/3	M1 Southbound Off-slip Ahead	U	A	6	21
2/1	North Circ Adj M1 SB Ahead	U	B	27	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	27	0
2/3	North Circ Adj M1 SB Right	U	B	27	0
3/1	East Circ Ahead	U	D	65	32
3/2	East Circ Right	U	D	65	32
3/3	East Circ Right	U	D	65	32
5/1	A52 Westbound Off-slip Ahead Left	U	C	37	59
5/2	A52 Westbound Off-slip Ahead	U	C	37	59
5/3	A52 Westbound Off-slip Ahead	U	C	37	59
12/1	South Circ Adj M1 NB Ahead	U	B	26	54
12/2	South Circ Adj M1 NB Right Ahead	U	B	26	54
12/3	South Circ Adj M1 NB Right	U	B	26	54
13/1	M1 Northbound Off-slip Left	U	A	0	20
13/2	M1 Northbound Off-slip Ahead Left	U	A	0	20
13/3	M1 Northbound Off-slip Ahead	U	A	0	20
14/1	West Circ Right Ahead	U	D	32	5
14/2	West Circ Right	U	D	32	5
14/3	West Circ Right	U	D	32	5
17/1	A52 Eastbound Off-slip Ahead Left	U	C	10	26
17/2	A52 Eastbound Off-slip Ahead	U	C	10	26


Unnamed Junction
PRC: -30.5%
Total Traffic Delay: 284.1 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**117.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**117.5%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	15	-	-	798	2056:1915	419+268	116.2 : 116.2%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	15	-	-	516	2059	439	117.5%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	48	-	-	458	1908	1247	36.0%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	48	-	-	1167	1906:1904	1038+757	65.0 : 65.0%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	42	-	-	521	1946	1116	43.9%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	752	1945	1115	64.2%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	517	1943	1114	39.5%
4/1		U	N/A	N/A	-		-	-	-	-	769	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	380	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	22	-	-	1063	2061:1923	478+590	99.5 : 99.5%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	22	-	-	721	2064	633	113.9%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	563	1953	1953	28.8%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	940	1952	1952	46.3%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1238	1951	1951	55.0%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	833	1980	1980	40.5%
8/1		U	N/A	N/A	-		-	-	-	-	833	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	280	1923:1919	287+178	60.2 : 60.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	325	1926	287	113.1%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	670	1980	1980	33.8%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1113	1980	1980	54.4%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1563	1980	1980	68.7%
11/1		U	N/A	N/A	-		-	-	-	-	670	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	562	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	28	-	-	551	1936	936	55.0%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	28	-	-	1563	1931:1931	931+668	84.4 : 86.0%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	20	-	-	963	2053:1912	671+395	90.3 : 90.3%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	20	-	-	584	2057	720	81.1%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	33	-	-	888	1937	1098	74.5%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	33	-	-	916	1935	1096	76.4%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	33	-	-	586	1932	1095	53.5%
15/1		U	N/A	N/A	-		-	-	-	-	908	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	363	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	485	1952	1952	23.4%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1008	1950	1950	47.7%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	812	1950	1950	41.6%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	16	-	-	299	1928	546	54.7%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	16	-	-	318	2067	586	54.3%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	702	1980	1980	33.3%
19/1		U	N/A	N/A	-		-	-	-	-	702	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	327	2061:1921	204+386	55.4 : 55.4%
20/3	Left	O	N/A	N/A	-		-	-	-	-	355	1928	386	91.9%
21/1		U	N/A	N/A	-		-	-	-	-	699	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	663	Inf	Inf	0.0%

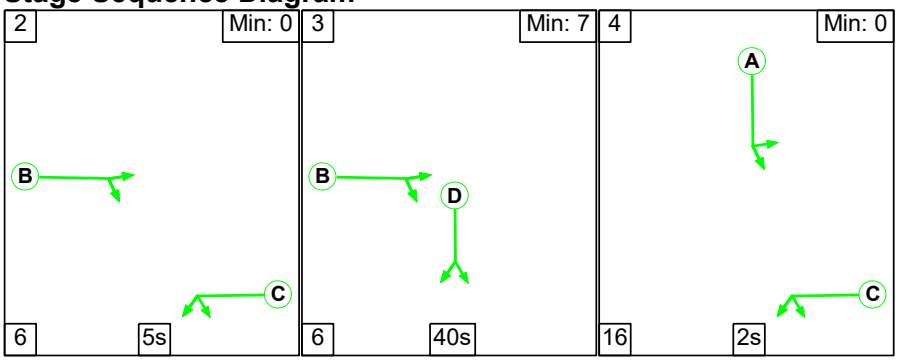
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1856**	**0**	**0**	**70.2**	**213.9**	**0.0**	**284.1**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1856**	**0**	**0**	**70.2**	**213.9**	**0.0**	**284.1**	**-**	**-**	**-**	**-**	
1/2+1/1	798	687	-	-	-	10.6	59.1	-	69.7	314.5	15.3	59.1	74.4	
1/3	516	439	-	-	-	7.1	41.5	-	48.6	338.9	12.3	41.5	53.8	
2/1	449	449	-	-	-	0.7	0.3	-	1.0	8.1	4.1	0.3	4.4	
2/2+2/3	1167	1167	-	-	-	2.1	0.9	-	3.1	9.5	7.5	0.9	8.4	
3/1	489	489	-	-	-	1.4	0.4	-	1.8	13.0	5.4	0.4	5.8	
3/2	716	716	-	-	-	2.8	0.9	-	3.7	18.6	10.0	0.9	10.9	
3/3	440	440	-	-	-	0.3	0.3	-	0.6	4.8	4.3	0.3	4.7	
4/1	716	716	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1063	1063	-	-	-	7.3	15.1	-	22.4	76.0	12.1	15.1	27.2	
5/3	721	633	-	-	-	7.7	47.8	-	55.4	276.8	16.9	47.8	64.6	
6/1	563	563	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
6/2	904	904	-	-	-	0.0	0.4	-	0.4	1.8	6.5	0.4	7.0	
6/3	1073	1073	-	-	-	0.1	0.6	-	0.7	2.3	10.6	0.6	11.2	
7/1	801	801	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	801	801	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	280	280	560	0	0	0.4	0.8	-	1.2	15.1	1.7	0.8	2.5	
9/3	325	287	287	0	0	2.6	22.5	-	25.0	277.4	18.0	22.5	40.4	
10/1	670	670	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
10/2	1077	1077	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/3	1361	1361	-	-	-	0.0	1.1	-	1.1	2.9	0.0	1.1	1.1	
11/1	670	670	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	562	562	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	515	515	-	-	-	1.6	0.6	-	2.2	15.2	6.0	0.6	6.6	
12/2+12/3	1361	1361	-	-	-	4.8	2.8	-	7.6	20.0	11.4	2.8	14.1	
13/2+13/1	963	963	-	-	-	4.6	4.3	-	8.9	33.2	9.3	4.3	13.6	
13/3	584	584	-	-	-	2.9	2.1	-	5.0	30.6	8.8	2.1	10.8	
14/1	818	818	-	-	-	2.5	1.4	-	3.9	17.2	12.4	1.4	13.8	
14/2	838	838	-	-	-	2.2	1.6	-	3.8	16.4	12.7	1.6	14.3	
14/3	586	586	-	-	-	3.9	0.6	-	4.5	27.7	9.8	0.6	10.3	
15/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	458	458	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	930	930	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
16/3	812	812	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
17/1	299	299	-	-	-	1.5	0.6	-	2.1	25.5	4.2	0.6	4.8	
17/2	318	318	-	-	-	1.6	0.6	-	2.2	24.9	4.4	0.6	5.0	
18/1	659	659	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
19/1	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	327	327	654	0	0	0.6	0.6	-	1.2	13.1	1.9	0.6	2.5	
20/3	355	355	355	0	0	1.0	4.4	-	5.4	55.2	5.5	4.4	10.0	
21/1	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-30.5	Total Delay for Signalled Lanes (pcuHr):	206.32	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-0.4	Total Delay for Signalled Lanes (pcuHr):	40.13	Cycle Time (s):	60
	PRC Over All Lanes (%):	-30.5	Total Delay Over All Lanes(pcuHr):	284.11		

Scenario 7: '2038 WoD AM' (FG7: '2038 WoD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



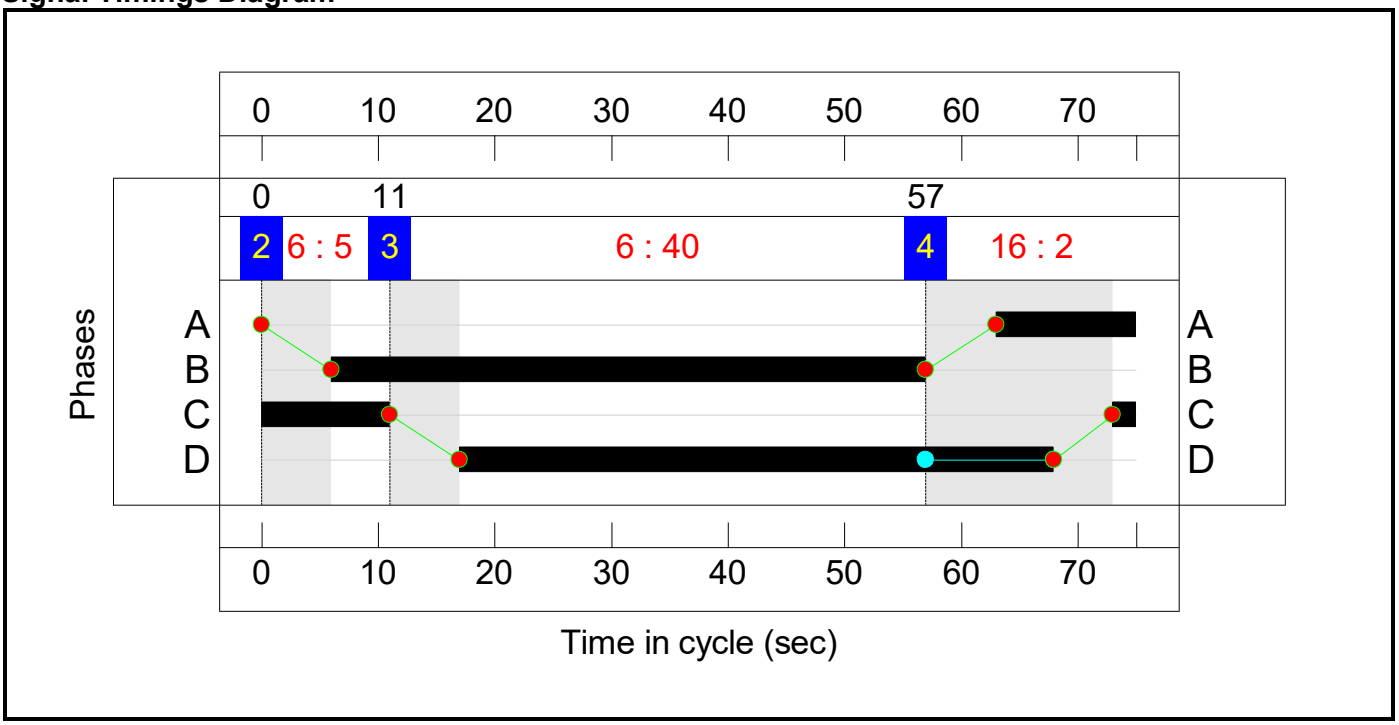
Stage Timings

Stage	2	3	4
Duration	5	40	2
Change Point	0	11	57

Phase Timings

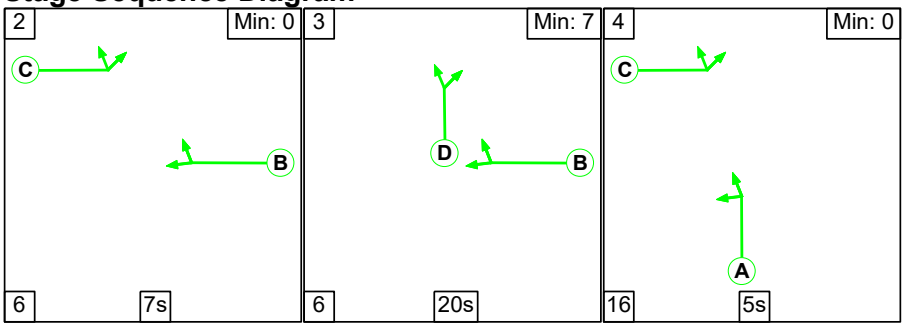
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	12	63	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	51	6	57
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	13	73	11
D	East Circ Right Ahead East Circ	Traffic	51	17	68

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



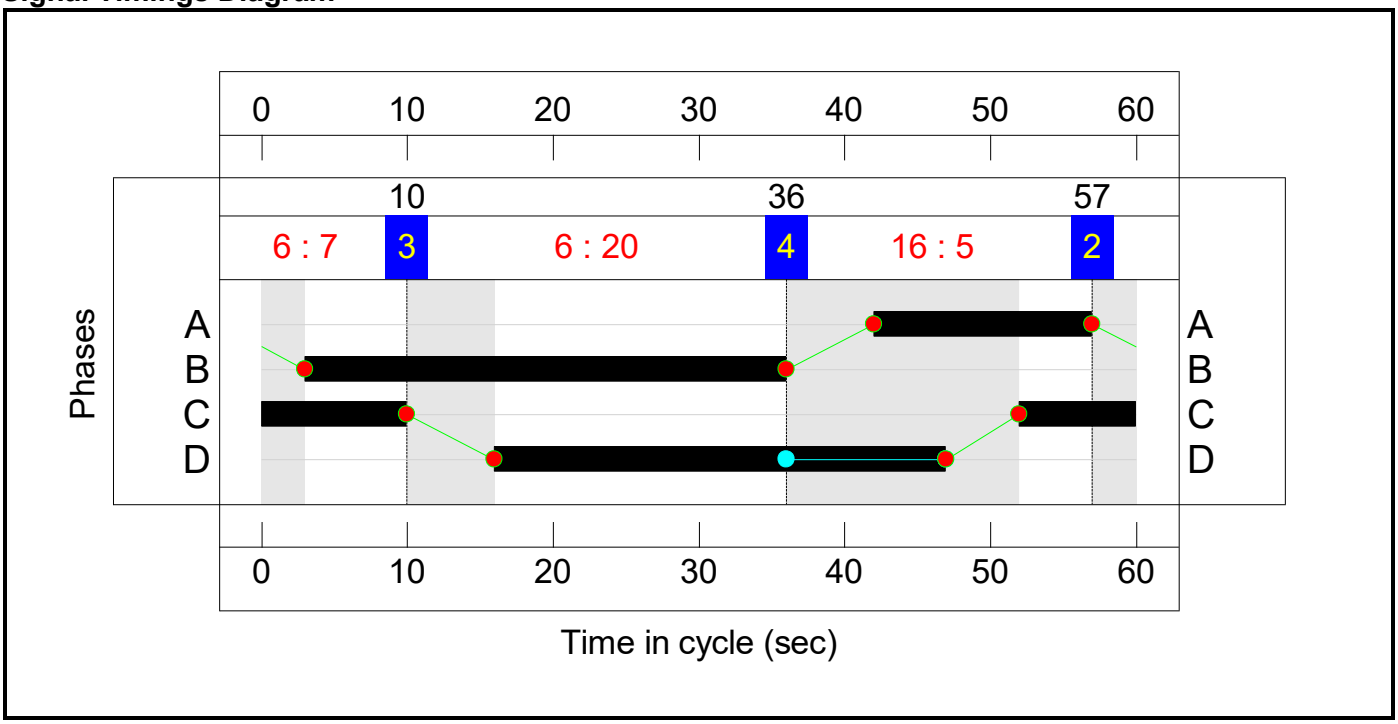
Stage Timings

Stage	2	3	4
Duration	7	20	5
Change Point	57	10	36

Phase Timings

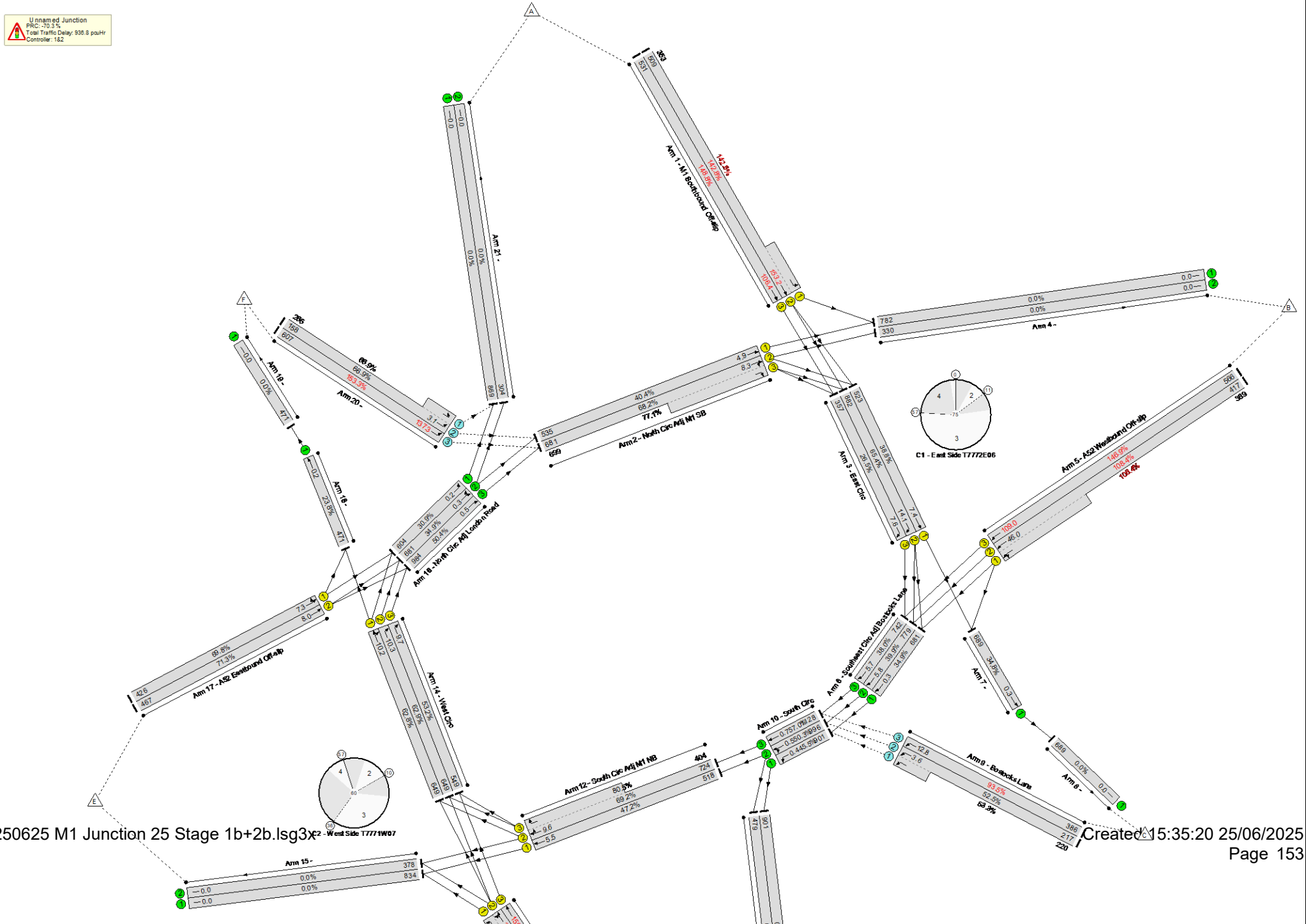
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	15	42	57
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	33	3	36
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	52	10
D	West Circ Right Ahead West Circ	Traffic	31	16	47

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	63	0
1/2	M1 Southbound Off-slip Ahead	U	A	63	0
1/3	M1 Southbound Off-slip Ahead	U	A	63	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	57
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	57
2/3	North Circ Adj M1 SB Right	U	B	6	57
3/1	East Circ Ahead	U	D	17	68
3/2	East Circ Right	U	D	17	68
3/3	East Circ Right	U	D	17	68
5/1	A52 Westbound Off-slip Ahead Left	U	C	73	11
5/2	A52 Westbound Off-slip Ahead	U	C	73	11
5/3	A52 Westbound Off-slip Ahead	U	C	73	11
12/1	South Circ Adj M1 NB Ahead	U	B	3	36
12/2	South Circ Adj M1 NB Right Ahead	U	B	3	36
12/3	South Circ Adj M1 NB Right	U	B	3	36
13/1	M1 Northbound Off-slip Left	U	A	42	57
13/2	M1 Northbound Off-slip Ahead Left	U	A	42	57
13/3	M1 Northbound Off-slip Ahead	U	A	42	57
14/1	West Circ Right Ahead	U	D	16	47
14/2	West Circ Right	U	D	16	47
14/3	West Circ Right	U	D	16	47
17/1	A52 Eastbound Off-slip Ahead Left	U	C	52	10
17/2	A52 Eastbound Off-slip Ahead	U	C	52	10


Unnamed Junction
PRC: -70.3 %
Total Traffic Delay: 936.8 pcuHr
Controller: 1&2
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**153.3%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**153.3%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	12	-	-	862	2056:1915	356+247	142.8 : 142.8%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	12	-	-	531	2059	357	148.8%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	51	-	-	649	1908	1323	40.4%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	51	-	-	1862	1906:1904	999+906	68.2 : 77.1%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	51	-	-	729	1946	1349	38.8%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	51	-	-	1148	1945	1349	65.4%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	51	-	-	531	1943	1347	26.5%
4/1		U	N/A	N/A	-		-	-	-	-	1002	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	494	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	13	-	-	806	2061:1923	385+359	108.4 : 108.4%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	13	-	-	566	2064	385	146.9%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	803	1953	1953	34.9%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	972	1952	1952	39.9%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1097	1951	1951	38.0%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	908	1980	1980	34.8%
8/1		U	N/A	N/A	-		-	-	-	-	908	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	437	1923:1919	413+413	52.5 : 53.3%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	386	1926	413	93.5%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1023	1980	1980	45.5%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1189	1980	1980	50.3%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1483	1980	1980	57.0%
11/1		U	N/A	N/A	-		-	-	-	-	1023	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	523	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	33	-	-	666	1936	1097	47.2%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	33	-	-	1483	1931:1931	1046+502	69.2 : 80.5%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	15	-	-	1267	2053:1912	547+316	146.7 : 146.7%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	15	-	-	820	2057	549	149.5%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	886	1937	1033	62.8%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	840	1935	1032	62.9%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	820	1932	1030	53.2%
15/1		U	N/A	N/A	-		-	-	-	-	1130	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	560	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	680	1952	1952	30.9%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	872	1950	1950	34.9%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1255	1950	1950	50.4%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	426	1928	611	69.8%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	467	2067	655	71.3%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	632	1980	1980	23.8%
19/1		U	N/A	N/A	-		-	-	-	-	632	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	423	2061:1921	236+396	66.9 : 66.9%
20/3	Left	O	N/A	N/A	-		-	-	-	-	607	1928	396	153.3%
21/1		U	N/A	N/A	-		-	-	-	-	945	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	381	Inf	Inf	0.0%

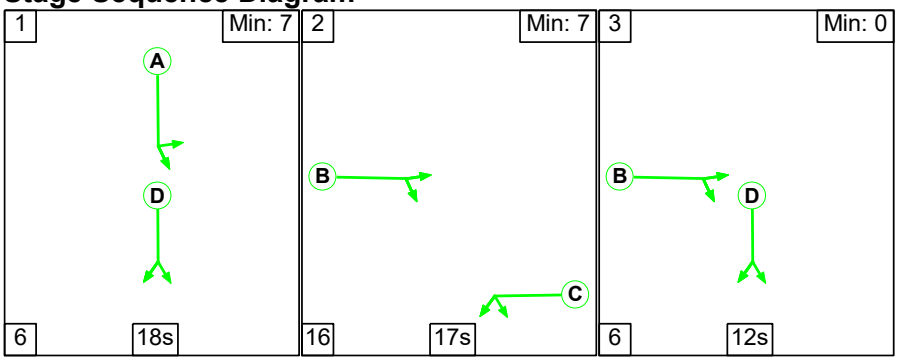
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2502**	**0**	**0**	**121.4**	**815.4**	**0.0**	**936.8**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2502**	**0**	**0**	**121.4**	**815.4**	**0.0**	**936.8**	**-**	**-**	**-**	**-**	
1/2+1/1	862	604	-	-	-	17.7	130.9	-	148.6	620.7	22.3	130.9	153.2	
1/3	531	357	-	-	-	12.0	88.6	-	100.6	681.8	17.9	88.6	106.4	
2/1	535	535	-	-	-	0.7	0.3	-	1.1	7.2	4.6	0.3	4.9	
2/2+2/3	1380	1380	-	-	-	2.1	1.3	-	3.4	8.9	7.0	1.3	8.3	
3/1	523	523	-	-	-	1.0	0.3	-	1.3	8.8	7.1	0.3	7.4	
3/2	882	882	-	-	-	1.7	0.9	-	2.6	10.7	13.2	0.9	14.1	
3/3	357	357	-	-	-	1.8	0.2	-	2.0	20.4	7.4	0.2	7.6	
4/1	782	782	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	330	330	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	806	744	-	-	-	9.3	36.7	-	46.0	205.3	9.4	36.7	46.0	
5/3	566	385	-	-	-	12.0	91.9	-	103.9	660.8	17.1	91.9	109.0	
6/1	681	681	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
6/2	779	779	-	-	-	0.0	0.3	-	0.3	1.6	5.4	0.3	5.8	
6/3	742	742	-	-	-	0.0	0.3	-	0.3	1.6	5.4	0.3	5.7	
7/1	689	689	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
8/1	689	689	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	437	437	874	0	0	0.8	0.6	-	1.4	11.5	3.0	0.6	3.6	
9/3	386	386	386	0	0	1.5	5.2	-	6.7	62.4	7.6	5.2	12.8	
10/1	901	901	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
10/2	996	996	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/3	1128	1128	-	-	-	0.0	0.7	-	0.7	2.1	0.0	0.7	0.7	
11/1	901	901	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	518	518	-	-	-	1.1	0.4	-	1.6	10.8	5.0	0.4	5.5	
12/2+12/3	1128	1128	-	-	-	2.6	1.3	-	3.9	12.6	8.2	1.3	9.6	
13/2+13/1	1267	864	-	-	-	19.0	203.2	-	222.2	631.2	26.5	203.2	229.7	
13/3	820	549	-	-	-	14.7	137.2	-	151.9	667.0	22.7	137.2	159.9	
14/1	649	649	-	-	-	1.9	0.8	-	2.8	15.3	9.3	0.8	10.2	
14/2	649	649	-	-	-	2.5	0.8	-	3.3	18.3	9.5	0.8	10.3	
14/3	549	549	-	-	-	4.0	0.6	-	4.6	30.1	9.1	0.6	9.7	
15/1	834	834	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	604	604	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	681	681	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	984	984	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
17/1	426	426	-	-	-	2.1	1.1	-	3.3	27.6	6.2	1.1	7.3	
17/2	467	467	-	-	-	2.3	1.2	-	3.6	27.6	6.7	1.2	8.0	
18/1	471	471	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	423	423	846	0	0	0.6	1.0	-	1.6	13.9	2.1	1.0	3.1	
20/3	607	396	396	0	0	9.7	106.9	-	116.6	691.5	30.3	106.9	137.3	
21/1	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	304	304	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-65.3	Total Delay for Signalled Lanes (pcuHr):	409.48	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-66.1	Total Delay for Signalled Lanes (pcuHr):	397.08	Cycle Time (s):	60
	PRC Over All Lanes (%):	-70.3	Total Delay Over All Lanes(pcuHr):	936.81		

Scenario 8: '2038 WoD PM' (FG8: '2038 WoD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



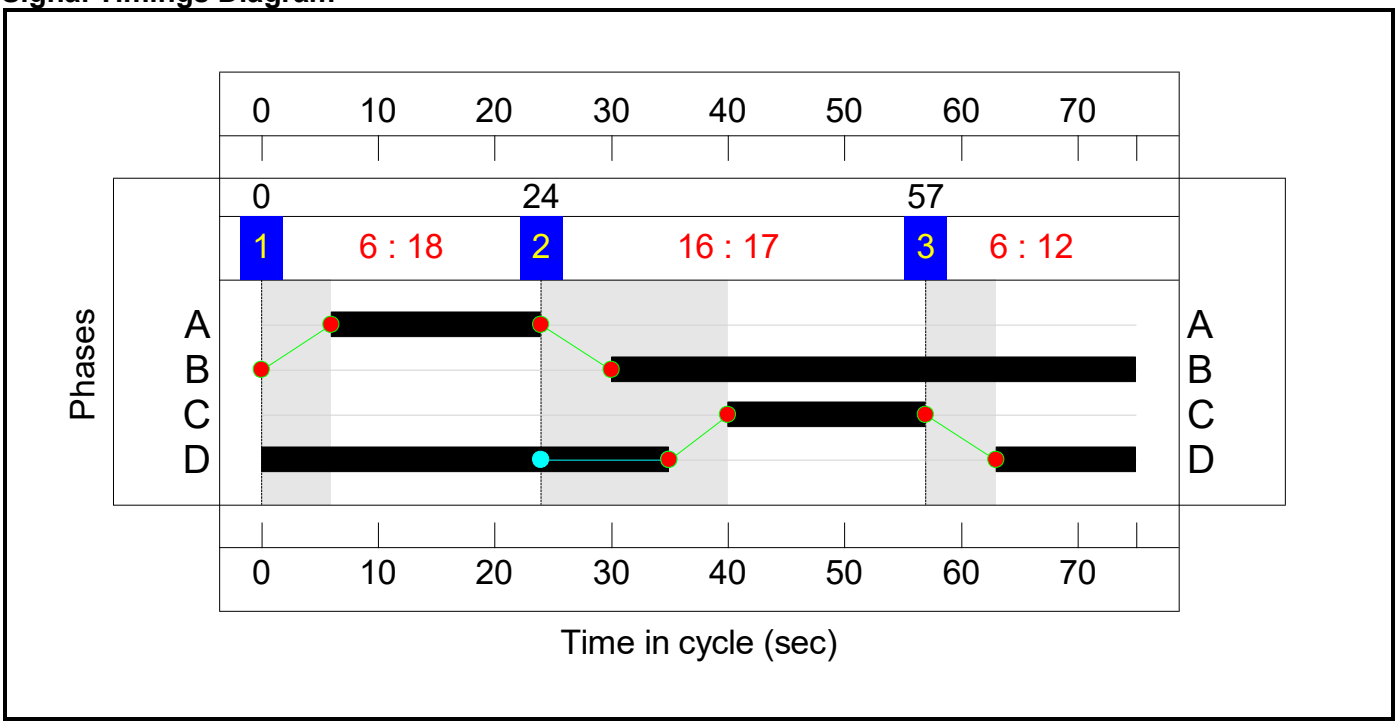
Stage Timings

Stage	1	2	3
Duration	18	17	12
Change Point	0	24	57

Phase Timings

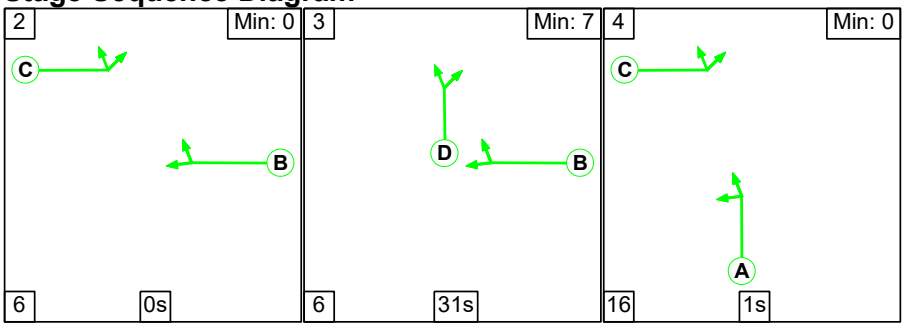
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	18	6	24
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	45	30	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	17	40	57
D	East Circ Right Ahead East Circ	Traffic	47	63	35

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



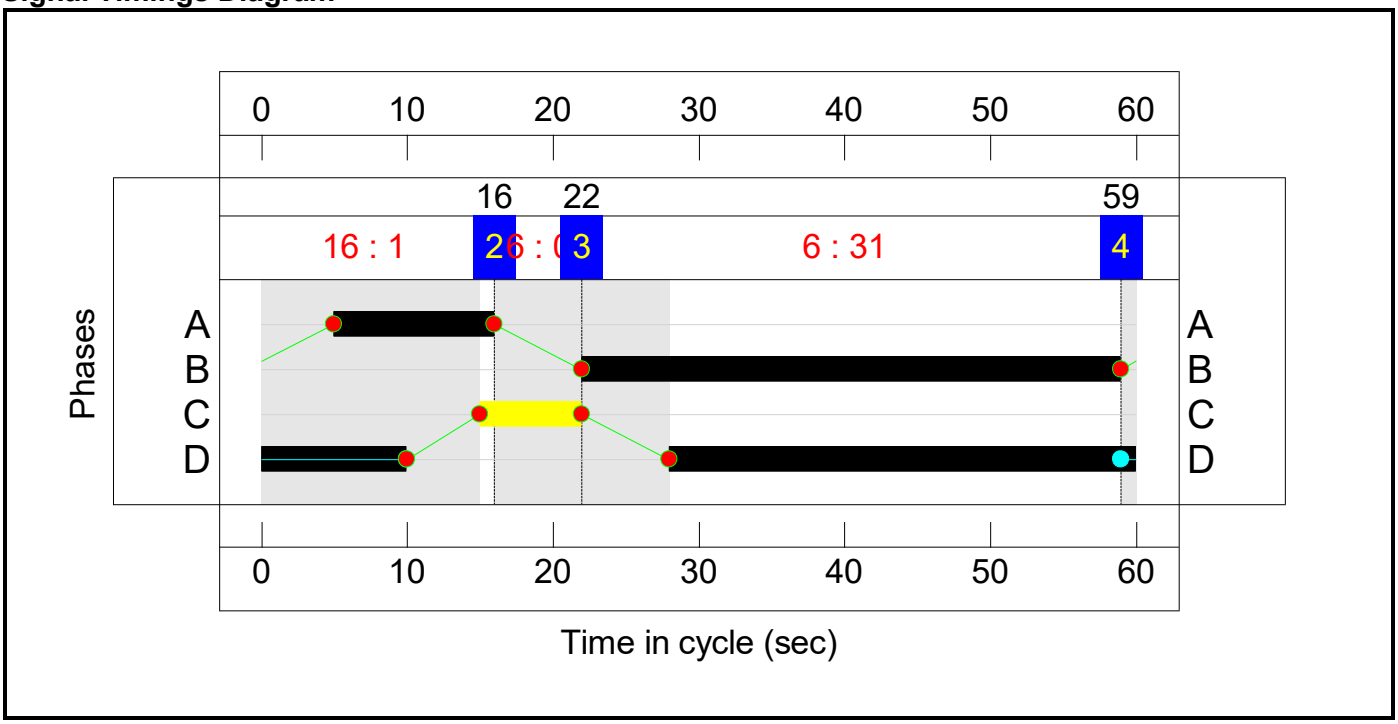
Stage Timings

Stage	2	3	4
Duration	0	31	1
Change Point	16	22	59

Phase Timings

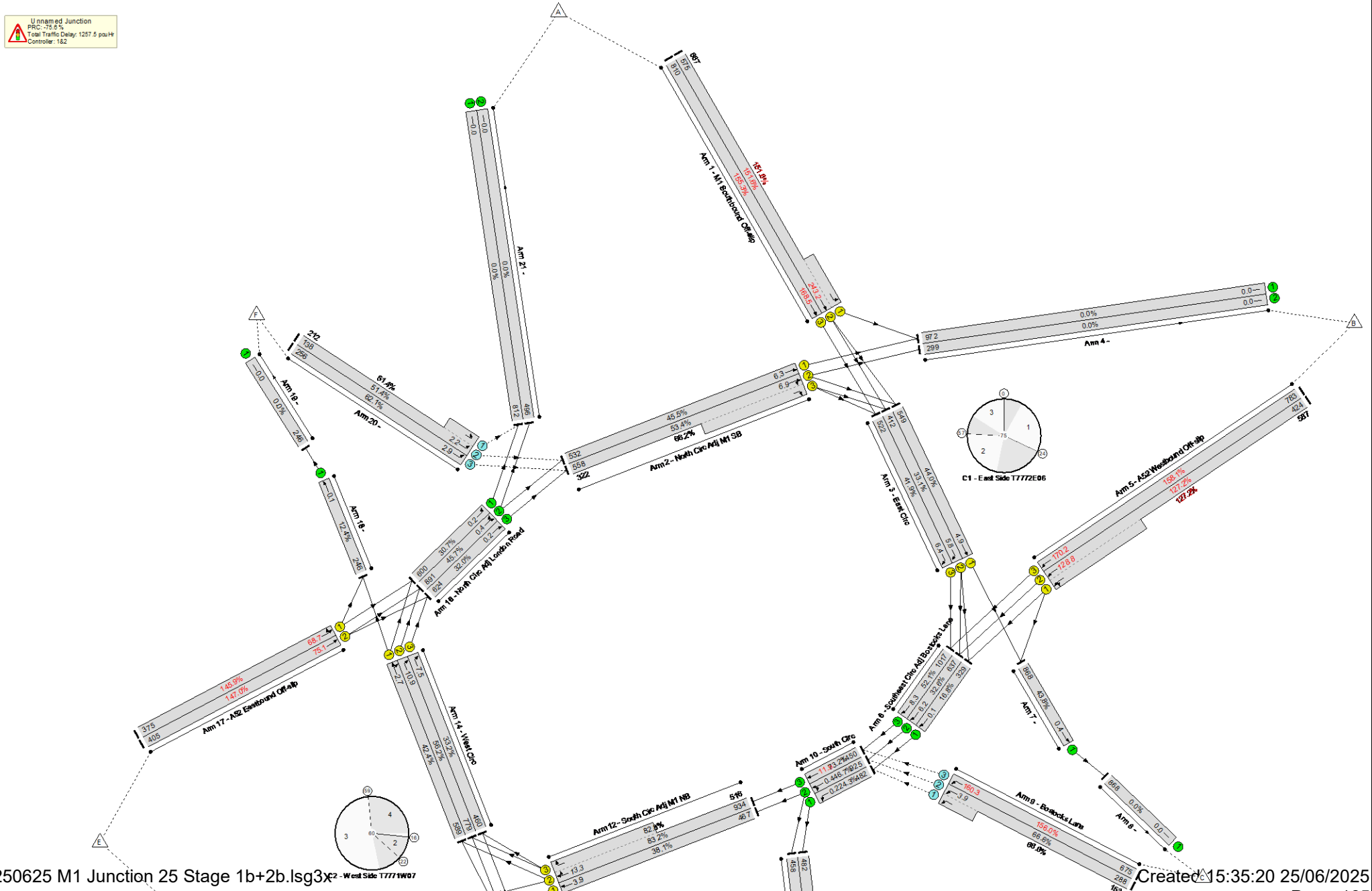
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	11	5	16
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	37	22	59
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	7	15	22
D	West Circ Right Ahead West Circ	Traffic	42	28	10

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	24
1/2	M1 Southbound Off-slip Ahead	U	A	6	24
1/3	M1 Southbound Off-slip Ahead	U	A	6	24
2/1	North Circ Adj M1 SB Ahead	U	B	30	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	30	0
2/3	North Circ Adj M1 SB Right	U	B	30	0
3/1	East Circ Ahead	U	D	63	35
3/2	East Circ Right	U	D	63	35
3/3	East Circ Right	U	D	63	35
5/1	A52 Westbound Off-slip Ahead Left	U	C	40	57
5/2	A52 Westbound Off-slip Ahead	U	C	40	57
5/3	A52 Westbound Off-slip Ahead	U	C	40	57
12/1	South Circ Adj M1 NB Ahead	U	B	22	59
12/2	South Circ Adj M1 NB Right Ahead	U	B	22	59
12/3	South Circ Adj M1 NB Right	U	B	22	59
13/1	M1 Northbound Off-slip Left	U	A	5	16
13/2	M1 Northbound Off-slip Ahead Left	U	A	5	16
13/3	M1 Northbound Off-slip Ahead	U	A	5	16
14/1	West Circ Right Ahead	U	D	28	10
14/2	West Circ Right	U	D	28	10
14/3	West Circ Right	U	D	28	10
17/1	A52 Eastbound Off-slip Ahead Left	U	C	15	22
17/2	A52 Eastbound Off-slip Ahead	U	C	15	22


Unnamed Junction
PRC: -75.6 %
Total Traffic Delay: 1257.5 pcu Hr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**158.1%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**158.1%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	18	-	-	1242	2056:1915	379+440	151.6 : 151.6%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	18	-	-	810	2059	522	155.3%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	45	-	-	730	1908	1170	45.5%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	45	-	-	1185	1906:1904	1044+487	53.4 : 66.2%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	47	-	-	799	1946	1245	44.0%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	47	-	-	513	1945	1245	33.1%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	47	-	-	810	1943	1244	41.9%
4/1		U	N/A	N/A	-		-	-	-	-	1397	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	448	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	17	-	-	1011	2061:1923	333+462	127.2 : 127.2%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	17	-	-	783	2064	495	158.1%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	411	1953	1953	16.8%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	707	1952	1952	32.6%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1593	1951	1951	52.1%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	1205	1980	1980	43.8%
8/1		U	N/A	N/A	-		-	-	-	-	1205	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	441	1923:1919	433+230	66.6 : 66.6%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	675	1926	433	156.0%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	564	1980	1980	24.3%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	995	1980	1980	46.7%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	2268	1980	1980	73.2%
11/1		U	N/A	N/A	-		-	-	-	-	564	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	482	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	37	-	-	513	1936	1226	38.1%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	37	-	-	2268	1932:1931	1121+623	83.2 : 82.8%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	11	-	-	894	2053:1912	411+191	148.6 : 148.6%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	11	-	-	612	2057	411	148.8%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	42	-	-	916	1937	1388	42.4%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	42	-	-	1197	1935	1387	56.2%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	42	-	-	688	1932	1385	33.2%
15/1		U	N/A	N/A	-		-	-	-	-	797	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	689	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	916	1952	1952	30.7%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1361	1950	1950	45.7%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	929	1950	1950	32.0%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	7	-	-	375	1928	257	145.9%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	7	-	-	405	2067	276	147.0%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	375	1980	1980	12.4%
19/1		U	N/A	N/A	-		-	-	-	-	375	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	350	2061:1921	268+412	51.4 : 51.4%
20/3	Left	O	N/A	N/A	-		-	-	-	-	256	1928	412	62.1%
21/1		U	N/A	N/A	-		-	-	-	-	1128	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	769	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2271**	**0**	**0**	**132.2**	**1125.3**	**0.0**	**1257.5**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2271**	**0**	**0**	**132.2**	**1125.3**	**0.0**	**1257.5**	**-**	**-**	**-**	**-**	
1/2+1/1	1242	819	-	-	-	24.9	212.9	-	237.8	689.2	30.3	212.9	243.2	
1/3	810	522	-	-	-	17.0	145.6	-	162.5	722.4	22.9	145.6	168.5	
2/1	532	532	-	-	-	1.2	0.4	-	1.6	10.6	5.9	0.4	6.3	
2/2+2/3	880	880	-	-	-	1.8	0.7	-	2.5	10.3	6.2	0.7	6.9	
3/1	549	549	-	-	-	1.0	0.4	-	1.4	9.0	4.5	0.4	4.9	
3/2	412	412	-	-	-	1.3	0.2	-	1.6	13.6	5.6	0.2	5.8	
3/3	522	522	-	-	-	0.2	0.4	-	0.6	4.0	6.0	0.4	6.4	
4/1	972	972	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	299	299	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1011	873	-	-	-	11.4	110.3	-	121.7	433.5	18.5	110.3	128.8	
5/3	783	495	-	-	-	16.9	145.2	-	162.0	745.0	25.0	145.2	170.2	
6/1	329	329	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1	
6/2	637	637	-	-	-	0.0	0.2	-	0.3	1.5	6.0	0.2	6.2	
6/3	1017	1017	-	-	-	0.0	0.5	-	0.6	2.0	7.7	0.5	8.3	
7/1	868	868	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
8/1	868	868	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	441	441	882	0	0	0.5	1.0	-	1.5	12.0	3.0	1.0	3.9	
9/3	675	433	433	0	0	12.1	122.6	-	134.6	718.1	37.7	122.6	160.3	
10/1	482	482	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
10/2	925	925	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
10/3	1450	1450	-	-	-	0.1	1.4	-	1.4	3.6	10.5	1.4	11.9	
11/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	467	467	-	-	-	0.7	0.3	-	1.0	7.7	3.6	0.3	3.9	
12/2+12/3	1450	1450	-	-	-	2.8	2.4	-	5.2	13.0	10.9	2.4	13.3	
13/2+13/1	894	602	-	-	-	13.2	147.6	-	160.8	647.5	17.0	147.6	164.7	
13/3	612	411	-	-	-	10.1	101.8	-	111.9	658.1	13.7	101.8	115.5	
14/1	589	589	-	-	-	0.3	0.4	-	0.7	4.2	2.3	0.4	2.7	
14/2	779	779	-	-	-	1.8	0.6	-	2.4	11.0	10.3	0.6	10.9	
14/3	460	460	-	-	-	1.8	0.2	-	2.0	16.0	7.3	0.2	7.5	
15/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	600	600	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
16/2	891	891	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
16/3	624	624	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
17/1	375	257	-	-	-	6.0	60.5	-	66.5	638.2	8.2	60.5	68.7	
17/2	405	276	-	-	-	6.5	66.2	-	72.7	646.5	8.9	66.2	75.1	
18/1	246	246	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1	
19/1	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	350	350	700	0	0	0.4	0.5	-	1.0	9.9	1.6	0.5	2.2	
20/3	256	256	256	0	0	0.4	0.8	-	1.2	16.8	2.1	0.8	2.9	
21/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06
C2 - West Side T7771W07

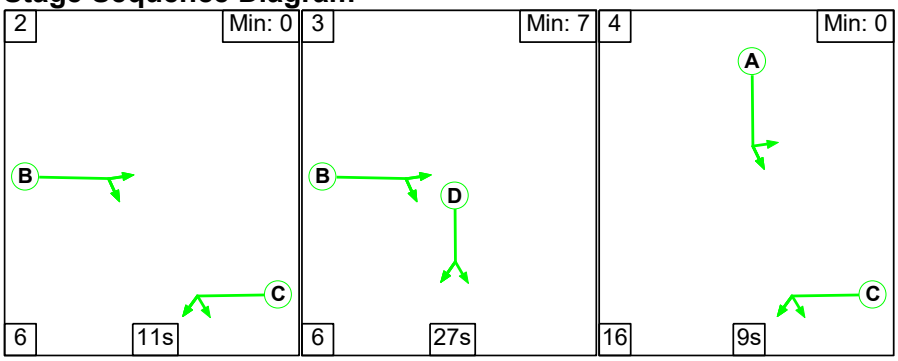
PRC for Signalled Lanes (%): -75.6
PRC for Signalled Lanes (%): -65.3
PRC Over All Lanes (%): -75.6

Total Delay for Signalled Lanes (pcuHr): 691.69
Total Delay for Signalled Lanes (pcuHr): 423.23
Total Delay Over All Lanes(pcuHr): 1257.51

Cycle Time (s): 75
Cycle Time (s): 60

Scenario 9: '2038 WD AM' (FG9: '2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



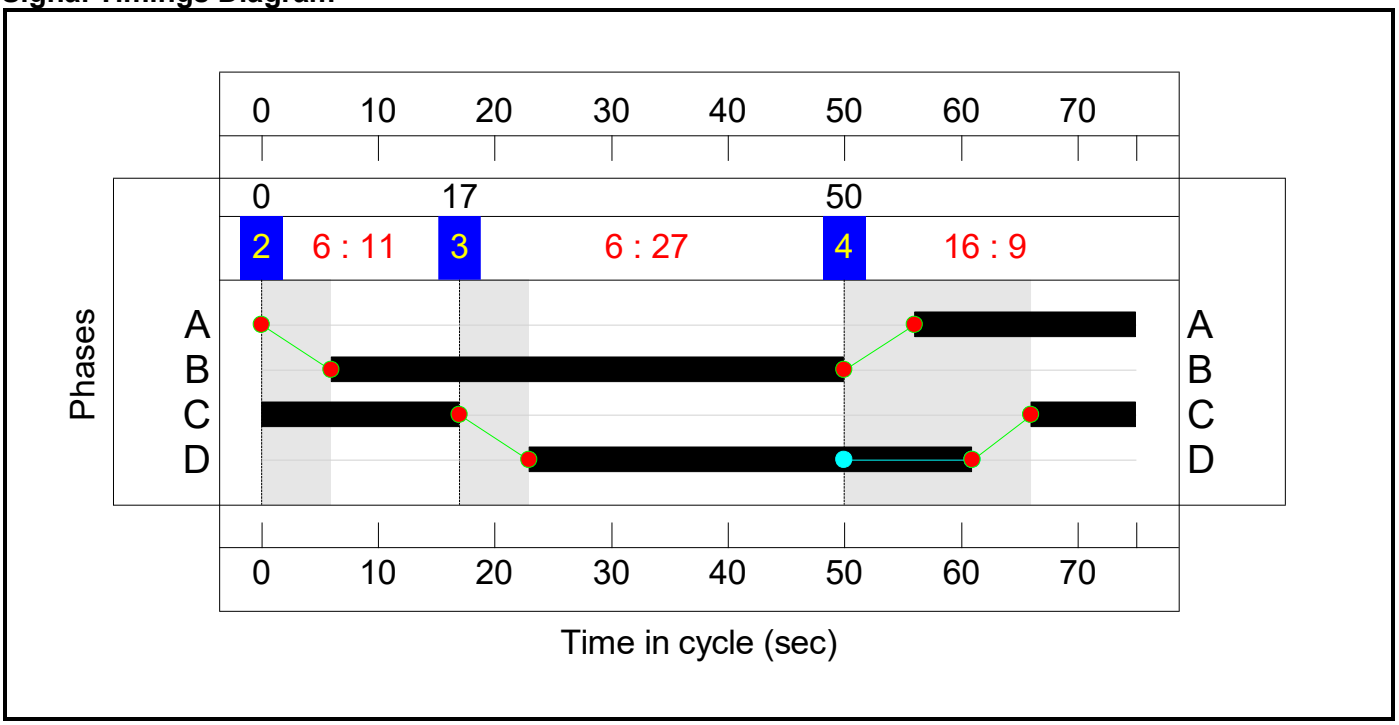
Stage Timings

Stage	2	3	4
Duration	11	27	9
Change Point	0	17	50

Phase Timings

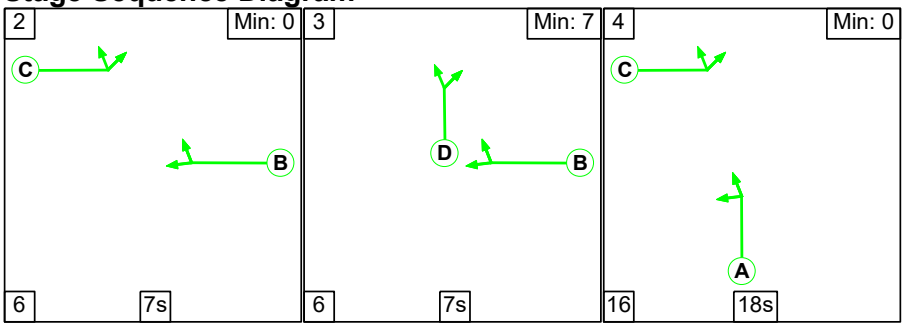
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	19	56	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	44	6	50
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	26	66	17
D	East Circ Right Ahead East Circ	Traffic	38	23	61

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



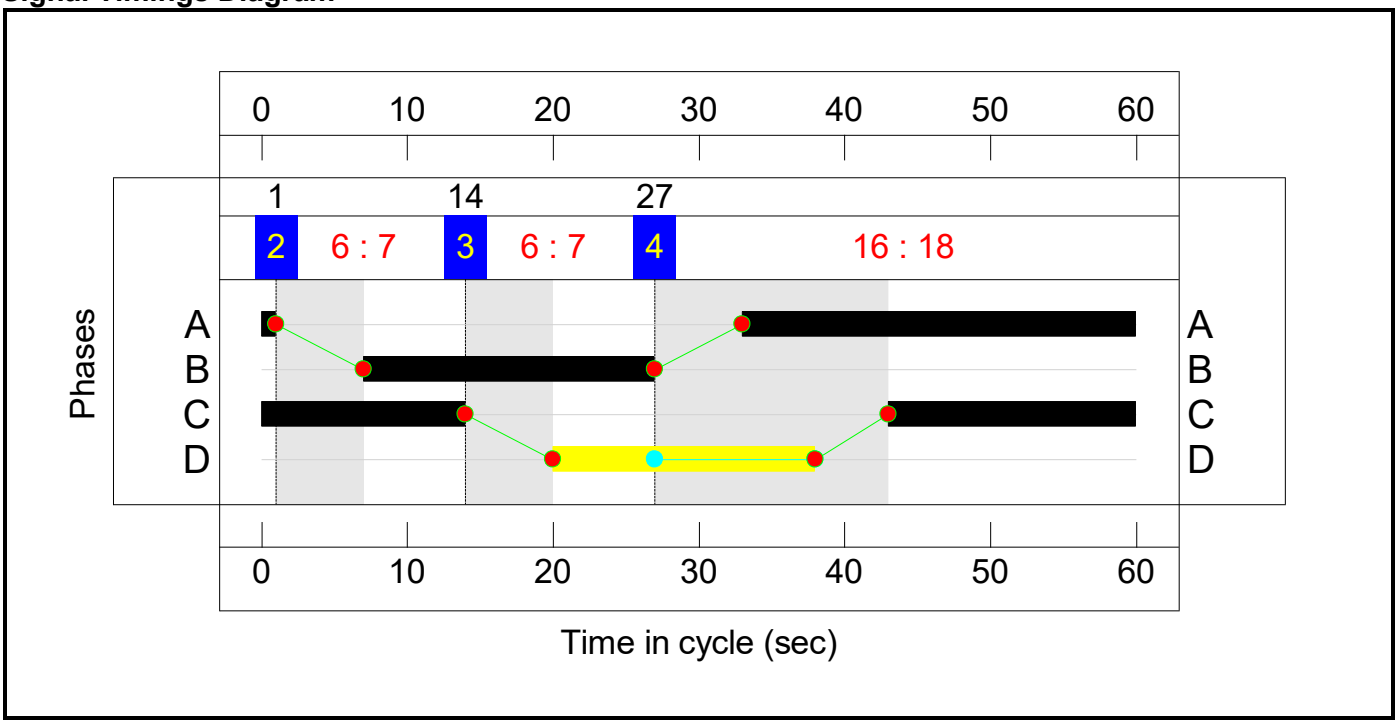
Stage Timings

Stage	2	3	4
Duration	7	7	18
Change Point	1	14	27

Phase Timings

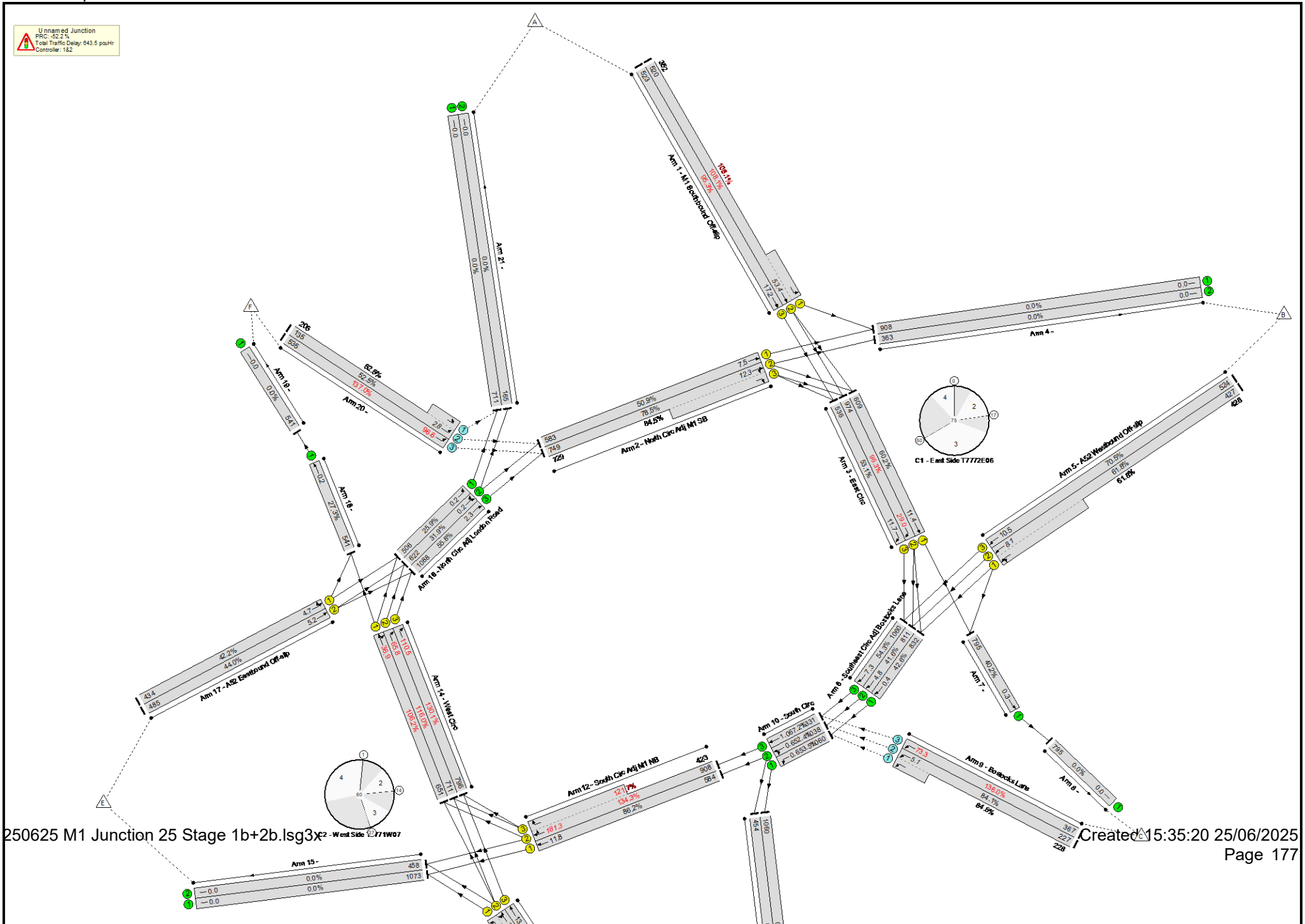
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	28	33	1
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	20	7	27
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	31	43	14
D	West Circ Right Ahead West Circ	Traffic	18	20	38

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	56	0
1/2	M1 Southbound Off-slip Ahead	U	A	56	0
1/3	M1 Southbound Off-slip Ahead	U	A	56	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	50
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	50
2/3	North Circ Adj M1 SB Right	U	B	6	50
3/1	East Circ Ahead	U	D	23	61
3/2	East Circ Right	U	D	23	61
3/3	East Circ Right	U	D	23	61
5/1	A52 Westbound Off-slip Ahead Left	U	C	66	17
5/2	A52 Westbound Off-slip Ahead	U	C	66	17
5/3	A52 Westbound Off-slip Ahead	U	C	66	17
12/1	South Circ Adj M1 NB Ahead	U	B	7	27
12/2	South Circ Adj M1 NB Right Ahead	U	B	7	27
12/3	South Circ Adj M1 NB Right	U	B	7	27
13/1	M1 Northbound Off-slip Left	U	A	33	1
13/2	M1 Northbound Off-slip Ahead Left	U	A	33	1
13/3	M1 Northbound Off-slip Ahead	U	A	33	1
14/1	West Circ Right Ahead	U	D	20	38
14/2	West Circ Right	U	D	20	38
14/3	West Circ Right	U	D	20	38
17/1	A52 Eastbound Off-slip Ahead Left	U	C	43	14
17/2	A52 Eastbound Off-slip Ahead	U	C	43	14


Unnamed Junction
PRC: -52.2 %
Total Traffic Delay: 643.5 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T771W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**137.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**137.0%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	19	-	-	872	2056:1915	481+326	108.1 : 108.1%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	19	-	-	523	2059	549	95.3%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	44	-	-	668	1908	1145	50.9%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	44	-	-	1807	1906:1904	955+863	78.5 : 84.5%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	38	-	-	718	1946	1012	60.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	38	-	-	1119	1945	1011	96.3%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	38	-	-	541	1943	1010	53.1%
4/1		U	N/A	N/A	-		-	-	-	-	1020	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	472	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	26	-	-	855	2061:1923	691+692	61.8 : 61.8%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	26	-	-	524	2064	743	70.5%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	912	1953	1953	42.6%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	876	1952	1952	41.6%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1065	1951	1951	54.3%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	904	1980	1980	40.2%
8/1		U	N/A	N/A	-		-	-	-	-	904	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	455	1923:1919	270+270	84.1 : 84.5%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	367	1926	270	136.0%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1140	1980	1980	53.5%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1103	1980	1980	52.4%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1432	1980	1980	67.2%
11/1		U	N/A	N/A	-		-	-	-	-	1140	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	456	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	20	-	-	647	1936	678	86.2%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	20	-	-	1432	1931:1931	676+347	134.3 : 121.7%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	28	-	-	1318	2053:1912	838+494	98.9 : 98.9%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	28	-	-	796	2057	994	80.1%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	18	-	-	811	1937	613	106.2%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	18	-	-	882	1935	613	116.0%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	18	-	-	796	1932	612	130.1%
15/1		U	N/A	N/A	-		-	-	-	-	1136	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	568	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	613	1952	1952	25.9%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	891	1950	1950	31.9%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1272	1950	1950	55.8%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	31	-	-	434	1928	1028	42.2%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	31	-	-	485	2067	1102	44.0%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	632	1980	1980	27.3%
19/1		U	N/A	N/A	-		-	-	-	-	632	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	340	2061:1921	257+391	52.5 : 52.5%
20/3	Left	O	N/A	N/A	-		-	-	-	-	535	1928	391	137.0%
21/1		U	N/A	N/A	-		-	-	-	-	818	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	358	Inf	Inf	0.0%

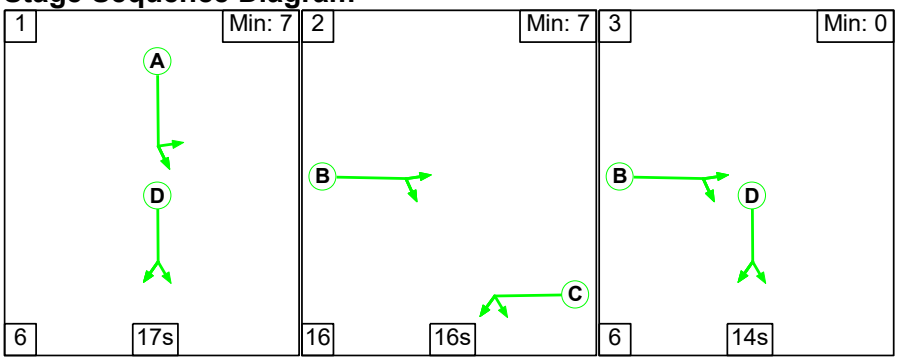
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2250**	**0**	**0**	**102.9**	**540.5**	**0.0**	**643.5**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2250**	**0**	**0**	**102.9**	**540.5**	**0.0**	**643.5**	**-**	**-**	**-**	**-**	
1/2+1/1	872	807	-	-	-	8.8	38.2	-	47.0	194.2	15.2	38.2	53.4	
1/3	523	523	-	-	-	3.9	6.6	-	10.6	72.8	10.6	6.6	17.2	
2/1	583	583	-	-	-	1.4	0.5	-	1.9	11.8	7.0	0.5	7.5	
2/2+2/3	1478	1478	-	-	-	4.0	2.1	-	6.2	15.0	10.2	2.1	12.3	
3/1	609	609	-	-	-	2.5	0.8	-	3.2	19.0	10.7	0.8	11.4	
3/2	974	974	-	-	-	4.7	8.9	-	13.6	50.2	20.1	8.9	29.0	
3/3	536	536	-	-	-	4.7	0.6	-	5.2	35.1	11.1	0.6	11.7	
4/1	908	908	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	855	855	-	-	-	4.6	0.8	-	5.5	23.0	7.3	0.8	8.1	
5/3	524	524	-	-	-	3.0	1.2	-	4.2	28.7	9.3	1.2	10.5	
6/1	832	832	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
6/2	811	811	-	-	-	0.0	0.4	-	0.4	1.6	4.4	0.4	4.8	
6/3	1060	1060	-	-	-	0.0	0.6	-	0.6	2.1	6.7	0.6	7.3	
7/1	795	795	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	795	795	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	455	455	910	0	0	1.3	2.5	-	3.8	30.1	2.6	2.5	5.1	
9/3	367	270	270	0	0	5.7	50.4	-	56.1	549.8	22.9	50.4	73.3	
10/1	1060	1060	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/2	1038	1038	-	-	-	0.0	0.6	-	0.6	1.9	0.0	0.6	0.6	
10/3	1331	1331	-	-	-	0.0	1.0	-	1.0	2.8	0.0	1.0	1.0	
11/1	1060	1060	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	584	584	-	-	-	2.9	2.9	-	5.9	36.2	8.9	2.9	11.8	
12/2+12/3	1331	990	-	-	-	14.6	155.9	-	170.5	461.3	25.4	155.9	181.3	
13/2+13/1	1318	1318	-	-	-	4.7	14.8	-	19.6	53.4	15.8	14.8	30.7	
13/3	796	796	-	-	-	2.9	2.0	-	4.9	22.0	11.1	2.0	13.0	
14/1	651	613	-	-	-	4.2	25.4	-	29.6	163.7	11.5	25.4	36.9	
14/2	711	613	-	-	-	7.2	52.3	-	59.5	301.4	13.5	52.3	65.8	
14/3	796	612	-	-	-	12.6	94.2	-	106.8	483.0	16.3	94.2	110.5	
15/1	1073	1073	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	506	506	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	622	622	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
16/3	1088	1088	-	-	-	0.0	0.6	-	0.6	2.1	1.7	0.6	2.3	
17/1	434	434	-	-	-	1.0	0.4	-	1.4	11.5	4.3	0.4	4.7	
17/2	485	485	-	-	-	1.2	0.4	-	1.5	11.5	4.8	0.4	5.2	
18/1	541	541	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
19/1	541	541	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	340	340	680	0	0	0.6	0.6	-	1.2	12.3	2.2	0.6	2.8	
20/3	535	391	391	0	0	6.4	74.0	-	80.4	541.1	22.6	74.0	96.6	
21/1	711	711	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	165	165	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-20.1	Total Delay for Signalled Lanes (pcuHr):	97.37	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-49.3	Total Delay for Signalled Lanes (pcuHr):	399.62	Cycle Time (s): 60
	PRC Over All Lanes (%):	-52.2	Total Delay Over All Lanes(pcuHr):	643.48	

Scenario 10: '2038 WD PM' (FG10: '2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



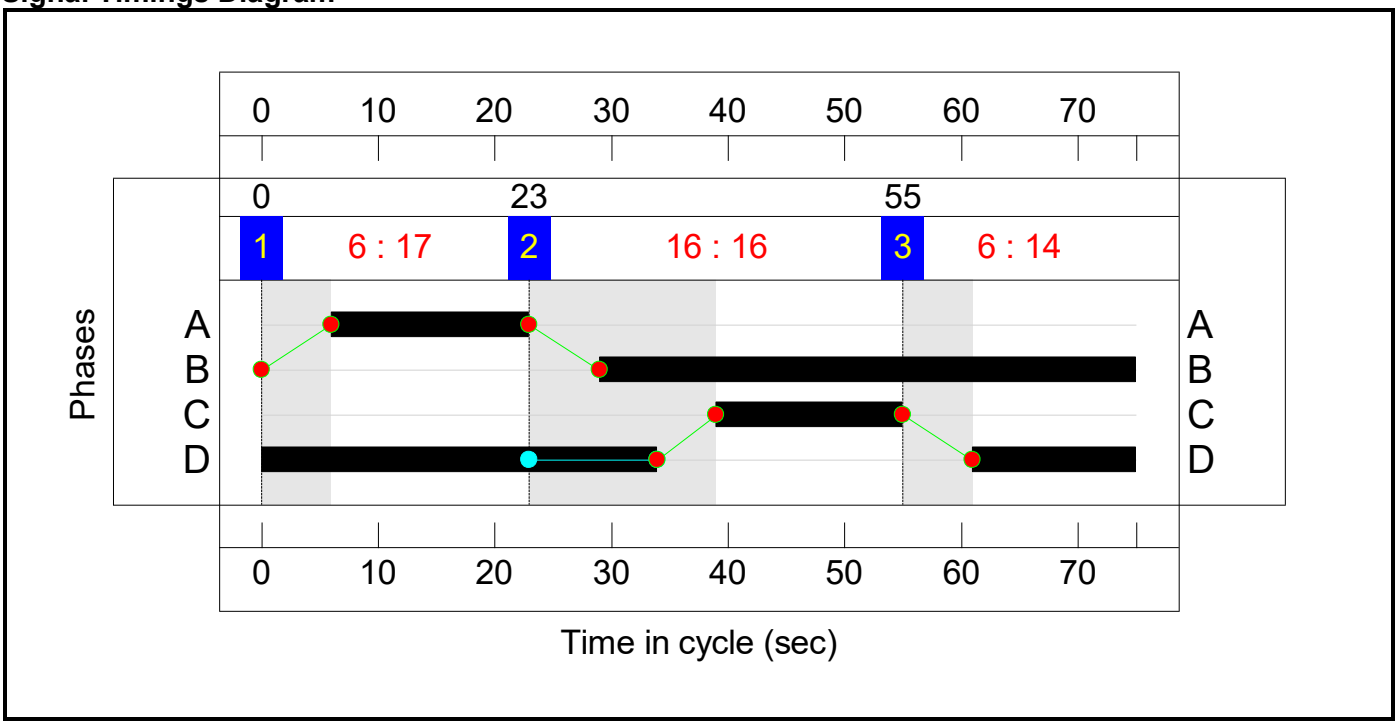
Stage Timings

Stage	1	2	3
Duration	17	16	14
Change Point	0	23	55

Phase Timings

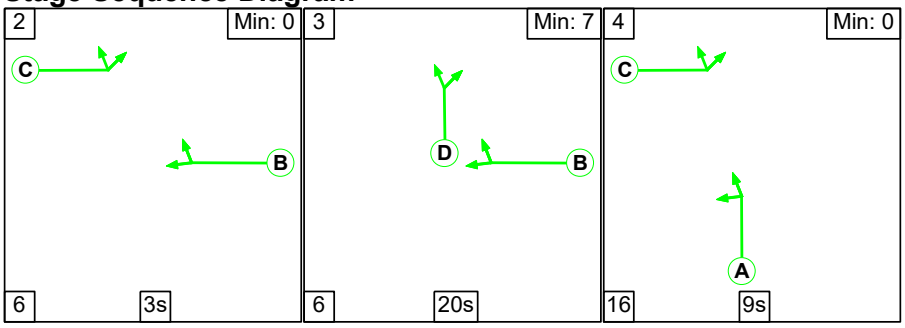
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	17	6	23
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	46	29	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	16	39	55
D	East Circ Right Ahead East Circ	Traffic	48	61	34

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



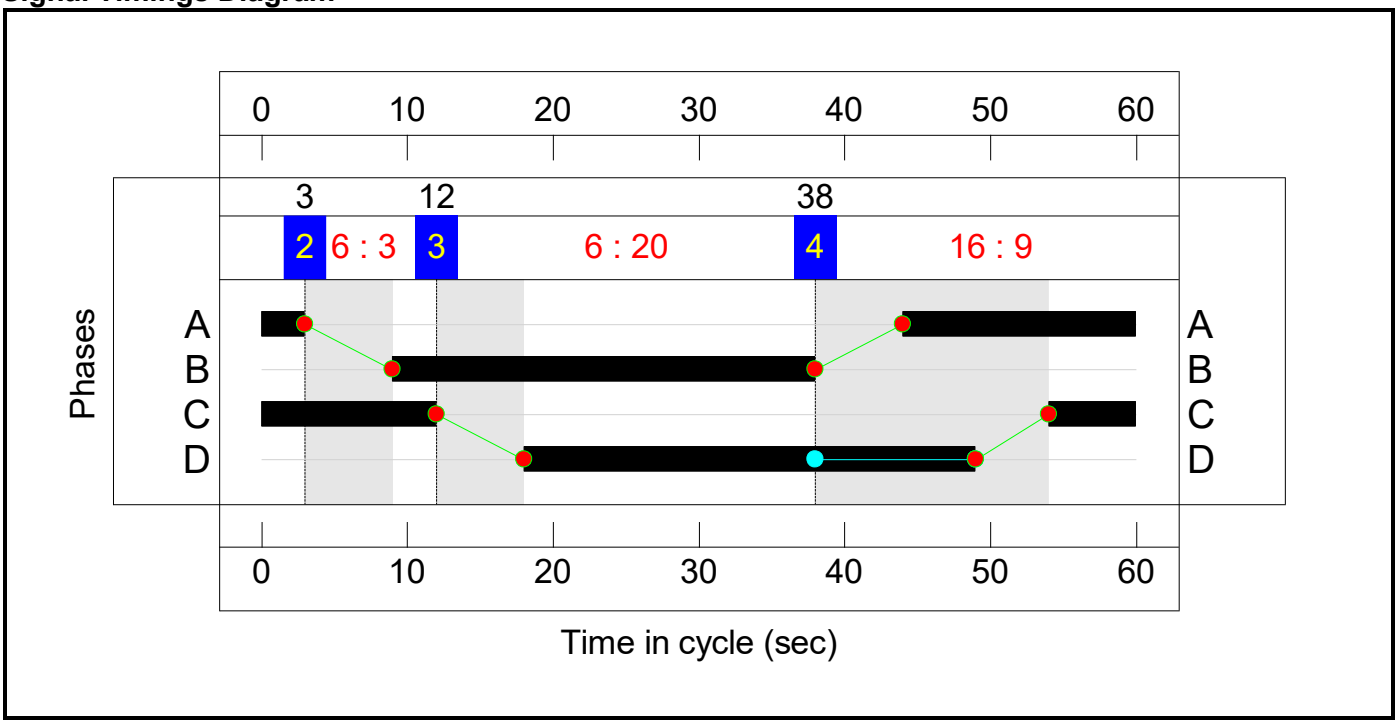
Stage Timings

Stage	2	3	4
Duration	3	20	9
Change Point	3	12	38

Phase Timings

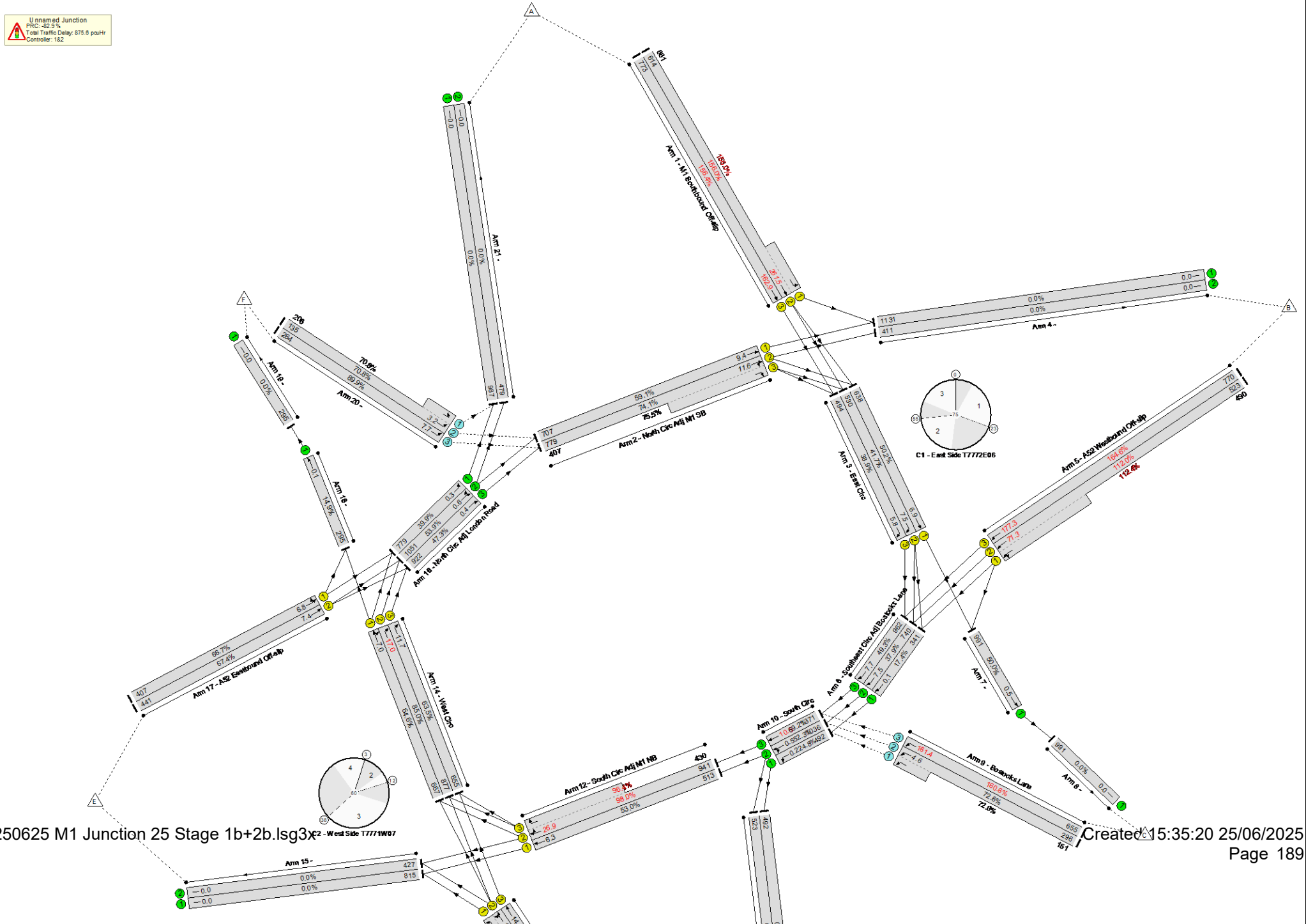
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	19	44	3
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	29	9	38
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	54	12
D	West Circ Right Ahead West Circ	Traffic	31	18	49

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	23
1/2	M1 Southbound Off-slip Ahead	U	A	6	23
1/3	M1 Southbound Off-slip Ahead	U	A	6	23
2/1	North Circ Adj M1 SB Ahead	U	B	29	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	29	0
2/3	North Circ Adj M1 SB Right	U	B	29	0
3/1	East Circ Ahead	U	D	61	34
3/2	East Circ Right	U	D	61	34
3/3	East Circ Right	U	D	61	34
5/1	A52 Westbound Off-slip Ahead Left	U	C	39	55
5/2	A52 Westbound Off-slip Ahead	U	C	39	55
5/3	A52 Westbound Off-slip Ahead	U	C	39	55
12/1	South Circ Adj M1 NB Ahead	U	B	9	38
12/2	South Circ Adj M1 NB Right Ahead	U	B	9	38
12/3	South Circ Adj M1 NB Right	U	B	9	38
13/1	M1 Northbound Off-slip Left	U	A	44	3
13/2	M1 Northbound Off-slip Ahead Left	U	A	44	3
13/3	M1 Northbound Off-slip Ahead	U	A	44	3
14/1	West Circ Right Ahead	U	D	18	49
14/2	West Circ Right	U	D	18	49
14/3	West Circ Right	U	D	18	49
17/1	A52 Eastbound Off-slip Ahead Left	U	C	54	12
17/2	A52 Eastbound Off-slip Ahead	U	C	54	12


Unnamed Junction
PRC: -82.9 %
Total Traffic Delay: 875.6 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**164.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**164.6%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	17	-	-	1275	2056:1915	394+424	156.0 : 156.0%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	17	-	-	773	2059	494	156.4%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	46	-	-	768	1908	1196	59.1%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	46	-	-	1200	1906:1904	1051+539	74.1 : 75.5%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	48	-	-	790	1946	1271	50.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	48	-	-	599	1945	1271	41.7%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	48	-	-	773	1943	1269	38.9%
4/1		U	N/A	N/A	-		-	-	-	-	1429	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	425	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	16	-	-	1013	2061:1923	467+436	112.0 : 112.4%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	16	-	-	770	2064	468	164.6%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	351	1953	1953	17.4%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	865	1952	1952	37.9%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1543	1951	1951	49.3%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	1186	1980	1980	50.0%
8/1		U	N/A	N/A	-		-	-	-	-	1186	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	447	1923:1919	408+208	72.6 : 72.6%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	655	1926	408	160.6%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	502	1980	1980	24.8%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1161	1980	1980	52.3%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	2198	1980	1980	69.2%
11/1		U	N/A	N/A	-		-	-	-	-	502	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	579	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	29	-	-	582	1936	968	53.0%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	29	-	-	2198	1931:1931	960+446	98.0 : 96.4%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	19	-	-	926	2053:1912	655+317	95.3 : 95.3%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	19	-	-	631	2057	686	92.0%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	989	1937	1033	64.6%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	1130	1935	1032	85.0%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	669	1932	1030	63.5%
15/1		U	N/A	N/A	-		-	-	-	-	884	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	665	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	1028	1952	1952	39.9%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1304	1950	1950	53.9%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	936	1950	1950	47.3%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	407	1928	611	66.7%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	441	2067	655	67.4%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	368	1980	1980	14.9%
19/1		U	N/A	N/A	-		-	-	-	-	368	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	343	2061:1921	191+294	70.8 : 70.8%
20/3	Left	O	N/A	N/A	-		-	-	-	-	264	1928	294	89.9%
21/1		U	N/A	N/A	-		-	-	-	-	1236	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	671	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2252**	**0**	**0**	**122.6**	**753.0**	**0.0**	**875.6**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2252**	**0**	**0**	**122.6**	**753.0**	**0.0**	**875.6**	**-**	**-**	**-**	**-**	
1/2+1/1	1275	817	-	-	-	26.7	230.3	-	257.0	725.7	31.3	230.3	261.5	
1/3	773	494	-	-	-	16.5	140.8	-	157.3	732.4	22.1	140.8	162.9	
2/1	707	707	-	-	-	1.6	0.7	-	2.4	12.0	8.6	0.7	9.4	
2/2+2/3	1186	1186	-	-	-	2.7	1.5	-	4.1	12.5	10.2	1.5	11.6	
3/1	638	638	-	-	-	1.2	0.5	-	1.7	9.9	6.4	0.5	6.9	
3/2	530	530	-	-	-	1.6	0.4	-	2.0	13.4	7.1	0.4	7.5	
3/3	494	494	-	-	-	0.2	0.3	-	0.5	3.9	5.5	0.3	5.8	
4/1	1131	1131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	411	411	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1013	903	-	-	-	11.2	59.3	-	70.5	250.5	12.1	59.3	71.3	
5/3	770	468	-	-	-	17.3	152.3	-	169.7	793.3	25.0	152.3	177.3	
6/1	341	341	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1	
6/2	740	740	-	-	-	0.0	0.3	-	0.3	1.6	7.2	0.3	7.5	
6/3	962	962	-	-	-	0.0	0.5	-	0.5	1.9	7.2	0.5	7.7	
7/1	991	991	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
8/1	991	991	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	447	447	894	0	0	0.6	1.3	-	1.9	15.0	3.3	1.3	4.6	
9/3	655	408	408	0	0	12.3	124.9	-	137.1	753.7	36.6	124.9	161.4	
10/1	492	492	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
10/2	1036	1036	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
10/3	1371	1371	-	-	-	0.0	1.1	-	1.2	3.1	9.4	1.1	10.5	
11/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	523	523	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	513	513	-	-	-	1.5	0.6	-	2.0	14.2	5.7	0.6	6.3	
12/2+12/3	1371	1371	-	-	-	5.0	11.8	-	16.7	43.9	15.2	11.8	26.9	
13/2+13/1	926	926	-	-	-	4.7	7.6	-	12.2	47.6	10.1	7.6	17.7	
13/3	631	631	-	-	-	3.4	4.9	-	8.3	47.2	10.0	4.9	14.9	
14/1	667	667	-	-	-	1.0	0.9	-	1.9	10.3	6.1	0.9	7.0	
14/2	877	877	-	-	-	4.6	2.7	-	7.3	29.9	14.3	2.7	17.0	
14/3	655	655	-	-	-	4.7	0.9	-	5.6	30.7	10.9	0.9	11.7	
15/1	815	815	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	779	779	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
16/2	1051	1051	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
16/3	922	922	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4	
17/1	407	407	-	-	-	2.0	1.0	-	3.0	26.5	5.8	1.0	6.8	
17/2	441	441	-	-	-	2.2	1.0	-	3.2	26.2	6.4	1.0	7.4	
18/1	295	295	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1	
19/1	295	295	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	343	343	686	0	0	0.8	1.2	-	2.0	20.8	2.0	1.2	3.2	
20/3	264	264	264	0	0	0.8	3.6	-	4.4	60.4	4.1	3.6	7.7	
21/1	987	987	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06
C2 - West Side T7771W07

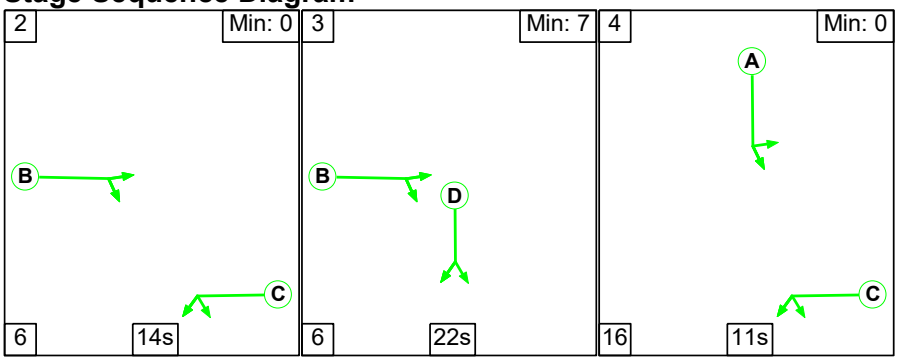
PRC for Signalled Lanes (%): -82.9
PRC for Signalled Lanes (%): -8.9
PRC Over All Lanes (%): -82.9

Total Delay for Signalled Lanes (pcuHr): 665.18
Total Delay for Signalled Lanes (pcuHr): 60.25
Total Delay Over All Lanes(pcuHr): 875.61

Cycle Time (s): 75
Cycle Time (s): 60

Scenario 11: '2b 2028 WD AM' (FG11: '2b 2028 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



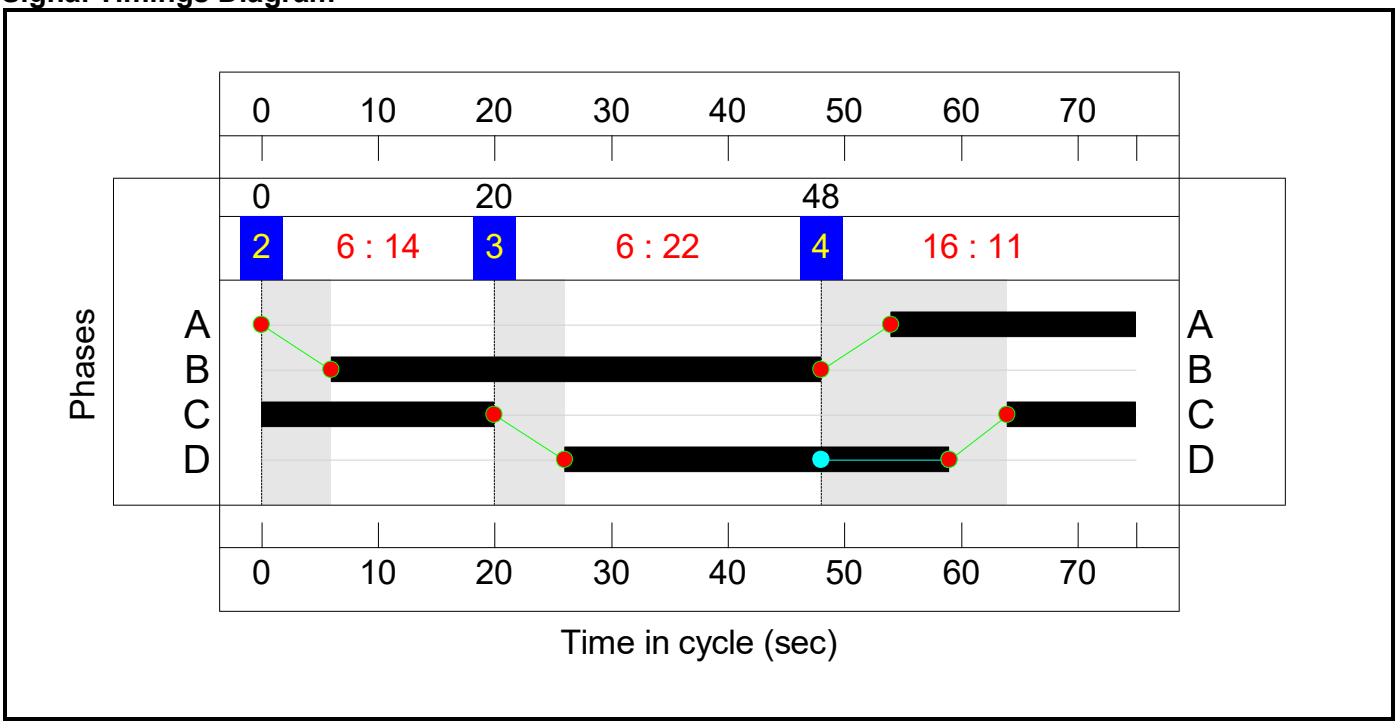
Stage Timings

Stage	2	3	4
Duration	14	22	11
Change Point	0	20	48

Phase Timings

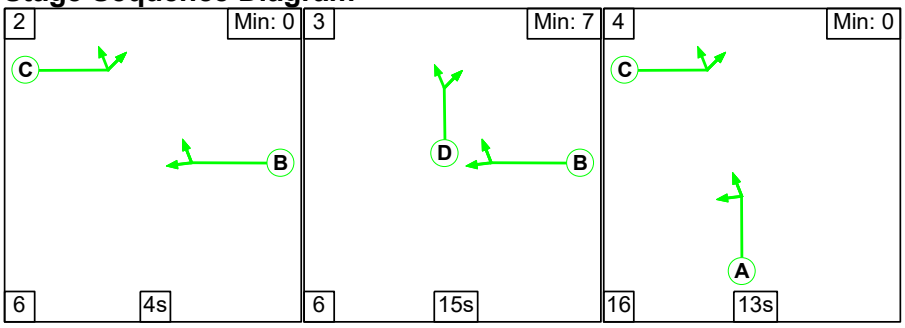
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	21	54	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	42	6	48
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	31	64	20
D	East Circ Right Ahead East Circ	Traffic	33	26	59

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



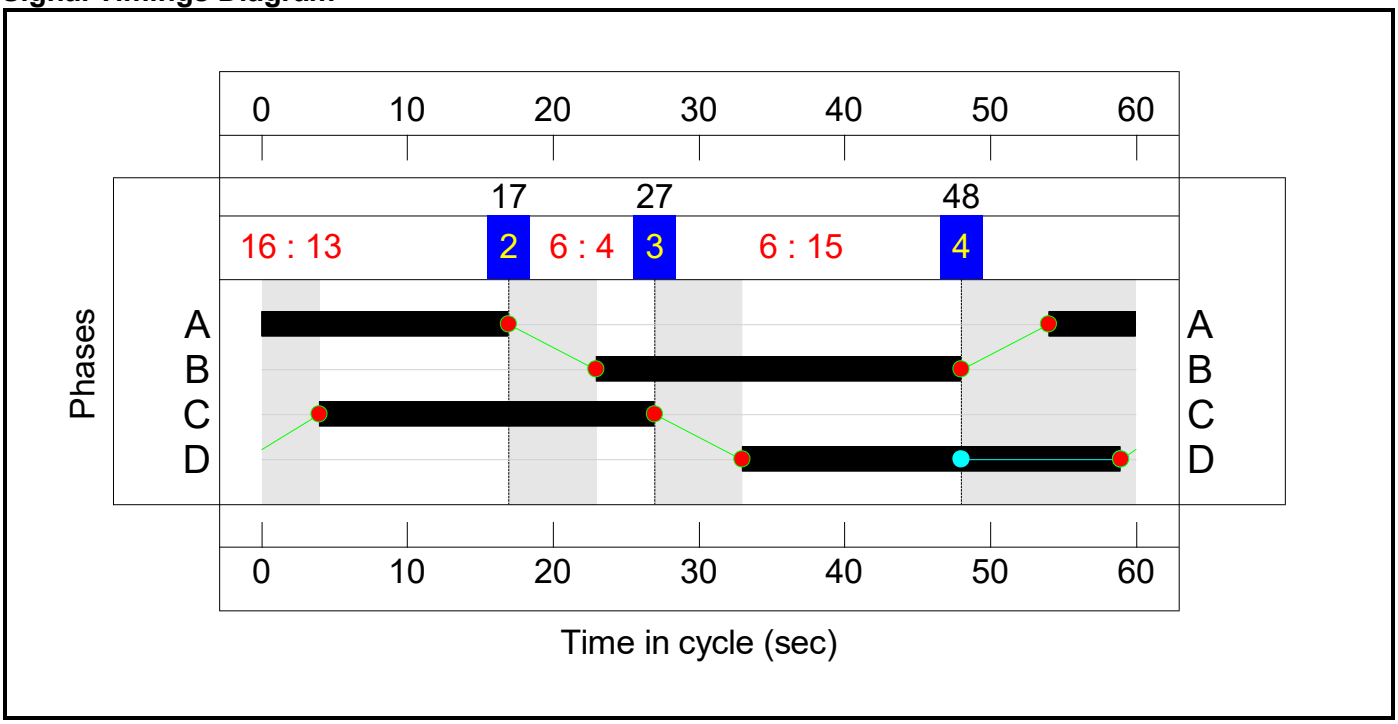
Stage Timings

Stage	2	3	4
Duration	4	15	13
Change Point	17	27	48

Phase Timings

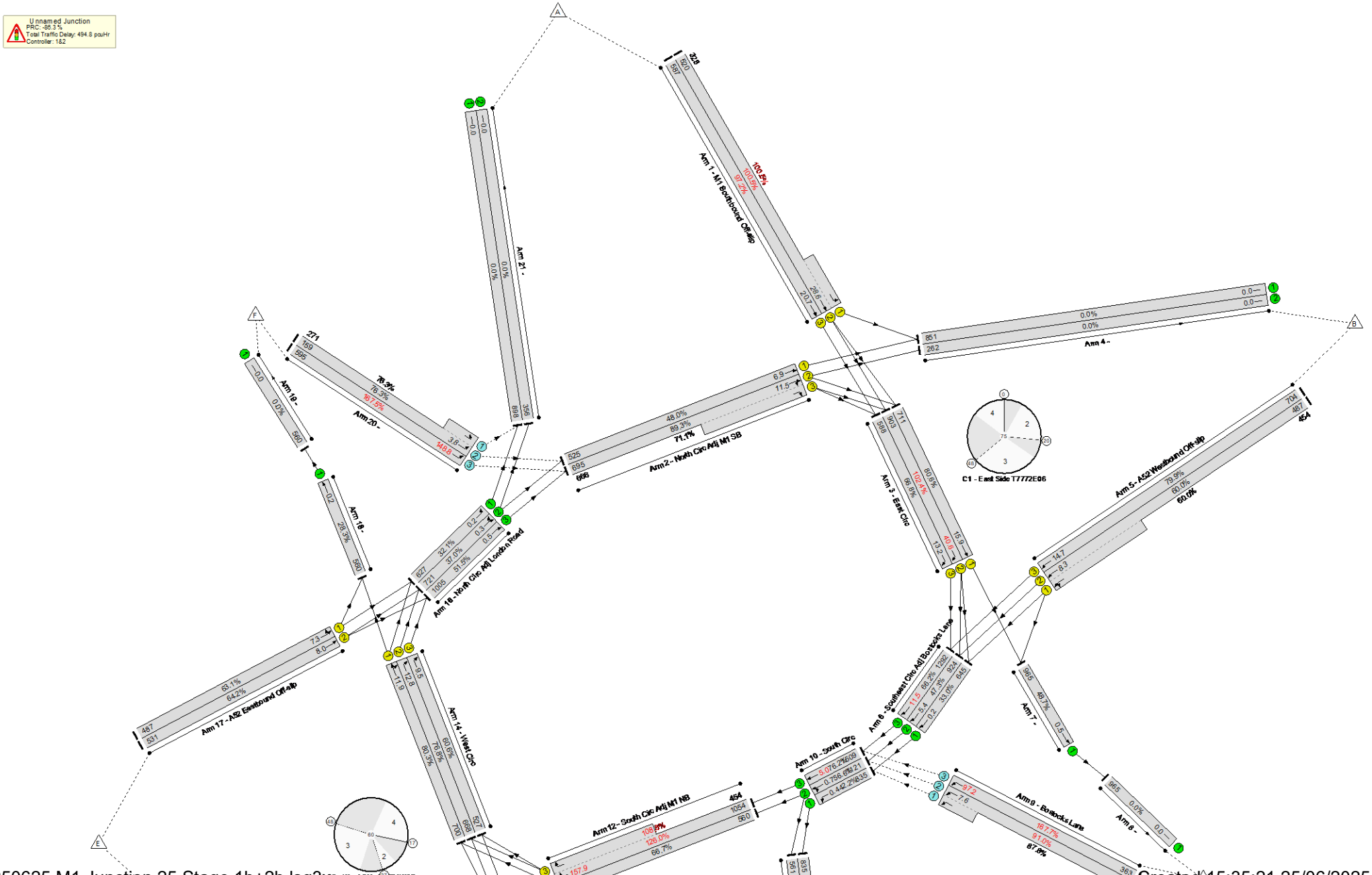
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	23	54	17
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	25	23	48
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	23	4	27
D	West Circ Right Ahead West Circ	Traffic	26	33	59

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	54	0
1/2	M1 Southbound Off-slip Ahead	U	A	54	0
1/3	M1 Southbound Off-slip Ahead	U	A	54	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	48
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	48
2/3	North Circ Adj M1 SB Right	U	B	6	48
3/1	East Circ Ahead	U	D	26	59
3/2	East Circ Right	U	D	26	59
3/3	East Circ Right	U	D	26	59
5/1	A52 Westbound Off-slip Ahead Left	U	C	64	20
5/2	A52 Westbound Off-slip Ahead	U	C	64	20
5/3	A52 Westbound Off-slip Ahead	U	C	64	20
12/1	South Circ Adj M1 NB Ahead	U	B	23	48
12/2	South Circ Adj M1 NB Right Ahead	U	B	23	48
12/3	South Circ Adj M1 NB Right	U	B	23	48
13/1	M1 Northbound Off-slip Left	U	A	54	17
13/2	M1 Northbound Off-slip Ahead Left	U	A	54	17
13/3	M1 Northbound Off-slip Ahead	U	A	54	17
14/1	West Circ Right Ahead	U	D	33	59
14/2	West Circ Right	U	D	33	59
14/3	West Circ Right	U	D	33	59
17/1	A52 Eastbound Off-slip Ahead Left	U	C	4	27
17/2	A52 Eastbound Off-slip Ahead	U	C	4	27


Unnamed Junction
PRC: -98.2 %
Total Traffic Delay: 494.8 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T771W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**167.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**167.7%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	21	-	-	848	2056:1915	517+326	100.5 : 100.5%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	21	-	-	587	2059	604	97.2%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	42	-	-	589	1908	1094	48.0%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	42	-	-	1600	1906:1904	778+937	89.3 : 71.1%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	33	-	-	744	1946	882	80.6%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	33	-	-	1112	1945	882	102.4%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	33	-	-	589	1943	881	66.8%
4/1		U	N/A	N/A	-		-	-	-	-	917	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	262	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	31	-	-	941	2061:1923	811+756	60.0 : 60.0%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	31	-	-	704	2064	881	79.9%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	764	1953	1953	33.0%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1035	1952	1952	47.3%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1293	1951	1951	66.2%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	998	1980	1980	48.7%
8/1		U	N/A	N/A	-		-	-	-	-	998	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	387	1923:1919	216+216	91.0 : 87.8%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	363	1926	216	167.7%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	954	1980	1980	42.2%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1232	1980	1980	56.6%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1656	1980	1980	76.2%
11/1		U	N/A	N/A	-		-	-	-	-	954	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	579	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	25	-	-	653	1936	839	66.7%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	25	-	-	1656	1931:1931	837+417	126.0 : 108.8%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	23	-	-	984	2053:1912	711+607	74.7 : 74.7%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	23	-	-	527	2057	823	64.0%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	26	-	-	874	1937	872	80.3%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	26	-	-	859	1935	871	76.8%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	26	-	-	527	1932	869	60.6%
15/1		U	N/A	N/A	-		-	-	-	-	1106	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	454	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	729	1952	1952	32.1%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	912	1950	1950	37.0%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1005	1950	1950	51.5%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	23	-	-	487	1928	771	63.1%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	23	-	-	531	2067	827	64.2%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	632	1980	1980	28.3%
19/1		U	N/A	N/A	-		-	-	-	-	632	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	430	2061:1921	208+355	76.3 : 76.3%
20/3	Left	O	N/A	N/A	-		-	-	-	-	595	1928	355	167.5%
21/1		U	N/A	N/A	-		-	-	-	-	1000	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	482	Inf	Inf	0.0%

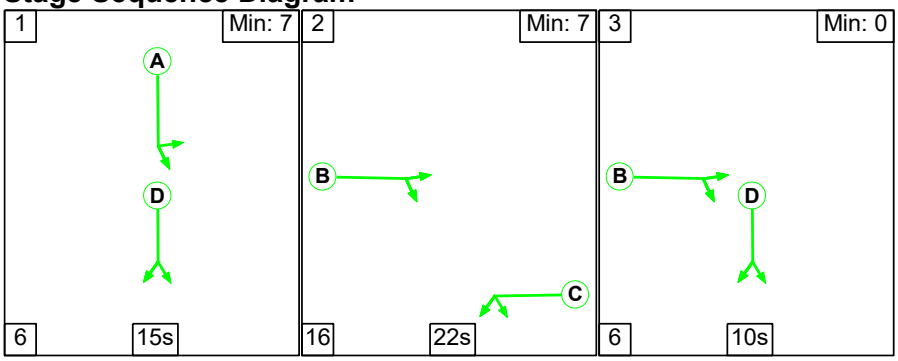
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2206**	**0**	**0**	**94.7**	**400.1**	**0.0**	**494.8**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2206**	**0**	**0**	**94.7**	**400.1**	**0.0**	**494.8**	**-**	**-**	**-**	**-**	
1/2+1/1	848	844	-	-	-	6.0	15.7	-	21.7	92.2	12.9	15.7	28.6	
1/3	587	587	-	-	-	4.3	8.6	-	12.9	78.9	12.1	8.6	20.7	
2/1	525	525	-	-	-	1.4	0.5	-	1.8	12.6	6.4	0.5	6.9	
2/2+2/3	1360	1360	-	-	-	4.0	1.9	-	5.9	15.6	9.6	1.9	11.5	
3/1	711	711	-	-	-	4.1	2.0	-	6.1	30.9	13.9	2.0	15.9	
3/2	903	882	-	-	-	5.6	21.4	-	27.0	107.4	19.3	21.4	40.6	
3/3	588	588	-	-	-	6.0	1.0	-	7.0	42.9	12.2	1.0	13.2	
4/1	851	851	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	262	262	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	941	941	-	-	-	4.2	0.7	-	5.0	19.0	7.6	0.7	8.3	
5/3	704	704	-	-	-	3.7	1.9	-	5.6	28.7	12.7	1.9	14.7	
6/1	645	645	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
6/2	924	924	-	-	-	0.0	0.4	-	0.5	1.8	5.0	0.4	5.4	
6/3	1292	1292	-	-	-	0.1	1.0	-	1.0	2.9	10.5	1.0	11.5	
7/1	965	965	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
8/1	965	965	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	387	387	774	0	0	1.4	3.6	-	5.0	46.7	3.9	3.6	7.6	
9/3	363	216	216	0	0	8.0	74.5	-	82.5	818.4	22.7	74.5	97.2	
10/1	835	835	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
10/2	1121	1121	-	-	-	0.0	0.7	-	0.7	2.1	0.0	0.7	0.7	
10/3	1509	1509	-	-	-	0.0	1.6	-	1.6	3.8	3.4	1.6	5.0	
11/1	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	560	560	-	-	-	2.1	1.0	-	3.1	20.0	7.3	1.0	8.3	
12/2+12/3	1509	1197	-	-	-	13.2	130.2	-	143.3	342.0	27.7	130.2	157.9	
13/2+13/1	984	984	-	-	-	3.9	1.5	-	5.4	19.7	7.1	1.5	8.5	
13/3	527	527	-	-	-	2.1	0.9	-	3.0	20.6	7.0	0.9	7.9	
14/1	700	700	-	-	-	2.1	2.0	-	4.1	21.3	9.9	2.0	11.9	
14/2	668	668	-	-	-	3.5	1.6	-	5.1	27.4	11.1	1.6	12.8	
14/3	527	527	-	-	-	4.5	0.8	-	5.2	35.8	8.8	0.8	9.5	
15/1	1013	1013	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	360	360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	627	627	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
16/2	721	721	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
16/3	1005	1005	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
17/1	487	487	-	-	-	2.0	0.9	-	2.8	20.7	6.5	0.9	7.3	
17/2	531	531	-	-	-	2.1	0.9	-	3.0	20.6	7.1	0.9	8.0	
18/1	560	560	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
19/1	560	560	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	430	430	860	0	0	0.8	1.6	-	2.3	19.4	2.2	1.6	3.8	
20/3	595	355	355	0	0	9.7	121.1	-	130.8	791.1	27.8	121.1	148.8	
21/1	898	898	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-13.8	Total Delay for Signalled Lanes (pcuHr):	92.98	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-40.0	Total Delay for Signalled Lanes (pcuHr):	175.14	Cycle Time (s):	60
	PRC Over All Lanes (%):	-86.3	Total Delay Over All Lanes(pcuHr):	494.82		

Scenario 12: '2b 2028 WD PM' (FG12: '2b 2028 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



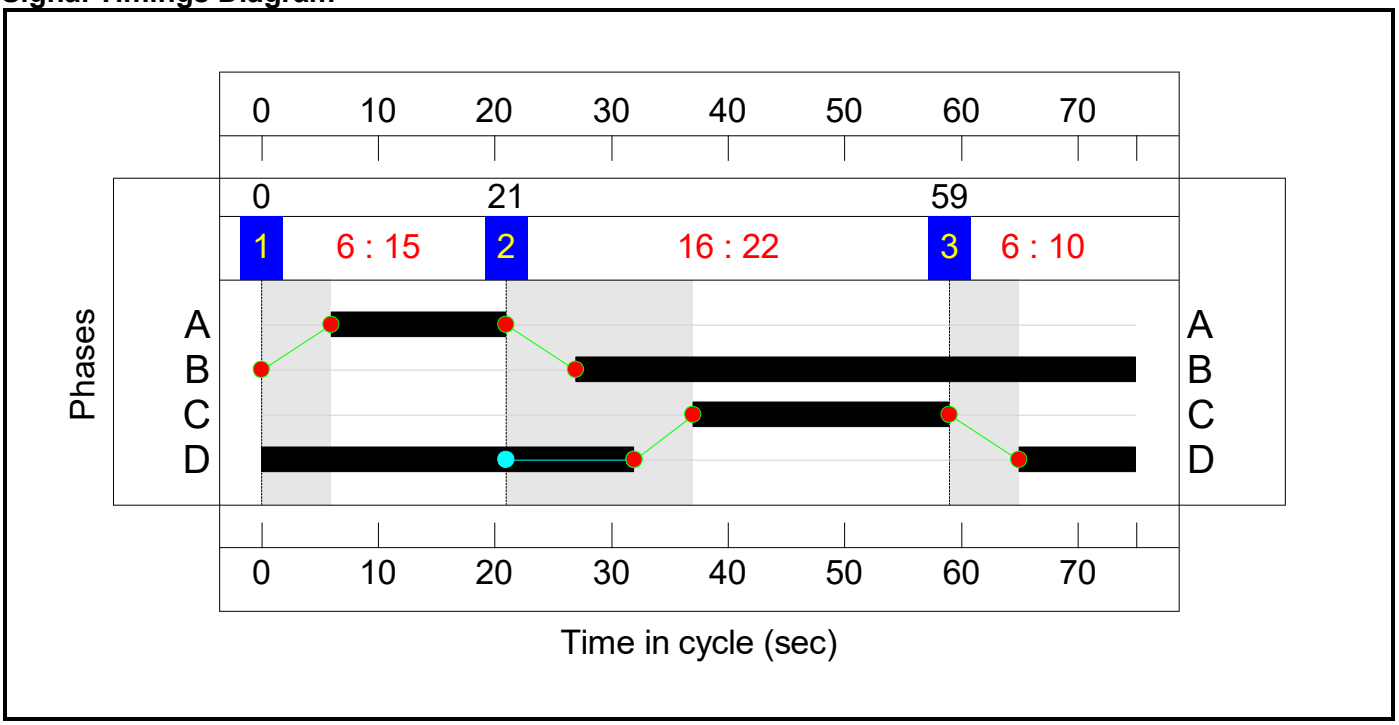
Stage Timings

Stage	1	2	3
Duration	15	22	10
Change Point	0	21	59

Phase Timings

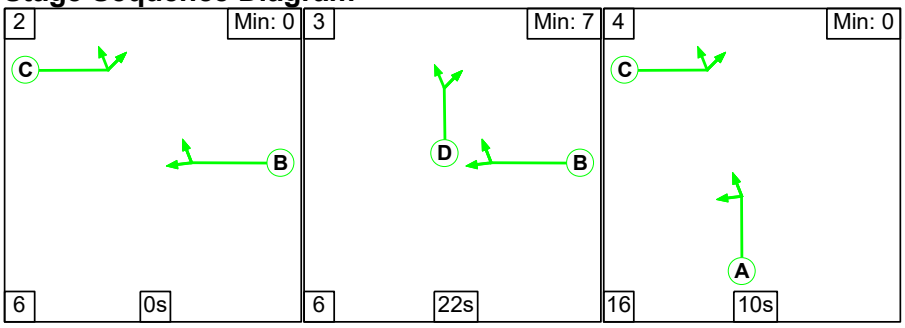
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	15	6	21
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	48	27	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	22	37	59
D	East Circ Right Ahead East Circ	Traffic	42	65	32

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



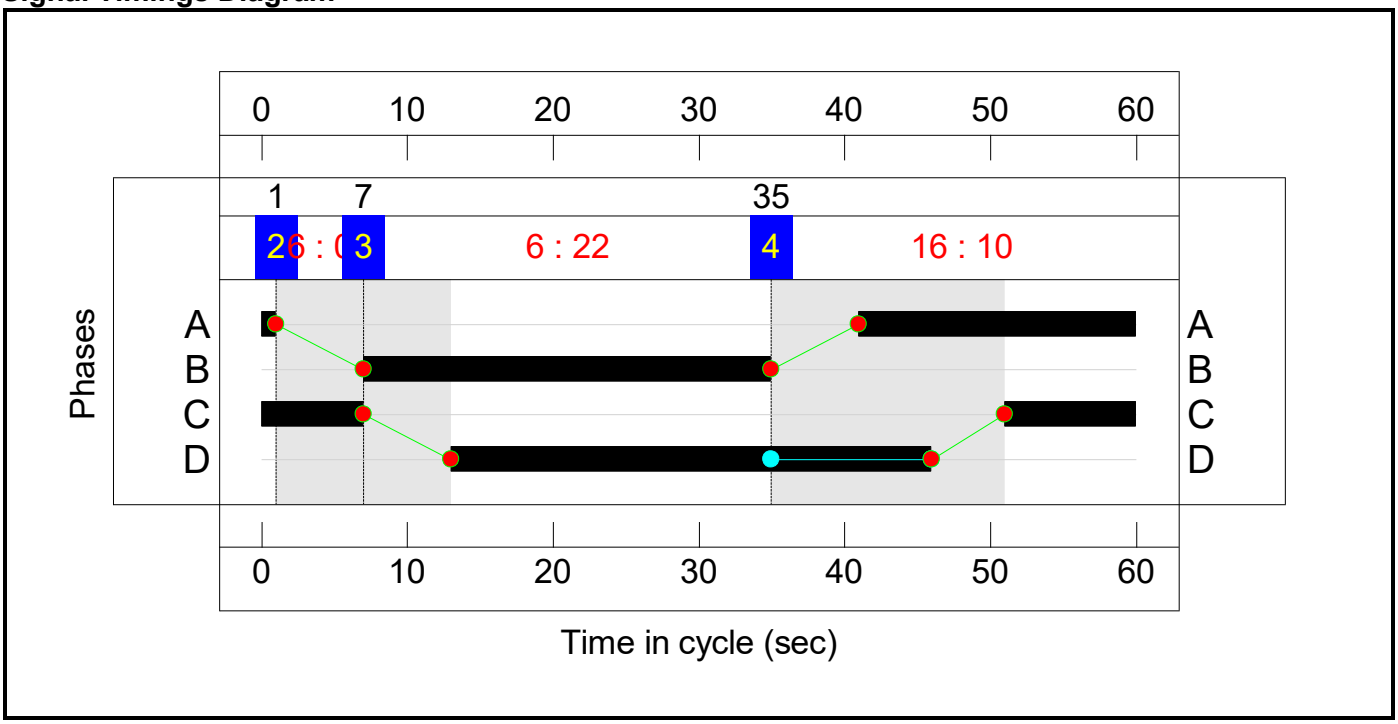
Stage Timings

Stage	2	3	4
Duration	0	22	10
Change Point	1	7	35

Phase Timings

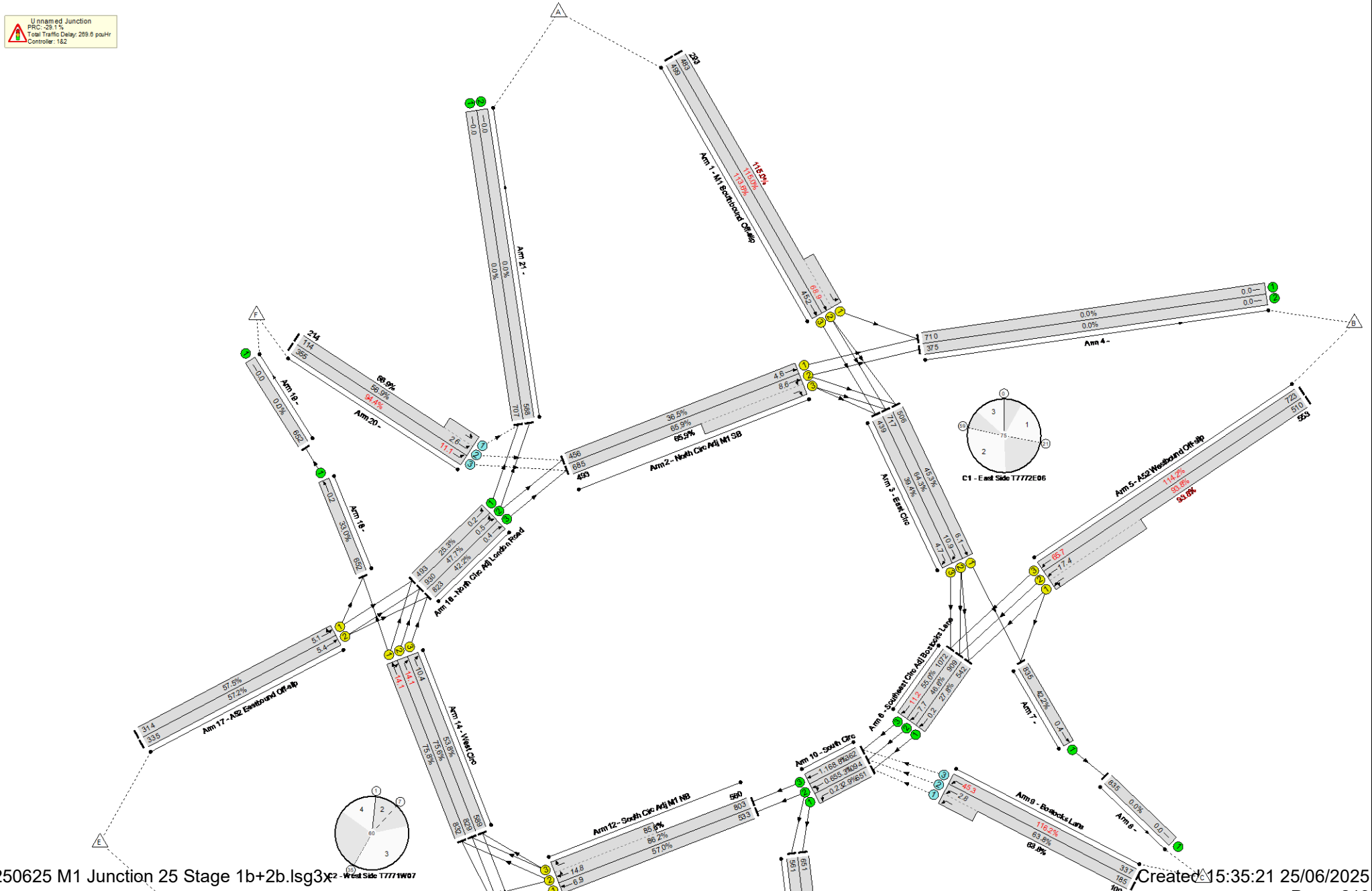
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	20	41	1
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	28	7	35
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	16	51	7
D	West Circ Right Ahead West Circ	Traffic	33	13	46

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	21
1/2	M1 Southbound Off-slip Ahead	U	A	6	21
1/3	M1 Southbound Off-slip Ahead	U	A	6	21
2/1	North Circ Adj M1 SB Ahead	U	B	27	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	27	0
2/3	North Circ Adj M1 SB Right	U	B	27	0
3/1	East Circ Ahead	U	D	65	32
3/2	East Circ Right	U	D	65	32
3/3	East Circ Right	U	D	65	32
5/1	A52 Westbound Off-slip Ahead Left	U	C	37	59
5/2	A52 Westbound Off-slip Ahead	U	C	37	59
5/3	A52 Westbound Off-slip Ahead	U	C	37	59
12/1	South Circ Adj M1 NB Ahead	U	B	7	35
12/2	South Circ Adj M1 NB Right Ahead	U	B	7	35
12/3	South Circ Adj M1 NB Right	U	B	7	35
13/1	M1 Northbound Off-slip Left	U	A	41	1
13/2	M1 Northbound Off-slip Ahead Left	U	A	41	1
13/3	M1 Northbound Off-slip Ahead	U	A	41	1
14/1	West Circ Right Ahead	U	D	13	46
14/2	West Circ Right	U	D	13	46
14/3	West Circ Right	U	D	13	46
17/1	A52 Eastbound Off-slip Ahead Left	U	C	51	7
17/2	A52 Eastbound Off-slip Ahead	U	C	51	7


Unnamed Junction
PRC: -29.1 %
Total Traffic Delay: 269.6 pcuHr
Controller: 1&2
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**116.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**116.2%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	15	-	-	776	2056:1915	420+255	115.0 : 115.0%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	15	-	-	499	2059	439	113.6%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	48	-	-	467	1908	1247	36.5%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	48	-	-	1178	1906:1904	1040+748	65.9 : 65.9%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	42	-	-	535	1946	1116	45.3%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	751	1945	1115	64.3%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	499	1943	1114	39.4%
4/1		U	N/A	N/A	-		-	-	-	-	760	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	375	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	22	-	-	1063	2061:1923	544+590	93.8 : 93.8%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	22	-	-	723	2064	633	114.2%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	542	1953	1953	27.8%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	943	1952	1952	46.6%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1222	1951	1951	55.0%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	864	1980	1980	42.2%
8/1		U	N/A	N/A	-		-	-	-	-	864	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	294	1923:1919	290+171	63.8 : 63.8%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	337	1926	290	116.2%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	651	1980	1980	32.9%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1128	1980	1980	55.3%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1559	1980	1980	68.8%
11/1		U	N/A	N/A	-		-	-	-	-	651	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	561	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	28	-	-	567	1936	936	57.0%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	28	-	-	1559	1931:1931	931+654	86.2 : 85.6%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	20	-	-	982	2053:1912	670+408	91.1 : 91.1%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	20	-	-	587	2057	720	81.5%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	33	-	-	903	1937	1098	75.8%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	33	-	-	912	1935	1096	75.6%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	33	-	-	589	1932	1095	53.8%
15/1		U	N/A	N/A	-		-	-	-	-	939	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	352	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	526	1952	1952	25.3%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1013	1950	1950	47.7%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	823	1950	1950	42.2%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	16	-	-	314	1928	546	57.5%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	16	-	-	335	2067	586	57.2%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	691	1980	1980	33.0%
19/1		U	N/A	N/A	-		-	-	-	-	691	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	328	2061:1921	200+376	56.9 : 56.9%
20/3	Left	O	N/A	N/A	-		-	-	-	-	355	1928	376	94.4%
21/1		U	N/A	N/A	-		-	-	-	-	740	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	660	Inf	Inf	0.0%

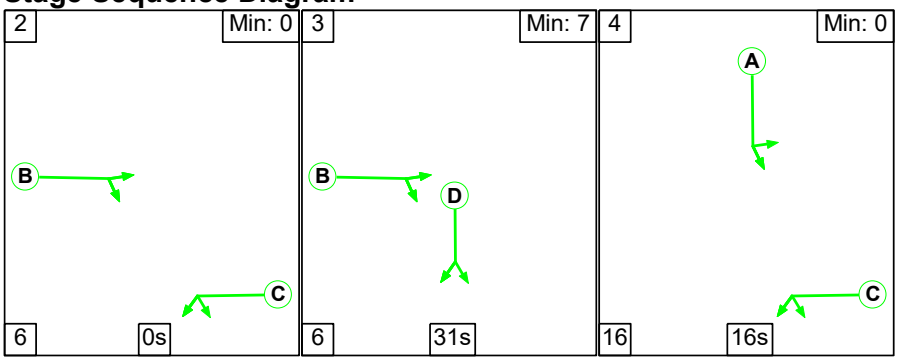
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1889**	**0**	**0**	**70.0**	**199.6**	**0.0**	**269.6**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1889**	**0**	**0**	**70.0**	**199.6**	**0.0**	**269.6**	**-**	**-**	**-**	**-**	
1/2+1/1	776	675	-	-	-	10.0	54.1	-	64.1	297.5	14.8	54.1	68.9	
1/3	499	439	-	-	-	6.3	33.6	-	39.9	287.9	11.6	33.6	45.2	
2/1	456	456	-	-	-	0.7	0.3	-	1.0	8.2	4.3	0.3	4.6	
2/2+2/3	1178	1178	-	-	-	2.2	1.0	-	3.1	9.6	7.6	1.0	8.6	
3/1	506	506	-	-	-	1.5	0.4	-	1.9	13.4	5.7	0.4	6.1	
3/2	717	717	-	-	-	2.8	0.9	-	3.7	18.6	10.0	0.9	10.9	
3/3	439	439	-	-	-	0.3	0.3	-	0.6	4.8	4.3	0.3	4.7	
4/1	710	710	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1063	1063	-	-	-	7.3	6.4	-	13.7	46.3	11.1	6.4	17.4	
5/3	723	633	-	-	-	7.7	48.7	-	56.5	281.1	16.9	48.7	65.7	
6/1	542	542	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
6/2	909	909	-	-	-	0.0	0.4	-	0.5	1.8	7.2	0.4	7.7	
6/3	1072	1072	-	-	-	0.1	0.6	-	0.7	2.3	10.6	0.6	11.2	
7/1	835	835	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
8/1	835	835	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	294	294	588	0	0	0.4	0.9	-	1.3	16.1	1.9	0.9	2.8	
9/3	337	290	290	0	0	3.0	26.7	-	29.7	316.9	18.6	26.7	45.3	
10/1	651	651	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
10/2	1094	1094	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6	
10/3	1362	1362	-	-	-	0.0	1.1	-	1.1	2.9	0.0	1.1	1.1	
11/1	651	651	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	533	533	-	-	-	1.6	0.7	-	2.3	15.5	6.2	0.7	6.9	
12/2+12/3	1362	1362	-	-	-	4.8	3.0	-	7.8	20.6	11.8	3.0	14.8	
13/2+13/1	982	982	-	-	-	4.7	4.7	-	9.4	34.3	9.3	4.7	14.0	
13/3	587	587	-	-	-	2.9	2.1	-	5.0	30.9	8.8	2.1	10.9	
14/1	832	832	-	-	-	2.4	1.5	-	4.0	17.3	12.5	1.5	14.1	
14/2	829	829	-	-	-	2.3	1.5	-	3.8	16.5	12.6	1.5	14.1	
14/3	589	589	-	-	-	4.0	0.6	-	4.5	27.8	9.8	0.6	10.4	
15/1	905	905	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	493	493	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	930	930	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
16/3	823	823	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
17/1	314	314	-	-	-	1.6	0.7	-	2.3	26.1	4.4	0.7	5.1	
17/2	335	335	-	-	-	1.7	0.7	-	2.4	25.5	4.7	0.7	5.4	
18/1	652	652	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
19/1	652	652	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	328	328	656	0	0	0.6	0.7	-	1.2	13.6	1.9	0.7	2.6	
20/3	355	355	355	0	0	1.0	5.5	-	6.5	66.3	5.6	5.5	11.1	
21/1	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	588	588	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-27.7	Total Delay for Signalled Lanes (pcuHr):	184.49	Cycle Time (s):	75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-1.2	Total Delay for Signalled Lanes (pcuHr):	41.44	Cycle Time (s):	60
	PRC Over All Lanes (%):	-29.1	Total Delay Over All Lanes(pcuHr):	269.58		

Scenario 13: '2b 2038 WD AM' (FG13: '2b 2038 WD AM Base', Plan 1: 'Network Control Plan 1 AM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



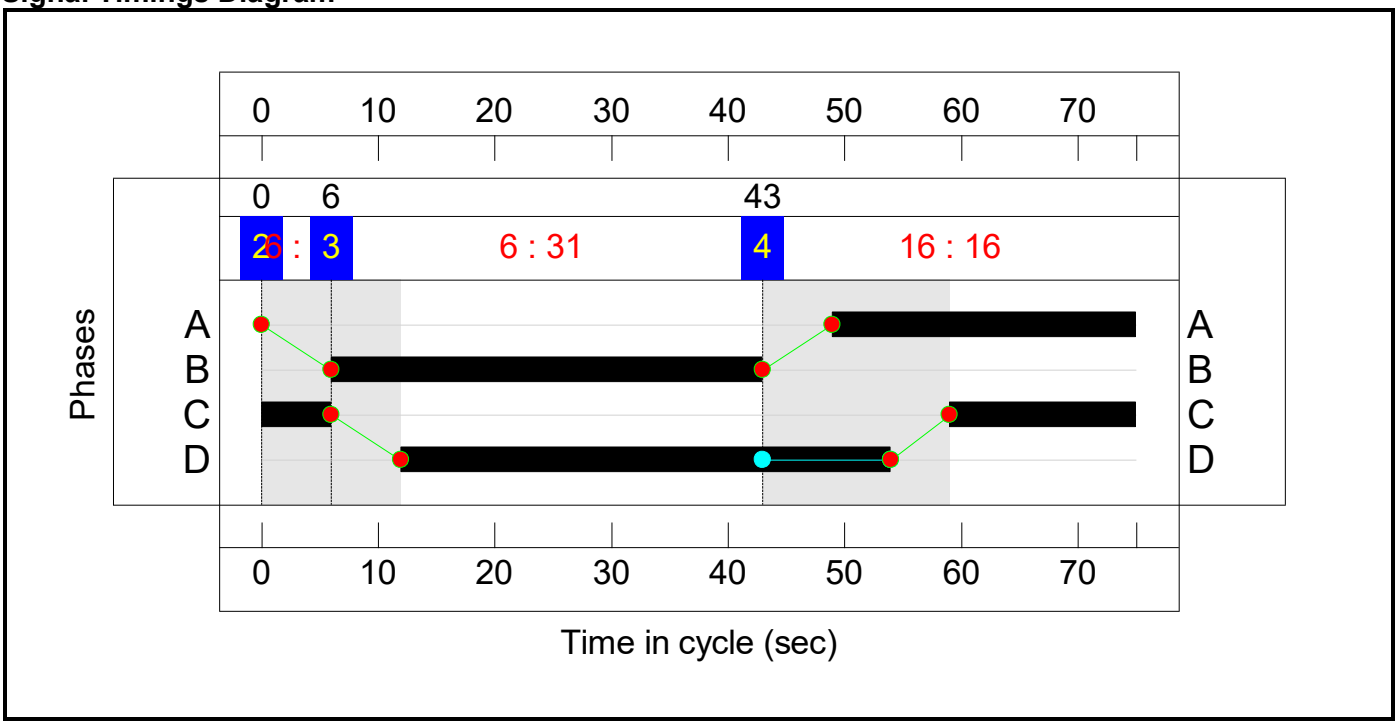
Stage Timings

Stage	2	3	4
Duration	0	31	16
Change Point	0	6	43

Phase Timings

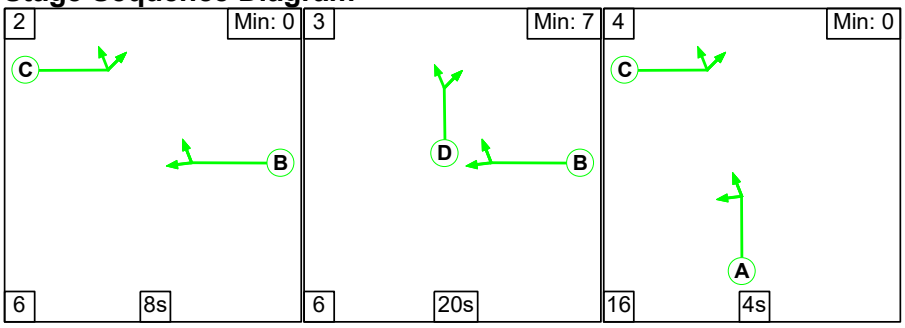
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	26	49	0
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	37	6	43
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	22	59	6
D	East Circ Right Ahead East Circ	Traffic	42	12	54

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



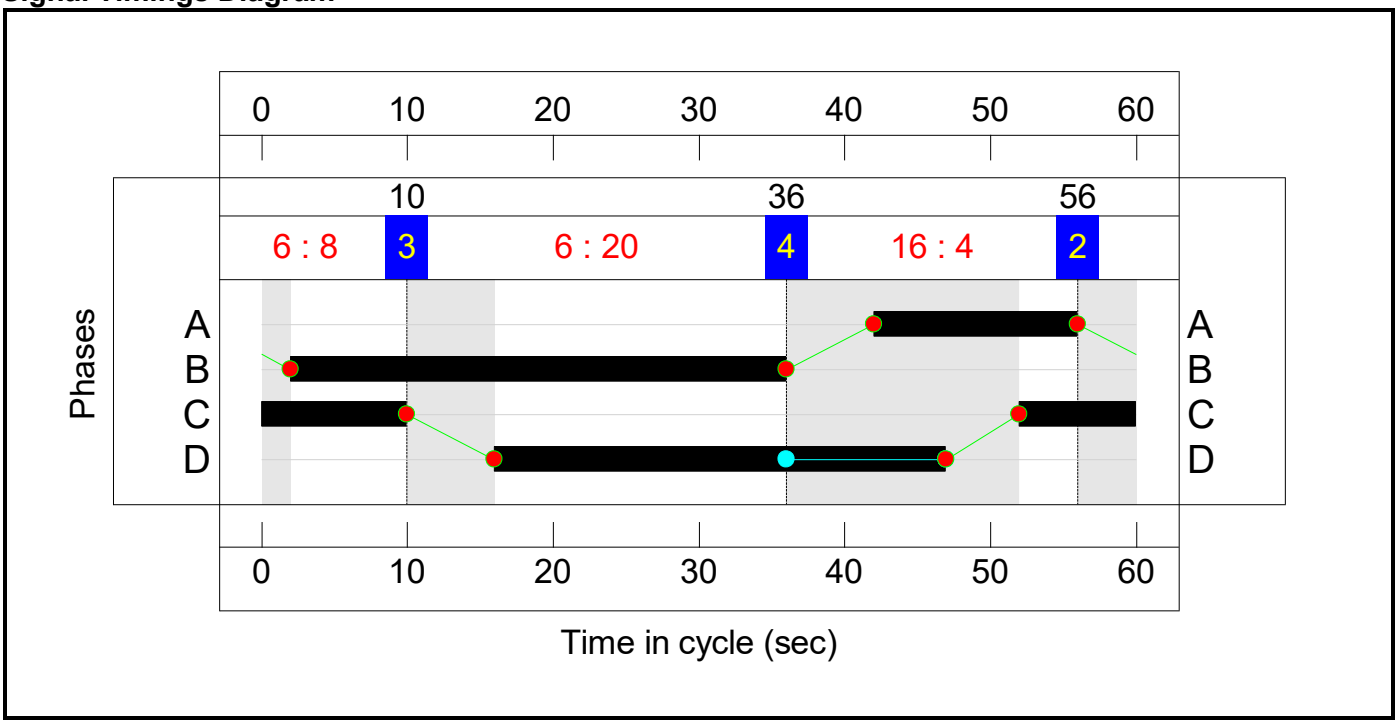
Stage Timings

Stage	2	3	4
Duration	8	20	4
Change Point	56	10	36

Phase Timings

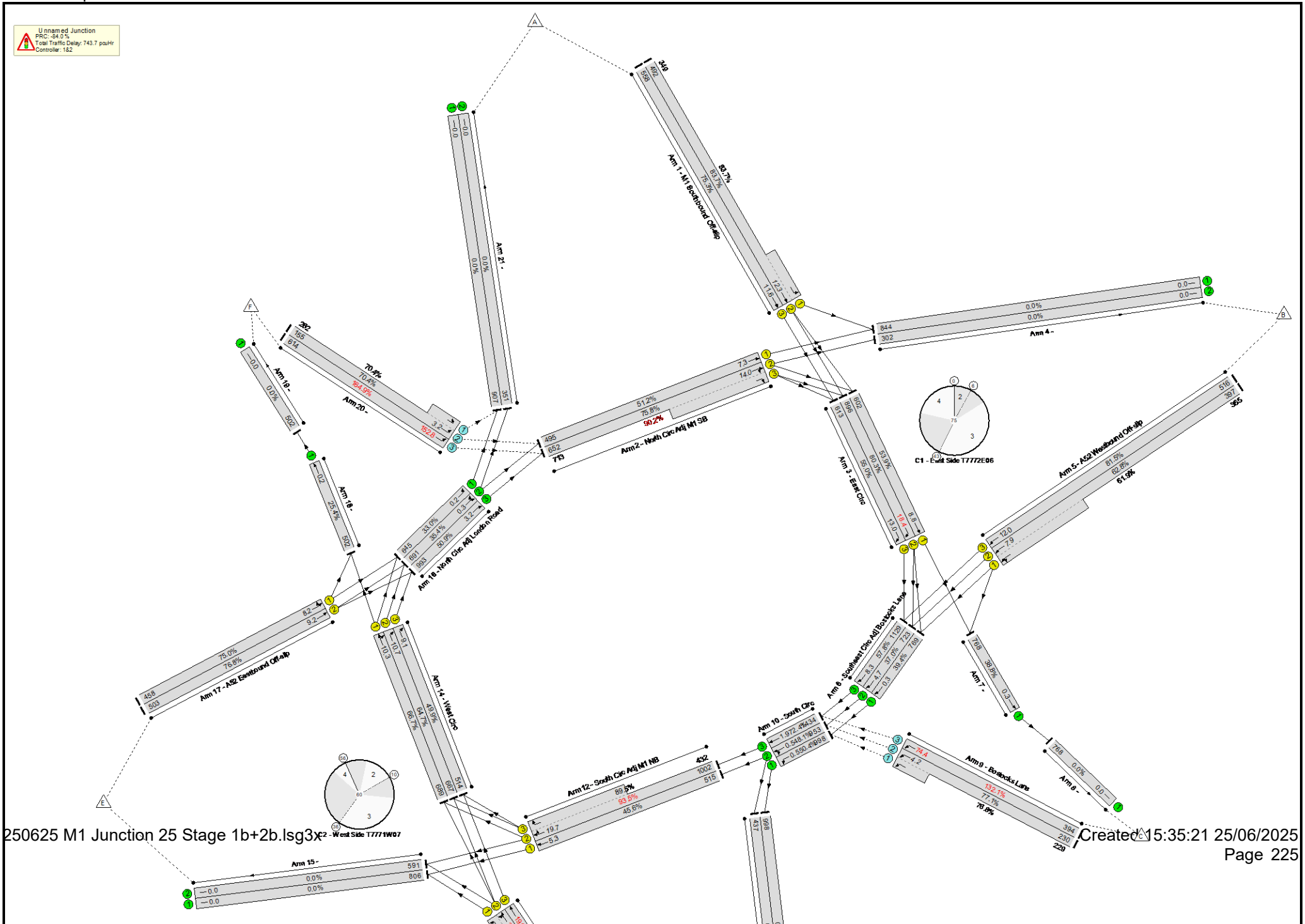
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	14	42	56
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	34	2	36
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	18	52	10
D	West Circ Right Ahead West Circ	Traffic	31	16	47

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	49	0
1/2	M1 Southbound Off-slip Ahead	U	A	49	0
1/3	M1 Southbound Off-slip Ahead	U	A	49	0
2/1	North Circ Adj M1 SB Ahead	U	B	6	43
2/2	North Circ Adj M1 SB Right Ahead	U	B	6	43
2/3	North Circ Adj M1 SB Right	U	B	6	43
3/1	East Circ Ahead	U	D	12	54
3/2	East Circ Right	U	D	12	54
3/3	East Circ Right	U	D	12	54
5/1	A52 Westbound Off-slip Ahead Left	U	C	59	6
5/2	A52 Westbound Off-slip Ahead	U	C	59	6
5/3	A52 Westbound Off-slip Ahead	U	C	59	6
12/1	South Circ Adj M1 NB Ahead	U	B	2	36
12/2	South Circ Adj M1 NB Right Ahead	U	B	2	36
12/3	South Circ Adj M1 NB Right	U	B	2	36
13/1	M1 Northbound Off-slip Left	U	A	42	56
13/2	M1 Northbound Off-slip Ahead Left	U	A	42	56
13/3	M1 Northbound Off-slip Ahead	U	A	42	56
14/1	West Circ Right Ahead	U	D	16	47
14/2	West Circ Right	U	D	16	47
14/3	West Circ Right	U	D	16	47
17/1	A52 Eastbound Off-slip Ahead Left	U	C	52	10
17/2	A52 Eastbound Off-slip Ahead	U	C	52	10


Unnamed Junction
PRC: -84.0 %
Total Traffic Delay: 743.7 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06
C2 - West Side T777/1W07

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**165.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**165.6%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	26	-	-	841	2056:1915	588+417	83.7 : 83.7%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	26	-	-	558	2059	741	75.3%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	37	-	-	680	1908	967	51.2%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	37	-	-	1938	1906:1904	860+790	75.8 : 90.2%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	42	-	-	765	1946	1116	53.9%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	1073	1945	1115	80.3%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	42	-	-	654	1943	1114	55.0%
4/1		U	N/A	N/A	-		-	-	-	-	1029	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	496	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	22	-	-	762	2061:1923	632+590	62.8 : 61.9%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	22	-	-	516	2064	633	81.5%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	902	1953	1953	39.4%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	767	1952	1952	37.0%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1170	1951	1951	57.8%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	931	1980	1980	38.8%
8/1		U	N/A	N/A	-		-	-	-	-	931	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	459	1923:1919	298+298	77.1 : 76.8%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	394	1926	298	132.1%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	1131	1980	1980	50.4%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	997	1980	1980	48.1%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1564	1980	1980	72.4%
11/1		U	N/A	N/A	-		-	-	-	-	1131	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	440	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	34	-	-	557	1936	1129	45.6%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	34	-	-	1564	1932:1931	1071+483	93.5 : 89.5%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	14	-	-	1331	2053:1912	513+290	165.6 : 165.6%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	14	-	-	845	2057	514	164.3%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	31	-	-	839	1937	1033	66.7%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	875	1935	1032	64.7%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	31	-	-	845	1932	1030	49.9%
15/1		U	N/A	N/A	-		-	-	-	-	1038	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	700	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	671	1952	1952	33.0%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	899	1950	1950	35.4%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1324	1950	1950	50.9%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	18	-	-	458	1928	611	75.0%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	18	-	-	503	2067	655	76.8%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	626	1980	1980	25.4%
19/1		U	N/A	N/A	-		-	-	-	-	626	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	417	2061:1921	220+372	70.4 : 70.4%
20/3	Left	O	N/A	N/A	-		-	-	-	-	614	1928	372	164.9%
21/1		U	N/A	N/A	-		-	-	-	-	933	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	374	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**2423**	**0**	**0**	**107.9**	**635.8**	**0.0**	**743.7**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**2423**	**0**	**0**	**107.9**	**635.8**	**0.0**	**743.7**	**-**	**-**	**-**	**-**	
1/2+1/1	841	841	-	-	-	4.6	2.5	-	7.1	30.4	9.8	2.5	12.3	
1/3	558	558	-	-	-	3.3	1.5	-	4.8	30.7	10.1	1.5	11.6	
2/1	495	495	-	-	-	1.7	0.5	-	2.2	16.1	6.7	0.5	7.3	
2/2+2/3	1365	1365	-	-	-	5.4	2.4	-	7.8	20.5	11.7	2.4	14.0	
3/1	602	602	-	-	-	1.7	0.6	-	2.3	13.9	8.3	0.6	8.8	
3/2	896	896	-	-	-	2.2	2.0	-	4.2	16.7	16.4	2.0	18.4	
3/3	613	613	-	-	-	4.3	0.6	-	5.0	29.1	12.4	0.6	13.0	
4/1	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	302	302	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	762	762	-	-	-	4.7	0.8	-	5.5	26.2	7.1	0.8	7.9	
5/3	516	516	-	-	-	3.4	2.1	-	5.6	38.9	9.9	2.1	12.0	
6/1	769	769	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
6/2	723	723	-	-	-	0.0	0.3	-	0.3	1.5	4.4	0.3	4.7	
6/3	1129	1129	-	-	-	0.0	0.7	-	0.7	2.3	7.6	0.7	8.3	
7/1	768	768	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3	
8/1	768	768	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	459	459	918	0	0	1.3	1.6	-	2.9	22.9	2.6	1.6	4.2	
9/3	394	298	298	0	0	5.5	49.8	-	55.3	505.5	24.6	49.8	74.4	
10/1	998	998	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/2	953	953	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
10/3	1434	1434	-	-	-	0.0	1.3	-	1.3	3.3	0.6	1.3	1.9	
11/1	998	998	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	515	515	-	-	-	1.0	0.4	-	1.4	10.0	4.9	0.4	5.3	
12/2+12/3	1434	1434	-	-	-	3.8	5.5	-	9.3	23.3	14.2	5.5	19.7	
13/2+13/1	1331	804	-	-	-	23.3	264.9	-	288.2	779.5	31.7	264.9	296.7	
13/3	845	514	-	-	-	16.9	166.6	-	183.5	782.0	24.9	166.6	191.5	
14/1	689	689	-	-	-	1.7	1.0	-	2.7	14.0	9.3	1.0	10.3	
14/2	667	667	-	-	-	2.5	0.9	-	3.5	18.6	9.8	0.9	10.7	
14/3	514	514	-	-	-	3.8	0.5	-	4.3	29.9	8.6	0.5	9.1	
15/1	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	645	645	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2	
16/2	691	691	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
16/3	993	993	-	-	-	0.0	0.5	-	0.5	1.9	2.7	0.5	3.2	
17/1	458	458	-	-	-	2.3	1.5	-	3.8	30.0	6.7	1.5	8.2	
17/2	503	503	-	-	-	2.6	1.6	-	4.2	30.1	7.5	1.6	9.2	
18/1	502	502	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
19/1	502	502	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	417	417	834	0	0	0.7	1.2	-	1.8	16.0	2.0	1.2	3.2	
20/3	614	372	372	0	0	11.0	122.1	-	133.2	780.7	30.7	122.1	152.8	
21/1	907	907	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06
C2 - West Side T7771W07

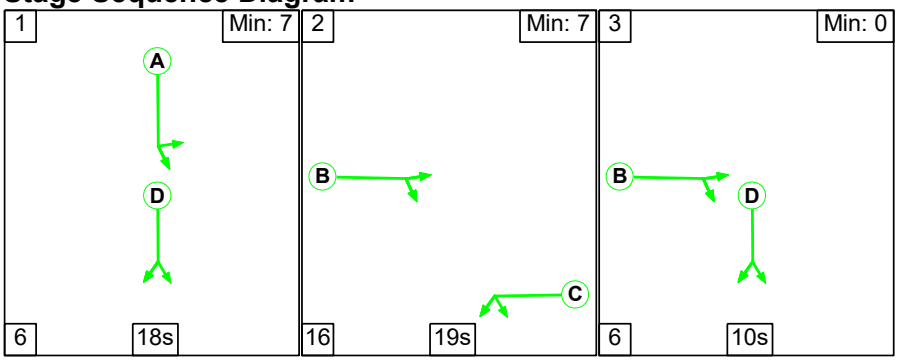
PRC for Signalled Lanes (%): -0.2
PRC for Signalled Lanes (%): -84.0
PRC Over All Lanes (%): -84.0

Total Delay for Signalled Lanes (pcuHr): 44.41
Total Delay for Signalled Lanes (pcuHr): 500.88
Total Delay Over All Lanes(pcuHr): 743.68

Cycle Time (s): 75
Cycle Time (s): 60

Scenario 14: '2b 2038 WD PM' (FG14: '2b 2038 WD PM Base', Plan 2: 'Network Control Plan 2 PM')
Controller :C1 - East Side T7772E06

Stage Sequence Diagram



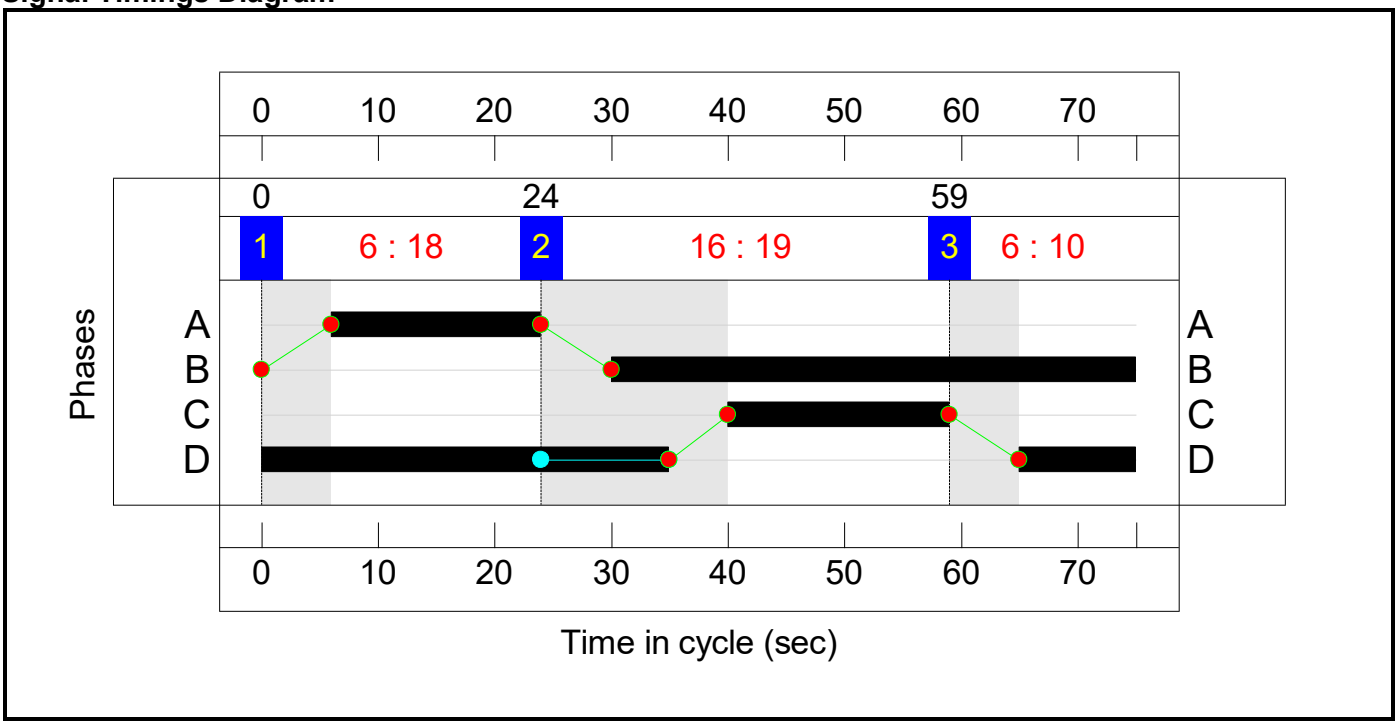
Stage Timings

Stage	1	2	3
Duration	18	19	10
Change Point	0	24	59

Phase Timings

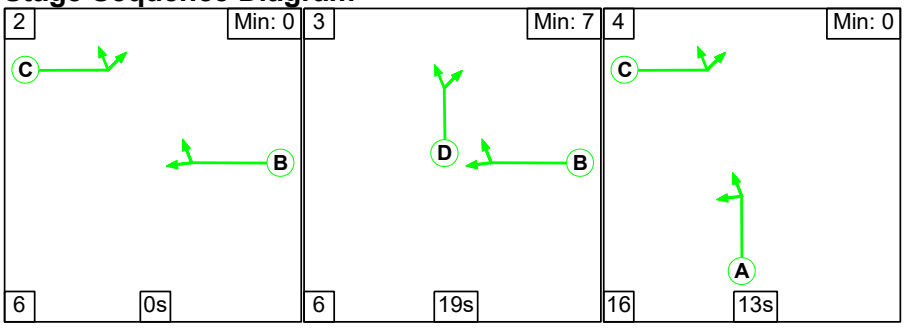
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Southbound Off-slip Ahead Left M1 Southbound Off-slip	Traffic	18	6	24
B	North Circ Adj M1 SB Right Ahead Eastbound Circ	Traffic	45	30	0
C	A52 Westbound Off-slip Ahead Left A52 Westbound	Traffic	19	40	59
D	East Circ Right Ahead East Circ	Traffic	45	65	35

Signal Timings Diagram



Controller :C2 - West Side T7771W07

Stage Sequence Diagram



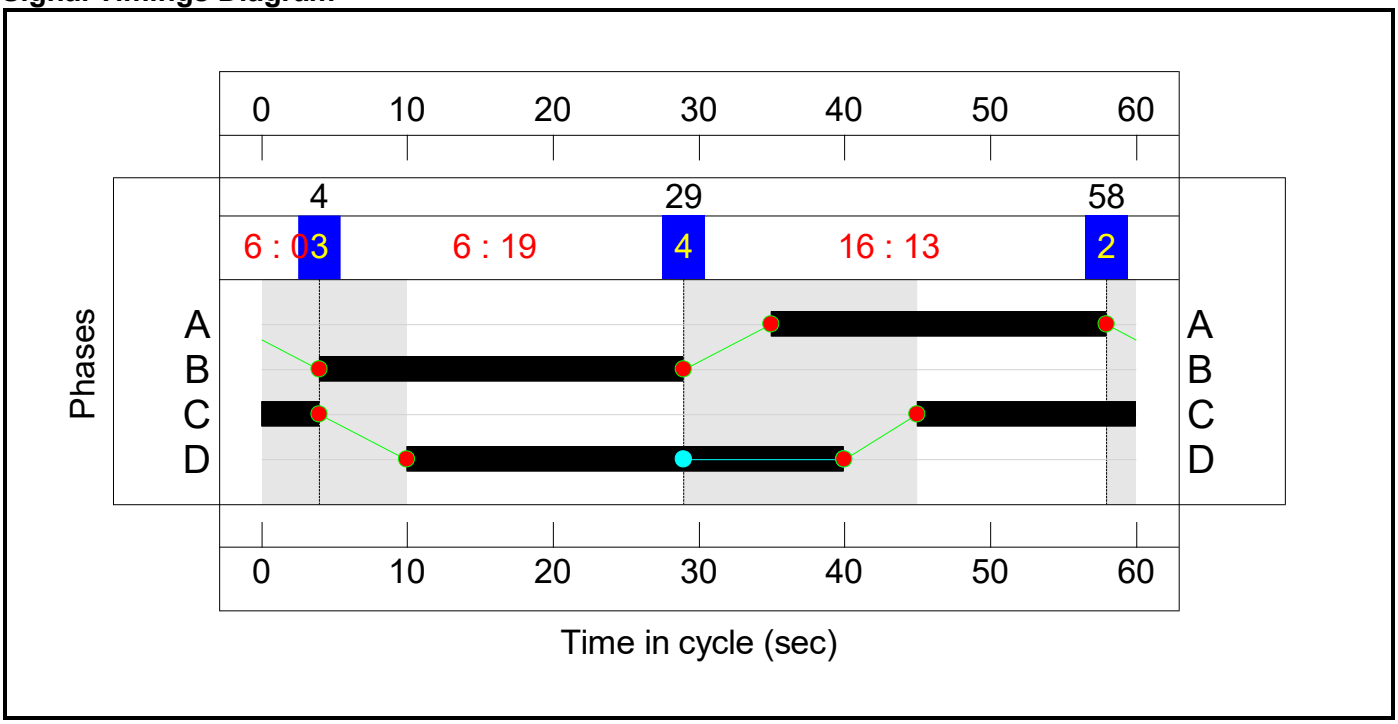
Stage Timings

Stage	2	3	4
Duration	0	19	13
Change Point	58	4	29

Phase Timings

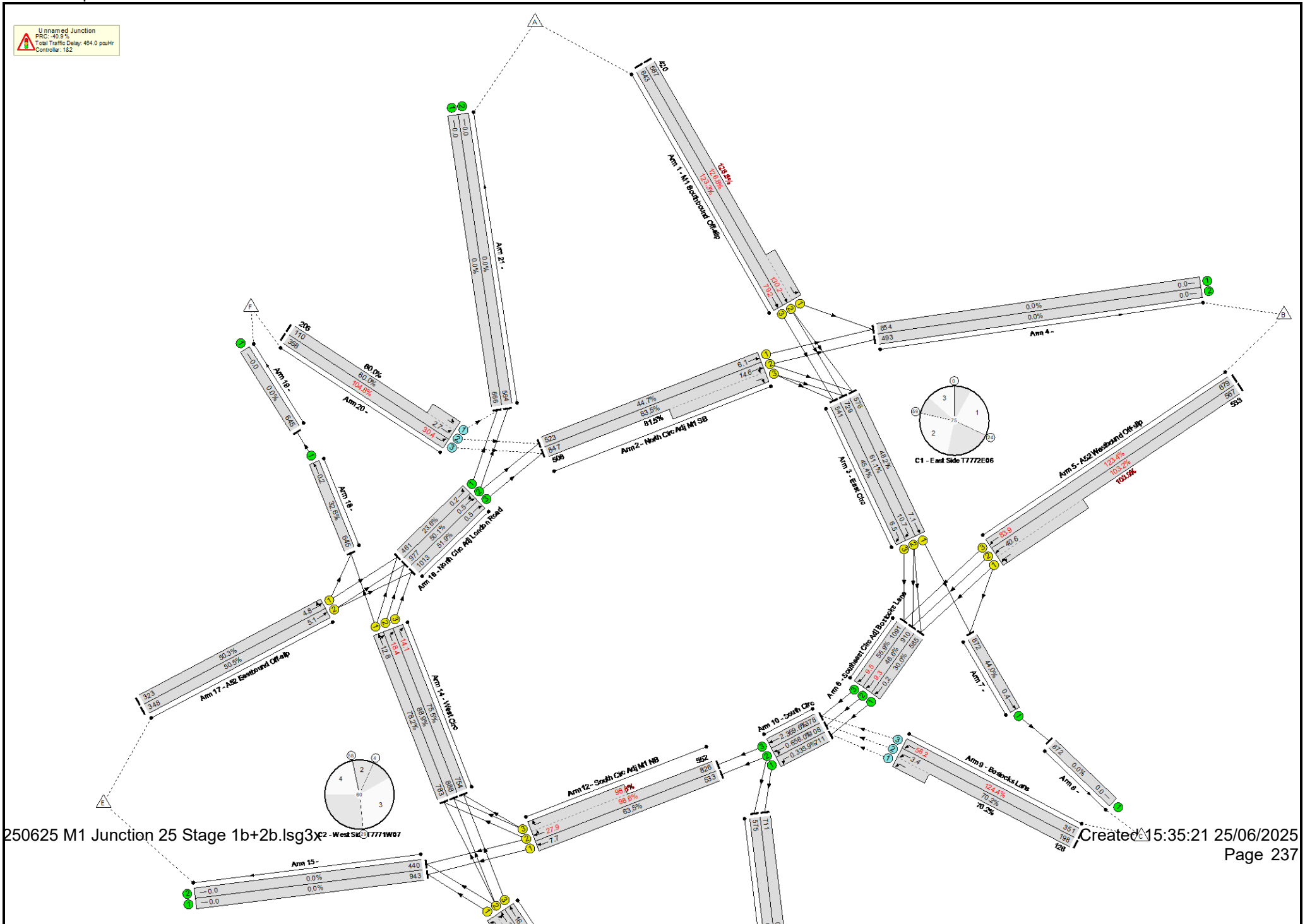
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M1 Northbound Off-slip Ahead Left M1 Northbound Off-slip	Traffic	23	35	58
B	South Circ Adj M1 NB Right Ahead Westbound Circ	Traffic	25	4	29
C	A52 Eastbound Off-slip Ahead Left A52 Eastbound Entry	Traffic	19	45	4
D	West Circ Right Ahead West Circ	Traffic	30	10	40

Signal Timings Diagram



Lane Green Times

Junction: Unnamed Junction					
Lane	**Description**	**Type**	**Phases**	**Start Green**	**End Green**
1/1	M1 Southbound Off-slip Left	U	A	6	24
1/2	M1 Southbound Off-slip Ahead	U	A	6	24
1/3	M1 Southbound Off-slip Ahead	U	A	6	24
2/1	North Circ Adj M1 SB Ahead	U	B	30	0
2/2	North Circ Adj M1 SB Right Ahead	U	B	30	0
2/3	North Circ Adj M1 SB Right	U	B	30	0
3/1	East Circ Ahead	U	D	65	35
3/2	East Circ Right	U	D	65	35
3/3	East Circ Right	U	D	65	35
5/1	A52 Westbound Off-slip Ahead Left	U	C	40	59
5/2	A52 Westbound Off-slip Ahead	U	C	40	59
5/3	A52 Westbound Off-slip Ahead	U	C	40	59
12/1	South Circ Adj M1 NB Ahead	U	B	4	29
12/2	South Circ Adj M1 NB Right Ahead	U	B	4	29
12/3	South Circ Adj M1 NB Right	U	B	4	29
13/1	M1 Northbound Off-slip Left	U	A	35	58
13/2	M1 Northbound Off-slip Ahead Left	U	A	35	58
13/3	M1 Northbound Off-slip Ahead	U	A	35	58
14/1	West Circ Right Ahead	U	D	10	40
14/2	West Circ Right	U	D	10	40
14/3	West Circ Right	U	D	10	40
17/1	A52 Eastbound Off-slip Ahead Left	U	C	45	4
17/2	A52 Eastbound Off-slip Ahead	U	C	45	4


Unnamed Junction
PRC: -40.9 %
Total Traffic Delay: 464.0 pcuHr
Controller: 182
Arm 1 - M1 Southbound Off-slip
Arm 2 - North Circ Adj M1 SB
Arm 3 - East Circ
Arm 4 -
Arm 5 - A52 Westbound Off-slip
Arm 6 - Southeast Circ Adj Bostocks Lane
Arm 7 -
Arm 8 -
Arm 9 - Bostocks Lane
Arm 10 - South Circ
Arm 12 - South Circ Adj M1 NB
Arm 14 - West Circ
Arm 15 -
Arm 17 - A52 Eastbound Off-slip
Arm 18 - North Circ Adj London Road
Arm 18 -
Arm 19 -
Arm 20 -
Arm 21 -
C1 - East Side T777/2E06

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: EMG2	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**126.8%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	-	**126.8%**
1/2+1/1	M1 Southbound Off-slip Ahead Left	U	N/A	N/A	C1:A		1	18	-	-	1007	2056:1915	463+331	126.8 : 126.8%
1/3	M1 Southbound Off-slip Ahead	U	N/A	N/A	C1:A		1	18	-	-	643	2059	522	123.3%
2/1	North Circ Adj M1 SB Ahead	U	N/A	N/A	C1:B		1	45	-	-	540	1908	1170	44.7%
2/2+2/3	North Circ Adj M1 SB Right Ahead	U	N/A	N/A	C1:B		1	45	-	-	1371	1906:1904	1014+623	83.5 : 81.5%
3/1	East Circ Ahead	U	N/A	N/A	C1:D		1	45	-	-	637	1946	1194	48.2%
3/2	East Circ Right	U	N/A	N/A	C1:D		1	45	-	-	807	1945	1193	61.1%
3/3	East Circ Right	U	N/A	N/A	C1:D		1	45	-	-	664	1943	1192	45.4%
4/1		U	N/A	N/A	-		-	-	-	-	960	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	-	493	Inf	Inf	0.0%
5/2+5/1	A52 Westbound Off-slip Ahead Left	U	N/A	N/A	C1:C		1	19	-	-	1100	2061:1923	550+513	103.2 : 103.9%
5/3	A52 Westbound Off-slip Ahead	U	N/A	N/A	C1:C		1	19	-	-	679	2064	550	123.4%
6/1	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	602	1953	1953	30.0%
6/2	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	997	1952	1952	46.6%
6/3	Southeast Circ Adj Bostocks Lane Ahead	U	N/A	N/A	-		-	-	-	-	1343	1951	1951	55.9%

7/1	Ahead	U	N/A	N/A	-		-	-	-	-	945	1980	1980	44.0%
8/1		U	N/A	N/A	-		-	-	-	-	945	Inf	Inf	0.0%
9/2+9/1	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	324	1923:1919	282+180	70.2 : 70.2%
9/3	Bostocks Lane Left	O	N/A	N/A	-		-	-	-	-	351	1926	282	124.4%
10/1	South Circ Left	U	N/A	N/A	-		-	-	-	-	728	1980	1980	35.9%
10/2	South Circ Left Ahead	U	N/A	N/A	-		-	-	-	-	1195	1980	1980	56.0%
10/3	South Circ Ahead	U	N/A	N/A	-		-	-	-	-	1694	1980	1980	69.6%
11/1		U	N/A	N/A	-		-	-	-	-	728	Inf	Inf	0.0%
11/2		U	N/A	N/A	-		-	-	-	-	593	Inf	Inf	0.0%
12/1	South Circ Adj M1 NB Ahead	U	N/A	N/A	C2:B		1	25	-	-	602	1936	839	63.5%
12/2+12/3	South Circ Adj M1 NB Right Ahead	U	N/A	N/A	C2:B		1	25	-	-	1694	1932:1931	837+560	98.6 : 98.6%
13/2+13/1	M1 Northbound Off-slip Ahead Left	U	N/A	N/A	C2:A		1	23	-	-	1143	2053:1912	737+412	99.5 : 99.5%
13/3	M1 Northbound Off-slip Ahead	U	N/A	N/A	C2:A		1	23	-	-	754	2057	823	91.6%
14/1	West Circ Right Ahead	U	N/A	N/A	C2:D		1	30	-	-	881	1937	1001	78.2%
14/2	West Circ Right	U	N/A	N/A	C2:D		1	30	-	-	1015	1935	1000	88.9%
14/3	West Circ Right	U	N/A	N/A	C2:D		1	30	-	-	754	1932	998	75.5%
15/1		U	N/A	N/A	-		-	-	-	-	1012	Inf	Inf	0.0%
15/2		U	N/A	N/A	-		-	-	-	-	531	Inf	Inf	0.0%
16/1	North Circ Adj London Road Left	U	N/A	N/A	-		-	-	-	-	501	1952	1952	23.6%
16/2	North Circ Adj London Road Ahead Left	U	N/A	N/A	-		-	-	-	-	1104	1950	1950	50.1%

16/3	North Circ Adj London Road Ahead	U	N/A	N/A	-		-	-	-	-	1013	1950	1950	51.9%
17/1	A52 Eastbound Off-slip Ahead Left	U	N/A	N/A	C2:C		1	19	-	-	323	1928	643	50.3%
17/2	A52 Eastbound Off-slip Ahead	U	N/A	N/A	C2:C		1	19	-	-	348	2067	689	50.5%
18/1	Ahead	U	N/A	N/A	-		-	-	-	-	703	1980	1980	32.6%
19/1		U	N/A	N/A	-		-	-	-	-	703	Inf	Inf	0.0%
20/2+20/1	Left Left2	O	N/A	N/A	-		-	-	-	-	315	2061:1921	183+342	60.0 : 60.0%
20/3	Left	O	N/A	N/A	-		-	-	-	-	358	1928	342	104.8%
21/1		U	N/A	N/A	-		-	-	-	-	706	Inf	Inf	0.0%
21/2		U	N/A	N/A	-		-	-	-	-	674	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: EMG2	**-**	**-**	**1902**	**0**	**0**	**90.4**	**373.6**	**0.0**	**464.0**	**-**	**-**	**-**	**-**	
Unnamed Junction	**-**	**-**	**1902**	**0**	**0**	**90.4**	**373.6**	**0.0**	**464.0**	**-**	**-**	**-**	**-**	
1/2+1/1	1007	794	-	-	-	15.5	108.7	-	124.2	444.1	21.4	108.7	130.2	
1/3	643	522	-	-	-	9.5	63.2	-	72.7	407.1	15.9	63.2	79.2	
2/1	523	523	-	-	-	1.1	0.4	-	1.5	10.5	5.7	0.4	6.1	
2/2+2/3	1355	1355	-	-	-	3.5	2.4	-	5.8	15.4	12.2	2.4	14.6	
3/1	576	576	-	-	-	1.4	0.5	-	1.8	11.6	6.6	0.5	7.1	
3/2	729	729	-	-	-	2.5	0.8	-	3.3	16.3	9.9	0.8	10.7	
3/3	541	541	-	-	-	0.3	0.4	-	0.7	4.8	6.0	0.4	6.5	
4/1	854	854	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2+5/1	1100	1062	-	-	-	9.4	28.5	-	37.9	124.0	12.2	28.5	40.6	
5/3	679	550	-	-	-	8.9	66.8	-	75.8	401.7	17.1	66.8	83.9	
6/1	585	585	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
6/2	910	910	-	-	-	0.0	0.4	-	0.5	1.9	8.9	0.4	9.3	
6/3	1091	1091	-	-	-	0.0	0.6	-	0.7	2.2	8.9	0.6	9.5	
7/1	872	872	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4	
8/1	872	872	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2+9/1	324	324	648	0	0	0.5	1.2	-	1.7	18.4	2.3	1.2	3.4	
9/3	351	282	282	0	0	4.0	36.8	-	40.8	418.3	19.4	36.8	56.2	
10/1	711	711	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3	
10/2	1108	1108	-	-	-	0.0	0.6	-	0.6	2.1	0.0	0.6	0.6	
10/3	1378	1378	-	-	-	0.0	1.1	-	1.1	3.0	1.1	1.1	2.3	
11/1	711	711	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

11/2	575	575	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
12/1	533	533	-	-	-	2.0	0.9	-	2.8	19.1	6.8	0.9	7.7	
12/2+12/3	1378	1378	-	-	-	5.9	14.4	-	20.3	53.1	13.5	14.4	27.9	
13/2+13/1	1143	1143	-	-	-	5.1	15.5	-	20.6	65.0	13.7	15.5	29.3	
13/3	754	754	-	-	-	3.6	4.8	-	8.4	40.0	11.7	4.8	16.5	
14/1	783	783	-	-	-	2.6	1.8	-	4.4	20.1	11.0	1.8	12.8	
14/2	888	888	-	-	-	3.2	3.7	-	6.9	27.9	14.6	3.7	18.4	
14/3	754	754	-	-	-	5.8	1.5	-	7.3	34.8	12.6	1.5	14.1	
15/1	943	943	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
15/2	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
16/1	461	461	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2	
16/2	977	977	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5	
16/3	1013	1013	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5	
17/1	323	323	-	-	-	1.4	0.5	-	1.9	21.6	4.3	0.5	4.8	
17/2	348	348	-	-	-	1.6	0.5	-	2.1	21.3	4.6	0.5	5.1	
18/1	645	645	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2	
19/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
20/2+20/1	315	315	630	0	0	0.7	0.7	-	1.4	16.0	1.9	0.7	2.7	
20/3	358	342	342	0	0	1.9	14.4	-	16.3	164.0	16.0	14.4	30.4	
21/1	666	666	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
21/2	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	

C1 - East Side T7772E06	PRC for Signalled Lanes (%):	-40.9	Total Delay for Signalled Lanes (pcuHr):	323.83	Cycle Time (s): 75
C2 - West Side T7771W07	PRC for Signalled Lanes (%):	-10.6	Total Delay for Signalled Lanes (pcuHr):	74.75	Cycle Time (s): 60
	PRC Over All Lanes (%):	-40.9	Total Delay Over All Lanes(pcuHr):	463.99	

APPENDIX 69: Junction 15: Station Road/Broad Rushes Roundabout Stage 1B/2B Modelling Results

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.0.0.2177
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Filename: 250821 Station Road_Broad Rushes roundabout (LANE SIM)_Stage_1b.j11
Path: J:\2022\220500-East Midlands Gateway Phase 2 (1)\ProjectDelivery\01-WIP\DesignAndCalculations\T&I Planning\Traffic Models\15. Station Road_Broad Rushes roundabout (Castle Donington)
Report generation date: 21/08/2025 11:06:57

»2022 | base | AM
»2022 | base | PM
»2028 | WoD Flows | AM
»2028 | WoD Flows | PM
»2028 | WD Flows | AM
»2028 | WD Flows | PM
»2038 | WoD Flows | AM
»2038 | WoD Flows | PM
»2038 | WD Flows | AM
»2038 | WD Flows | PM
»2028 | 2a WD Flows | AM
»2028 | 2a WD Flows | PM
»2038 | 2a WD Flows | AM
»2038 | 2a WD Flows | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	[Lane Simulation] - 2022 - base									
1 - Station Road (N)	D1	3.2	8.29	0.68	A	D2	2.1	7.22	0.59	A
2 - Station Road (S)		1.1	8.82	0.49	A		5.0	25.77	0.80	D
3 - Broad Rushes		0.9	6.90	0.46	A		2.0	10.82	0.63	B
	[Lane Simulation] - 2028 - 2a WD Flows									
1 - Station Road (N)	D11	5.0	12.70	0.76	B	D12	3.0	8.56	0.66	A
2 - Station Road (S)		1.8	11.57	0.54	B		5.6	30.47	0.86	D
3 - Broad Rushes		2.3	12.72	0.64	B		4.8	25.17	0.83	D
	[Lane Simulation] - 2028 - WD Flows									
1 - Station Road (N)	D5	7.8	17.77	0.83	C	D6	3.5	8.73	0.69	A
2 - Station Road (S)		1.0	9.75	0.46	A		5.2	29.59	0.85	D
3 - Broad Rushes		3.0	16.25	0.71	C		2.9	15.20	0.72	C
	[Lane Simulation] - 2028 - WoD Flows									
1 - Station Road (N)	D3	7.0	14.71	0.81	B	D4	3.3	9.29	0.69	A
2 - Station Road (S)		0.9	9.71	0.46	A		6.3	33.50	0.86	D
3 - Broad Rushes		2.9	14.58	0.69	B		2.9	15.58	0.71	C
	[Lane Simulation] - 2038 - 2a WD Flows									
1 - Station Road (N)	D13	0.3	4.66	0.11	A	D14	0.9	5.70	0.34	A
2 - Station Road (S)		1.8	7.86	0.55	A		5.9	24.17	0.85	C
3 - Broad Rushes		1.5	6.80	0.46	A		0.5	4.76	0.28	A
	[Lane Simulation] - 2038 - WD Flows									
1 - Station Road (N)	D9	6.6	14.40	0.80	B	D10	3.7	9.72	0.70	A
2 - Station Road (S)		1.8	13.19	0.59	B		14.0	64.50	0.95	F
3 - Broad Rushes		3.1	16.23	0.73	C		10.0	47.31	0.94	E
	[Lane Simulation] - 2038 - WoD Flows									
1 - Station Road (N)	D7	5.1	12.22	0.75	B	D8	2.9	8.13	0.65	A
2 - Station Road (S)		1.7	12.32	0.56	B		6.9	35.60	0.87	E
3 - Broad Rushes		3.0	14.15	0.71	B		3.3	18.88	0.76	C

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	Station Road_Broad Rushes roundabout
Location	
Site number	Junction 15
Date	18/10/2023
Version	
Status	(new file)
Identifier	Aaiza
Client	
Jobnumber	220500
Enumerator	BWB\Aaiza.Shafiq
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			1001539163	64

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	base	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	base	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2022 | base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	8.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.08	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Station Road (N)		
2	Station Road (S)		
3	Broad Rushes		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Station Road (N)	3.44	7.51	62.0	28.0	50.0	45.2		
2 - Station Road (S)	3.80	7.58	24.0	46.0	50.0	32.6		
3 - Broad Rushes	3.58	9.41	28.0	35.0	50.0	26.4		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Station Road (N)	0.651	1982
2 - Station Road (S)	0.661	1949
3 - Broad Rushes	0.716	2217

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

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
1 - Station Road (N)	Direct		100

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - Station Road (N)	Evenly split	10.00
2 - Station Road (S)	Evenly split	10.00
3 - Broad Rushes	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - Station Road (N)	Entry	1	1	2	✓	7.00			0	99999	
			2	1, 3	✓	7.00			0	99999	
		2	1	(1, 3, 2)		Infinity					
	Exit	1	1			Infinity					
2 - Station Road (S)	Entry	1	1	3	✓	5.00			0	99999	
			2	1, 2	✓	5.00			0	99999	
		2	1	(1, 3, 2)		Infinity					
	Exit	1	1			Infinity					
3 - Broad Rushes	Entry	1	1	1	✓	7.00			0	99999	
			2	3, 2	✓	7.00			0	99999	
		2	1	(1, 3, 2)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - Station Road (N)	Entry	1	1	0.325	991
			2	0.325	991
2 - Station Road (S)	Entry	1	1	0.330	974
			2	0.330	974
3 - Broad Rushes	Entry	1	1	0.358	1108
			2	0.358	1108

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm		
			Station Road (N)	Broad Rushes	Station Road (S)
1 - Station Road (N)	1	1			✓
		2	✓	✓	
	2	1	✓	✓	✓
3 - Broad Rushes	1	1	✓		
		2		✓	✓
	2	1	✓	✓	✓
2 - Station Road (S)	1	1		✓	
		2	✓		✓
	2	1	✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1126	100.000
2 - Station Road (S)		ONE HOUR	✓	371	100.000
3 - Broad Rushes		ONE HOUR	✓	426	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	626	500
	2 - Station Road (S)	349	0	22
	3 - Broad Rushes	414	12	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	0	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.68	8.29	3.2	A	1027	1541
2 - Station Road (S)	0.49	8.82	1.1	A	340	510
3 - Broad Rushes	0.46	6.90	0.9	A	391	587

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	836	209	8	1841	0.454	836	839	571	0.0	1.3	5.367	A
2 - Station Road (S)	280	70	380	890	0.314	278	282	464	0.0	0.5	5.925	A
3 - Broad Rushes	319	80	260	1020	0.312	318	321	397	0.0	0.5	5.093	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	995	249	12	1902	0.523	990	996	684	1.3	2.3	6.393	A
2 - Station Road (S)	328	82	439	890	0.368	326	339	563	0.5	0.6	7.035	A
3 - Broad Rushes	388	97	308	1039	0.373	388	397	457	0.5	0.5	6.019	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1248	312	14	1830	0.682	1263	1250	849	2.3	2.1	8.277	A
2 - Station Road (S)	413	103	558	851	0.485	412	413	719	0.6	1.1	8.500	A
3 - Broad Rushes	473	118	387	1031	0.459	476	475	583	0.5	0.9	6.898	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1233	308	13	1818	0.678	1230	1235	825	2.1	3.2	8.293	A
2 - Station Road (S)	400	100	541	854	0.469	401	412	701	1.1	1.0	8.819	A
3 - Broad Rushes	463	116	379	995	0.465	459	471	564	0.9	0.9	6.859	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	979	245	12	1798	0.544	978	1023	686	3.2	1.8	6.779	A
2 - Station Road (S)	337	84	433	892	0.378	338	345	557	1.0	0.6	7.437	A
3 - Broad Rushes	375	94	317	1002	0.374	381	390	454	0.9	0.5	5.787	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	872	218	9	1824	0.478	874	859	589	1.8	1.2	5.461	A
2 - Station Road (S)	282	71	395	892	0.316	283	283	488	0.6	0.5	6.363	A
3 - Broad Rushes	331	83	268	1057	0.313	329	332	409	0.5	0.6	5.180	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	457	1088	0.420	456	461	0.0	0.8	5.619	A
			2	1, 3	379	1088	0.348	380	378	0.0	0.5	5.013	A
		2	1	(1, 3, 2)	836			836	844	0.0	0.0	0.021	A
	Exit	1	1		571			571	578	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	18	849	0.021	18	17	0.0	0.0	4.589	A
			2	1, 2	262	849	0.308	260	265	0.0	0.5	5.978	A
		2	1	(1, 3, 2)	280			280	284	0.0	0.0	0.028	A
	Exit	1	1		464			464	469	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	311	1015	0.306	311	313	0.0	0.5	5.131	A
			2	3, 2	8	1015	0.008	8	8	0.0	0.0	3.551	A
		2	1	(1, 3, 2)	319			319	323	0.0	0.0	0.000	A
	Exit	1	1		397			397	395	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	551	1087	0.507	551	560	0.8	1.3	7.045	A
			2	1, 3	444	1087	0.408	439	436	0.5	1.1	5.407	A
		2	1	(1, 3, 2)	995			995	1000	0.0	0.0	0.067	A
	Exit	1	1		684			684	706	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	18	829	0.022	18	19	0.0	0.0	4.890	A
			2	1, 2	310	829	0.374	308	319	0.5	0.6	7.103	A
		2	1	(1, 3, 2)	328			328	339	0.0	0.0	0.060	A
	Exit	1	1		563			563	571	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	376	998	0.376	376	386	0.5	0.5	6.080	A
			2	3, 2	12	998	0.012	12	11	0.0	0.0	3.647	A
		2	1	(1, 3, 2)	388			388	398	0.0	0.0	0.008	A
	Exit	1	1		457			457	456	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	696	1086	0.640	705	697	1.3	1.3	8.691	A
			2	1, 3	554	1086	0.510	558	553	1.1	0.8	6.803	A
		2	1	(1, 3, 2)	1248			1250	1249	0.0	0.0	0.420	A
	Exit	1	1		849			849	850	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	25	790	0.032	25	24	0.0	0.0	4.516	A
			2	1, 2	388	790	0.491	387	389	0.6	1.1	8.584	A
		2	1	(1, 3, 2)	413			413	415	0.0	0.0	0.144	A
	Exit	1	1		719			719	710	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	459	970	0.474	462	461	0.5	0.8	6.931	A
			2	3, 2	14	970	0.014	14	13	0.0	0.0	3.657	A
		2	1	(1, 3, 2)	473			473	476	0.0	0.0	0.054	A
	Exit	1	1		583			583	577	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	689	1087	0.634	689	696	1.3	1.9	8.789	A
			2	1, 3	541	1087	0.498	541	540	0.8	1.1	6.758	A
		2	1	(1, 3, 2)	1233			1230	1239	0.0	0.2	0.383	A
	Exit	1	1		825			825	846	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	23	795	0.028	22	22	0.0	0.0	4.540	A
			2	1, 2	377	795	0.474	379	390	1.1	0.9	8.744	A
		2	1	(1, 3, 2)	400			399	412	0.0	0.1	0.302	A
	Exit	1	1		701			701	711	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	450	973	0.462	446	456	0.8	0.9	6.947	A
			2	3, 2	13	973	0.013	13	15	0.0	0.0	3.693	A
		2	1	(1, 3, 2)	463			463	472	0.0	0.0	0.020	A
	Exit	1	1		564			564	562	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	548	1087	0.505	546	575	1.9	1.3	7.365	A
			2	1, 3	430	1087	0.396	433	448	1.1	0.5	5.715	A
		2	1	(1, 3, 2)	979			979	1018	0.2	0.0	0.143	A
	Exit	1	1		686			686	702	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	831	0.026	21	22	0.0	0.0	4.332	A
			2	1, 2	316	831	0.380	317	324	0.9	0.5	7.528	A
		2	1	(1, 3, 2)	337			337	344	0.1	0.0	0.120	A
	Exit	1	1		557			557	587	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	363	995	0.365	369	378	0.9	0.5	5.842	A
			2	3, 2	12	995	0.012	12	11	0.0	0.0	3.585	A
		2	1	(1, 3, 2)	375			375	388	0.0	0.0	0.011	A
	Exit	1	1		454			454	470	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	477	1088	0.438	480	475	1.3	0.7	5.872	A
			2	1, 3	395	1088	0.363	395	384	0.5	0.5	4.926	A
		2	1	(1, 3, 2)	872			872	857	0.0	0.0	0.016	A
	Exit	1	1		589			589	589	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	844	0.017	15	16	0.0	0.0	4.290	A
			2	1, 2	267	844	0.317	268	267	0.5	0.5	6.463	A
		2	1	(1, 3, 2)	282			282	283	0.0	0.0	0.026	A
	Exit	1	1		488			488	484	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	322	1013	0.318	321	322	0.5	0.6	5.231	A
			2	3, 2	9	1013	0.009	9	9	0.0	0.0	3.395	A
		2	1	(1, 3, 2)	331			331	332	0.0	0.0	0.000	A
	Exit	1	1		409			409	400	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	457	114	991	1088	0.420	456	461	0.0	0.8	5.619	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	379	95	991	1088	0.348	380	378	0.0	0.5	5.013	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	457	114	-	-	-	457	464	0.0	0.0	0.022	A
				3	379	95	-	-	-	379	379	0.0	0.0	0.018	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	959	836	0.022	18	17	0.0	0.0	4.589	A
			2	1	262	65	974	849	0.308	260	265	0.0	0.5	5.978	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	262	65	-	-	-	262	267	0.0	0.0	0.029	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	17	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	311	78	1108	1016	0.306	311	313	0.0	0.5	5.131	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	8	2	953	871	0.009	8	8	0.0	0.0	3.551	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	311	78	-	-	-	311	315	0.0	0.0	0.000	A
				2	8	2	-	-	-	8	8	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	551	138	991	1087	0.507	551	560	0.8	1.3	7.045	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	444	111	991	1087	0.408	439	436	0.5	1.1	5.407	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	551	138	-	-	-	551	561	0.0	0.0	0.075	A
				3	444	111	-	-	-	444	439	0.0	0.0	0.056	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	944	801	0.022	18	19	0.0	0.0	4.890	A
			2	1	310	77	974	830	0.373	308	319	0.5	0.6	7.103	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	310	77	-	-	-	310	320	0.0	0.0	0.064	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	19	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	376	94	1108	998	0.376	376	386	0.5	0.5	6.080	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1074	967	0.012	12	11	0.0	0.0	3.647	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	376	94	-	-	-	376	387	0.0	0.0	0.008	A
				2	12	3	-	-	-	12	11	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	696	174	991	1086	0.640	705	697	1.3	1.3	8.691	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	554	139	991	1086	0.510	558	553	1.1	0.8	6.803	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	695	174	-	-	-	696	697	0.0	0.0	0.458	A
				3	553	138	-	-	-	554	552	0.0	0.0	0.373	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	25	6	974	794	0.031	25	24	0.0	0.0	4.516	A
			2	1	388	97	974	791	0.490	387	389	0.6	1.1	8.584	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	388	97	-	-	-	388	391	0.0	0.0	0.147	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	25	6	-	-	-	25	24	0.0	0.0	0.102	A
3 - Broad Rushes	Entry	1	1	1	459	115	1108	969	0.474	462	461	0.5	0.8	6.931	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	14	3	1091	959	0.014	14	13	0.0	0.0	3.657	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	460	115	-	-	-	459	463	0.0	0.0	0.053	A
				2	14	3	-	-	-	14	13	0.0	0.0	0.083	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	689	172	991	1087	0.634	689	696	1.3	1.9	8.789	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	541	135	991	1087	0.498	541	540	0.8	1.1	6.758	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	690	173	-	-	-	689	698	0.0	0.1	0.384	A
				3	542	136	-	-	-	541	541	0.0	0.1	0.382	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	959	785	0.029	22	22	0.0	0.0	4.540	A
			2	1	377	94	974	795	0.474	379	390	1.1	0.9	8.744	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	378	94	-	-	-	377	389	0.0	0.1	0.310	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	-	-	-	23	22	0.0	0.0	0.167	A
3 - Broad Rushes	Entry	1	1	1	450	112	1108	972	0.463	446	456	0.8	0.9	6.947	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1039	912	0.014	13	15	0.0	0.0	3.693	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	450	112	-	-	-	450	456	0.0	0.0	0.020	A
				2	13	3	-	-	-	13	15	0.0	0.0	0.035	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	548	137	991	1087	0.505	546	575	1.9	1.3	7.365	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	430	108	991	1087	0.396	433	448	1.1	0.5	5.715	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	549	137	-	-	-	548	573	0.1	0.0	0.158	A
				3	430	108	-	-	-	430	446	0.1	0.0	0.125	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	974	831	0.026	21	22	0.0	0.0	4.332	A
			2	1	316	79	974	832	0.380	317	324	0.9	0.5	7.528	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	316	79	-	-	-	316	322	0.1	0.0	0.123	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	22	0.0	0.0	0.074	A
3 - Broad Rushes	Entry	1	1	1	363	91	1108	996	0.365	369	378	0.9	0.5	5.842	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1039	929	0.013	12	11	0.0	0.0	3.585	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	363	91	-	-	-	363	377	0.0	0.0	0.008	A
				2	12	3	-	-	-	12	11	0.0	0.0	0.080	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	477	119	991	1088	0.438	480	475	1.3	0.7	5.872	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	395	99	991	1088	0.363	395	384	0.5	0.5	4.926	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	477	119	-	-	-	477	473	0.0	0.0	0.021	A
				3	395	99	-	-	-	395	384	0.0	0.0	0.010	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	974	847	0.017	15	16	0.0	0.0	4.290	A
			2	1	267	67	974	844	0.317	268	267	0.5	0.5	6.463	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	267	67	-	-	-	267	267	0.0	0.0	0.028	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	16	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	322	80	1108	1013	0.318	321	322	0.5	0.6	5.231	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	9	2	987	901	0.010	9	9	0.0	0.0	3.395	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	322	80	-	-	-	322	323	0.0	0.0	0.000	A
				2	9	2	-	-	-	9	9	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2022 | base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	13.44	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.44	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	991	100.000
2 - Station Road (S)		ONE HOUR	✓	608	100.000
3 - Broad Rushes		ONE HOUR	✓	511	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	551	440
	2 - Station Road (S)	596	0	12
	3 - Broad Rushes	490	21	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	0	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.59	7.22	2.1	A	906	1359
2 - Station Road (S)	0.80	25.77	5.0	D	556	834
3 - Broad Rushes	0.63	10.82	2.0	B	466	699

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	748	187	17	1877	0.398	750	746	826	0.0	0.9	5.042	A
2 - Station Road (S)	463	116	329	903	0.513	463	456	439	0.0	1.1	8.814	A
3 - Broad Rushes	388	97	454	998	0.389	388	387	338	0.0	0.5	6.201	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	880	220	18	1906	0.462	881	894	979	0.9	1.5	5.860	A
2 - Station Road (S)	551	138	392	878	0.627	551	550	508	1.1	2.1	12.019	B
3 - Broad Rushes	460	115	539	923	0.498	458	467	403	0.5	1.1	7.169	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1081	270	22	1876	0.576	1083	1085	1178	1.5	2.1	7.081	A
2 - Station Road (S)	652	163	482	839	0.777	647	664	623	2.1	4.0	20.479	C
3 - Broad Rushes	561	140	637	901	0.622	563	562	493	1.1	1.4	9.951	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1097	274	24	1850	0.593	1102	1100	1194	2.1	2.0	7.220	A
2 - Station Road (S)	664	166	491	826	0.804	668	674	635	4.0	5.0	25.771	D
3 - Broad Rushes	565	141	657	895	0.632	562	571	503	1.4	2.0	10.815	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	896	224	19	1831	0.489	895	905	949	2.0	1.4	5.810	A
2 - Station Road (S)	538	135	393	885	0.608	534	565	521	5.0	1.8	14.495	B
3 - Broad Rushes	443	111	523	934	0.474	444	463	404	2.0	0.9	7.937	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	735	184	16	1896	0.387	736	749	815	1.4	0.9	5.202	A
2 - Station Road (S)	467	117	323	885	0.528	460	467	429	1.8	1.5	8.852	A
3 - Broad Rushes	382	95	451	1001	0.381	380	387	333	0.9	0.7	6.137	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	421	1085	0.388	422	413	0.0	0.6	5.335	A
			2	1, 3	327	1085	0.301	329	333	0.0	0.3	4.672	A
		2	1	(1, 3, 2)	748			748	749	0.0	0.0	0.003	A
	Exit	1	1		826			826	819	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	866	0.011	9	8	0.0	0.0	3.972	A
			2	1, 2	452	866	0.523	454	447	0.0	1.0	8.478	A
		2	1	(1, 3, 2)	463			462	460	0.0	0.1	0.407	A
	Exit	1	1		439			439	428	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	371	946	0.392	371	372	0.0	0.5	6.292	A
			2	3, 2	17	946	0.018	17	16	0.0	0.0	3.859	A
		2	1	(1, 3, 2)	388			388	390	0.0	0.0	0.007	A
	Exit	1	1		338			338	341	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	491	1085	0.452	490	499	0.6	0.9	6.160	A
			2	1, 3	390	1085	0.359	392	395	0.3	0.6	5.408	A
		2	1	(1, 3, 2)	880			880	896	0.0	0.0	0.033	A
	Exit	1	1		979			979	988	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	845	0.013	11	11	0.0	0.0	4.091	A
			2	1, 2	541	845	0.640	539	540	1.0	1.8	10.561	B
		2	1	(1, 3, 2)	551			552	554	0.1	0.3	1.561	A
	Exit	1	1		508			508	518	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	442	915	0.482	440	448	0.5	1.0	7.264	A
			2	3, 2	18	915	0.020	18	19	0.0	0.0	4.194	A
		2	1	(1, 3, 2)	460			460	469	0.0	0.0	0.029	A
	Exit	1	1		403			403	406	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	598	1084	0.552	601	604	0.9	1.1	7.510	A
			2	1, 3	484	1084	0.447	482	480	0.6	1.0	6.138	A
		2	1	(1, 3, 2)	1081			1082	1087	0.0	0.1	0.179	A
	Exit	1	1		1178			1178	1188	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	815	0.013	11	12	0.0	0.0	4.138	A
			2	1, 2	643	815	0.789	637	652	1.8	2.6	14.285	B
		2	1	(1, 3, 2)	652			653	667	0.3	1.4	6.346	A
	Exit	1	1		623			623	629	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	540	881	0.613	541	537	1.0	1.4	9.935	A
			2	3, 2	22	881	0.025	22	25	0.0	0.0	4.112	A
		2	1	(1, 3, 2)	561			562	563	0.0	0.0	0.270	A
	Exit	1	1		493			493	493	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	608	1083	0.562	611	610	1.1	1.1	7.720	A
			2	1, 3	490	1083	0.453	491	490	1.0	0.9	6.193	A
		2	1	(1, 3, 2)	1097			1098	1099	0.1	0.0	0.180	A
	Exit	1	1		1194			1194	1210	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	812	0.014	11	12	0.0	0.0	4.675	A
			2	1, 2	658	812	0.810	657	663	2.6	3.0	16.039	C
		2	1	(1, 3, 2)	664			669	676	1.4	2.0	9.921	A
	Exit	1	1		635			635	633	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	540	873	0.619	537	548	1.4	1.9	10.727	B
			2	3, 2	24	873	0.028	24	23	0.0	0.0	4.302	A
		2	1	(1, 3, 2)	565			565	573	0.0	0.0	0.344	A
	Exit	1	1		503			503	502	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	503	1085	0.464	502	502	1.1	0.8	6.227	A
			2	1, 3	393	1085	0.363	393	403	0.9	0.6	5.217	A
		2	1	(1, 3, 2)	896			896	903	0.0	0.0	0.034	A
	Exit	1	1		949			949	998	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	844	0.012	10	11	0.0	0.0	4.485	A
			2	1, 2	526	844	0.623	523	554	3.0	1.6	11.900	B
		2	1	(1, 3, 2)	538			536	559	2.0	0.3	2.836	A
	Exit	1	1		521			521	522	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	425	921	0.461	426	444	1.9	0.8	8.017	A
			2	3, 2	19	921	0.021	19	19	0.0	0.0	4.109	A
		2	1	(1, 3, 2)	443			444	459	0.0	0.0	0.090	A
	Exit	1	1		404			404	413	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	412	1085	0.379	412	419	0.8	0.5	5.486	A
			2	1, 3	323	1085	0.297	323	331	0.6	0.4	4.834	A
		2	1	(1, 3, 2)	735			735	747	0.0	0.0	0.004	A
	Exit	1	1		815			815	828	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	867	0.011	10	9	0.0	0.0	4.298	A
			2	1, 2	455	867	0.525	451	458	1.6	1.3	8.560	A
		2	1	(1, 3, 2)	467			464	466	0.3	0.2	0.423	A
	Exit	1	1		429			429	436	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	365	947	0.386	364	370	0.8	0.7	6.238	A
			2	3, 2	16	947	0.017	16	17	0.0	0.0	3.957	A
		2	1	(1, 3, 2)	382			382	387	0.0	0.0	0.000	A
	Exit	1	1		333			333	340	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	421	105	991	1085	0.388	422	413	0.0	0.6	5.335	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	327	82	991	1085	0.301	329	333	0.0	0.3	4.672	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	421	105	-	-	-	421	415	0.0	0.0	0.003	A
				3	327	82	-	-	-	327	334	0.0	0.0	0.002	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	838	741	0.013	9	8	0.0	0.0	3.972	A
			2	1	452	113	974	866	0.522	454	447	0.0	1.0	8.478	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	454	113	-	-	-	452	451	0.0	0.1	0.408	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	9	0.0	0.0	0.359	A
3 - Broad Rushes	Entry	1	1	1	371	93	1108	945	0.392	371	372	0.0	0.5	6.292	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1098	936	0.018	17	16	0.0	0.0	3.859	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	371	93	-	-	-	371	374	0.0	0.0	0.007	A
				2	17	4	-	-	-	17	16	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	491	123	991	1085	0.452	490	499	0.6	0.9	6.160	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	390	97	991	1085	0.359	392	395	0.3	0.6	5.408	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	491	123	-	-	-	491	500	0.0	0.0	0.037	A
				3	389	97	-	-	-	390	396	0.0	0.0	0.027	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	911	791	0.014	11	11	0.0	0.0	4.091	A
			2	1	541	135	974	845	0.640	539	540	1.0	1.8	10.561	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	540	135	-	-	-	541	543	0.1	0.3	1.558	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	1.741	A
3 - Broad Rushes	Entry	1	1	1	442	110	1108	915	0.483	440	448	0.5	1.0	7.264	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	4	1098	907	0.020	18	19	0.0	0.0	4.194	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	442	110	-	-	-	442	450	0.0	0.0	0.029	A
				2	18	4	-	-	-	18	19	0.0	0.0	0.028	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	598	149	991	1084	0.552	601	604	0.9	1.1	7.510	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	484	121	991	1083	0.447	482	480	0.6	1.0	6.138	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	598	149	-	-	-	598	605	0.0	0.0	0.180	A
				3	483	121	-	-	-	484	482	0.0	0.0	0.178	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	929	780	0.013	11	12	0.0	0.0	4.138	A
			2	1	643	161	974	815	0.788	637	652	1.8	2.6	14.285	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	642	160	-	-	-	643	655	0.3	1.4	6.390	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	-	-	-	10	12	0.0	0.0	4.007	A
3 - Broad Rushes	Entry	1	1	1	540	135	1108	881	0.613	541	537	1.0	1.4	9.935	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	1108	879	0.025	22	25	0.0	0.0	4.112	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	538	135	-	-	-	540	538	0.0	0.0	0.278	A
				2	22	6	-	-	-	22	25	0.0	0.0	0.100	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	608	152	991	1083	0.562	611	610	1.1	1.1	7.720	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	490	123	991	1083	0.453	491	490	1.0	0.9	6.193	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	607	152	-	-	-	608	610	0.0	0.0	0.199	A
				3	490	122	-	-	-	490	489	0.0	0.0	0.156	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	947	789	0.014	11	12	0.0	0.0	4.675	A
			2	1	658	164	974	812	0.810	657	663	2.6	3.0	16.039	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	652	163	-	-	-	658	664	1.4	1.9	9.926	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	11	12	0.0	0.0	9.647	A
3 - Broad Rushes	Entry	1	1	1	540	135	1108	873	0.619	537	548	1.4	1.9	10.727	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1108	871	0.028	24	23	0.0	0.0	4.302	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	541	135	-	-	-	540	550	0.0	0.0	0.344	A
				2	24	6	-	-	-	24	23	0.0	0.0	0.358	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	503	126	991	1085	0.463	502	502	1.1	0.8	6.227	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	393	98	991	1084	0.363	393	403	0.9	0.6	5.217	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	503	126	-	-	-	503	501	0.0	0.0	0.031	A
				3	393	98	-	-	-	393	401	0.0	0.0	0.037	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	911	783	0.013	10	11	0.0	0.0	4.485	A
			2	1	526	131	974	845	0.623	523	554	3.0	1.6	11.900	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	528	132	-	-	-	526	548	1.9	0.3	2.837	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	-	-	-	10	11	0.0	0.0	2.787	A
3 - Broad Rushes	Entry	1	1	1	425	106	1108	921	0.461	426	444	1.9	0.8	8.017	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1098	909	0.021	19	19	0.0	0.0	4.109	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	424	106	-	-	-	425	440	0.0	0.0	0.089	A
				2	19	5	-	-	-	19	19	0.0	0.0	0.110	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	412	103	991	1085	0.380	412	419	0.8	0.5	5.486	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	323	81	991	1085	0.297	323	331	0.6	0.4	4.834	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	412	103	-	-	-	412	418	0.0	0.0	0.005	A
				3	323	81	-	-	-	323	330	0.0	0.0	0.003	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	901	799	0.012	10	9	0.0	0.0	4.298	A
			2	1	455	114	974	868	0.525	451	458	1.6	1.3	8.560	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	458	114	-	-	-	455	456	0.3	0.2	0.427	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	10	0.0	0.0	0.233	A
3 - Broad Rushes	Entry	1	1	1	365	91	1108	947	0.386	364	370	0.8	0.7	6.238	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1057	898	0.018	16	17	0.0	0.0	3.957	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	365	91	-	-	-	365	370	0.0	0.0	0.000	A
				2	16	4	-	-	-	16	17	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	13.99	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.99	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1340	100.000
2 - Station Road (S)		ONE HOUR	✓	314	100.000
3 - Broad Rushes		ONE HOUR	✓	645	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	710	630
	2 - Station Road (S)	296	0	18
	3 - Broad Rushes	628	17	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	6	9
	2 - Station Road (S)	10	0	6
	3 - Broad Rushes	12	6	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.81	14.71	7.0	B	1237	1855
2 - Station Road (S)	0.46	9.71	0.9	A	289	434
3 - Broad Rushes	0.69	14.58	2.9	B	587	881

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1036	259	13	1826	0.567	1027	1014	704	0.0	2.5	6.726	A
2 - Station Road (S)	244	61	490	877	0.278	245	235	550	0.0	0.4	6.723	A
3 - Broad Rushes	482	121	231	1008	0.479	485	482	505	0.0	0.9	7.114	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1206	302	15	1782	0.677	1201	1202	829	2.5	3.2	8.501	A
2 - Station Road (S)	281	70	561	837	0.336	284	290	655	0.4	0.6	7.886	A
3 - Broad Rushes	574	143	268	1039	0.552	576	584	577	0.9	1.3	9.149	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1470	368	18	1805	0.814	1458	1456	994	3.2	7.0	14.708	B
2 - Station Road (S)	338	84	685	757	0.446	338	346	791	0.6	0.9	9.279	A
3 - Broad Rushes	690	173	322	1028	0.672	690	706	701	1.3	2.7	13.286	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1465	366	18	1895	0.773	1464	1482	1030	7.0	6.1	14.304	B
2 - Station Road (S)	357	89	692	784	0.455	360	357	789	0.9	0.9	9.706	A
3 - Broad Rushes	710	178	338	1027	0.691	711	715	715	2.7	2.9	14.578	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1216	304	16	1893	0.642	1218	1228	833	6.1	3.0	9.328	A
2 - Station Road (S)	286	72	574	833	0.344	284	292	660	0.9	0.8	8.184	A
3 - Broad Rushes	581	145	269	1045	0.555	580	589	589	2.9	1.5	10.374	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1027	257	12	1817	0.566	1027	1017	691	3.0	2.2	6.975	A
2 - Station Road (S)	229	57	482	889	0.258	230	239	557	0.8	0.4	6.981	A
3 - Broad Rushes	487	122	217	1046	0.466	485	496	495	1.5	1.1	7.840	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	542	1087	0.499	538	534	0.0	1.3	6.786	A
			2	1, 3	492	1087	0.453	490	480	0.0	1.1	6.335	A
		2	1	(1, 3, 2)	1036			1034	1024	0.0	0.1	0.146	A
	Exit	1	1		704			704	689	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	812	0.018	14	15	0.0	0.0	4.923	A
			2	1, 2	229	812	0.282	231	220	0.0	0.4	6.802	A
		2	1	(1, 3, 2)	244			244	237	0.0	0.0	0.043	A
	Exit	1	1		550			550	547	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	469	1026	0.458	473	469	0.0	0.9	7.125	A
			2	3, 2	13	1026	0.013	13	13	0.0	0.0	3.489	A
		2	1	(1, 3, 2)	482			482	486	0.0	0.0	0.091	A
	Exit	1	1		505			505	495	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	642	1086	0.591	639	637	1.3	1.6	8.252	A
			2	1, 3	561	1086	0.517	561	565	1.1	1.3	7.475	A
		2	1	(1, 3, 2)	1206			1204	1204	0.1	0.3	0.608	A
	Exit	1	1		829			829	843	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	789	0.020	16	16	0.0	0.0	5.338	A
			2	1, 2	266	789	0.337	268	274	0.4	0.5	7.865	A
		2	1	(1, 3, 2)	281			282	291	0.0	0.0	0.155	A
	Exit	1	1		655			655	652	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	559	1013	0.552	561	569	0.9	1.3	9.001	A
			2	3, 2	15	1013	0.015	15	15	0.0	0.0	3.814	A
		2	1	(1, 3, 2)	574			573	586	0.0	0.0	0.284	A
	Exit	1	1		577			577	582	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	777	1085	0.716	773	776	1.6	2.6	10.906	B
			2	1, 3	687	1085	0.633	685	679	1.3	2.2	9.774	A
		2	1	(1, 3, 2)	1470			1463	1463	0.3	2.3	4.291	A
	Exit	1	1		994			994	1014	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	748	0.022	16	19	0.0	0.1	5.020	A
			2	1, 2	321	748	0.429	322	327	0.5	0.7	9.166	A
		2	1	(1, 3, 2)	338			337	347	0.0	0.1	0.336	A
	Exit	1	1		791			791	795	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	672	993	0.677	672	687	1.3	2.3	11.785	B
			2	3, 2	19	993	0.019	18	19	0.0	0.0	3.858	A
		2	1	(1, 3, 2)	690			691	710	0.0	0.3	1.711	A
	Exit	1	1		701			701	698	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	772	1085	0.711	771	778	2.6	2.5	10.990	B
			2	1, 3	693	1085	0.638	692	704	2.2	2.0	10.065	B
		2	1	(1, 3, 2)	1465			1464	1481	2.3	1.6	3.746	A
	Exit	1	1		1030			1030	1033	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	745	0.029	22	21	0.1	0.0	5.057	A
			2	1, 2	337	745	0.451	338	336	0.7	0.9	9.560	A
		2	1	(1, 3, 2)	357			358	358	0.1	0.0	0.434	A
	Exit	1	1		789			789	796	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	690	988	0.699	693	697	2.3	2.4	12.513	B
			2	3, 2	18	988	0.018	18	18	0.0	0.0	4.261	A
		2	1	(1, 3, 2)	710			708	715	0.3	0.5	2.271	A
	Exit	1	1		715			715	725	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	644	1086	0.593	644	654	2.5	1.6	8.961	A
			2	1, 3	572	1086	0.527	574	573	2.0	1.2	7.689	A
		2	1	(1, 3, 2)	1216			1216	1222	1.6	0.2	0.998	A
	Exit	1	1		833			833	849	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	785	0.019	15	15	0.0	0.0	4.958	A
			2	1, 2	271	785	0.346	269	277	0.9	0.8	8.155	A
		2	1	(1, 3, 2)	286			286	292	0.0	0.0	0.201	A
	Exit	1	1		660			660	671	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	564	1012	0.558	564	572	2.4	1.3	9.783	A
			2	3, 2	16	1012	0.016	16	17	0.0	0.0	3.800	A
		2	1	(1, 3, 2)	581			581	585	0.5	0.1	0.812	A
	Exit	1	1		589			589	589	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	544	1087	0.501	545	539	1.6	1.0	7.180	A
			2	1, 3	483	1087	0.445	482	478	1.2	1.2	6.411	A
		2	1	(1, 3, 2)	1027			1028	1015	0.2	0.0	0.161	A
	Exit	1	1		691			691	710	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	815	0.017	13	12	0.0	0.0	4.540	A
			2	1, 2	216	815	0.265	217	227	0.8	0.3	7.012	A
		2	1	(1, 3, 2)	229			229	237	0.0	0.0	0.097	A
	Exit	1	1		557			557	552	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	475	1031	0.460	474	483	1.3	1.1	7.806	A
			2	3, 2	12	1031	0.012	12	13	0.0	0.0	3.856	A
		2	1	(1, 3, 2)	487			487	495	0.1	0.0	0.166	A
	Exit	1	1		495			495	490	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	542	136	991	1087	0.499	538	534	0.0	1.3	6.786	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	492	123	991	1087	0.453	490	480	0.0	1.1	6.335	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	543	136	-	-	-	542	539	0.0	0.1	0.151	A
				3	492	123	-	-	-	492	485	0.0	0.0	0.141	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	941	786	0.019	14	15	0.0	0.0	4.923	A
			2	1	229	57	974	813	0.282	231	220	0.0	0.4	6.802	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	229	57	-	-	-	229	221	0.0	0.0	0.042	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	15	0.0	0.0	0.057	A
3 - Broad Rushes	Entry	1	1	1	469	117	1108	1026	0.458	473	469	0.0	0.9	7.125	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1005	934	0.014	13	13	0.0	0.0	3.489	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	469	117	-	-	-	469	473	0.0	0.0	0.093	A
				2	13	3	-	-	-	13	13	0.0	0.0	0.026	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	642	161	991	1086	0.591	639	637	1.3	1.6	8.252	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	561	140	991	1086	0.517	561	565	1.1	1.3	7.475	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	644	161	-	-	-	642	638	0.1	0.2	0.614	A
				3	563	141	-	-	-	561	566	0.0	0.2	0.601	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	916	742	0.022	16	16	0.0	0.0	5.338	A
			2	1	266	66	974	788	0.337	268	274	0.4	0.5	7.865	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	266	66	-	-	-	266	275	0.0	0.0	0.159	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	16	0.0	0.0	0.090	A
3 - Broad Rushes	Entry	1	1	1	559	140	1108	1013	0.551	561	569	0.9	1.3	9.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1099	1004	0.015	15	15	0.0	0.0	3.814	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	559	140	-	-	-	559	571	0.0	0.0	0.285	A
				2	15	4	-	-	-	15	15	0.0	0.0	0.270	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	777	194	991	1085	0.716	773	776	1.6	2.6	10.906	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	687	172	991	1085	0.633	685	679	1.3	2.2	9.774	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	778	195	-	-	-	777	780	0.2	1.1	4.291	A
				3	692	173	-	-	-	687	683	0.2	1.2	4.291	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	974	746	0.022	16	19	0.0	0.1	5.020	A
			2	1	321	80	974	747	0.430	322	327	0.5	0.7	9.166	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	322	80	-	-	-	321	328	0.0	0.1	0.341	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	19	0.0	0.0	0.256	A
3 - Broad Rushes	Entry	1	1	1	672	168	1108	993	0.677	672	687	1.3	2.3	11.785	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1099	985	0.019	18	19	0.0	0.0	3.858	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	672	168	-	-	-	672	691	0.0	0.3	1.715	A
				2	19	5	-	-	-	19	19	0.0	0.0	1.573	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	772	193	991	1085	0.711	771	778	2.6	2.5	10.990	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	693	173	991	1085	0.638	692	704	2.2	2.0	10.065	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	772	193	-	-	-	772	777	1.1	0.8	3.722	A
				3	693	173	-	-	-	693	704	1.2	0.8	3.773	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	974	742	0.029	22	21	0.1	0.0	5.057	A
			2	1	337	84	974	745	0.452	338	336	0.7	0.9	9.560	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	335	84	-	-	-	337	337	0.1	0.0	0.437	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	21	0.0	0.0	0.379	A
3 - Broad Rushes	Entry	1	1	1	690	173	1108	988	0.699	693	697	2.3	2.4	12.513	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	4	1090	975	0.018	18	18	0.0	0.0	4.261	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	692	173	-	-	-	690	697	0.3	0.5	2.280	A
				2	18	4	-	-	-	18	18	0.0	0.0	1.944	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	644	161	991	1086	0.593	644	654	2.5	1.6	8.961	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	572	143	991	1086	0.527	574	573	2.0	1.2	7.689	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	645	161	-	-	-	644	651	0.8	0.1	0.999	A
				3	571	143	-	-	-	572	570	0.8	0.0	0.996	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	933	752	0.020	15	15	0.0	0.0	4.958	A
			2	1	271	68	974	784	0.346	269	277	0.9	0.8	8.155	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	271	68	-	-	-	271	277	0.0	0.0	0.208	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	15	0.0	0.0	0.073	A
3 - Broad Rushes	Entry	1	1	1	564	141	1108	1012	0.558	564	572	2.4	1.3	9.783	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1108	1012	0.016	16	17	0.0	0.0	3.800	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	565	141	-	-	-	564	567	0.5	0.1	0.825	A
				2	16	4	-	-	-	16	17	0.0	0.0	0.396	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	544	136	991	1087	0.501	545	539	1.6	1.0	7.180	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	483	121	991	1087	0.445	482	478	1.2	1.2	6.411	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	544	136	-	-	-	544	536	0.1	0.0	0.150	A
				3	483	121	-	-	-	483	478	0.0	0.0	0.173	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	933	780	0.017	13	12	0.0	0.0	4.540	A
			2	1	216	54	974	814	0.265	217	227	0.8	0.3	7.012	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	216	54	-	-	-	216	225	0.0	0.0	0.101	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	13	12	0.0	0.0	0.020	A
3 - Broad Rushes	Entry	1	1	1	475	119	1108	1030	0.461	474	483	1.3	1.1	7.806	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1071	992	0.012	12	13	0.0	0.0	3.856	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	475	119	-	-	-	475	482	0.1	0.0	0.170	A
				2	12	3	-	-	-	12	13	0.0	0.0	0.044	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	17.18	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	17.18	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1153	100.000
2 - Station Road (S)		ONE HOUR	✓	612	100.000
3 - Broad Rushes		ONE HOUR	✓	580	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	605	548
	2 - Station Road (S)	598	0	14
	3 - Broad Rushes	556	24	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	5
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	5	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.69	9.29	3.3	A	1057	1585
2 - Station Road (S)	0.86	33.50	6.3	D	563	845
3 - Broad Rushes	0.71	15.58	2.9	C	533	799

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	861	215	18	1878	0.458	859	863	869	0.0	1.5	5.903	A
2 - Station Road (S)	460	115	408	850	0.541	460	458	469	0.0	1.1	9.344	A
3 - Broad Rushes	436	109	448	953	0.458	438	439	420	0.0	0.8	6.931	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1040	260	19	1894	0.549	1039	1041	1048	1.5	1.8	6.777	A
2 - Station Road (S)	554	139	489	862	0.643	557	554	569	1.1	2.0	14.142	B
3 - Broad Rushes	524	131	543	931	0.563	524	523	503	0.8	1.4	9.048	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1279	320	26	1919	0.667	1281	1270	1278	1.8	3.3	9.149	A
2 - Station Road (S)	683	171	602	819	0.835	674	665	705	2.0	6.3	26.771	D
3 - Broad Rushes	648	162	659	912	0.711	646	643	617	1.4	2.9	14.100	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1265	316	30	1841	0.687	1266	1277	1264	3.3	3.2	9.286	A
2 - Station Road (S)	669	167	608	777	0.862	671	678	688	6.3	5.8	33.498	D
3 - Broad Rushes	636	159	656	933	0.682	639	649	623	2.9	2.7	15.582	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1037	259	22	1932	0.537	1038	1044	1024	3.2	1.9	6.730	A
2 - Station Road (S)	547	137	491	827	0.661	546	575	568	5.8	2.2	17.392	C
3 - Broad Rushes	513	128	535	961	0.533	511	530	502	2.7	1.5	9.745	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	860	215	17	1884	0.456	864	877	879	1.9	1.2	5.807	A
2 - Station Road (S)	465	116	411	859	0.541	467	472	471	2.2	1.2	10.349	B
3 - Broad Rushes	439	110	457	991	0.443	440	445	421	1.5	0.9	7.626	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	451	1085	0.416	450	453	0.0	0.8	5.927	A
			2	1, 3	409	1085	0.377	408	410	0.0	0.7	5.787	A
		2	1	(1, 3, 2)	861			860	869	0.0	0.0	0.041	A
	Exit	1	1		869			869	868	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	839	0.014	12	10	0.0	0.0	4.514	A
			2	1, 2	449	839	0.535	448	447	0.0	1.1	8.993	A
		2	1	(1, 3, 2)	460			460	462	0.0	0.0	0.452	A
	Exit	1	1		469			469	471	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	418	948	0.441	420	421	0.0	0.8	7.047	A
			2	3, 2	18	948	0.019	18	18	0.0	0.0	3.768	A
		2	1	(1, 3, 2)	436			436	442	0.0	0.0	0.027	A
	Exit	1	1		420			420	420	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	553	1085	0.510	550	547	0.8	1.0	6.875	A
			2	1, 3	488	1085	0.450	489	494	0.7	0.7	6.392	A
		2	1	(1, 3, 2)	1040			1041	1042	0.0	0.0	0.128	A
	Exit	1	1		1048			1048	1043	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	813	0.017	14	13	0.0	0.0	4.767	A
			2	1, 2	542	813	0.667	543	541	1.1	1.8	11.994	B
		2	1	(1, 3, 2)	554			556	557	0.0	0.2	2.303	A
	Exit	1	1		569			569	568	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	505	914	0.552	505	502	0.8	1.4	9.027	A
			2	3, 2	19	914	0.021	19	21	0.0	0.0	4.058	A
		2	1	(1, 3, 2)	524			524	525	0.0	0.0	0.220	A
	Exit	1	1		503			503	507	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	677	1082	0.626	679	668	1.0	1.6	8.754	A
			2	1, 3	602	1082	0.556	602	601	0.7	1.4	8.016	A
		2	1	(1, 3, 2)	1279			1279	1274	0.0	0.3	0.731	A
	Exit	1	1		1278			1278	1267	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	775	0.019	15	15	0.0	0.0	4.854	A
			2	1, 2	662	775	0.854	659	650	1.8	3.3	16.382	C
		2	1	(1, 3, 2)	683			676	671	0.2	3.0	10.551	B
	Exit	1	1		705			705	695	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	621	873	0.712	620	617	1.4	2.6	13.066	B
			2	3, 2	26	873	0.030	26	26	0.0	0.0	4.158	A
		2	1	(1, 3, 2)	648			647	648	0.0	0.3	1.386	A
	Exit	1	1		617			617	616	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	663	1081	0.613	658	667	1.6	1.9	8.817	A
			2	1, 3	604	1081	0.559	608	611	1.4	1.2	8.141	A
		2	1	(1, 3, 2)	1265			1267	1277	0.3	0.2	0.790	A
	Exit	1	1		1264			1264	1285	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	773	0.019	15	15	0.0	0.0	4.905	A
			2	1, 2	656	773	0.849	656	663	3.3	3.2	17.783	C
		2	1	(1, 3, 2)	669			671	678	3.0	2.6	16.009	C
	Exit	1	1		688			688	694	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	607	874	0.695	608	621	2.6	2.4	14.116	B
			2	3, 2	31	874	0.035	30	28	0.0	0.0	4.360	A
		2	1	(1, 3, 2)	636			638	649	0.3	0.2	1.924	A
	Exit	1	1		623			623	626	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	547	1084	0.505	547	548	1.9	1.1	6.834	A
			2	1, 3	490	1084	0.452	491	495	1.2	0.8	6.380	A
		2	1	(1, 3, 2)	1037			1037	1039	0.2	0.0	0.115	A
	Exit	1	1		1024			1024	1072	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	812	0.014	11	11	0.0	0.0	4.821	A
			2	1, 2	536	812	0.660	535	563	3.2	1.9	13.114	B
		2	1	(1, 3, 2)	547			547	569	2.6	0.3	4.606	A
	Exit	1	1		568			568	570	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	492	917	0.536	489	509	2.4	1.4	9.664	A
			2	3, 2	21	917	0.023	22	22	0.0	0.0	3.900	A
		2	1	(1, 3, 2)	513			513	526	0.2	0.1	0.342	A
	Exit	1	1		502			502	507	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	450	1085	0.414	454	459	1.1	0.5	5.869	A
			2	1, 3	410	1085	0.378	411	418	0.8	0.7	5.691	A
		2	1	(1, 3, 2)	860			860	874	0.0	0.0	0.022	A
	Exit	1	1		879			879	888	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	839	0.012	10	11	0.0	0.0	4.592	A
			2	1, 2	456	839	0.543	457	461	1.9	1.2	9.670	A
		2	1	(1, 3, 2)	465			466	469	0.3	0.0	0.829	A
	Exit	1	1		471			471	477	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	422	945	0.447	422	427	1.4	0.8	7.599	A
			2	3, 2	17	945	0.018	17	18	0.0	0.0	4.204	A
		2	1	(1, 3, 2)	439			440	442	0.1	0.0	0.180	A
	Exit	1	1		421			421	429	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	451	113	991	1085	0.416	450	453	0.0	0.8	5.927	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	409	102	991	1085	0.377	408	410	0.0	0.7	5.787	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	451	113	-	-	-	451	456	0.0	0.0	0.040	A
				3	409	102	-	-	-	409	413	0.0	0.0	0.042	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	891	766	0.015	12	10	0.0	0.0	4.514	A
			2	1	449	112	974	839	0.535	448	447	0.0	1.1	8.993	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	448	112	-	-	-	449	452	0.0	0.0	0.459	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	10	0.0	0.0	0.178	A
3 - Broad Rushes	Entry	1	1	1	418	105	1108	948	0.442	420	421	0.0	0.8	7.047	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	5	1104	943	0.019	18	18	0.0	0.0	3.768	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	418	105	-	-	-	418	424	0.0	0.0	0.028	A
				2	18	5	-	-	-	18	18	0.0	0.0	0.008	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	553	138	991	1084	0.510	550	547	0.8	1.0	6.875	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	488	122	991	1085	0.450	489	494	0.7	0.7	6.392	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	553	138	-	-	-	553	548	0.0	0.0	0.138	A
				3	487	122	-	-	-	488	495	0.0	0.0	0.116	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	939	784	0.017	14	13	0.0	0.0	4.767	A
			2	1	542	136	974	813	0.668	543	541	1.1	1.8	11.994	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	541	135	-	-	-	542	544	0.0	0.2	2.319	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	14	13	0.0	0.0	1.668	A
3 - Broad Rushes	Entry	1	1	1	505	126	1108	914	0.552	505	502	0.8	1.4	9.027	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1099	906	0.021	19	21	0.0	0.0	4.058	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	505	126	-	-	-	505	504	0.0	0.0	0.221	A
				2	19	5	-	-	-	19	21	0.0	0.0	0.180	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	677	169	991	1082	0.626	679	668	1.0	1.6	8.754	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	602	151	991	1082	0.556	602	601	0.7	1.4	8.016	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	677	169	-	-	-	677	670	0.0	0.2	0.724	A
				3	602	150	-	-	-	602	604	0.0	0.1	0.739	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	948	755	0.019	15	15	0.0	0.0	4.854	A
			2	1	662	165	974	775	0.853	659	650	1.8	3.3	16.382	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	668	167	-	-	-	662	656	0.2	2.9	10.578	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	14	15	0.0	0.1	9.354	A
3 - Broad Rushes	Entry	1	1	1	621	155	1108	873	0.712	620	617	1.4	2.6	13.066	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	26	7	1108	875	0.030	26	26	0.0	0.0	4.158	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	622	155	-	-	-	621	621	0.0	0.3	1.397	A
				2	26	7	-	-	-	26	26	0.0	0.0	1.145	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	663	166	991	1081	0.613	658	667	1.6	1.9	8.817	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	604	151	991	1081	0.559	608	611	1.4	1.2	8.141	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	662	166	-	-	-	663	668	0.2	0.1	0.800	A
				3	603	151	-	-	-	604	610	0.1	0.1	0.778	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	961	759	0.020	15	15	0.0	0.0	4.905	A
			2	1	656	164	974	774	0.849	656	663	3.3	3.2	17.783	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	654	164	-	-	-	656	663	2.9	2.5	16.028	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	15	0.1	0.0	15.183	C
3 - Broad Rushes	Entry	1	1	1	607	152	1108	874	0.695	608	621	2.6	2.4	14.116	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1108	871	0.035	30	28	0.0	0.0	4.360	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	606	151	-	-	-	607	621	0.3	0.2	1.949	A
				2	30	8	-	-	-	31	28	0.0	0.0	1.408	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	547	137	991	1084	0.505	547	548	1.9	1.1	6.834	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	490	123	991	1084	0.452	491	495	1.2	0.8	6.380	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	547	137	-	-	-	547	545	0.1	0.0	0.119	A
				3	490	123	-	-	-	490	494	0.1	0.0	0.110	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	904	751	0.015	11	11	0.0	0.0	4.821	A
			2	1	536	134	974	812	0.660	535	563	3.2	1.9	13.114	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	536	134	-	-	-	536	558	2.5	0.3	4.636	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	3.132	A
3 - Broad Rushes	Entry	1	1	1	492	123	1108	917	0.536	489	509	2.4	1.4	9.664	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	1099	908	0.024	22	22	0.0	0.0	3.900	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	491	123	-	-	-	492	504	0.2	0.1	0.343	A
				2	21	5	-	-	-	21	22	0.0	0.0	0.313	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	450	112	991	1085	0.414	454	459	1.1	0.5	5.869	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	410	103	991	1085	0.378	411	418	0.8	0.7	5.691	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	450	112	-	-	-	450	457	0.0	0.0	0.022	A
				3	410	103	-	-	-	410	417	0.0	0.0	0.022	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	917	787	0.013	10	11	0.0	0.0	4.592	A
			2	1	456	114	974	839	0.543	457	461	1.9	1.2	9.670	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	455	114	-	-	-	456	458	0.3	0.0	0.830	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	-	-	-	10	11	0.0	0.0	0.797	A
3 - Broad Rushes	Entry	1	1	1	422	106	1108	945	0.447	422	427	1.4	0.8	7.599	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1099	939	0.018	17	18	0.0	0.0	4.204	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	422	106	-	-	-	422	425	0.1	0.0	0.180	A
				2	17	4	-	-	-	17	18	0.0	0.0	0.176	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	16.28	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.28	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1396	100.000
2 - Station Road (S)		ONE HOUR	✓	315	100.000
3 - Broad Rushes		ONE HOUR	✓	647	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	748	648
	2 - Station Road (S)	296	0	19
	3 - Broad Rushes	629	18	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	6	9
	2 - Station Road (S)	10	0	6
	3 - Broad Rushes	12	6	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.83	17.77	7.8	C	1285	1927
2 - Station Road (S)	0.46	9.75	1.0	A	290	435
3 - Broad Rushes	0.71	16.25	3.0	C	596	894

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1068	267	12	1834	0.583	1065	1057	693	0.0	2.3	6.959	A
2 - Station Road (S)	229	57	498	881	0.260	229	238	579	0.0	0.5	6.610	A
3 - Broad Rushes	489	122	215	1014	0.483	490	483	511	0.0	1.1	7.380	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1248	312	17	1892	0.659	1250	1261	841	2.3	3.5	9.469	A
2 - Station Road (S)	293	73	577	810	0.362	291	290	691	0.5	0.7	7.960	A
3 - Broad Rushes	588	147	272	1048	0.561	586	586	596	1.1	1.8	9.397	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1540	385	21	1896	0.812	1538	1520	1038	3.5	7.6	16.228	C
2 - Station Road (S)	353	88	704	760	0.465	357	359	856	0.7	1.0	9.752	A
3 - Broad Rushes	718	180	335	1016	0.707	725	722	725	1.8	2.9	15.769	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1536	384	19	1844	0.833	1530	1532	1008	7.6	7.8	17.774	C
2 - Station Road (S)	344	86	718	823	0.418	346	352	831	1.0	0.9	9.136	A
3 - Broad Rushes	703	176	325	1030	0.682	702	715	739	2.9	3.0	16.250	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1262	315	16	1835	0.688	1267	1278	838	7.8	3.4	10.150	B
2 - Station Road (S)	286	72	586	823	0.348	286	291	697	0.9	0.7	8.254	A
3 - Broad Rushes	584	146	268	1044	0.559	586	596	604	3.0	1.2	9.772	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1054	263	12	1866	0.565	1049	1058	703	3.4	2.3	7.555	A
2 - Station Road (S)	233	58	482	882	0.265	234	240	579	0.7	0.5	6.992	A
3 - Broad Rushes	493	123	219	1046	0.471	496	500	498	1.2	0.9	7.795	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	569	1087	0.523	567	566	0.0	1.3	6.964	A
			2	1, 3	499	1087	0.459	498	491	0.0	1.0	6.701	A
		2	1	(1, 3, 2)	1068			1068	1066	0.0	0.1	0.114	A
	Exit	1	1		693			693	693	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	810	0.016	13	15	0.0	0.0	4.797	A
			2	1, 2	216	810	0.266	215	223	0.0	0.4	6.684	A
		2	1	(1, 3, 2)	229			229	240	0.0	0.0	0.050	A
	Exit	1	1		579			579	579	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	478	1031	0.464	478	470	0.0	1.1	7.385	A
			2	3, 2	12	1031	0.012	12	13	0.0	0.0	4.047	A
		2	1	(1, 3, 2)	489			490	487	0.0	0.0	0.089	A
	Exit	1	1		511			511	506	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	675	1085	0.622	673	680	1.3	1.8	9.319	A
			2	1, 3	575	1085	0.530	577	581	1.0	1.5	7.960	A
		2	1	(1, 3, 2)	1248			1249	1265	0.1	0.2	0.762	A
	Exit	1	1		841			841	843	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	19	784	0.024	19	19	0.0	0.0	4.832	A
			2	1, 2	274	784	0.350	272	272	0.4	0.7	8.044	A
		2	1	(1, 3, 2)	293			293	291	0.0	0.0	0.124	A
	Exit	1	1		691			691	695	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	570	1011	0.564	569	571	1.1	1.6	9.101	A
			2	3, 2	17	1011	0.017	17	16	0.0	0.0	3.823	A
		2	1	(1, 3, 2)	588			587	589	0.0	0.1	0.431	A
	Exit	1	1		596			596	600	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	835	1084	0.771	834	811	1.8	3.1	11.790	B
			2	1, 3	700	1084	0.646	704	708	1.5	1.9	10.021	B
		2	1	(1, 3, 2)	1540			1536	1526	0.2	2.7	5.208	A
	Exit	1	1		1038			1038	1039	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	22	742	0.029	22	22	0.0	0.0	5.643	A
			2	1, 2	332	742	0.448	335	337	0.7	0.9	9.592	A
		2	1	(1, 3, 2)	353			354	360	0.0	0.1	0.405	A
	Exit	1	1		856			856	831	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	700	989	0.708	704	702	1.6	2.5	13.153	B
			2	3, 2	21	989	0.022	21	20	0.0	0.0	4.013	A
		2	1	(1, 3, 2)	718			721	725	0.1	0.3	2.857	A
	Exit	1	1		725			725	730	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	805	1085	0.742	812	819	3.1	2.6	12.521	B
			2	1, 3	724	1085	0.668	718	714	1.9	2.3	10.303	B
		2	1	(1, 3, 2)	1536			1529	1532	2.7	2.9	6.282	A
	Exit	1	1		1008			1008	1024	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	737	0.029	21	23	0.0	0.1	5.589	A
			2	1, 2	323	737	0.438	325	329	0.9	0.8	9.164	A
		2	1	(1, 3, 2)	344			344	352	0.1	0.0	0.221	A
	Exit	1	1		831			831	839	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	684	992	0.690	683	695	2.5	2.4	13.076	B
			2	3, 2	19	992	0.019	19	20	0.0	0.0	4.109	A
		2	1	(1, 3, 2)	703			703	715	0.3	0.6	3.448	A
	Exit	1	1		739			739	737	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	678	1085	0.625	681	687	2.6	1.9	9.491	A
			2	1, 3	583	1085	0.537	586	591	2.3	1.2	8.000	A
		2	1	(1, 3, 2)	1262			1261	1270	2.9	0.4	1.397	A
	Exit	1	1		838			838	853	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	18	781	0.023	18	18	0.1	0.1	5.262	A
			2	1, 2	269	781	0.344	268	273	0.8	0.6	8.302	A
		2	1	(1, 3, 2)	286			286	290	0.0	0.0	0.151	A
	Exit	1	1		697			697	703	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	568	1013	0.561	570	580	2.4	1.1	9.309	A
			2	3, 2	17	1013	0.016	16	16	0.0	0.0	3.847	A
		2	1	(1, 3, 2)	584			585	591	0.6	0.0	0.653	A
	Exit	1	1		604			604	609	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	570	1087	0.524	567	567	1.9	1.2	7.518	A
			2	1, 3	484	1087	0.446	482	491	1.2	1.1	6.775	A
		2	1	(1, 3, 2)	1054			1054	1055	0.4	0.0	0.382	A
	Exit	1	1		703			703	712	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	815	0.019	15	15	0.1	0.0	4.718	A
			2	1, 2	218	815	0.268	219	225	0.6	0.4	7.086	A
		2	1	(1, 3, 2)	233			233	239	0.0	0.0	0.058	A
	Exit	1	1		579			579	581	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	481	1030	0.467	484	486	1.1	0.9	7.764	A
			2	3, 2	12	1030	0.012	12	14	0.0	0.0	3.823	A
		2	1	(1, 3, 2)	493			493	499	0.0	0.0	0.149	A
	Exit	1	1		498			498	506	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	569	142	991	1087	0.523	567	566	0.0	1.3	6.964	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	499	125	991	1087	0.459	498	491	0.0	1.0	6.701	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	570	142	-	-	-	569	571	0.0	0.1	0.120	A
				3	498	125	-	-	-	499	495	0.0	0.0	0.108	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	932	773	0.017	13	15	0.0	0.0	4.797	A
			2	1	216	54	974	810	0.266	215	223	0.0	0.4	6.684	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	216	54	-	-	-	216	225	0.0	0.0	0.053	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	13	15	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	478	120	1108	1031	0.464	478	470	0.0	1.1	7.385	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1042	965	0.013	12	13	0.0	0.0	4.047	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	477	119	-	-	-	478	474	0.0	0.0	0.087	A
				2	12	3	-	-	-	12	13	0.0	0.0	0.143	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	675	169	991	1085	0.622	673	680	1.3	1.8	9.319	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	575	144	991	1085	0.530	577	581	1.0	1.5	7.960	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	674	168	-	-	-	675	682	0.1	0.1	0.785	A
				3	574	143	-	-	-	575	583	0.0	0.1	0.735	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	941	757	0.025	19	19	0.0	0.0	4.832	A
			2	1	274	69	974	783	0.350	272	272	0.4	0.7	8.044	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	274	69	-	-	-	274	273	0.0	0.0	0.132	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	18	0.0	0.0	0.012	A
3 - Broad Rushes	Entry	1	1	1	570	143	1108	1011	0.564	569	571	1.1	1.6	9.101	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1080	986	0.018	17	16	0.0	0.0	3.823	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	571	143	-	-	-	570	573	0.0	0.1	0.434	A
				2	17	4	-	-	-	17	16	0.0	0.0	0.318	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	835	209	991	1084	0.771	834	811	1.8	3.1	11.790	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	700	175	991	1084	0.646	704	708	1.5	1.9	10.021	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	837	209	-	-	-	835	817	0.1	1.4	5.161	A
				3	703	176	-	-	-	700	709	0.1	1.3	5.263	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	974	738	0.030	22	22	0.0	0.0	5.643	A
			2	1	332	83	974	743	0.447	335	337	0.7	0.9	9.592	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	332	83	-	-	-	332	338	0.0	0.1	0.425	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	-	-	-	22	22	0.0	0.0	0.114	A
3 - Broad Rushes	Entry	1	1	1	700	175	1108	989	0.708	704	702	1.6	2.5	13.153	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	1099	978	0.022	21	20	0.0	0.0	4.013	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	697	174	-	-	-	700	706	0.1	0.3	2.853	A
				2	21	5	-	-	-	21	20	0.0	0.0	3.004	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	805	201	991	1084	0.743	812	819	3.1	2.6	12.521	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	724	181	991	1085	0.668	718	714	1.9	2.3	10.303	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	809	202	-	-	-	805	817	1.4	1.6	6.421	A
				3	727	182	-	-	-	724	716	1.3	1.3	6.119	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	966	733	0.029	21	23	0.0	0.1	5.589	A
			2	1	323	81	974	738	0.438	325	329	0.9	0.8	9.164	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	323	81	-	-	-	323	329	0.1	0.0	0.232	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	23	0.0	0.0	0.063	A
3 - Broad Rushes	Entry	1	1	1	684	171	1108	992	0.689	683	695	2.5	2.4	13.076	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1099	983	0.019	19	20	0.0	0.0	4.109	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	684	171	-	-	-	684	695	0.3	0.6	3.453	A
				2	19	5	-	-	-	19	20	0.0	0.0	3.261	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	678	170	991	1085	0.625	681	687	2.6	1.9	9.491	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	583	146	991	1085	0.537	586	591	2.3	1.2	8.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	679	170	-	-	-	678	684	1.6	0.2	1.430	A
				3	583	146	-	-	-	583	586	1.3	0.2	1.357	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	949	763	0.024	18	18	0.1	0.1	5.262	A
			2	1	269	67	974	780	0.344	268	273	0.8	0.6	8.302	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	269	67	-	-	-	269	272	0.0	0.0	0.155	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	18	0.0	0.0	0.081	A
3 - Broad Rushes	Entry	1	1	1	568	142	1108	1012	0.561	570	580	2.4	1.1	9.309	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1070	978	0.017	16	16	0.0	0.0	3.847	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	567	142	-	-	-	568	575	0.6	0.0	0.655	A
				2	17	4	-	-	-	17	16	0.0	0.0	0.561	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	570	142	991	1087	0.524	567	567	1.9	1.2	7.518	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	484	121	991	1087	0.446	482	491	1.2	1.1	6.775	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	570	142	-	-	-	570	564	0.2	0.0	0.392	A
				3	484	121	-	-	-	484	491	0.2	0.0	0.371	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	974	812	0.019	15	15	0.1	0.0	4.718	A
			2	1	218	55	974	814	0.268	219	225	0.6	0.4	7.086	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	218	54	-	-	-	218	225	0.0	0.0	0.058	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	15	0.0	0.0	0.060	A
3 - Broad Rushes	Entry	1	1	1	481	120	1108	1030	0.467	484	486	1.1	0.9	7.764	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1080	1002	0.012	12	14	0.0	0.0	3.823	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	481	120	-	-	-	481	486	0.0	0.0	0.147	A
				2	12	3	-	-	-	12	14	0.0	0.0	0.204	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	15.80	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	15.80	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2028	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1130	100.000
2 - Station Road (S)		ONE HOUR	✓	603	100.000
3 - Broad Rushes		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	599	531
	2 - Station Road (S)	589	0	14
	3 - Broad Rushes	565	24	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	5
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	5	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.69	8.73	3.5	A	1036	1553
2 - Station Road (S)	0.85	29.59	5.2	D	554	831
3 - Broad Rushes	0.72	15.20	2.9	C	538	808

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	858	214	15	1885	0.455	856	846	856	0.0	1.4	5.554	A
2 - Station Road (S)	455	114	405	861	0.528	453	446	467	0.0	1.5	9.752	A
3 - Broad Rushes	431	108	441	1003	0.429	430	437	418	0.0	0.8	6.927	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1009	252	19	1835	0.550	1014	1020	1051	1.4	1.5	6.573	A
2 - Station Road (S)	553	138	480	838	0.660	555	543	554	1.5	2.1	13.289	B
3 - Broad Rushes	529	132	541	976	0.542	529	537	493	0.8	1.3	9.052	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1268	317	27	1837	0.690	1269	1253	1255	1.5	3.5	8.600	A
2 - Station Road (S)	654	164	582	795	0.823	650	659	714	2.1	5.2	24.273	C
3 - Broad Rushes	648	162	634	918	0.707	647	648	598	1.3	2.9	14.661	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1227	307	27	1897	0.647	1218	1250	1280	3.5	3.4	8.727	A
2 - Station Road (S)	663	166	576	780	0.849	672	672	668	5.2	4.9	29.589	D
3 - Broad Rushes	652	163	656	911	0.716	651	649	593	2.9	2.8	15.199	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1007	252	24	1860	0.542	1005	1021	1025	3.4	2.0	6.681	A
2 - Station Road (S)	534	134	467	837	0.638	536	558	562	4.9	1.6	14.730	B
3 - Broad Rushes	529	132	524	948	0.558	526	543	478	2.8	1.6	9.814	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	845	211	20	1880	0.450	846	864	875	2.0	1.3	5.676	A
2 - Station Road (S)	466	116	400	855	0.544	466	465	466	1.6	1.3	9.573	A
3 - Broad Rushes	442	110	456	990	0.446	439	446	411	1.6	1.0	7.499	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	455	1086	0.419	451	448	0.0	0.8	5.623	A
			2	1, 3	402	1086	0.371	405	397	0.0	0.5	5.441	A
		2	1	(1, 3, 2)	858			857	851	0.0	0.0	0.011	A
	Exit	1	1		856			856	854	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	840	0.015	12	11	0.0	0.0	4.418	A
			2	1, 2	443	840	0.528	441	435	0.0	1.4	9.092	A
		2	1	(1, 3, 2)	455			456	451	0.0	0.1	0.758	A
	Exit	1	1		467			467	466	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	416	951	0.437	415	419	0.0	0.8	7.006	A
			2	3, 2	15	951	0.016	15	17	0.0	0.0	3.855	A
		2	1	(1, 3, 2)	431			431	440	0.0	0.0	0.051	A
	Exit	1	1		418			418	408	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	535	1084	0.493	535	539	0.8	1.0	6.647	A
			2	1, 3	475	1084	0.438	480	481	0.5	0.5	6.362	A
		2	1	(1, 3, 2)	1009			1010	1021	0.0	0.0	0.062	A
	Exit	1	1		1051			1051	1048	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	816	0.017	14	12	0.0	0.0	4.534	A
			2	1, 2	540	816	0.662	541	532	1.4	1.7	11.557	B
		2	1	(1, 3, 2)	553			554	545	0.1	0.3	1.865	A
	Exit	1	1		554			554	560	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	509	915	0.557	510	516	0.8	1.3	9.145	A
			2	3, 2	19	915	0.021	19	21	0.0	0.0	4.075	A
		2	1	(1, 3, 2)	529			529	539	0.0	0.0	0.115	A
	Exit	1	1		493			493	493	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	686	1082	0.634	687	669	1.0	1.9	8.567	A
			2	1, 3	580	1082	0.536	582	583	0.5	1.2	7.471	A
		2	1	(1, 3, 2)	1268			1266	1258	0.0	0.4	0.531	A
	Exit	1	1		1255			1255	1266	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	782	0.020	15	15	0.0	0.0	4.967	A
			2	1, 2	638	782	0.816	634	644	1.7	3.3	16.240	C
		2	1	(1, 3, 2)	654			653	665	0.3	1.9	8.223	A
	Exit	1	1		714			714	696	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	621	881	0.704	620	622	1.3	2.5	13.399	B
			2	3, 2	27	881	0.030	27	27	0.0	0.0	4.289	A
		2	1	(1, 3, 2)	648			647	653	0.0	0.4	1.601	A
	Exit	1	1		598			598	598	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	647	1082	0.598	642	659	1.9	1.6	8.362	A
			2	1, 3	581	1082	0.536	576	591	1.2	1.7	7.911	A
		2	1	(1, 3, 2)	1227			1227	1251	0.4	0.0	0.578	A
	Exit	1	1		1280			1280	1279	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	784	0.020	16	16	0.0	0.0	4.903	A
			2	1, 2	650	784	0.829	656	657	3.3	2.7	17.173	C
		2	1	(1, 3, 2)	663			666	670	1.9	2.2	12.674	B
	Exit	1	1		668			668	686	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	626	874	0.716	624	622	2.5	2.5	13.859	B
			2	3, 2	27	874	0.030	27	27	0.0	0.0	4.021	A
		2	1	(1, 3, 2)	652			652	649	0.4	0.2	1.795	A
	Exit	1	1		593			593	607	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	543	1083	0.502	538	546	1.6	1.3	6.863	A
			2	1, 3	463	1083	0.428	467	475	1.7	0.6	6.320	A
		2	1	(1, 3, 2)	1007			1007	1016	0.0	0.1	0.066	A
	Exit	1	1		1025			1025	1065	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	820	0.014	12	13	0.0	0.0	4.835	A
			2	1, 2	524	820	0.639	524	546	2.7	1.6	11.788	B
		2	1	(1, 3, 2)	534			536	554	2.2	0.1	3.310	A
	Exit	1	1		562			562	570	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	505	921	0.548	501	519	2.5	1.6	9.755	A
			2	3, 2	24	921	0.026	24	24	0.0	0.0	4.123	A
		2	1	(1, 3, 2)	529			529	539	0.2	0.0	0.352	A
	Exit	1	1		478			478	488	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	446	1084	0.411	446	457	1.3	0.8	5.854	A
			2	1, 3	399	1084	0.368	400	406	0.6	0.5	5.425	A
		2	1	(1, 3, 2)	845			845	861	0.1	0.0	0.023	A
	Exit	1	1		875			875	882	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	842	0.012	10	10	0.0	0.0	4.190	A
			2	1, 2	455	842	0.540	456	455	1.6	1.1	9.097	A
		2	1	(1, 3, 2)	466			465	463	0.1	0.1	0.593	A
	Exit	1	1		466			466	476	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	422	945	0.446	419	427	1.6	1.0	7.570	A
			2	3, 2	20	945	0.021	20	19	0.0	0.0	3.802	A
		2	1	(1, 3, 2)	442			442	443	0.0	0.0	0.101	A
	Exit	1	1		411			411	416	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	455	114	991	1086	0.419	451	448	0.0	0.8	5.623	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	402	101	991	1086	0.371	405	397	0.0	0.5	5.441	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	456	114	-	-	-	455	452	0.0	0.0	0.012	A
				3	402	101	-	-	-	402	399	0.0	0.0	0.009	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	849	732	0.017	12	11	0.0	0.0	4.418	A
			2	1	443	111	974	841	0.527	441	435	0.0	1.4	9.092	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	442	111	-	-	-	443	441	0.0	0.1	0.772	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	11	0.0	0.0	0.202	A
3 - Broad Rushes	Entry	1	1	1	416	104	1108	951	0.437	415	419	0.0	0.8	7.006	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1087	935	0.016	15	17	0.0	0.0	3.855	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	416	104	-	-	-	416	422	0.0	0.0	0.050	A
				2	15	4	-	-	-	15	17	0.0	0.0	0.057	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	535	134	991	1084	0.493	535	539	0.8	1.0	6.647	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	475	119	991	1084	0.438	480	481	0.5	0.5	6.362	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	535	134	-	-	-	535	540	0.0	0.0	0.070	A
				3	474	119	-	-	-	475	481	0.0	0.0	0.053	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	907	760	0.018	14	12	0.0	0.0	4.534	A
			2	1	540	135	974	816	0.662	541	532	1.4	1.7	11.557	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	540	135	-	-	-	540	533	0.1	0.3	1.879	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	-	-	-	14	12	0.0	0.0	1.245	A
3 - Broad Rushes	Entry	1	1	1	509	127	1108	915	0.557	510	516	0.8	1.3	9.145	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1108	919	0.021	19	21	0.0	0.0	4.075	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	509	127	-	-	-	509	518	0.0	0.0	0.117	A
				2	19	5	-	-	-	19	21	0.0	0.0	0.076	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	686	171	991	1082	0.634	687	669	1.0	1.9	8.567	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	580	145	991	1082	0.536	582	583	0.5	1.2	7.471	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	686	171	-	-	-	686	673	0.0	0.2	0.534	A
				3	582	145	-	-	-	580	586	0.0	0.3	0.528	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	965	776	0.020	15	15	0.0	0.0	4.967	A
			2	1	638	159	974	782	0.816	634	644	1.7	3.3	16.240	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	639	160	-	-	-	638	650	0.3	1.8	8.247	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	15	0.0	0.0	7.185	A
3 - Broad Rushes	Entry	1	1	1	621	155	1108	881	0.704	620	622	1.3	2.5	13.399	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	1108	878	0.030	27	27	0.0	0.0	4.289	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	622	156	-	-	-	621	626	0.0	0.4	1.625	A
				2	26	7	-	-	-	27	27	0.0	0.0	1.062	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	647	162	991	1082	0.598	642	659	1.9	1.6	8.362	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	581	145	991	1082	0.536	576	591	1.2	1.7	7.911	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	647	162	-	-	-	647	658	0.2	0.0	0.589	A
				3	580	145	-	-	-	581	593	0.3	0.0	0.566	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	945	756	0.021	16	16	0.0	0.0	4.903	A
			2	1	650	163	974	784	0.829	656	657	3.3	2.7	17.173	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	647	162	-	-	-	650	654	1.8	2.1	12.735	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	16	0.0	0.0	10.164	B
3 - Broad Rushes	Entry	1	1	1	626	156	1108	873	0.717	624	622	2.5	2.5	13.859	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	1108	876	0.030	27	27	0.0	0.0	4.021	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	626	156	-	-	-	626	622	0.4	0.2	1.809	A
				2	27	7	-	-	-	27	27	0.0	0.0	1.487	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	543	136	991	1083	0.502	538	546	1.6	1.3	6.863	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	463	116	991	1083	0.428	467	475	1.7	0.6	6.320	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	544	136	-	-	-	543	545	0.0	0.1	0.064	A
				3	464	116	-	-	-	463	471	0.0	0.0	0.067	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	926	778	0.015	12	13	0.0	0.0	4.835	A
			2	1	524	131	974	820	0.639	524	546	2.7	1.6	11.788	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	523	131	-	-	-	524	541	2.1	0.1	3.313	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	12	13	0.0	0.0	3.175	A
3 - Broad Rushes	Entry	1	1	1	505	126	1108	921	0.548	501	519	2.5	1.6	9.755	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1108	918	0.026	24	24	0.0	0.0	4.123	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	505	126	-	-	-	505	515	0.2	0.0	0.350	A
				2	24	6	-	-	-	24	24	0.0	0.0	0.381	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	446	111	991	1084	0.411	446	457	1.3	0.8	5.854	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	399	100	991	1085	0.368	400	406	0.6	0.5	5.425	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	446	111	-	-	-	446	455	0.1	0.0	0.022	A
				3	399	100	-	-	-	399	406	0.0	0.0	0.024	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	936	805	0.013	10	10	0.0	0.0	4.190	A
			2	1	455	114	974	842	0.540	456	455	1.6	1.1	9.097	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	455	114	-	-	-	455	453	0.1	0.1	0.593	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	3	-	-	-	10	10	0.0	0.0	0.606	A
3 - Broad Rushes	Entry	1	1	1	422	105	1108	945	0.446	419	427	1.6	1.0	7.570	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1098	935	0.021	20	19	0.0	0.0	3.802	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	422	105	-	-	-	422	425	0.0	0.0	0.099	A
				2	20	5	-	-	-	20	19	0.0	0.0	0.143	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	12.75	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.75	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038	WoD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1277	100.000
2 - Station Road (S)		ONE HOUR	✓	402	100.000
3 - Broad Rushes		ONE HOUR	✓	605	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	681	596
	2 - Station Road (S)	380	0	22
	3 - Broad Rushes	591	14	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	6	9
	2 - Station Road (S)	8	0	5
	3 - Broad Rushes	14	8	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.75	12.22	5.1	B	1166	1749
2 - Station Road (S)	0.56	12.32	1.7	B	369	553
3 - Broad Rushes	0.71	14.15	3.0	B	555	833

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	957	239	9	1903	0.503	951	944	734	0.0	2.2	6.478	A
2 - Station Road (S)	307	77	443	856	0.359	309	310	517	0.0	0.5	7.368	A
3 - Broad Rushes	451	113	293	1021	0.442	450	454	459	0.0	1.1	7.461	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1154	288	13	1885	0.612	1149	1149	876	2.2	3.3	8.053	A
2 - Station Road (S)	363	91	544	839	0.433	363	365	617	0.5	0.9	8.347	A
3 - Broad Rushes	545	136	343	994	0.549	545	547	565	1.1	1.5	8.863	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1402	350	16	1879	0.746	1404	1409	1081	3.3	5.1	11.972	B
2 - Station Road (S)	442	111	655	797	0.555	438	447	764	0.9	1.7	11.454	B
3 - Broad Rushes	682	170	417	1001	0.682	680	673	676	1.5	2.5	14.059	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1373	343	17	1877	0.732	1380	1406	1070	5.1	4.2	12.222	B
2 - Station Road (S)	441	110	645	808	0.546	441	458	751	1.7	1.4	12.317	B
3 - Broad Rushes	673	168	419	950	0.709	668	674	668	2.5	3.0	14.148	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1147	287	13	1816	0.632	1140	1158	862	4.2	3.0	8.053	A
2 - Station Road (S)	361	90	528	874	0.413	359	370	624	1.4	0.9	8.792	A
3 - Broad Rushes	530	133	340	1029	0.515	534	549	547	3.0	1.1	9.790	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	963	241	10	1869	0.515	964	974	722	3.0	1.6	6.737	A
2 - Station Road (S)	299	75	451	883	0.338	301	313	524	0.9	0.5	7.255	A
3 - Broad Rushes	449	112	282	1020	0.440	450	462	469	1.1	0.9	7.479	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	511	1088	0.470	508	506	0.0	1.1	6.483	A
			2	1, 3	443	1088	0.407	443	439	0.0	0.9	6.167	A
		2	1	(1, 3, 2)	957			954	952	0.0	0.2	0.128	A
	Exit	1	1		734			734	737	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	828	0.020	16	17	0.0	0.0	4.370	A
			2	1, 2	291	828	0.351	293	293	0.0	0.5	7.442	A
		2	1	(1, 3, 2)	307			307	312	0.0	0.0	0.099	A
	Exit	1	1		517			517	516	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	443	1004	0.441	442	444	0.0	1.1	7.516	A
			2	3, 2	9	1004	0.009	9	10	0.0	0.0	3.488	A
		2	1	(1, 3, 2)	451			451	458	0.0	0.0	0.041	A
	Exit	1	1		459			459	456	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	604	1087	0.556	604	614	1.1	1.6	8.067	A
			2	1, 3	546	1087	0.503	544	535	0.9	1.3	7.033	A
		2	1	(1, 3, 2)	1154			1151	1153	0.2	0.4	0.460	A
	Exit	1	1		876			876	879	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	794	0.026	20	21	0.0	0.0	5.457	A
			2	1, 2	343	794	0.432	343	344	0.5	0.8	8.342	A
		2	1	(1, 3, 2)	363			364	366	0.0	0.0	0.171	A
	Exit	1	1		617			617	626	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	534	986	0.542	533	534	1.1	1.5	8.782	A
			2	3, 2	13	986	0.013	13	12	0.0	0.0	4.375	A
		2	1	(1, 3, 2)	545			547	548	0.0	0.0	0.189	A
	Exit	1	1		565			565	556	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	743	1086	0.684	749	758	1.6	2.2	10.640	B
			2	1, 3	658	1086	0.606	655	651	1.3	2.0	9.154	A
		2	1	(1, 3, 2)	1402			1401	1414	0.4	1.0	1.984	A
	Exit	1	1		1081			1081	1082	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	21	758	0.027	21	24	0.0	0.0	4.365	A
			2	1, 2	420	758	0.554	417	423	0.8	1.5	10.907	B
		2	1	(1, 3, 2)	442			441	450	0.0	0.2	0.882	A
	Exit	1	1		764			764	773	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	667	959	0.696	664	658	1.5	2.4	12.309	B
			2	3, 2	16	959	0.017	16	15	0.0	0.0	4.098	A
		2	1	(1, 3, 2)	682			683	677	0.0	0.2	1.933	A
	Exit	1	1		676			676	675	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	738	1085	0.680	734	742	2.2	2.4	10.265	B
			2	1, 3	641	1085	0.591	645	664	2.0	1.6	9.544	A
		2	1	(1, 3, 2)	1373			1379	1406	1.0	0.3	2.316	A
	Exit	1	1		1070			1070	1093	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	23	761	0.030	23	25	0.0	0.0	4.717	A
			2	1, 2	420	761	0.551	419	434	1.5	1.3	11.556	B
		2	1	(1, 3, 2)	441			442	457	0.2	0.1	1.156	A
	Exit	1	1		751			751	758	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	651	959	0.679	651	659	2.4	2.5	12.293	B
			2	3, 2	17	959	0.017	17	15	0.0	0.0	3.985	A
		2	1	(1, 3, 2)	673			669	675	0.2	0.5	2.041	A
	Exit	1	1		668			668	689	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	619	1087	0.570	611	618	2.4	1.8	8.135	A
			2	1, 3	528	1087	0.486	528	541	1.6	1.2	7.260	A
		2	1	(1, 3, 2)	1147			1147	1154	0.3	0.1	0.325	A
	Exit	1	1		862			862	886	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	19	800	0.024	19	21	0.0	0.0	4.958	A
			2	1, 2	342	800	0.428	340	349	1.3	0.9	8.729	A
		2	1	(1, 3, 2)	361			361	368	0.1	0.0	0.292	A
	Exit	1	1		624			624	630	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	518	987	0.525	522	537	2.5	1.1	9.457	A
			2	3, 2	13	987	0.013	13	12	0.0	0.0	4.188	A
		2	1	(1, 3, 2)	530			531	544	0.5	0.0	0.505	A
	Exit	1	1		547			547	562	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	512	1087	0.471	514	522	1.8	0.7	6.758	A
			2	1, 3	451	1087	0.414	451	452	1.2	0.9	6.455	A
		2	1	(1, 3, 2)	963			963	969	0.1	0.0	0.120	A
	Exit	1	1		722			722	746	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	18	825	0.022	18	18	0.0	0.0	4.870	A
			2	1, 2	280	825	0.340	282	295	0.9	0.5	7.283	A
		2	1	(1, 3, 2)	299			299	311	0.0	0.0	0.114	A
	Exit	1	1		524			524	533	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	439	1007	0.436	440	451	1.1	0.9	7.484	A
			2	3, 2	10	1007	0.010	10	11	0.0	0.0	3.784	A
		2	1	(1, 3, 2)	449			449	461	0.0	0.0	0.088	A
	Exit	1	1		469			469	470	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	511	128	991	1088	0.470	508	506	0.0	1.1	6.483	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	443	111	991	1088	0.407	443	439	0.0	0.9	6.167	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	513	128	-	-	-	511	510	0.0	0.1	0.138	A
				3	444	111	-	-	-	443	442	0.0	0.1	0.116	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	954	812	0.020	16	17	0.0	0.0	4.370	A
			2	1	291	73	974	828	0.351	293	293	0.0	0.5	7.442	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	291	73	-	-	-	291	295	0.0	0.0	0.101	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	17	0.0	0.0	0.064	A
3 - Broad Rushes	Entry	1	1	1	443	111	1108	1004	0.441	442	444	0.0	1.1	7.516	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	9	2	994	900	0.010	9	10	0.0	0.0	3.488	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	443	111	-	-	-	443	448	0.0	0.0	0.043	A
				2	9	2	-	-	-	9	10	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	604	151	991	1087	0.556	604	614	1.1	1.6	8.067	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	546	137	991	1087	0.503	544	535	0.9	1.3	7.033	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	607	152	-	-	-	604	616	0.1	0.2	0.456	A
				3	548	137	-	-	-	546	537	0.1	0.1	0.464	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	974	794	0.026	20	21	0.0	0.0	5.457	A
			2	1	343	86	974	794	0.433	343	344	0.5	0.8	8.342	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	343	86	-	-	-	343	345	0.0	0.0	0.177	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	21	0.0	0.0	0.086	A
3 - Broad Rushes	Entry	1	1	1	534	134	1108	986	0.542	533	534	1.1	1.5	8.782	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1029	917	0.014	13	12	0.0	0.0	4.375	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	533	133	-	-	-	534	536	0.0	0.0	0.191	A
				2	13	3	-	-	-	13	12	0.0	0.0	0.117	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	743	186	991	1086	0.684	749	758	1.6	2.2	10.640	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	658	164	991	1086	0.606	655	651	1.3	2.0	9.154	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	744	186	-	-	-	743	760	0.2	0.6	1.998	A
				3	658	164	-	-	-	658	654	0.1	0.4	1.966	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	974	761	0.027	21	24	0.0	0.0	4.365	A
			2	1	420	105	974	757	0.555	417	423	0.8	1.5	10.907	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	422	105	-	-	-	420	426	0.0	0.2	0.903	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	21	5	-	-	-	21	24	0.0	0.0	0.499	A
3 - Broad Rushes	Entry	1	1	1	667	167	1108	959	0.696	664	658	1.5	2.4	12.309	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1097	948	0.017	16	15	0.0	0.0	4.098	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	666	166	-	-	-	667	662	0.0	0.2	1.941	A
				2	16	4	-	-	-	16	15	0.0	0.0	1.624	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	738	184	991	1085	0.680	734	742	2.2	2.4	10.265	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	641	160	991	1085	0.591	645	664	2.0	1.6	9.544	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	735	184	-	-	-	738	743	0.6	0.2	2.359	A
				3	638	160	-	-	-	641	663	0.4	0.1	2.267	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	974	757	0.030	23	25	0.0	0.0	4.717	A
			2	1	420	105	974	761	0.551	419	434	1.5	1.3	11.556	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	418	105	-	-	-	420	433	0.2	0.1	1.178	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	-	-	-	23	25	0.0	0.0	0.790	A
3 - Broad Rushes	Entry	1	1	1	651	163	1108	959	0.680	651	659	2.4	2.5	12.293	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1097	946	0.018	17	15	0.0	0.0	3.985	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	655	164	-	-	-	651	660	0.2	0.5	2.039	A
				2	17	4	-	-	-	17	15	0.0	0.0	2.119	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	619	155	991	1087	0.570	611	618	2.4	1.8	8.135	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	528	132	991	1087	0.486	528	541	1.6	1.2	7.260	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	619	155	-	-	-	619	615	0.2	0.0	0.321	A
				3	528	132	-	-	-	528	539	0.1	0.0	0.331	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	954	783	0.024	19	21	0.0	0.0	4.958	A
			2	1	342	86	974	800	0.428	340	349	1.3	0.9	8.729	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	342	86	-	-	-	342	347	0.1	0.0	0.298	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	21	0.0	0.0	0.197	A
3 - Broad Rushes	Entry	1	1	1	518	130	1108	988	0.525	522	537	2.5	1.1	9.457	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1063	947	0.013	13	12	0.0	0.0	4.188	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	518	129	-	-	-	518	531	0.5	0.0	0.515	A
				2	13	3	-	-	-	13	12	0.0	0.0	0.108	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	512	128	991	1088	0.471	514	522	1.8	0.7	6.758	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	451	113	991	1087	0.414	451	452	1.2	0.9	6.455	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	512	128	-	-	-	512	518	0.0	0.0	0.122	A
				3	451	113	-	-	-	451	451	0.0	0.0	0.118	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	974	822	0.022	18	18	0.0	0.0	4.870	A
			2	1	280	70	974	825	0.340	282	295	0.9	0.5	7.283	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	280	70	-	-	-	280	293	0.0	0.0	0.122	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	18	5	-	-	-	18	18	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	439	110	1108	1008	0.435	440	451	1.1	0.9	7.484	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	10	3	994	898	0.011	10	11	0.0	0.0	3.784	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	438	110	-	-	-	439	451	0.0	0.0	0.090	A
				2	10	3	-	-	-	10	11	0.0	0.0	0.021	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WoD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	18.45	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.45	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038	WoD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1085	100.000
2 - Station Road (S)		ONE HOUR	✓	633	100.000
3 - Broad Rushes		ONE HOUR	✓	630	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	583	502
	2 - Station Road (S)	620	0	13
	3 - Broad Rushes	606	24	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

From	To			
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
	1 - Station Road (N)	0	2	5
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	5	0	0

Cyclist %

From	To			
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.65	8.13	2.9	A	995	1493
2 - Station Road (S)	0.87	35.60	6.9	E	584	876
3 - Broad Rushes	0.76	18.88	3.3	C	574	861

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	826	206	19	1890	0.437	824	809	938	0.0	1.3	5.469	A
2 - Station Road (S)	490	122	384	889	0.551	489	480	459	0.0	1.4	9.353	A
3 - Broad Rushes	478	119	479	1007	0.474	478	477	395	0.0	1.0	7.802	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	975	244	22	1908	0.511	977	985	1087	1.3	1.7	6.484	A
2 - Station Road (S)	561	140	451	814	0.690	558	564	548	1.4	2.3	13.294	B
3 - Broad Rushes	568	142	545	949	0.599	563	564	464	1.0	1.8	10.248	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1181	295	28	1868	0.632	1178	1188	1352	1.7	2.9	8.133	A
2 - Station Road (S)	704	176	543	806	0.873	702	695	663	2.3	6.4	29.820	D
3 - Broad Rushes	682	171	688	901	0.757	692	692	557	1.8	3.0	17.379	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1193	298	27	1847	0.646	1196	1203	1348	2.9	2.4	7.904	A
2 - Station Road (S)	699	175	556	815	0.859	701	699	667	6.4	6.9	35.605	E
3 - Broad Rushes	686	172	687	903	0.760	688	692	570	3.0	3.3	18.882	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	989	247	23	1898	0.521	989	986	1111	2.4	1.7	6.556	A
2 - Station Road (S)	570	142	462	838	0.680	576	598	550	6.9	2.0	19.443	C
3 - Broad Rushes	563	141	565	916	0.614	569	585	473	3.3	1.6	12.331	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	808	202	18	1822	0.444	809	823	921	1.7	1.4	5.686	A
2 - Station Road (S)	482	120	369	836	0.577	480	490	458	2.0	1.3	10.510	B
3 - Broad Rushes	467	117	471	955	0.489	468	482	378	1.6	0.9	8.096	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	440	1085	0.406	440	436	0.0	0.7	5.622	A
			2	1, 3	386	1085	0.356	384	373	0.0	0.6	5.263	A
		2	1	(1, 3, 2)	826			826	814	0.0	0.0	0.010	A
	Exit	1	1		938			938	928	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	847	0.013	11	10	0.0	0.0	4.607	A
			2	1, 2	478	847	0.564	479	470	0.0	1.2	8.990	A
		2	1	(1, 3, 2)	490			489	485	0.0	0.1	0.440	A
	Exit	1	1		459			459	454	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	459	937	0.490	459	459	0.0	1.0	7.865	A
			2	3, 2	19	937	0.020	19	18	0.0	0.0	3.919	A
		2	1	(1, 3, 2)	478			478	481	0.0	0.0	0.093	A
	Exit	1	1		395			395	383	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	523	1084	0.483	526	532	0.7	0.9	6.644	A
			2	1, 3	451	1084	0.416	451	453	0.6	0.7	6.085	A
		2	1	(1, 3, 2)	975			974	986	0.0	0.1	0.089	A
	Exit	1	1		1087			1087	1095	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	825	0.015	12	11	0.0	0.0	4.233	A
			2	1, 2	547	825	0.663	545	552	1.2	1.9	11.563	B
		2	1	(1, 3, 2)	561			559	567	0.1	0.4	1.866	A
	Exit	1	1		548			548	553	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	545	913	0.597	541	543	1.0	1.7	10.061	B
			2	3, 2	22	913	0.025	22	21	0.0	0.0	4.124	A
		2	1	(1, 3, 2)	568			567	567	0.0	0.1	0.410	A
	Exit	1	1		464			464	465	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	637	1082	0.589	635	636	0.9	1.5	8.181	A
			2	1, 3	544	1082	0.503	543	553	0.7	1.2	7.274	A
		2	1	(1, 3, 2)	1181			1180	1193	0.1	0.2	0.366	A
	Exit	1	1		1352			1352	1345	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	795	0.018	14	14	0.0	0.0	4.792	A
			2	1, 2	689	795	0.866	688	680	1.9	3.2	16.672	C
		2	1	(1, 3, 2)	704			703	699	0.4	3.2	13.304	B
	Exit	1	1		663			663	662	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	659	862	0.764	664	665	1.7	2.6	15.122	C
			2	3, 2	28	862	0.032	28	27	0.0	0.0	4.256	A
		2	1	(1, 3, 2)	682			686	695	0.1	0.5	2.669	A
	Exit	1	1		557			557	567	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	638	1082	0.589	640	645	1.5	1.2	8.005	A
			2	1, 3	555	1082	0.513	556	557	1.2	1.1	7.114	A
		2	1	(1, 3, 2)	1193			1193	1201	0.2	0.1	0.306	A
	Exit	1	1		1348			1348	1350	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	790	0.017	14	15	0.0	0.0	4.778	A
			2	1, 2	687	790	0.870	687	685	3.2	3.5	17.730	C
		2	1	(1, 3, 2)	699			701	701	3.2	3.3	18.122	C
	Exit	1	1		667			667	672	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	660	862	0.765	660	665	2.6	2.7	15.616	C
			2	3, 2	27	862	0.031	27	27	0.0	0.0	4.582	A
		2	1	(1, 3, 2)	686			687	692	0.5	0.6	3.702	A
	Exit	1	1		570			570	572	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	528	1083	0.488	527	526	1.2	1.0	6.724	A
			2	1, 3	461	1083	0.425	462	460	1.1	0.7	6.102	A
		2	1	(1, 3, 2)	989			989	984	0.1	0.0	0.122	A
	Exit	1	1		1111			1111	1147	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	822	0.013	11	12	0.0	0.0	4.328	A
			2	1, 2	562	822	0.684	565	586	3.5	1.8	13.668	B
		2	1	(1, 3, 2)	570			573	590	3.3	0.3	6.181	A
	Exit	1	1		550			550	549	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	541	906	0.597	546	561	2.7	1.5	11.529	B
			2	3, 2	23	906	0.025	23	23	0.0	0.0	4.187	A
		2	1	(1, 3, 2)	563			564	580	0.6	0.1	1.171	A
	Exit	1	1		473			473	472	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	439	1085	0.405	440	445	1.0	0.7	5.754	A
			2	1, 3	369	1085	0.341	369	377	0.7	0.6	5.541	A
		2	1	(1, 3, 2)	808			808	821	0.0	0.0	0.029	A
	Exit	1	1		921			921	942	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	852	0.011	9	10	0.0	0.0	4.365	A
			2	1, 2	473	852	0.555	471	480	1.8	1.2	9.743	A
		2	1	(1, 3, 2)	482			482	487	0.3	0.1	0.900	A
	Exit	1	1		458			458	464	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	449	940	0.478	450	463	1.5	0.8	8.140	A
			2	3, 2	18	940	0.019	18	19	0.0	0.0	4.151	A
		2	1	(1, 3, 2)	467			467	479	0.1	0.0	0.130	A
	Exit	1	1		378			378	387	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	440	110	991	1085	0.406	440	436	0.0	0.7	5.622	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	386	96	991	1085	0.356	384	373	0.0	0.6	5.263	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	440	110	-	-	-	440	439	0.0	0.0	0.008	A
				3	386	96	-	-	-	386	376	0.0	0.0	0.012	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	907	792	0.014	11	10	0.0	0.0	4.607	A
			2	1	478	120	974	847	0.564	479	470	0.0	1.2	8.990	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	479	120	-	-	-	478	475	0.0	0.1	0.440	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	10	0.0	0.0	0.415	A
3 - Broad Rushes	Entry	1	1	1	459	115	1108	937	0.490	459	459	0.0	1.0	7.865	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1083	916	0.020	19	18	0.0	0.0	3.919	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	459	115	-	-	-	459	463	0.0	0.0	0.095	A
				2	19	5	-	-	-	19	18	0.0	0.0	0.064	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	523	131	991	1083	0.483	526	532	0.7	0.9	6.644	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	451	113	991	1084	0.416	451	453	0.6	0.7	6.085	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	524	131	-	-	-	523	532	0.0	0.1	0.095	A
				3	451	113	-	-	-	451	453	0.0	0.0	0.082	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	934	791	0.016	12	11	0.0	0.0	4.233	A
			2	1	547	137	974	825	0.663	545	552	1.2	1.9	11.563	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	549	137	-	-	-	547	555	0.1	0.4	1.878	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	11	0.0	0.0	1.283	A
3 - Broad Rushes	Entry	1	1	1	545	136	1108	914	0.597	541	543	1.0	1.7	10.061	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	1108	911	0.025	22	21	0.0	0.0	4.124	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	546	136	-	-	-	545	546	0.0	0.1	0.413	A
				2	22	6	-	-	-	22	21	0.0	0.0	0.338	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	637	159	991	1082	0.588	635	636	0.9	1.5	8.181	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	544	136	991	1082	0.503	543	553	0.7	1.2	7.274	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	637	159	-	-	-	637	638	0.1	0.1	0.364	A
				3	545	136	-	-	-	544	555	0.0	0.1	0.368	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	943	770	0.018	14	14	0.0	0.0	4.792	A
			2	1	689	172	974	795	0.866	688	680	1.9	3.2	16.672	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	689	172	-	-	-	689	685	0.4	3.2	13.340	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	-	-	-	14	14	0.0	0.1	11.630	B
3 - Broad Rushes	Entry	1	1	1	659	165	1108	862	0.764	664	665	1.7	2.6	15.122	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	28	7	1103	855	0.032	28	27	0.0	0.0	4.256	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	655	164	-	-	-	659	669	0.1	0.5	2.689	A
				2	27	7	-	-	-	28	27	0.0	0.0	2.190	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	638	159	991	1082	0.589	640	645	1.5	1.2	8.005	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	555	139	991	1082	0.513	556	557	1.2	1.1	7.114	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	638	159	-	-	-	638	644	0.1	0.1	0.323	A
				3	555	139	-	-	-	555	557	0.1	0.0	0.287	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	3	961	779	0.018	14	15	0.0	0.0	4.778	A
			2	1	687	172	974	791	0.870	687	685	3.2	3.5	17.730	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	686	171	-	-	-	687	686	3.2	3.3	18.189	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	-	-	-	14	15	0.1	0.0	15.003	C
3 - Broad Rushes	Entry	1	1	1	660	165	1108	862	0.765	660	665	2.6	2.7	15.616	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	1108	863	0.031	27	27	0.0	0.0	4.582	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	659	165	-	-	-	660	665	0.5	0.6	3.726	A
				2	27	7	-	-	-	27	27	0.0	0.0	3.153	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	528	132	991	1083	0.488	527	526	1.2	1.0	6.724	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	461	115	991	1083	0.425	462	460	1.1	0.7	6.102	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	528	132	-	-	-	528	525	0.1	0.0	0.120	A
				3	460	115	-	-	-	461	459	0.0	0.0	0.124	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	929	782	0.014	11	12	0.0	0.0	4.328	A
			2	1	562	141	974	822	0.684	565	586	3.5	1.8	13.668	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	559	140	-	-	-	562	579	3.3	0.3	6.197	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	12	0.0	0.0	5.367	A
3 - Broad Rushes	Entry	1	1	1	541	135	1108	906	0.596	546	561	2.7	1.5	11.529	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	23	6	1103	902	0.025	23	23	0.0	0.0	4.187	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	540	135	-	-	-	541	557	0.6	0.1	1.193	A
				2	23	6	-	-	-	23	23	0.0	0.0	0.684	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	439	110	991	1085	0.405	440	445	1.0	0.7	5.754	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	369	92	991	1085	0.341	369	377	0.7	0.6	5.541	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	439	110	-	-	-	439	444	0.0	0.0	0.033	A
				3	369	92	-	-	-	369	377	0.0	0.0	0.025	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	893	778	0.012	9	10	0.0	0.0	4.365	A
			2	1	473	118	974	853	0.555	471	480	1.8	1.2	9.743	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	473	118	-	-	-	473	478	0.3	0.1	0.906	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	10	0.0	0.0	0.614	A
3 - Broad Rushes	Entry	1	1	1	449	112	1108	940	0.478	450	463	1.5	0.8	8.140	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	4	1103	935	0.019	18	19	0.0	0.0	4.151	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	449	112	-	-	-	449	460	0.1	0.0	0.130	A
				2	18	4	-	-	-	18	19	0.0	0.0	0.116	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	14.67	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.67	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2038	WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1326	100.000
2 - Station Road (S)		ONE HOUR	✓	423	100.000
3 - Broad Rushes		ONE HOUR	✓	642	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	718	608
	2 - Station Road (S)	401	0	22
	3 - Broad Rushes	627	15	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	6	9
	2 - Station Road (S)	8	0	5
	3 - Broad Rushes	12	7	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.80	14.40	6.6	B	1224	1836
2 - Station Road (S)	0.59	13.19	1.8	B	387	581
3 - Broad Rushes	0.73	16.23	3.1	C	585	877

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1014	253	10	1859	0.545	1014	1003	768	0.0	2.2	6.979	A
2 - Station Road (S)	313	78	468	881	0.355	312	313	555	0.0	0.9	7.427	A
3 - Broad Rushes	481	120	294	1027	0.468	483	476	485	0.0	1.0	7.954	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1218	305	14	1831	0.665	1207	1199	936	2.2	3.6	8.430	A
2 - Station Road (S)	383	96	559	814	0.471	388	391	662	0.9	0.9	9.160	A
3 - Broad Rushes	582	145	367	989	0.589	582	571	579	1.0	1.3	9.364	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1478	370	17	1840	0.803	1473	1451	1142	3.6	6.6	13.348	B
2 - Station Road (S)	474	118	672	803	0.590	478	475	819	0.9	1.8	11.867	B
3 - Broad Rushes	702	175	449	978	0.718	710	704	701	1.3	2.8	14.400	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1465	366	16	1855	0.790	1474	1475	1127	6.6	5.9	14.396	B
2 - Station Road (S)	462	116	687	779	0.594	465	472	804	1.8	1.8	13.192	B
3 - Broad Rushes	697	174	440	955	0.730	704	709	711	2.8	3.1	16.232	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1174	294	13	1794	0.654	1167	1196	901	5.9	2.9	9.046	A
2 - Station Road (S)	374	94	537	845	0.443	373	387	644	1.8	1.1	9.208	A
3 - Broad Rushes	563	141	351	999	0.563	564	588	559	3.1	1.5	10.975	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	994	249	11	1911	0.520	999	1007	781	2.9	1.7	6.736	A
2 - Station Road (S)	318	80	453	862	0.369	320	328	557	1.1	0.6	8.008	A
3 - Broad Rushes	483	121	306	1030	0.470	486	492	468	1.5	1.1	8.272	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	546	1088	0.502	545	543	0.0	1.2	7.244	A
			2	1, 3	468	1088	0.430	468	460	0.0	1.0	6.348	A
		2	1	(1, 3, 2)	1014			1014	1012	0.0	0.0	0.137	A
	Exit	1	1		768			768	761	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	17	820	0.021	18	17	0.0	0.0	4.541	A
			2	1, 2	295	820	0.360	294	296	0.0	0.9	7.495	A
		2	1	(1, 3, 2)	313			313	316	0.0	0.0	0.089	A
	Exit	1	1		555			555	554	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	471	1003	0.470	473	465	0.0	1.0	7.868	A
			2	3, 2	9	1003	0.009	10	11	0.0	0.0	3.881	A
		2	1	(1, 3, 2)	481			481	479	0.0	0.0	0.181	A
	Exit	1	1		485			485	477	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	652	1086	0.600	648	652	1.2	1.8	8.528	A
			2	1, 3	562	1086	0.518	559	547	1.0	1.4	7.342	A
		2	1	(1, 3, 2)	1218			1215	1203	0.0	0.3	0.428	A
	Exit	1	1		936			936	929	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	20	790	0.026	20	21	0.0	0.0	4.821	A
			2	1, 2	362	790	0.459	367	370	0.9	0.8	8.860	A
		2	1	(1, 3, 2)	383			383	391	0.0	0.1	0.513	A
	Exit	1	1		662			662	664	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	568	977	0.581	568	558	1.0	1.3	9.234	A
			2	3, 2	14	977	0.014	14	12	0.0	0.0	3.855	A
		2	1	(1, 3, 2)	582			582	572	0.0	0.0	0.253	A
	Exit	1	1		579			579	568	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	795	1085	0.733	802	788	1.8	2.3	11.147	B
			2	1, 3	676	1085	0.623	672	663	1.4	2.3	9.338	A
		2	1	(1, 3, 2)	1478			1472	1457	0.3	1.9	2.998	A
	Exit	1	1		1142			1142	1136	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	30	752	0.040	30	27	0.0	0.1	5.142	A
			2	1, 2	447	752	0.594	449	448	0.8	1.6	11.138	B
		2	1	(1, 3, 2)	474			477	478	0.1	0.1	1.079	A
	Exit	1	1		819			819	804	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	686	948	0.724	693	688	1.3	2.5	13.039	B
			2	3, 2	17	948	0.018	17	16	0.0	0.0	4.038	A
		2	1	(1, 3, 2)	702			703	709	0.0	0.3	1.548	A
	Exit	1	1		701			701	690	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	790	1085	0.728	787	789	2.3	2.7	11.665	B
			2	1, 3	683	1085	0.629	687	686	2.3	1.7	9.863	A
		2	1	(1, 3, 2)	1465			1473	1474	1.9	1.4	3.552	A
	Exit	1	1		1127			1127	1139	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	24	747	0.033	24	26	0.1	0.1	5.398	A
			2	1, 2	439	747	0.587	440	446	1.6	1.7	12.000	B
		2	1	(1, 3, 2)	462			463	473	0.1	0.1	1.559	A
	Exit	1	1		804			804	806	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	684	951	0.719	687	693	2.5	2.6	13.919	B
			2	3, 2	16	951	0.017	16	17	0.0	0.0	4.317	A
		2	1	(1, 3, 2)	697			700	709	0.3	0.5	2.529	A
	Exit	1	1		711			711	712	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	632	1086	0.582	631	648	2.7	1.5	8.877	A
			2	1, 3	542	1086	0.499	537	548	1.7	1.2	7.689	A
		2	1	(1, 3, 2)	1174			1174	1190	1.4	0.1	0.744	A
	Exit	1	1		901			901	940	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	22	797	0.027	22	21	0.1	0.0	4.921	A
			2	1, 2	352	797	0.442	351	366	1.7	1.1	9.182	A
		2	1	(1, 3, 2)	374			374	384	0.1	0.0	0.271	A
	Exit	1	1		644			644	663	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	549	983	0.558	551	574	2.6	1.4	10.156	B
			2	3, 2	14	983	0.014	13	14	0.0	0.0	4.019	A
		2	1	(1, 3, 2)	563			563	584	0.5	0.0	1.037	A
	Exit	1	1		559			559	569	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	540	1087	0.497	546	551	1.5	0.9	7.089	A
			2	1, 3	454	1087	0.417	453	456	1.2	0.9	6.085	A
		2	1	(1, 3, 2)	994			994	1003	0.1	0.0	0.098	A
	Exit	1	1		781			781	793	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	14	824	0.018	15	15	0.0	0.0	4.594	A
			2	1, 2	304	824	0.369	306	313	1.1	0.6	7.958	A
		2	1	(1, 3, 2)	318			318	326	0.0	0.0	0.226	A
	Exit	1	1		557			557	563	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	473	999	0.474	475	481	1.4	1.1	8.189	A
			2	3, 2	10	999	0.010	11	12	0.0	0.0	3.511	A
		2	1	(1, 3, 2)	483			484	491	0.0	0.0	0.202	A
	Exit	1	1		468			468	471	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	546	137	991	1088	0.502	545	543	0.0	1.2	7.244	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	468	117	991	1088	0.430	468	460	0.0	1.0	6.348	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	546	136	-	-	-	546	548	0.0	0.0	0.143	A
				3	468	117	-	-	-	468	464	0.0	0.0	0.130	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	955	808	0.021	18	17	0.0	0.0	4.541	A
			2	1	295	74	974	820	0.360	294	296	0.0	0.9	7.495	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	296	74	-	-	-	295	299	0.0	0.0	0.092	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	17	0.0	0.0	0.038	A
3 - Broad Rushes	Entry	1	1	1	471	118	1108	1003	0.470	473	465	0.0	1.0	7.868	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	9	2	1032	931	0.010	10	11	0.0	0.0	3.881	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	471	118	-	-	-	471	468	0.0	0.0	0.184	A
				2	9	2	-	-	-	9	11	0.0	0.0	0.040	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
			1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	652	163	991	1086	0.600	648	652	1.2	1.8	8.528	A
1 - Station Road (N)	Entry	1	2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	562	141	991	1086	0.518	559	547	1.0	1.4	7.342	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	654	164	-	-	-	652	654	0.0	0.2	0.445	A
				3	564	141	-	-	-	562	549	0.0	0.1	0.408	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	974	794	0.026	20	21	0.0	0.0	4.821	A
			2	1	362	91	974	790	0.459	367	370	0.9	0.8	8.860	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	362	91	-	-	-	362	370	0.0	0.1	0.518	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	20	5	-	-	-	20	21	0.0	0.0	0.427	A
3 - Broad Rushes	Entry	1	1	1	568	142	1108	977	0.581	568	558	1.0	1.3	9.234	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	14	3	1032	910	0.015	14	12	0.0	0.0	3.855	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	568	142	-	-	-	568	560	0.0	0.0	0.254	A
				2	14	3	-	-	-	14	12	0.0	0.0	0.207	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	795	199	991	1085	0.733	802	788	1.8	2.3	11.147	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	676	169	991	1085	0.623	672	663	1.4	2.3	9.338	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	799	200	-	-	-	795	790	0.2	1.1	3.034	A
				3	679	170	-	-	-	676	667	0.1	0.9	2.954	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	974	758	0.040	30	27	0.0	0.1	5.142	A
			2	1	447	112	974	752	0.594	449	448	0.8	1.6	11.138	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	443	111	-	-	-	447	451	0.1	0.1	1.112	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	30	8	-	-	-	30	27	0.0	0.0	0.530	A
3 - Broad Rushes	Entry	1	1	1	686	172	1108	948	0.724	693	688	1.3	2.5	13.039	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	1076	925	0.018	17	16	0.0	0.0	4.038	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	685	171	-	-	-	686	693	0.0	0.3	1.559	A
				2	17	4	-	-	-	17	16	0.0	0.0	1.111	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	790	197	991	1085	0.728	787	789	2.3	2.7	11.665	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	683	171	991	1085	0.629	687	686	2.3	1.7	9.863	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	785	196	-	-	-	790	791	1.1	0.7	3.593	A
				3	680	170	-	-	-	683	683	0.9	0.7	3.503	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	974	748	0.033	24	26	0.1	0.1	5.398	A
			2	1	439	110	974	747	0.588	440	446	1.6	1.7	12.000	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	438	110	-	-	-	439	447	0.1	0.1	1.593	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	24	6	-	-	-	24	26	0.0	0.0	0.974	A
3 - Broad Rushes	Entry	1	1	1	684	171	1108	951	0.719	687	693	2.5	2.6	13.919	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	1087	930	0.018	16	17	0.0	0.0	4.317	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	681	170	-	-	-	684	693	0.3	0.5	2.543	A
				2	16	4	-	-	-	16	17	0.0	0.0	1.992	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	991	1086	0.582	631	648	2.7	1.5	8.877	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	542	135	991	1086	0.499	537	548	1.7	1.2	7.689	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	-	-	-	632	644	0.7	0.0	0.757	A
				3	542	136	-	-	-	542	546	0.7	0.0	0.729	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	965	788	0.028	22	21	0.1	0.0	4.921	A
			2	1	352	88	974	797	0.442	351	366	1.7	1.1	9.182	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	352	88	-	-	-	352	363	0.1	0.0	0.279	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	22	5	-	-	-	22	21	0.0	0.0	0.143	A
3 - Broad Rushes	Entry	1	1	1	549	137	1108	982	0.559	551	574	2.6	1.4	10.156	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	14	3	1087	954	0.014	13	14	0.0	0.0	4.019	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	549	137	-	-	-	549	569	0.5	0.0	1.044	A
				2	14	3	-	-	-	14	14	0.0	0.0	0.763	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	540	135	991	1087	0.497	546	551	1.5	0.9	7.089	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	454	113	991	1087	0.417	453	456	1.2	0.9	6.085	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	540	135	-	-	-	540	549	0.0	0.0	0.104	A
				3	454	113	-	-	-	454	454	0.0	0.0	0.090	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	945	803	0.018	15	15	0.0	0.0	4.594	A
			2	1	304	76	974	825	0.368	306	313	1.1	0.6	7.958	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	304	76	-	-	-	304	310	0.0	0.0	0.233	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	14	4	-	-	-	14	15	0.0	0.0	0.083	A
3 - Broad Rushes	Entry	1	1	1	473	118	1108	999	0.473	475	481	1.4	1.1	8.189	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	10	3	1043	940	0.011	11	12	0.0	0.0	3.511	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	473	118	-	-	-	473	479	0.0	0.0	0.203	A
				2	10	3	-	-	-	10	12	0.0	0.0	0.177	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	34.49	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	34.49	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2038	WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1176	100.000
2 - Station Road (S)		ONE HOUR	✓	667	100.000
3 - Broad Rushes		ONE HOUR	✓	733	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	593	583
	2 - Station Road (S)	654	0	13
	3 - Broad Rushes	709	24	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	12
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	11	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.70	9.72	3.7	A	1081	1622
2 - Station Road (S)	0.95	64.50	14.0	F	609	913
3 - Broad Rushes	0.94	47.31	10.0	E	663	995

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	905	226	18	1827	0.495	902	888	1016	0.0	1.5	6.076	A
2 - Station Road (S)	503	126	446	864	0.582	503	501	475	0.0	1.6	11.298	B
3 - Broad Rushes	539	135	494	945	0.570	540	545	455	0.0	1.5	10.293	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1039	260	22	1802	0.576	1031	1061	1215	1.5	2.5	7.226	A
2 - Station Road (S)	591	148	510	794	0.744	601	599	544	1.6	2.5	16.309	C
3 - Broad Rushes	654	163	588	900	0.727	650	660	522	1.5	3.0	15.363	C

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1294	324	28	1855	0.698	1304	1301	1471	2.5	3.4	9.688	A
2 - Station Road (S)	735	184	651	773	0.950	713	705	681	2.5	11.2	41.587	E
3 - Broad Rushes	805	201	701	895	0.900	797	782	663	3.0	8.8	32.986	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1285	321	24	1867	0.688	1281	1304	1503	3.4	3.7	9.721	A
2 - Station Road (S)	734	184	633	772	0.950	731	727	672	11.2	14.0	64.504	F
3 - Broad Rushes	802	200	716	853	0.940	811	799	648	8.8	10.0	47.312	E

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1088	272	20	1876	0.580	1082	1076	1222	3.7	2.3	7.443	A
2 - Station Road (S)	591	148	538	818	0.722	605	639	563	14.0	2.8	32.276	D
3 - Broad Rushes	642	160	592	923	0.695	650	691	551	10.0	2.5	24.063	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	878	219	18	1867	0.470	875	893	1015	2.3	1.7	6.065	A
2 - Station Road (S)	500	125	443	867	0.576	502	513	450	2.8	1.4	12.558	B
3 - Broad Rushes	538	135	491	978	0.550	542	566	455	2.5	1.3	11.168	B

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	456	1085	0.420	457	447	0.0	0.6	5.690	A
			2	1, 3	449	1085	0.414	446	440	0.0	0.9	6.379	A
		2	1	(1, 3, 2)	905			905	894	0.0	0.0	0.060	A
	Exit	1	1		1016			1016	1017	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	827	0.010	9	10	0.0	0.0	4.111	A
			2	1, 2	494	827	0.597	494	491	0.0	1.4	10.452	B
		2	1	(1, 3, 2)	503			503	507	0.0	0.1	0.967	A
	Exit	1	1		475			475	466	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	521	932	0.559	522	526	0.0	1.4	9.942	A
			2	3, 2	18	932	0.019	18	19	0.0	0.0	3.777	A
		2	1	(1, 3, 2)	539			539	550	0.0	0.1	0.578	A
	Exit	1	1		455			455	450	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	523	1083	0.482	522	533	0.6	1.1	6.599	A
			2	1, 3	514	1083	0.475	510	528	0.9	1.4	7.526	A
		2	1	(1, 3, 2)	1039			1037	1064	0.0	0.1	0.186	A
	Exit	1	1		1215			1215	1224	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	806	0.016	13	13	0.0	0.0	4.492	A
			2	1, 2	585	806	0.727	588	586	1.4	2.1	13.200	B
		2	1	(1, 3, 2)	591			598	602	0.1	0.4	3.277	A
	Exit	1	1		544			544	555	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	629	898	0.700	627	638	1.4	2.5	13.562	B
			2	3, 2	22	898	0.025	22	22	0.0	0.0	4.198	A
		2	1	(1, 3, 2)	654			651	665	0.1	0.5	2.105	A
	Exit	1	1		522			522	540	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	651	1082	0.602	653	655	1.1	1.6	8.508	A
			2	1, 3	645	1082	0.596	651	646	1.4	1.5	9.153	A
		2	1	(1, 3, 2)	1294			1296	1304	0.1	0.3	0.872	A
	Exit	1	1		1471			1471	1449	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	759	0.015	12	13	0.0	0.0	4.865	A
			2	1, 2	703	759	0.926	701	692	2.1	4.0	19.166	C
		2	1	(1, 3, 2)	735			715	713	0.4	7.2	22.504	C
	Exit	1	1		681			681	681	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	772	858	0.900	770	756	2.5	5.0	20.714	C
			2	3, 2	27	858	0.032	28	26	0.0	0.0	4.480	A
		2	1	(1, 3, 2)	805			800	792	0.5	3.8	12.672	B
	Exit	1	1		663			663	660	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	654	1083	0.604	648	657	1.6	1.9	8.519	A
			2	1, 3	632	1083	0.583	633	647	1.5	1.7	9.070	A
		2	1	(1, 3, 2)	1285			1286	1305	0.3	0.2	0.942	A
	Exit	1	1		1503			1503	1486	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	765	0.020	15	15	0.0	0.0	4.920	A
			2	1, 2	714	765	0.933	716	713	4.0	4.0	20.704	C
		2	1	(1, 3, 2)	734			729	727	7.2	10.0	44.091	E
	Exit	1	1		672			672	682	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	785	852	0.922	787	774	5.0	5.0	22.948	C
			2	3, 2	24	852	0.028	24	25	0.0	0.0	4.388	A
		2	1	(1, 3, 2)	802			809	799	3.8	5.0	24.989	C
	Exit	1	1		648			648	661	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	546	1084	0.504	543	545	1.9	1.1	6.977	A
			2	1, 3	542	1084	0.500	538	532	1.7	1.1	7.377	A
		2	1	(1, 3, 2)	1088			1088	1071	0.2	0.1	0.279	A
	Exit	1	1		1222			1222	1293	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	13	796	0.016	13	14	0.0	0.0	4.543	A
			2	1, 2	585	796	0.734	592	626	4.0	2.0	15.485	C
		2	1	(1, 3, 2)	591			598	632	10.0	0.8	17.537	C
	Exit	1	1		563			563	568	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	626	897	0.698	630	668	5.0	2.2	16.577	C
			2	3, 2	20	897	0.022	20	23	0.0	0.0	4.352	A
		2	1	(1, 3, 2)	642			646	680	5.0	0.2	8.351	A
	Exit	1	1		551			551	545	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	431	1085	0.398	431	445	1.1	0.7	5.756	A
			2	1, 3	446	1085	0.411	443	447	1.1	0.9	6.256	A
		2	1	(1, 3, 2)	878			877	890	0.1	0.0	0.076	A
	Exit	1	1		1015			1015	1050	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	12	828	0.014	11	10	0.0	0.0	4.677	A
			2	1, 2	488	828	0.590	491	503	2.0	1.3	11.031	B
		2	1	(1, 3, 2)	500			500	510	0.8	0.1	1.742	A
	Exit	1	1		450			450	465	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	520	933	0.557	524	547	2.2	1.3	10.846	B
			2	3, 2	19	933	0.020	18	19	0.0	0.0	3.773	A
		2	1	(1, 3, 2)	538			538	562	0.2	0.0	0.618	A
	Exit	1	1		455			455	457	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	456	114	991	1085	0.420	457	447	0.0	0.6	5.690	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	449	112	991	1085	0.414	446	440	0.0	0.9	6.379	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	456	114	-	-	-	456	450	0.0	0.0	0.055	A
				3	449	112	-	-	-	449	444	0.0	0.0	0.065	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	901	768	0.011	9	10	0.0	0.0	4.111	A
			2	1	494	123	974	827	0.597	494	491	0.0	1.4	10.452	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	494	124	-	-	-	494	497	0.0	0.1	0.969	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	10	0.0	0.0	0.880	A
3 - Broad Rushes	Entry	1	1	1	521	130	1108	931	0.559	522	526	0.0	1.4	9.942	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	5	1108	928	0.020	18	19	0.0	0.0	3.777	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	520	130	-	-	-	521	532	0.0	0.1	0.584	A
				2	18	5	-	-	-	18	19	0.0	0.0	0.448	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	523	131	991	1083	0.482	522	533	0.6	1.1	6.599	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	514	129	991	1083	0.475	510	528	0.9	1.4	7.526	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	523	131	-	-	-	523	534	0.0	0.1	0.179	A
				3	515	129	-	-	-	514	530	0.0	0.1	0.194	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	917	754	0.017	13	13	0.0	0.0	4.492	A
			2	1	585	146	974	806	0.727	588	586	1.4	2.1	13.200	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	579	145	-	-	-	585	589	0.1	0.4	3.302	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	13	13	0.0	0.0	2.158	A
3 - Broad Rushes	Entry	1	1	1	629	157	1108	898	0.701	627	638	1.4	2.5	13.562	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	1108	897	0.025	22	22	0.0	0.0	4.198	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	631	158	-	-	-	629	643	0.1	0.5	2.103	A
				2	22	6	-	-	-	22	22	0.0	0.0	2.164	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	651	163	991	1082	0.602	653	655	1.1	1.6	8.508	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	645	161	991	1082	0.596	651	646	1.4	1.5	9.153	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	650	163	-	-	-	651	657	0.1	0.2	0.871	A
				3	644	161	-	-	-	645	647	0.1	0.1	0.874	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	933	731	0.016	12	13	0.0	0.0	4.865	A
			2	1	703	176	974	759	0.926	701	692	2.1	4.0	19.166	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	723	181	-	-	-	703	700	0.4	7.1	22.585	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	13	0.0	0.1	18.228	C
3 - Broad Rushes	Entry	1	1	1	772	193	1108	858	0.900	770	756	2.5	5.0	20.714	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	1108	856	0.032	28	26	0.0	0.0	4.480	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	778	195	-	-	-	772	766	0.5	3.7	12.686	B
				2	27	7	-	-	-	27	26	0.0	0.1	12.303	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	654	164	991	1083	0.604	648	657	1.6	1.9	8.519	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	632	158	991	1083	0.583	633	647	1.5	1.7	9.070	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	654	163	-	-	-	654	658	0.2	0.1	0.921	A
				3	631	158	-	-	-	632	647	0.1	0.1	0.966	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	942	736	0.020	15	15	0.0	0.0	4.920	A
			2	1	714	179	974	765	0.933	716	713	4.0	4.0	20.704	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	719	180	-	-	-	714	712	7.1	9.8	44.170	E
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	15	0.1	0.2	40.450	E
3 - Broad Rushes	Entry	1	1	1	785	196	1108	852	0.922	787	774	5.0	5.0	22.948	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1099	845	0.028	24	25	0.0	0.0	4.388	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	778	194	-	-	-	785	773	3.7	4.8	25.054	D
				2	24	6	-	-	-	24	25	0.1	0.2	23.197	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	546	137	991	1084	0.504	543	545	1.9	1.1	6.977	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	542	135	991	1084	0.500	538	532	1.7	1.1	7.377	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	546	137	-	-	-	546	542	0.1	0.0	0.266	A
				3	542	136	-	-	-	542	529	0.1	0.1	0.292	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	13	3	909	742	0.017	13	14	0.0	0.0	4.543	A
			2	1	585	146	974	796	0.734	592	626	4.0	2.0	15.485	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	578	145	-	-	-	585	618	9.8	0.8	17.591	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	13	14	0.2	0.0	15.167	C
3 - Broad Rushes	Entry	1	1	1	626	157	1108	896	0.699	630	668	5.0	2.2	16.577	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1108	892	0.023	20	23	0.0	0.0	4.352	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	622	155	-	-	-	626	657	4.8	0.2	8.353	A
				2	20	5	-	-	-	20	23	0.2	0.0	8.287	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	431	108	991	1085	0.398	431	445	1.1	0.7	5.756	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	446	111	991	1085	0.411	443	447	1.1	0.9	6.256	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	432	108	-	-	-	431	444	0.0	0.0	0.073	A
				3	446	111	-	-	-	446	446	0.1	0.0	0.079	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	851	721	0.016	11	10	0.0	0.0	4.677	A
			2	1	488	122	974	828	0.590	491	503	2.0	1.3	11.031	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	488	122	-	-	-	488	501	0.8	0.1	1.756	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	10	0.0	0.0	1.029	A
3 - Broad Rushes	Entry	1	1	1	520	130	1108	932	0.558	524	547	2.2	1.3	10.846	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1099	926	0.020	18	19	0.0	0.0	3.773	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	520	130	-	-	-	520	543	0.2	0.0	0.616	A
				2	19	5	-	-	-	19	19	0.0	0.0	0.664	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	12.51	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.51	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1293	100.000
2 - Station Road (S)		ONE HOUR	✓	392	100.000
3 - Broad Rushes		ONE HOUR	✓	576	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	702	591
	2 - Station Road (S)	370	0	22
	3 - Broad Rushes	561	15	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	6	9
	2 - Station Road (S)	10	0	6
	3 - Broad Rushes	12	6	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.76	12.70	5.0	B	1186	1780
2 - Station Road (S)	0.54	11.57	1.8	B	358	536
3 - Broad Rushes	0.64	12.72	2.3	B	526	790

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	979	245	9	1847	0.530	976	976	689	0.0	2.2	7.005	A
2 - Station Road (S)	293	73	452	874	0.335	290	290	533	0.0	0.7	7.604	A
3 - Broad Rushes	426	107	274	1003	0.425	424	432	468	0.0	1.0	6.984	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1161	290	13	1872	0.620	1160	1171	833	2.2	2.8	8.250	A
2 - Station Road (S)	343	86	528	841	0.408	341	354	646	0.7	0.9	8.547	A
3 - Broad Rushes	522	131	322	1036	0.504	523	519	546	1.0	1.0	8.058	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1428	357	15	1870	0.764	1429	1420	1015	2.8	4.7	12.045	B
2 - Station Road (S)	422	106	644	793	0.532	428	430	800	0.9	1.1	10.860	B
3 - Broad Rushes	635	159	402	1019	0.623	629	632	671	1.0	2.3	11.018	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1439	360	18	1923	0.749	1445	1441	1018	4.7	5.0	12.697	B
2 - Station Road (S)	434	108	658	810	0.536	432	439	804	1.1	1.8	11.572	B
3 - Broad Rushes	622	155	408	966	0.644	627	640	682	2.3	2.3	12.725	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1143	286	15	1873	0.610	1155	1175	824	5.0	2.5	8.461	A
2 - Station Road (S)	349	87	531	824	0.424	347	359	639	1.8	0.9	9.038	A
3 - Broad Rushes	513	128	325	1022	0.502	515	527	553	2.3	1.1	8.797	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	967	242	12	1874	0.516	971	980	719	2.5	1.8	6.790	A
2 - Station Road (S)	305	76	438	864	0.352	305	308	545	0.9	0.7	7.929	A
3 - Broad Rushes	441	110	287	1030	0.428	444	448	455	1.1	0.7	7.512	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	525	1088	0.483	524	531	0.0	1.1	7.117	A
			2	1, 3	455	1088	0.418	452	446	0.0	1.1	6.501	A
		2	1	(1, 3, 2)	979			980	985	0.0	0.0	0.165	A
	Exit	1	1		689			689	697	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	16	825	0.019	16	15	0.0	0.0	4.754	A
			2	1, 2	277	825	0.335	274	275	0.0	0.6	7.600	A
		2	1	(1, 3, 2)	293			293	293	0.0	0.1	0.154	A
	Exit	1	1		533			533	541	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	417	1010	0.413	415	422	0.0	1.0	6.976	A
			2	3, 2	9	1010	0.009	9	10	0.0	0.0	3.792	A
		2	1	(1, 3, 2)	426			426	436	0.0	0.0	0.090	A
	Exit	1	1		468			468	461	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	632	1087	0.582	633	636	1.1	1.4	8.287	A
			2	1, 3	528	1087	0.486	528	535	1.1	1.2	7.407	A
		2	1	(1, 3, 2)	1161			1160	1173	0.0	0.2	0.351	A
	Exit	1	1		833			833	839	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	19	800	0.023	19	21	0.0	0.0	4.722	A
			2	1, 2	324	800	0.405	322	333	0.6	0.9	8.425	A
		2	1	(1, 3, 2)	343			342	355	0.1	0.0	0.336	A
	Exit	1	1		646			646	649	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	509	993	0.512	510	506	1.0	1.0	8.005	A
			2	3, 2	13	993	0.013	13	13	0.0	0.0	3.602	A
		2	1	(1, 3, 2)	522			522	519	0.0	0.0	0.170	A
	Exit	1	1		546			546	556	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	787	1086	0.725	785	770	1.4	2.4	10.928	B
			2	1, 3	643	1086	0.592	644	651	1.2	1.6	8.933	A
		2	1	(1, 3, 2)	1428			1431	1426	0.2	0.6	2.009	A
	Exit	1	1		1015			1015	1019	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	27	761	0.035	27	26	0.0	0.0	4.640	A
			2	1, 2	396	761	0.520	402	404	0.9	1.0	10.588	B
		2	1	(1, 3, 2)	422			422	431	0.0	0.1	0.643	A
	Exit	1	1		800			800	787	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	620	965	0.643	614	615	1.0	2.2	10.612	B
			2	3, 2	15	965	0.016	15	17	0.0	0.0	3.778	A
		2	1	(1, 3, 2)	635			635	637	0.0	0.1	0.589	A
	Exit	1	1		671			671	676	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	782	1085	0.721	787	782	2.4	2.4	11.297	B
			2	1, 3	659	1085	0.607	658	659	1.6	1.7	8.961	A
		2	1	(1, 3, 2)	1439			1442	1442	0.6	0.9	2.438	A
	Exit	1	1		1018			1018	1040	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	23	757	0.031	23	23	0.0	0.1	4.977	A
			2	1, 2	410	757	0.541	408	416	1.0	1.5	10.752	B
		2	1	(1, 3, 2)	434			433	441	0.1	0.2	1.121	A
	Exit	1	1		804			804	798	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	607	962	0.631	610	624	2.2	2.1	11.573	B
			2	3, 2	18	962	0.018	18	17	0.0	0.0	4.061	A
		2	1	(1, 3, 2)	622			625	640	0.1	0.2	1.357	A
	Exit	1	1		682			682	682	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	619	1086	0.570	624	633	2.4	1.3	8.491	A
			2	1, 3	528	1086	0.486	531	542	1.7	1.1	7.166	A
		2	1	(1, 3, 2)	1143			1147	1168	0.9	0.1	0.609	A
	Exit	1	1		824			824	852	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	23	799	0.028	22	20	0.1	0.1	5.129	A
			2	1, 2	326	799	0.408	325	339	1.5	0.8	8.925	A
		2	1	(1, 3, 2)	349			349	356	0.2	0.1	0.358	A
	Exit	1	1		639			639	647	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	497	992	0.501	499	513	2.1	1.1	8.757	A
			2	3, 2	15	992	0.015	15	14	0.0	0.0	4.070	A
		2	1	(1, 3, 2)	513			512	523	0.2	0.0	0.180	A
	Exit	1	1		553			553	562	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	530	1087	0.487	533	533	1.3	0.9	6.894	A
			2	1, 3	438	1087	0.403	438	447	1.1	0.9	6.267	A
		2	1	(1, 3, 2)	967			968	978	0.1	0.0	0.183	A
	Exit	1	1		719			719	728	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	17	830	0.021	18	17	0.1	0.0	5.217	A
			2	1, 2	287	830	0.346	287	292	0.8	0.6	7.865	A
		2	1	(1, 3, 2)	305			304	308	0.1	0.0	0.219	A
	Exit	1	1		545			545	545	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	429	1006	0.426	432	436	1.1	0.7	7.531	A
			2	3, 2	12	1006	0.012	12	11	0.0	0.0	3.815	A
		2	1	(1, 3, 2)	441			440	446	0.0	0.0	0.090	A
	Exit	1	1		455			455	464	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	525	131	991	1088	0.483	524	531	0.0	1.1	7.117	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	455	114	991	1088	0.418	452	446	0.0	1.1	6.501	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	524	131	-	-	-	525	535	0.0	0.0	0.182	A
				3	455	114	-	-	-	455	450	0.0	0.0	0.145	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	926	791	0.020	16	15	0.0	0.0	4.754	A
			2	1	277	69	974	825	0.336	274	275	0.0	0.6	7.600	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	277	69	-	-	-	277	277	0.0	0.1	0.159	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	16	4	-	-	-	16	15	0.0	0.0	0.063	A
3 - Broad Rushes	Entry	1	1	1	417	104	1108	1010	0.413	415	422	0.0	1.0	6.976	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	9	2	988	900	0.010	9	10	0.0	0.0	3.792	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	417	104	-	-	-	417	426	0.0	0.0	0.092	A
				2	9	2	-	-	-	9	10	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	991	1087	0.582	633	636	1.1	1.4	8.287	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	528	132	991	1087	0.486	528	535	1.1	1.2	7.407	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	632	158	-	-	-	632	638	0.0	0.1	0.376	A
				3	528	132	-	-	-	528	536	0.0	0.1	0.321	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	974	799	0.023	19	21	0.0	0.0	4.722	A
			2	1	324	81	974	801	0.404	322	333	0.6	0.9	8.425	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	324	81	-	-	-	324	334	0.1	0.0	0.347	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	19	5	-	-	-	19	21	0.0	0.0	0.168	A
3 - Broad Rushes	Entry	1	1	1	509	127	1108	993	0.512	510	506	1.0	1.0	8.005	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	13	3	1065	951	0.014	13	13	0.0	0.0	3.602	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	509	127	-	-	-	509	506	0.0	0.0	0.171	A
				2	13	3	-	-	-	13	13	0.0	0.0	0.150	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	787	197	991	1086	0.725	785	770	1.4	2.4	10.928	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	643	161	991	1086	0.592	644	651	1.2	1.6	8.933	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	786	196	-	-	-	787	774	0.1	0.3	2.047	A
				3	643	161	-	-	-	643	652	0.1	0.3	1.964	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	974	763	0.035	27	26	0.0	0.0	4.640	A
			2	1	396	99	974	761	0.520	402	404	0.9	1.0	10.588	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	395	99	-	-	-	396	405	0.0	0.1	0.668	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	-	-	-	27	26	0.0	0.0	0.259	A
3 - Broad Rushes	Entry	1	1	1	620	155	1108	965	0.643	614	615	1.0	2.2	10.612	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1087	947	0.016	15	17	0.0	0.0	3.778	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	619	155	-	-	-	620	620	0.0	0.1	0.590	A
				2	15	4	-	-	-	15	17	0.0	0.0	0.558	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	782	196	991	1085	0.721	787	782	2.4	2.4	11.297	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	659	165	991	1085	0.607	658	659	1.6	1.7	8.961	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	782	196	-	-	-	782	782	0.3	0.6	2.486	A
				3	657	164	-	-	-	659	660	0.3	0.3	2.379	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	965	751	0.031	23	23	0.0	0.1	4.977	A
			2	1	410	102	974	758	0.541	408	416	1.0	1.5	10.752	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	410	103	-	-	-	410	418	0.1	0.2	1.157	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	-	-	-	23	23	0.0	0.0	0.482	A
3 - Broad Rushes	Entry	1	1	1	607	152	1108	962	0.631	610	624	2.2	2.1	11.573	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	4	1098	950	0.019	18	17	0.0	0.0	4.061	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	604	151	-	-	-	607	623	0.1	0.2	1.371	A
				2	18	4	-	-	-	18	17	0.0	0.0	0.856	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	619	155	991	1086	0.570	624	633	2.4	1.3	8.491	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	528	132	991	1086	0.486	531	542	1.7	1.1	7.166	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	617	154	-	-	-	619	629	0.6	0.0	0.599	A
				3	527	132	-	-	-	528	539	0.3	0.0	0.620	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	965	786	0.029	22	20	0.1	0.1	5.129	A
			2	1	326	81	974	799	0.408	325	339	1.5	0.8	8.925	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	326	82	-	-	-	326	336	0.2	0.1	0.374	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	23	6	-	-	-	23	20	0.0	0.0	0.111	A
3 - Broad Rushes	Entry	1	1	1	497	124	1108	992	0.502	499	513	2.1	1.1	8.757	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	1076	960	0.015	15	14	0.0	0.0	4.070	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	498	124	-	-	-	497	509	0.2	0.0	0.180	A
				2	15	4	-	-	-	15	14	0.0	0.0	0.182	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	530	132	991	1087	0.487	533	533	1.3	0.9	6.894	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	438	110	991	1087	0.403	438	447	1.1	0.9	6.267	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	529	132	-	-	-	530	531	0.0	0.0	0.189	A
				3	438	109	-	-	-	438	447	0.0	0.0	0.175	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	955	808	0.022	18	17	0.1	0.0	5.217	A
			2	1	287	72	974	829	0.346	287	292	0.8	0.6	7.865	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	287	72	-	-	-	287	291	0.1	0.0	0.224	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	17	4	-	-	-	17	17	0.0	0.0	0.122	A
3 - Broad Rushes	Entry	1	1	1	429	107	1108	1006	0.426	432	436	1.1	0.7	7.531	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	12	3	1054	952	0.012	12	11	0.0	0.0	3.815	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	429	107	-	-	-	429	434	0.0	0.0	0.091	A
				2	12	3	-	-	-	12	11	0.0	0.0	0.066	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2028 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	18.73	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.73	C

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	1123	100.000
2 - Station Road (S)		ONE HOUR	✓	602	100.000
3 - Broad Rushes		ONE HOUR	✓	668	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	601	522
	2 - Station Road (S)	590	0	12
	3 - Broad Rushes	642	26	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	5
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	5	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.66	8.56	3.0	A	1028	1542
2 - Station Road (S)	0.86	30.47	5.6	D	557	835
3 - Broad Rushes	0.83	25.17	4.8	D	610	915

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	848	212	20	1934	0.438	847	842	921	0.0	1.3	5.754	A
2 - Station Road (S)	455	114	387	864	0.527	459	453	480	0.0	1.1	9.439	A
3 - Broad Rushes	494	124	449	957	0.516	492	491	397	0.0	1.2	7.990	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1010	252	24	1885	0.536	1008	1016	1110	1.3	1.7	6.640	A
2 - Station Road (S)	548	137	467	849	0.645	547	541	565	1.1	2.0	12.408	B
3 - Broad Rushes	596	149	536	951	0.627	598	603	479	1.2	1.5	10.856	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1242	311	29	1886	0.658	1242	1235	1349	1.7	3.0	8.544	A
2 - Station Road (S)	670	167	586	779	0.860	663	659	685	2.0	5.6	25.853	D
3 - Broad Rushes	734	183	652	925	0.794	726	722	597	1.5	4.8	18.811	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	1230	307	29	1873	0.657	1233	1239	1375	3.0	2.9	8.558	A
2 - Station Road (S)	676	169	576	804	0.840	675	673	686	5.6	5.6	30.473	D
3 - Broad Rushes	734	184	660	889	0.826	744	745	590	4.8	4.7	25.170	D

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	993	248	24	1914	0.519	995	1014	1115	2.9	1.7	6.557	A
2 - Station Road (S)	546	137	465	851	0.642	549	565	554	5.6	1.7	17.337	C
3 - Broad Rushes	600	150	538	985	0.609	601	623	476	4.7	1.9	13.125	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	846	212	19	1875	0.451	844	855	915	1.7	1.5	5.713	A
2 - Station Road (S)	445	111	389	832	0.535	447	462	475	1.7	1.0	9.378	A
3 - Broad Rushes	501	125	437	976	0.513	497	510	398	1.9	1.3	8.675	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	461	1084	0.425	460	451	0.0	0.8	5.905	A
			2	1, 3	387	1084	0.357	387	391	0.0	0.5	5.481	A
		2	1	(1, 3, 2)	848			848	847	0.0	0.0	0.043	A
	Exit	1	1		921			921	915	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	10	846	0.012	10	9	0.0	0.0	4.777	A
			2	1, 2	446	846	0.527	449	444	0.0	1.1	9.088	A
		2	1	(1, 3, 2)	455			456	457	0.0	0.0	0.439	A
	Exit	1	1		480			480	471	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	474	948	0.500	472	471	0.0	1.1	8.025	A
			2	3, 2	20	948	0.021	20	20	0.0	0.0	3.873	A
		2	1	(1, 3, 2)	494			494	496	0.0	0.0	0.137	A
	Exit	1	1		397			397	400	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	541	1083	0.500	541	543	0.8	0.9	6.838	A
			2	1, 3	469	1083	0.433	467	472	0.5	0.8	6.116	A
		2	1	(1, 3, 2)	1010			1010	1017	0.0	0.0	0.132	A
	Exit	1	1		1110			1110	1109	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	820	0.014	11	11	0.0	0.0	4.807	A
			2	1, 2	536	820	0.654	536	531	1.1	1.7	10.914	B
		2	1	(1, 3, 2)	548			547	544	0.0	0.3	1.595	A
	Exit	1	1		565			565	567	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	573	917	0.625	574	579	1.1	1.4	10.612	B
			2	3, 2	24	917	0.027	24	24	0.0	0.1	4.154	A
		2	1	(1, 3, 2)	596			597	604	0.0	0.0	0.515	A
	Exit	1	1		479			479	483	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	654	1081	0.605	656	660	0.9	1.6	8.691	A
			2	1, 3	588	1081	0.544	586	575	0.8	1.3	7.335	A
		2	1	(1, 3, 2)	1242			1243	1240	0.0	0.1	0.471	A
	Exit	1	1		1349			1349	1340	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	781	0.015	11	13	0.0	0.0	4.833	A
			2	1, 2	657	781	0.841	652	646	1.7	3.3	15.889	C
		2	1	(1, 3, 2)	670			668	665	0.3	2.3	10.090	B
	Exit	1	1		685			685	689	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	700	875	0.799	697	694	1.4	3.4	15.705	C
			2	3, 2	29	875	0.033	29	28	0.1	0.0	4.403	A
		2	1	(1, 3, 2)	734			728	730	0.0	1.3	3.485	A
	Exit	1	1		597			597	587	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	653	1081	0.604	657	661	1.6	1.4	8.493	A
			2	1, 3	576	1081	0.533	576	578	1.3	1.3	7.529	A
		2	1	(1, 3, 2)	1230			1229	1238	0.1	0.2	0.507	A
	Exit	1	1		1375			1375	1375	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	15	784	0.019	15	13	0.0	0.0	4.481	A
			2	1, 2	659	784	0.840	660	659	3.3	2.9	16.820	C
		2	1	(1, 3, 2)	676			674	671	2.3	2.7	13.878	B
	Exit	1	1		686			686	690	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	708	872	0.812	715	716	3.4	3.3	17.934	C
			2	3, 2	29	872	0.033	29	29	0.0	0.0	4.106	A
		2	1	(1, 3, 2)	734			737	744	1.3	1.3	7.794	A
	Exit	1	1		590			590	591	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	528	1083	0.488	530	541	1.4	0.9	6.606	A
			2	1, 3	464	1083	0.428	465	473	1.3	0.8	6.310	A
		2	1	(1, 3, 2)	993			993	1010	0.2	0.0	0.093	A
	Exit	1	1		1115			1115	1153	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	11	821	0.013	11	10	0.0	0.0	4.706	A
			2	1, 2	536	821	0.654	538	554	2.9	1.6	12.405	B
		2	1	(1, 3, 2)	546			547	559	2.7	0.1	5.285	A
	Exit	1	1		554			554	565	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	577	916	0.630	577	599	3.3	1.8	12.053	B
			2	3, 2	24	916	0.026	24	24	0.0	0.0	4.183	A
		2	1	(1, 3, 2)	600			601	617	1.3	0.1	1.526	A
	Exit	1	1		476			476	483	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	457	1085	0.422	456	457	0.9	0.9	5.885	A
			2	1, 3	389	1085	0.359	389	397	0.8	0.6	5.413	A
		2	1	(1, 3, 2)	846			847	854	0.0	0.0	0.044	A
	Exit	1	1		915			915	943	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	9	846	0.011	9	8	0.0	0.0	4.124	A
			2	1, 2	437	846	0.516	437	454	1.6	1.0	8.943	A
		2	1	(1, 3, 2)	445			446	460	0.1	0.0	0.537	A
	Exit	1	1		475			475	477	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	482	952	0.506	478	490	1.8	1.2	8.644	A
			2	3, 2	19	952	0.020	19	20	0.0	0.0	4.124	A
		2	1	(1, 3, 2)	501			501	507	0.1	0.0	0.223	A
	Exit	1	1		398			398	406	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	461	115	991	1084	0.425	460	451	0.0	0.8	5.905	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	387	97	991	1084	0.357	387	391	0.0	0.5	5.481	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	461	115	-	-	-	461	454	0.0	0.0	0.047	A
				3	387	97	-	-	-	387	393	0.0	0.0	0.038	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	893	773	0.013	10	9	0.0	0.0	4.777	A
			2	1	446	112	974	846	0.527	449	444	0.0	1.1	9.088	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	445	111	-	-	-	446	448	0.0	0.0	0.446	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	-	-	-	10	9	0.0	0.0	0.103	A
3 - Broad Rushes	Entry	1	1	1	474	118	1108	947	0.500	472	471	0.0	1.1	8.025	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	1108	947	0.021	20	20	0.0	0.0	3.873	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	474	119	-	-	-	474	476	0.0	0.0	0.141	A
				2	20	5	-	-	-	20	20	0.0	0.0	0.042	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	541	135	991	1083	0.500	541	543	0.8	0.9	6.838	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	469	117	991	1083	0.433	467	472	0.5	0.8	6.116	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	541	135	-	-	-	541	544	0.0	0.0	0.141	A
				3	469	117	-	-	-	469	473	0.0	0.0	0.122	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	909	765	0.015	11	11	0.0	0.0	4.807	A
			2	1	536	134	974	820	0.654	536	531	1.1	1.7	10.914	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	537	134	-	-	-	536	533	0.0	0.3	1.596	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.0	0.0	1.548	A
3 - Broad Rushes	Entry	1	1	1	573	143	1108	917	0.624	574	579	1.1	1.4	10.612	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1108	920	0.027	24	24	0.0	0.1	4.154	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	572	143	-	-	-	573	580	0.0	0.0	0.524	A
				2	24	6	-	-	-	24	24	0.0	0.0	0.306	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	654	164	991	1081	0.605	656	660	0.9	1.6	8.691	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	588	147	991	1081	0.544	586	575	0.8	1.3	7.335	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	654	163	-	-	-	654	663	0.0	0.1	0.467	A
				3	588	147	-	-	-	588	577	0.0	0.1	0.477	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	952	772	0.015	11	13	0.0	0.0	4.833	A
			2	1	657	164	974	780	0.841	652	646	1.7	3.3	15.889	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	658	165	-	-	-	657	653	0.3	2.2	10.107	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	11	13	0.0	0.1	9.229	A
3 - Broad Rushes	Entry	1	1	1	700	175	1108	875	0.799	697	694	1.4	3.4	15.705	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	29	7	1108	876	0.033	29	28	0.1	0.0	4.403	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	706	176	-	-	-	700	702	0.0	1.3	3.502	A
				2	28	7	-	-	-	29	28	0.0	0.0	3.097	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	653	163	991	1081	0.604	657	661	1.6	1.4	8.493	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	576	144	991	1081	0.533	576	578	1.3	1.3	7.529	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	653	163	-	-	-	653	660	0.1	0.1	0.529	A
				3	576	144	-	-	-	576	578	0.1	0.1	0.482	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	942	756	0.019	15	13	0.0	0.0	4.481	A
			2	1	659	165	974	784	0.840	660	659	3.3	2.9	16.820	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	661	165	-	-	-	659	658	2.2	2.6	13.914	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	15	4	-	-	-	15	13	0.1	0.1	12.130	B
3 - Broad Rushes	Entry	1	1	1	708	177	1108	872	0.812	715	716	3.4	3.3	17.934	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	29	7	1108	875	0.033	29	29	0.0	0.0	4.106	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	705	176	-	-	-	708	715	1.3	1.3	7.811	A
				2	29	7	-	-	-	29	29	0.0	0.0	7.382	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	528	132	991	1083	0.488	530	541	1.4	0.9	6.606	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	464	116	991	1083	0.428	465	473	1.3	0.8	6.310	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	528	132	-	-	-	528	539	0.1	0.0	0.083	A
				3	464	116	-	-	-	464	471	0.1	0.0	0.104	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	914	764	0.014	11	10	0.0	0.0	4.706	A
			2	1	536	134	974	820	0.654	538	554	2.9	1.6	12.405	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	535	134	-	-	-	536	549	2.6	0.1	5.293	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	10	0.1	0.0	4.843	A
3 - Broad Rushes	Entry	1	1	1	577	144	1108	916	0.630	577	599	3.3	1.8	12.053	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	24	6	1096	904	0.026	24	24	0.0	0.0	4.183	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	576	144	-	-	-	577	593	1.3	0.1	1.518	A
				2	24	6	-	-	-	24	24	0.0	0.0	1.713	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	457	114	991	1085	0.422	456	457	0.9	0.9	5.885	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	389	97	991	1084	0.359	389	397	0.8	0.6	5.413	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	457	114	-	-	-	457	457	0.0	0.0	0.049	A
				3	389	97	-	-	-	389	397	0.0	0.0	0.039	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	876	758	0.012	9	8	0.0	0.0	4.124	A
			2	1	437	109	974	846	0.516	437	454	1.6	1.0	8.943	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	436	109	-	-	-	437	451	0.1	0.0	0.537	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	8	0.0	0.0	0.543	A
3 - Broad Rushes	Entry	1	1	1	482	120	1108	952	0.506	478	490	1.8	1.2	8.644	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	1108	950	0.020	19	20	0.0	0.0	4.124	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	482	120	-	-	-	482	488	0.1	0.0	0.229	A
				2	19	5	-	-	-	19	20	0.0	0.0	0.076	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	7.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.10	A

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2038	2a WD Flows	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	145	100.000
2 - Station Road (S)		ONE HOUR	✓	717	100.000
3 - Broad Rushes		ONE HOUR	✓	634	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	52	93
	2 - Station Road (S)	282	0	435
	3 - Broad Rushes	215	419	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	6	9
	2 - Station Road (S)	8	0	5
	3 - Broad Rushes	12	7	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.11	4.66	0.3	A	131	196
2 - Station Road (S)	0.55	7.86	1.8	A	658	987
3 - Broad Rushes	0.46	6.80	1.5	A	584	877

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	104	26	310	1513	0.069	104	109	371	0.0	0.0	3.976	A
2 - Station Road (S)	548	137	63	1449	0.378	553	546	352	0.0	0.6	5.938	A
3 - Broad Rushes	461	115	219	1548	0.298	464	465	398	0.0	0.5	5.093	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	131	33	371	1458	0.090	130	136	456	0.0	0.2	4.327	A
2 - Station Road (S)	637	159	88	1478	0.431	638	651	413	0.6	1.2	6.829	A
3 - Broad Rushes	576	144	250	1580	0.365	576	571	475	0.5	1.1	5.902	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	155	39	472	1492	0.104	156	161	559	0.2	0.2	4.661	A
2 - Station Road (S)	787	197	102	1468	0.536	788	783	527	1.2	1.7	7.855	A
3 - Broad Rushes	713	178	314	1554	0.459	717	709	575	1.1	1.5	6.801	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	156	39	458	1470	0.106	155	165	550	0.2	0.3	4.540	A
2 - Station Road (S)	807	202	99	1477	0.546	806	801	515	1.7	1.8	7.688	A
3 - Broad Rushes	688	172	320	1481	0.465	689	711	585	1.5	1.3	6.556	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	123	31	385	1443	0.085	123	135	441	0.3	0.1	4.553	A
2 - Station Road (S)	629	157	82	1460	0.431	624	645	426	1.8	1.4	6.571	A
3 - Broad Rushes	582	145	246	1543	0.377	579	581	460	1.3	1.0	5.870	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	115	29	318	1537	0.075	115	120	379	0.1	0.2	4.412	A
2 - Station Road (S)	538	135	76	1410	0.382	537	555	356	1.4	0.9	5.875	A
3 - Broad Rushes	486	122	215	1557	0.312	482	487	398	1.0	0.9	5.247	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	41	990	0.041	41	40	0.0	0.0	4.036	A
			2	1, 3	63	990	0.064	63	69	0.0	0.0	3.940	A
		2	1	(1, 3, 2)	104			104	110	0.0	0.0	0.000	A
	Exit	1	1		371			371	371	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	330	953	0.346	335	333	0.0	0.4	6.231	A
			2	1, 2	218	953	0.229	219	213	0.0	0.3	5.325	A
		2	1	(1, 3, 2)	548			548	549	0.0	0.0	0.056	A
	Exit	1	1		352			352	347	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	154	1030	0.150	153	158	0.0	0.2	4.755	A
			2	3, 2	307	1030	0.298	310	307	0.0	0.3	5.257	A
		2	1	(1, 3, 2)	461			461	467	0.0	0.0	0.001	A
	Exit	1	1		398			398	403	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	43	970	0.044	42	46	0.0	0.0	3.821	A
			2	1, 3	89	970	0.092	88	89	0.0	0.1	4.601	A
		2	1	(1, 3, 2)	131			131	136	0.0	0.0	0.000	A
	Exit	1	1		456			456	455	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	387	945	0.409	387	391	0.4	0.8	7.065	A
			2	1, 2	250	945	0.264	250	260	0.3	0.3	6.003	A
		2	1	(1, 3, 2)	637			637	653	0.0	0.0	0.181	A
	Exit	1	1		413			413	423	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	205	1019	0.201	205	194	0.2	0.4	4.807	A
			2	3, 2	371	1019	0.365	371	377	0.3	0.7	6.365	A
		2	1	(1, 3, 2)	576			577	574	0.0	0.0	0.050	A
	Exit	1	1		475			475	480	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	55	937	0.058	55	55	0.0	0.0	4.424	A
			2	1, 3	101	937	0.108	102	106	0.1	0.2	4.788	A
		2	1	(1, 3, 2)	155			155	161	0.0	0.0	0.000	A
	Exit	1	1		559			559	552	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	471	941	0.501	474	473	0.8	0.9	8.037	A
			2	1, 2	317	941	0.337	314	311	0.3	0.8	6.051	A
		2	1	(1, 3, 2)	787			789	785	0.0	0.1	0.593	A
	Exit	1	1		527			527	523	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	244	996	0.245	245	241	0.4	0.3	5.356	A
			2	3, 2	470	996	0.472	472	468	0.7	1.2	7.382	A
		2	1	(1, 3, 2)	713			713	711	0.0	0.0	0.084	A
	Exit	1	1		575			575	578	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	56	942	0.059	56	60	0.0	0.1	4.220	A
			2	1, 3	100	942	0.106	99	106	0.2	0.2	4.725	A
		2	1	(1, 3, 2)	156			156	166	0.0	0.0	0.000	A
	Exit	1	1		550			550	562	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	488	942	0.518	486	482	0.9	1.1	7.877	A
			2	1, 2	319	942	0.339	320	319	0.8	0.6	6.353	A
		2	1	(1, 3, 2)	807			807	802	0.1	0.2	0.404	A
	Exit	1	1		515			515	529	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	229	994	0.230	231	242	0.3	0.2	5.030	A
			2	3, 2	460	994	0.462	458	469	1.2	1.1	7.257	A
		2	1	(1, 3, 2)	688			688	710	0.0	0.0	0.035	A
	Exit	1	1		585			585	588	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	41	966	0.042	41	48	0.1	0.1	4.320	A
			2	1, 3	82	966	0.085	82	86	0.2	0.0	4.690	A
		2	1	(1, 3, 2)	123			123	134	0.0	0.0	0.000	A
	Exit	1	1		441			441	450	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	381	947	0.402	377	391	1.1	0.8	6.899	A
			2	1, 2	247	947	0.261	246	254	0.6	0.5	5.677	A
		2	1	(1, 3, 2)	629			629	644	0.2	0.0	0.152	A
	Exit	1	1		426			426	433	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	195	1020	0.191	194	196	0.2	0.3	5.121	A
			2	3, 2	387	1020	0.379	385	385	1.1	0.7	6.155	A
		2	1	(1, 3, 2)	582			582	580	0.0	0.0	0.054	A
	Exit	1	1		460			460	477	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	39	987	0.039	39	42	0.1	0.0	3.975	A
			2	1, 3	76	987	0.077	76	78	0.0	0.1	4.662	A
		2	1	(1, 3, 2)	115			115	120	0.0	0.0	0.000	A
	Exit	1	1		379			379	383	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	321	949	0.338	322	334	0.8	0.4	6.130	A
			2	1, 2	217	949	0.229	215	221	0.5	0.5	5.284	A
		2	1	(1, 3, 2)	538			538	553	0.0	0.0	0.076	A
	Exit	1	1		356			356	367	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	165	1031	0.160	164	162	0.3	0.3	4.806	A
			2	3, 2	322	1031	0.312	318	324	0.7	0.7	5.444	A
		2	1	(1, 3, 2)	486			486	486	0.0	0.0	0.010	A
	Exit	1	1		398			398	412	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	991	990	0.041	41	40	0.0	0.0	4.036	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	63	16	991	989	0.064	63	69	0.0	0.0	3.940	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	-	-	-	41	40	0.0	0.0	0.000	A
				3	63	16	-	-	-	63	70	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	83	974	953	0.346	335	333	0.0	0.4	6.231	A
			2	1	218	55	974	953	0.229	219	213	0.0	0.3	5.325	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	218	55	-	-	-	218	214	0.0	0.0	0.043	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	330	82	-	-	-	330	335	0.0	0.0	0.065	A
3 - Broad Rushes	Entry	1	1	1	154	39	1108	1031	0.150	153	158	0.0	0.2	4.755	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	307	77	1108	1031	0.298	310	307	0.0	0.3	5.257	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	154	39	-	-	-	154	159	0.0	0.0	0.000	A
				2	307	77	-	-	-	307	308	0.0	0.0	0.002	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	991	971	0.044	42	46	0.0	0.0	3.821	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	89	22	991	971	0.092	88	89	0.0	0.1	4.601	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	-	-	-	43	46	0.0	0.0	0.000	A
				3	89	22	-	-	-	89	90	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	387	97	974	945	0.409	387	391	0.4	0.8	7.065	A
			2	1	250	62	974	945	0.264	250	260	0.3	0.3	6.003	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	250	62	-	-	-	250	261	0.0	0.0	0.140	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	387	97	-	-	-	387	393	0.0	0.0	0.207	A
3 - Broad Rushes	Entry	1	1	1	205	51	1108	1020	0.201	205	194	0.2	0.4	4.807	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	371	93	1108	1019	0.365	371	377	0.3	0.7	6.365	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	205	51	-	-	-	205	195	0.0	0.0	0.031	A
				2	371	93	-	-	-	371	378	0.0	0.0	0.060	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	991	941	0.058	55	55	0.0	0.0	4.424	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	101	25	991	938	0.108	102	106	0.1	0.2	4.788	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	55	14	-	-	-	55	55	0.0	0.0	0.000	A
				3	101	25	-	-	-	101	106	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	471	118	974	940	0.501	474	473	0.8	0.9	8.037	A
			2	1	317	79	974	941	0.337	314	311	0.3	0.8	6.051	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	318	79	-	-	-	317	312	0.0	0.1	0.506	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	470	117	-	-	-	471	473	0.0	0.0	0.649	A
3 - Broad Rushes	Entry	1	1	1	244	61	1108	996	0.245	245	241	0.4	0.3	5.356	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	470	117	1108	996	0.472	472	468	0.7	1.2	7.382	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	244	61	-	-	-	244	241	0.0	0.0	0.079	A
				2	470	117	-	-	-	470	470	0.0	0.0	0.087	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	991	939	0.059	56	60	0.0	0.1	4.220	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	100	25	991	940	0.107	99	106	0.2	0.2	4.725	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	56	14	-	-	-	56	60	0.0	0.0	0.000	A
				3	100	25	-	-	-	100	106	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	488	122	974	941	0.519	486	482	0.9	1.1	7.877	A
			2	1	319	80	974	941	0.339	320	319	0.8	0.6	6.353	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	319	80	-	-	-	319	319	0.1	0.0	0.373	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	489	122	-	-	-	488	483	0.0	0.1	0.424	A
3 - Broad Rushes	Entry	1	1	1	229	57	1108	994	0.230	231	242	0.3	0.2	5.030	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	460	115	1108	994	0.462	458	469	1.2	1.1	7.257	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	229	57	-	-	-	229	241	0.0	0.0	0.025	A
				2	460	115	-	-	-	460	469	0.0	0.0	0.040	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	991	966	0.042	41	48	0.1	0.1	4.320	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	21	991	967	0.085	82	86	0.2	0.0	4.690	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	41	10	-	-	-	41	48	0.0	0.0	0.000	A
				3	82	21	-	-	-	82	86	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	381	95	974	947	0.402	377	391	1.1	0.8	6.899	A
			2	1	247	62	974	947	0.261	246	254	0.6	0.5	5.677	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	247	62	-	-	-	247	254	0.0	0.0	0.148	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	381	95	-	-	-	381	390	0.1	0.0	0.155	A
3 - Broad Rushes	Entry	1	1	1	195	49	1108	1021	0.191	194	196	0.2	0.3	5.121	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	387	97	1108	1020	0.379	385	385	1.1	0.7	6.155	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	195	49	-	-	-	195	197	0.0	0.0	0.023	A
				2	387	97	-	-	-	387	383	0.0	0.0	0.069	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	991	987	0.039	39	42	0.1	0.0	3.975	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	76	19	991	988	0.077	76	78	0.0	0.1	4.662	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	39	10	-	-	-	39	42	0.0	0.0	0.000	A
				3	76	19	-	-	-	76	78	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	321	80	974	949	0.338	322	334	0.8	0.4	6.130	A
			2	1	217	54	974	949	0.229	215	221	0.5	0.5	5.284	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	217	54	-	-	-	217	221	0.0	0.0	0.049	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	321	80	-	-	-	321	332	0.0	0.0	0.092	A
3 - Broad Rushes	Entry	1	1	1	165	41	1108	1032	0.159	164	162	0.3	0.3	4.806	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	322	80	1108	1032	0.312	318	324	0.7	0.7	5.444	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	165	41	-	-	-	165	162	0.0	0.0	0.006	A
				2	322	80	-	-	-	322	324	0.0	0.0	0.012	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2038 | 2a WD Flows | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - Station Road (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3	14.16	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.16	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2038	2a WD Flows	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Station Road (N)		ONE HOUR	✓	479	100.000
2 - Station Road (S)		ONE HOUR	✓	798	100.000
3 - Broad Rushes		ONE HOUR	✓	418	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	169	310
	2 - Station Road (S)	141	0	657
	3 - Broad Rushes	161	257	0

Vehicle Mix

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

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	2	12
	2 - Station Road (S)	2	0	0
	3 - Broad Rushes	11	0	0

Cyclist %

		To		
		1 - Station Road (N)	2 - Station Road (S)	3 - Broad Rushes
From	1 - Station Road (N)	0	0	0
	2 - Station Road (S)	0	0	0
	3 - Broad Rushes	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)
1 - Station Road (N)	0.34	5.70	0.9	A	441	661
2 - Station Road (S)	0.85	24.17	5.9	C	735	1103
3 - Broad Rushes	0.28	4.76	0.5	A	386	579

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	360	90	189	1531	0.235	361	363	215	0.0	0.6	4.828	A
2 - Station Road (S)	604	151	234	1078	0.560	600	599	316	0.0	1.7	8.238	A
3 - Broad Rushes	308	77	97	1715	0.180	307	313	737	0.0	0.3	4.147	A

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	437	109	238	1565	0.279	437	441	270	0.6	0.6	5.157	A
2 - Station Road (S)	708	177	284	1039	0.681	710	712	392	1.7	1.9	10.652	B
3 - Broad Rushes	384	96	125	1707	0.225	384	390	869	0.3	0.5	4.378	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	531	133	289	1562	0.340	531	530	332	0.6	0.9	5.511	A
2 - Station Road (S)	869	217	340	1049	0.829	875	865	480	1.9	5.9	21.825	C
3 - Broad Rushes	465	116	156	1666	0.279	466	469	1060	0.5	0.5	4.748	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	527	132	297	1565	0.337	526	539	330	0.9	0.8	5.701	A
2 - Station Road (S)	891	223	339	1045	0.853	887	889	484	5.9	5.9	24.166	C
3 - Broad Rushes	465	116	160	1641	0.283	467	468	1067	0.5	0.5	4.763	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	434	109	234	1560	0.278	437	439	271	0.8	0.6	5.210	A
2 - Station Road (S)	731	183	283	1085	0.673	730	746	388	5.9	2.6	14.437	B
3 - Broad Rushes	381	95	125	1678	0.227	380	382	888	0.5	0.5	4.505	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	356	89	188	1561	0.228	356	367	231	0.6	0.5	4.605	A
2 - Station Road (S)	607	152	232	1083	0.561	607	616	313	2.6	1.3	8.617	A
3 - Broad Rushes	314	78	106	1737	0.181	313	322	732	0.5	0.5	4.195	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	127	1029	0.124	127	128	0.0	0.2	4.246	A
			2	1, 3	233	1029	0.226	234	235	0.0	0.3	5.173	A
		2	1	(1, 3, 2)	360			360	365	0.0	0.0	0.001	A
	Exit	1	1		215			215	225	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	505	897	0.563	504	495	0.0	1.3	8.541	A
			2	1, 2	97	897	0.108	97	104	0.0	0.1	4.618	A
		2	1	(1, 3, 2)	604			601	605	0.0	0.2	0.346	A
	Exit	1	1		316			316	320	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	118	1074	0.109	118	121	0.0	0.1	4.174	A
			2	3, 2	190	1074	0.177	189	192	0.0	0.2	4.132	A
		2	1	(1, 3, 2)	308			308	314	0.0	0.0	0.000	A
	Exit	1	1		737			737	731	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	155	1013	0.152	154	156	0.2	0.2	4.207	A
			2	1, 3	283	1013	0.279	284	285	0.3	0.4	5.726	A
		2	1	(1, 3, 2)	437			437	441	0.0	0.0	0.002	A
	Exit	1	1		270			270	278	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	584	881	0.663	585	584	1.3	1.5	10.199	B
			2	1, 2	125	881	0.142	125	129	0.1	0.2	4.949	A
		2	1	(1, 3, 2)	708			709	714	0.2	0.1	1.394	A
	Exit	1	1		392			392	397	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	146	1064	0.137	146	149	0.1	0.2	4.408	A
			2	3, 2	238	1064	0.224	238	241	0.2	0.3	4.361	A
		2	1	(1, 3, 2)	384			384	391	0.0	0.0	0.000	A
	Exit	1	1		869			869	868	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	191	997	0.192	191	188	0.2	0.2	4.573	A
			2	1, 3	340	997	0.341	340	342	0.4	0.7	6.069	A
		2	1	(1, 3, 2)	531			531	531	0.0	0.0	0.003	A
	Exit	1	1		332			332	334	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	717	862	0.832	720	711	1.5	3.0	14.611	B
			2	1, 2	156	862	0.181	156	154	0.2	0.2	5.252	A
		2	1	(1, 3, 2)	869			874	871	0.1	2.6	8.778	A
	Exit	1	1		480			480	476	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	177	1053	0.168	176	181	0.2	0.2	4.575	A
			2	3, 2	288	1053	0.274	289	288	0.3	0.3	4.845	A
		2	1	(1, 3, 2)	465			465	469	0.0	0.0	0.001	A
	Exit	1	1		1060			1060	1053	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	187	994	0.188	187	193	0.2	0.3	4.590	A
			2	1, 3	340	994	0.342	339	346	0.7	0.6	6.367	A
		2	1	(1, 3, 2)	527			527	539	0.0	0.0	0.009	A
	Exit	1	1		330			330	336	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	727	862	0.843	727	731	3.0	3.1	15.173	C
			2	1, 2	161	862	0.187	160	158	0.2	0.3	5.529	A
		2	1	(1, 3, 2)	891			888	889	2.6	2.5	10.703	B
	Exit	1	1		484			484	483	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	169	1051	0.161	170	178	0.2	0.2	4.764	A
			2	3, 2	296	1051	0.282	297	290	0.3	0.3	4.748	A
		2	1	(1, 3, 2)	465			465	468	0.0	0.0	0.010	A
	Exit	1	1		1067			1067	1077	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	152	1015	0.149	154	155	0.3	0.1	4.307	A
			2	1, 3	283	1015	0.279	283	285	0.6	0.5	5.721	A
		2	1	(1, 3, 2)	434			434	438	0.0	0.0	0.019	A
	Exit	1	1		271			271	282	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	604	881	0.685	605	612	3.1	1.8	11.831	B
			2	1, 2	126	881	0.143	125	134	0.3	0.2	5.008	A
		2	1	(1, 3, 2)	731			730	740	2.5	0.6	3.886	A
	Exit	1	1		388			388	389	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	146	1064	0.137	146	148	0.2	0.2	4.682	A
			2	3, 2	235	1064	0.221	234	234	0.3	0.3	4.395	A
		2	1	(1, 3, 2)	381			381	382	0.0	0.0	0.006	A
	Exit	1	1		888			888	897	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	2	126	1030	0.122	125	130	0.1	0.2	4.054	A
			2	1, 3	230	1030	0.223	232	237	0.5	0.3	4.939	A
		2	1	(1, 3, 2)	356			356	367	0.0	0.0	0.000	A
	Exit	1	1		231			231	230	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	3	500	898	0.557	501	510	1.8	1.1	8.743	A
			2	1, 2	107	898	0.119	106	106	0.2	0.1	4.702	A
		2	1	(1, 3, 2)	607			607	613	0.6	0.1	0.600	A
	Exit	1	1		313			313	329	0.0	0.0	0.000	A
3 - Broad Rushes	Entry	1	1	1	126	1070	0.118	125	123	0.2	0.2	4.247	A
			2	3, 2	188	1070	0.175	188	199	0.3	0.2	4.166	A
		2	1	(1, 3, 2)	314			314	322	0.0	0.0	0.000	A
	Exit	1	1		732			732	747	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	991	1029	0.124	127	128	0.0	0.2	4.246	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	233	58	991	1029	0.226	234	235	0.0	0.3	5.173	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	127	32	-	-	-	127	128	0.0	0.0	0.000	A
				3	233	58	-	-	-	233	236	0.0	0.0	0.001	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	505	126	974	897	0.562	504	495	0.0	1.3	8.541	A
			2	1	97	24	974	898	0.108	97	104	0.0	0.1	4.618	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	97	24	-	-	-	97	104	0.0	0.0	0.245	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	507	127	-	-	-	505	501	0.0	0.2	0.367	A
3 - Broad Rushes	Entry	1	1	1	118	29	1108	1073	0.110	118	121	0.0	0.1	4.174	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	190	48	1108	1074	0.177	189	192	0.0	0.2	4.132	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	118	29	-	-	-	118	121	0.0	0.0	0.000	A
				2	190	48	-	-	-	190	193	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	155	39	991	1013	0.153	154	156	0.2	0.2	4.207	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	283	71	991	1014	0.279	284	285	0.3	0.4	5.726	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	155	39	-	-	-	155	156	0.0	0.0	0.000	A
				3	283	71	-	-	-	283	285	0.0	0.0	0.003	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	584	146	974	880	0.663	585	584	1.3	1.5	10.199	B
			2	1	125	31	974	879	0.142	125	129	0.1	0.2	4.949	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	125	31	-	-	-	125	129	0.0	0.0	1.121	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	583	146	-	-	-	584	585	0.2	0.1	1.453	A
3 - Broad Rushes	Entry	1	1	1	146	36	1108	1065	0.137	146	149	0.1	0.2	4.408	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	238	60	1108	1064	0.224	238	241	0.2	0.3	4.361	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	146	36	-	-	-	146	150	0.0	0.0	0.000	A
				2	238	60	-	-	-	238	241	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	991	997	0.192	191	188	0.2	0.2	4.573	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	340	85	991	997	0.341	340	342	0.4	0.7	6.069	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	191	48	-	-	-	191	188	0.0	0.0	0.001	A
				3	340	85	-	-	-	340	343	0.0	0.0	0.005	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	717	179	974	862	0.832	720	711	1.5	3.0	14.611	B
			2	1	156	39	974	863	0.181	156	154	0.2	0.2	5.252	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	157	39	-	-	-	156	154	0.0	0.5	8.175	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	712	178	-	-	-	717	717	0.1	2.1	8.905	A
3 - Broad Rushes	Entry	1	1	1	177	44	1108	1053	0.168	176	181	0.2	0.2	4.575	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	288	72	1108	1053	0.274	289	288	0.3	0.3	4.845	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	177	44	-	-	-	177	180	0.0	0.0	0.001	A
				2	288	72	-	-	-	288	288	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	991	994	0.188	187	193	0.2	0.3	4.590	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	340	85	991	994	0.342	339	346	0.7	0.6	6.367	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	187	47	-	-	-	187	193	0.0	0.0	0.007	A
				3	340	85	-	-	-	340	346	0.0	0.0	0.010	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	727	182	974	862	0.844	727	731	3.0	3.1	15.173	C
			2	1	161	40	974	862	0.187	160	158	0.2	0.3	5.529	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	162	40	-	-	-	161	158	0.5	0.5	10.217	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	730	182	-	-	-	727	731	2.1	2.0	10.807	B
3 - Broad Rushes	Entry	1	1	1	169	42	1108	1051	0.161	170	178	0.2	0.2	4.764	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	296	74	1108	1051	0.282	297	290	0.3	0.3	4.748	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	169	42	-	-	-	169	178	0.0	0.0	0.013	A
				2	296	74	-	-	-	296	290	0.0	0.0	0.008	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalis level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	152	38	991	1014	0.150	154	155	0.3	0.1	4.307	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	283	71	991	1015	0.279	283	285	0.6	0.5	5.721	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	152	38	-	-	-	152	154	0.0	0.0	0.014	A
				3	283	71	-	-	-	283	284	0.0	0.0	0.022	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	604	151	974	881	0.685	605	612	3.1	1.8	11.831	B
			2	1	126	32	974	881	0.143	125	134	0.3	0.2	5.008	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	126	31	-	-	-	126	134	0.5	0.1	3.402	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	605	151	-	-	-	604	607	2.0	0.5	3.990	A
3 - Broad Rushes	Entry	1	1	1	146	36	1108	1063	0.137	146	148	0.2	0.2	4.682	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	235	59	1108	1063	0.221	234	234	0.3	0.3	4.395	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	146	36	-	-	-	146	148	0.0	0.0	0.008	A
				2	235	59	-	-	-	235	234	0.0	0.0	0.004	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Station Road (N)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	126	31	991	1028	0.122	125	130	0.1	0.2	4.054	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	230	58	991	1030	0.223	232	237	0.5	0.3	4.939	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	126	31	-	-	-	126	130	0.0	0.0	0.000	A
				3	230	58	-	-	-	230	237	0.0	0.0	0.000	A
2 - Station Road (S)	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	500	125	974	897	0.557	501	510	1.8	1.1	8.743	A
			2	1	107	27	974	897	0.119	106	106	0.2	0.1	4.702	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	107	27	-	-	-	107	106	0.1	0.0	0.532	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	501	125	-	-	-	500	507	0.5	0.1	0.614	A
3 - Broad Rushes	Entry	1	1	1	126	31	1108	1071	0.118	125	123	0.2	0.2	4.247	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	188	47	1108	1071	0.175	188	199	0.3	0.2	4.166	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	126	31	-	-	-	126	123	0.0	0.0	0.000	A
				2	188	47	-	-	-	188	199	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

APPENDIX 70: EMFM Stage 2A Modelling Forecasting Report Addendum (document reference East Midlands Gateway Phase 2: Forecasting Report Addendum Stage 2a v2.0)



EMFM 2019

East Midlands Gateway Phase 2: Forecasting Report Addendum Stage 2a

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Quality Information

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Section 1 – Overview

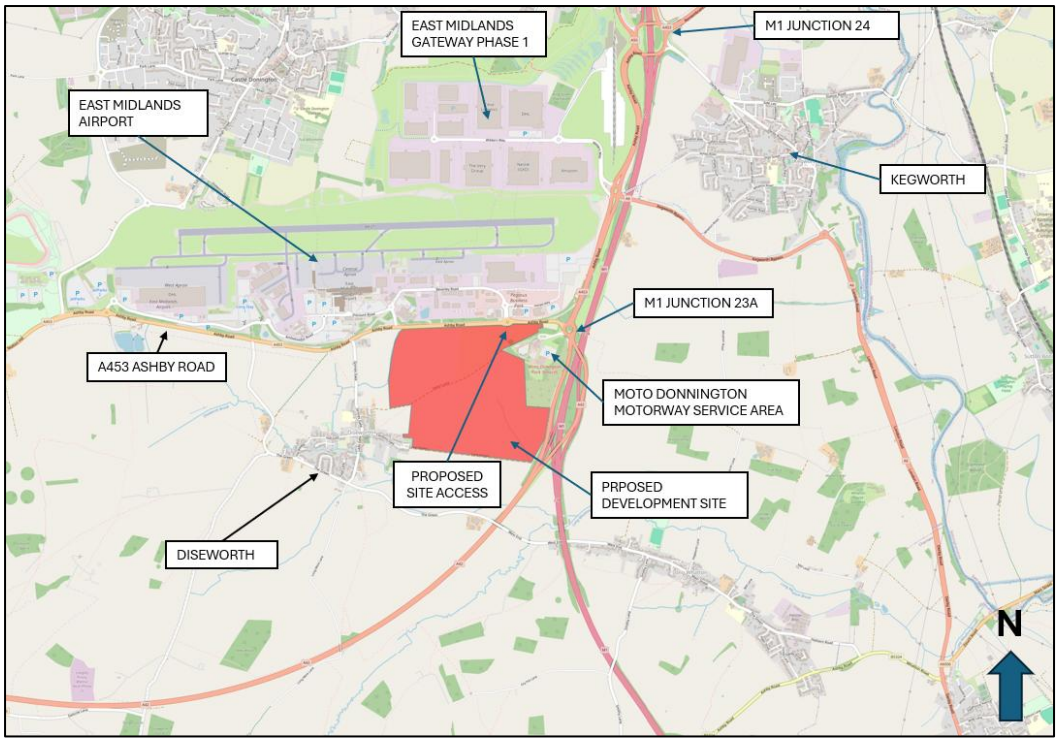
1.1 Introduction

1.1.1 The East Midlands Gateway Phase 2 (EMGP2) development is a proposed employment development of mixed B2 (general industrial) and B8 (storage or distribution) use, with capacity for 400,000sqm floorspace (300,000sqm ground floorspace and 100,000sqm of B8 mezzanine floorspace) of industrial use, comprising 340,000sqm B8 and 60,000sqm B2. In addition to this, 30,000sqm of B8 floorspace is proposed on EMG Phase 1 (EMGP1) (Plot 16).

1.1.2 The development site is located to the south of East Midlands Airport and west of the A42 and is expected to build out by 2031.

1.1.3 Figure 1.1 shows an indication of the location of the proposed EMGP2 development, denoted by the area shaded in red. The proposed development has a total area of circa 250 acres located to the south of the A453 and East Midlands Airport itself, to the east of Diseworth village. M1 Junction 23a lies to the east of the site with the Moto Donnington Motorway Service Area (MSA) directly abutting to the north-east.

Figure 1.1: Location of Proposed Development1



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1.1.4 The proposed EMGP2 development will access the highway network via a single point of access:

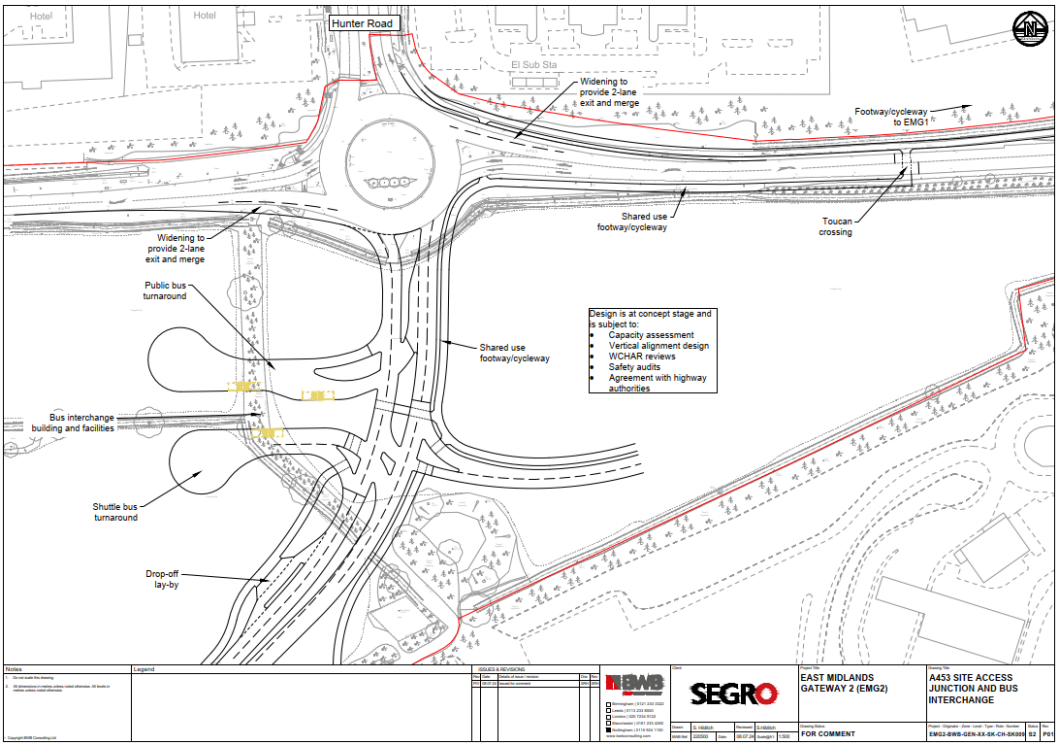
- a fourth arm off the existing A453 / Hunter Road roundabout, as indicatively shown in Figure 1.2.

1.1.5 The proposed EMGP1 (Plot 16) development will access the highway network via:

- the existing access via Wilder's Way.

[1] Location of Proposed Development adapted from Technical Note 1 – Transport Scoping Note, East Midlands Gateway Phase 2 (EMG-BWB-GEN-XX-RP-TR-0001_TN1 Transport Scoping Note-S1-P3.pdf). Provided as part of the information pack with the PRTM Development Form for East Midlands Gateway Phase 2.

Figure 1.2: Site Access Junction[2]



Shown Indicatively for the purposes of the figure – further changes made are set out in Figure 2.6 later on in this report.

1.1.6 AECOM has been commissioned to undertake strategic modelling to assess the potential traffic impacts of the proposed development using the East Midlands Freeport Model (EMFM) for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours.

1.1.7 The strategic modelling assessment for the proposed EMGP2 development has been undertaken in four stages, as follows:

Stage 1a modelling (Proforma 14)

2022/2023/2024 'Without Development'.

2028/2038 'Without Development (1a)'. Without EMGP2 development (with all Freeport and Local Plan sites).

2028/2038 'With Development (1a)'. With EMGP2 development (with all Freeport and Local Plan sites).

Stage 1b modelling (Proforma 14a)

2028/2038 'Without Development (1b)'. Without EMGP2 development (without Local Plan sites).

2028/2038 'With Development (1b)'. With EMGP2 development (without Local Plan sites).

Stage 2a modelling with mitigation (Proforma 14)

2028/2038 'With Development (2a)'. With EMGP2 and with mitigation measures (with all Freeport and Local Plan sites).

Stage 2b modelling with mitigation (Proforma 14a)

2028/2038 'With Development (2b)'. With EMGP2 and with mitigation measures (without Local Plan sites).

1.1.8 This report follows the East Midlands Gateway Phase 2 Base Year Model Review Addendum report[3], which details the calibrated 2019 base year model review and performance in the vicinity of the

[2] EMG2-BWB-GEN-XX-SK-CH-SK009 S2 P01
[3] EMFM 2019 – East Midlands Gateway Phase 2: Base Year Model Review Addendum v1.0 (2024-08-19)

proposed development site. It forms an addendum to the Stage 1a forecast results documented in the Forecasting Report4. This addendum documents the forecast model results for Stage 2a of the EMFM strategic modelling assessment of the proposed development.

1.1.9 Stage 1b[5] and Stage 2b forecasts are reported as separate addendums to the Forecasting Report[4].

1.2 Report Structure

1.2.1 Following the introduction, this report contains the following sections:

- Section 2 – Forecast Approach and Assumptions: this section details the forecast assumptions applied alongside the mitigation measure assumptions.
- Section 3 – Forecast Model Results: this section details the forecast results with the proposed development and mitigation measures included and assigned using EMFM.
- Section 4 – Summary of the Mitigation Assessment: this section provides a summary of the assessment with the proposed development and mitigation measures included.
- Appendix A: Compares the forecast model results for Stage 2a (with mitigation included) with Stage 1a (no mitigation).
- Appendix B: Presents indicative network statistics within the AoI by motorway and non-motorway links.

[4] EMFM 2019 – East Midlands Gateway Phase 2: Forecasting Report v1.0 (2025-02-04)
[5] EMFM 2019 – East Midlands Gateway Phase 2: Forecasting Report Addendum (Stage 1b) v1.0 (2025-03-13)

Section 2 – Forecast Approach and Assumptions

2.1 Introduction

2.1.1 This section sets out the forecast assumptions applied for this application of the EMFM, and the methodology adopted to create the required model forecasts.

2.1.2 The following forecast model scenarios have been produced for this version of the addendum:

Stage 2a modelling with mitigation included (Proforma 14)

2028/2038 'With Development (2a)'. With EMGP2 and with mitigation measures included (with all Freeport and Local Plan sites). Signal timings at junctions adjacent to mitigation measures have been optimised.

2.1.3 To produce the Stage 2a forecasts, the highway mitigation measures for the proposed development have been added to the 'With Development (1a)' scenario and assigned in the EMFM to create the required model forecasts for Stage 2a.

2.1.4 Section 2.2 provides the mitigation measures assumptions applied to the Stage 2a modelling in EMFM. Section 2.3 lists the signal timings at junctions adjacent to the mitigation measures have been optimised in the EMFM assessment and Section 2.4 outlines the methodology applied to optimise signal timings.

2.2 Mitigation Measures

2.2.1 The following list of mitigation measures were provided by the client and included in the Stage 2a EMFM assessment:

1. New M1 northbound to A50 westbound interchange link road and A50 westbound merge (as shown Figure 2.1 and Figure 2.2).
   - A single lane link road between the M1 northbound and the A50, bypassing M1 J24. This has been represented with a 50 mph speed limit in the EMFM.
   - One lane will diverge from the existing four-lane carriageway on the M1 northbound.
2. M1 southbound link approaching J24 (as shown Figure 2.3).
   - An additional M1 southbound lane, from one lane to two lanes, and merging with the A50 eastbound to form three lanes approaching J24.
3. EMGP1 access improvements (as shown Figure 2.4).
   - An additional circulatory lane on the eastern side of the Wilders Way / A453 / A6 Keyworth Bypass roundabout.
   - Signal timing adjustment to allow for a pedestrian phase at Wilders Way to improve access to EMGP2. No changes were applied in EMFM as the existing red phase was sufficiently long to allow for the pedestrian phase.
4. A453 Finger Farm Roundabout westbound exit widening (as shown Figure 2.5).
   - An additional 42 metres of two lanes widening on exit.
5. EMGP2 access junction and toucan crossing (as shown Figure 2.6).
   - Additional flare length has provided at the EMGP2 access roundabout on both the east and west arms.
   - A toucan crossing has been included on the A453 to the east of the proposed access roundabout.
6. M1 J24 minor works (as shown Figure 2.7).
   - The central lane reallocated for shared use for both M1 northbound traffic and traffic towards the A453. Currently this lane is for A453 traffic only.

Figure 2.1: M1 Northbound to A50 Westbound Interchange Link Road

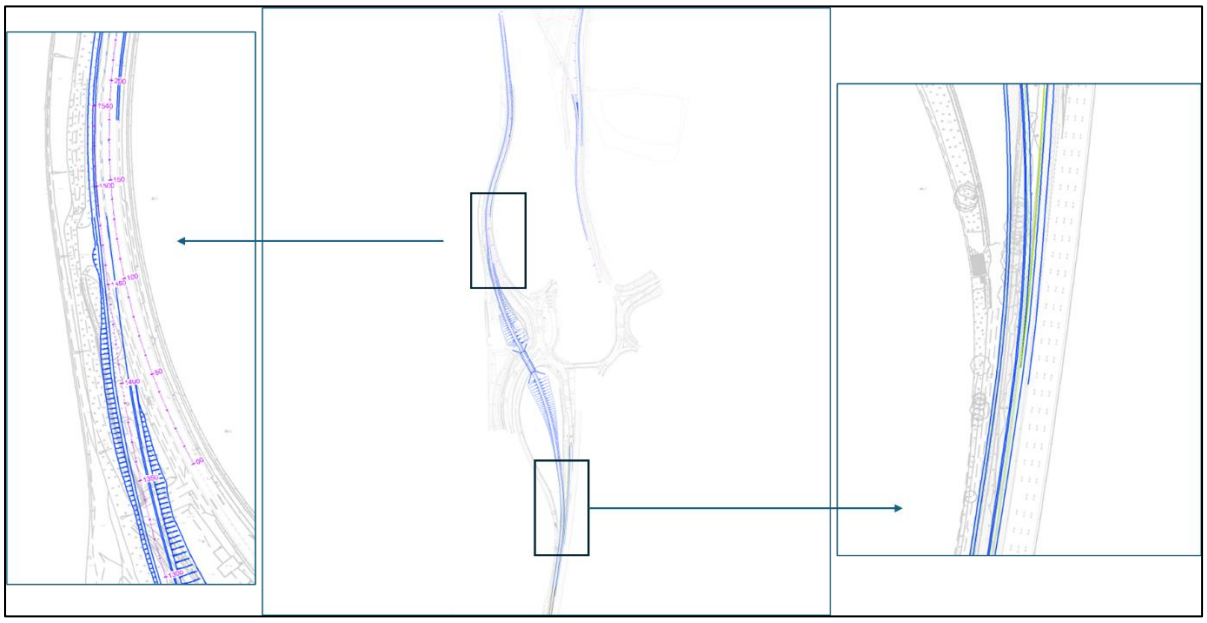


Figure 2.2: M1 Northbound to A50 Westbound Interchange Link Road Diverge Layout

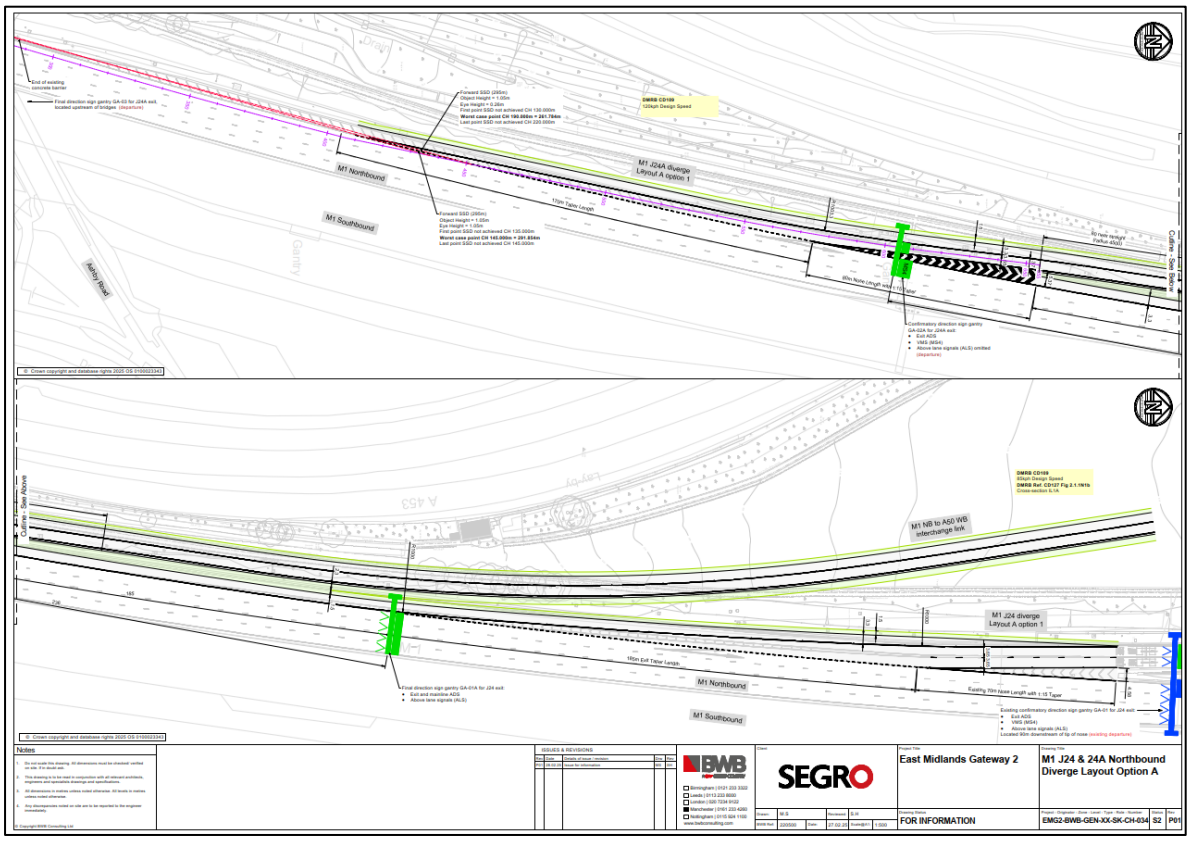


Figure 2.3: M1 Southbound Widening on Approach to J24

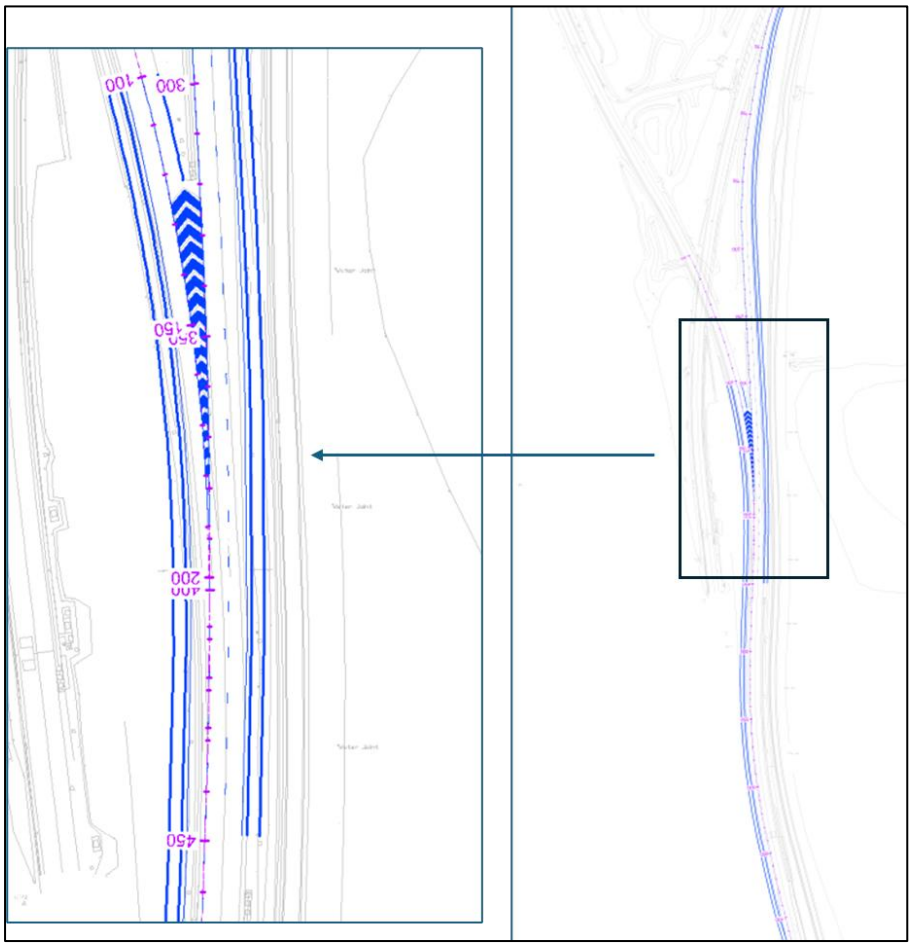


Figure 2.4: EMGP1 Access Improvements

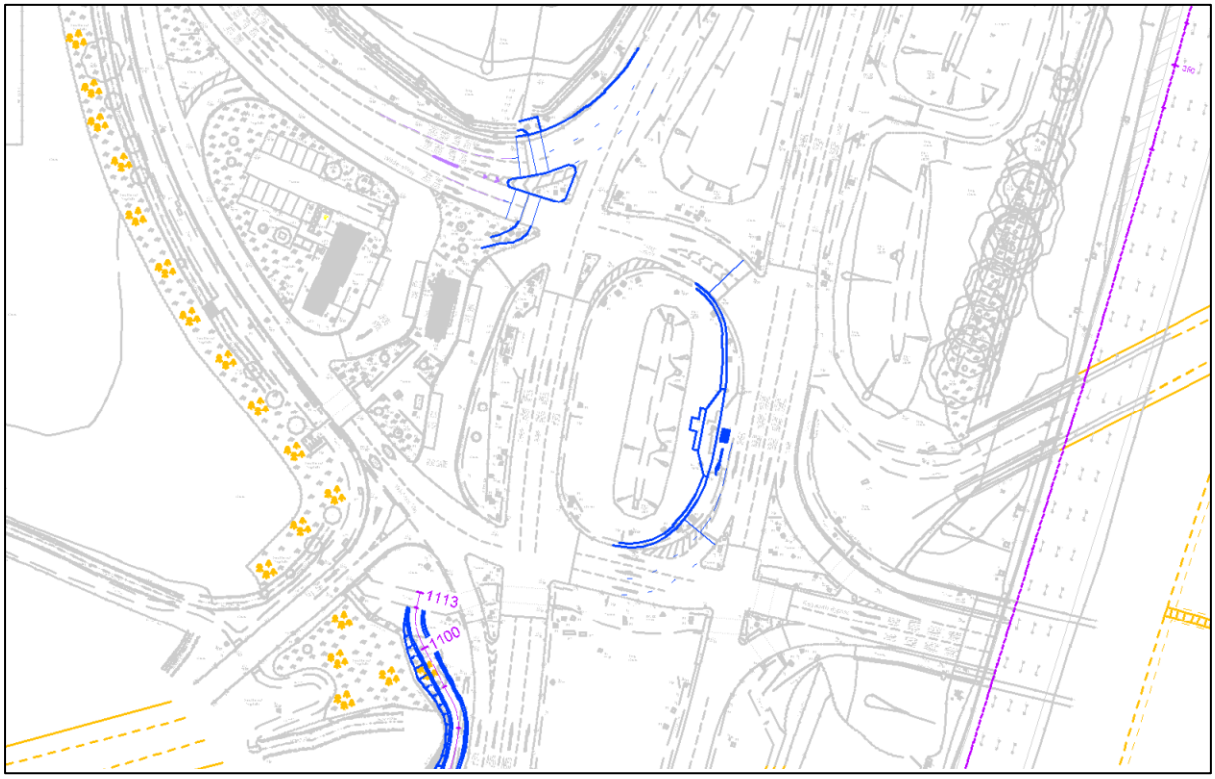


Figure 2.5: A453 Finger Farm Westbound Exit Widening

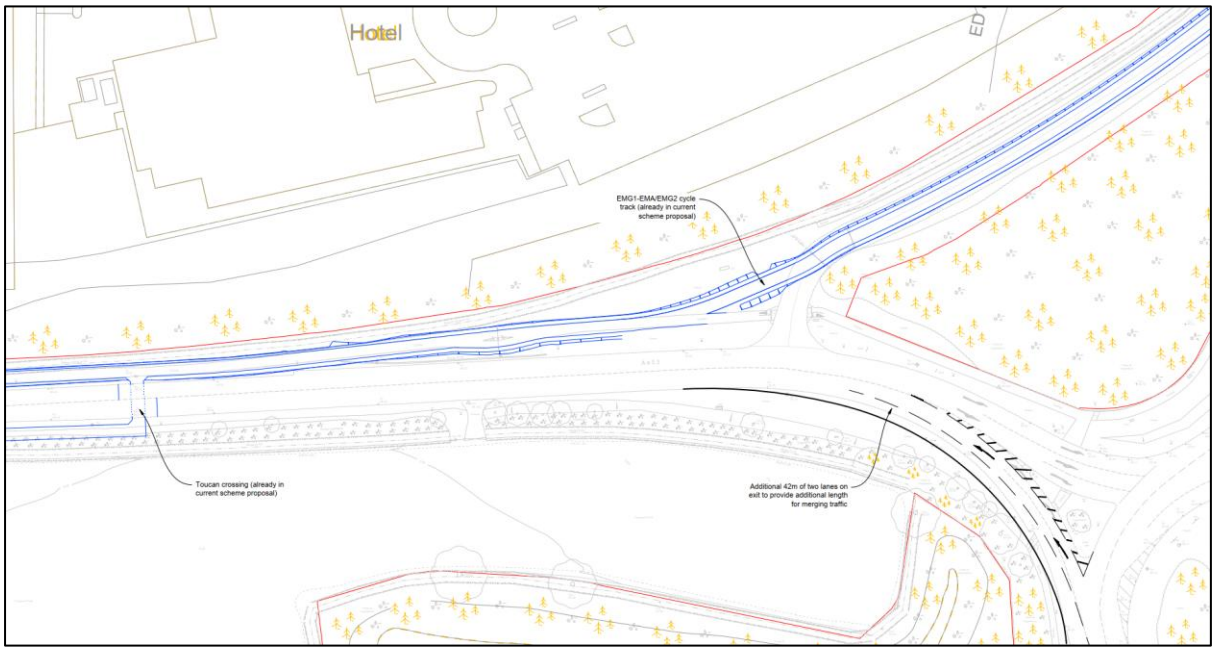
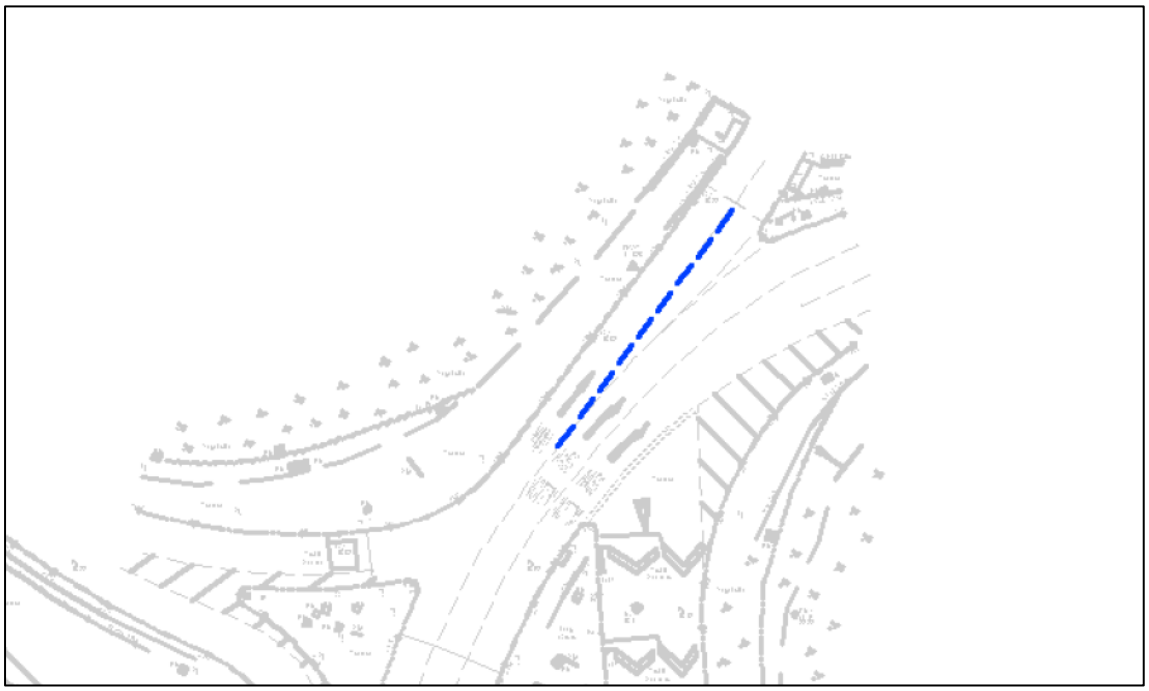


Figure 2.6: A453 EMGP2 Access Junction and Toucan Crossing



Figure 2.7: M1 J24 Minor Works (with Shared Central Lane)



2.3 Signal Optimised with Mitigation Included

2.3.1 Signal timings at two junctions adjacent to the mitigation measures have been optimised in the EMFM assessment at the following locations:

1. The signal head to the south-west of the Wilders Way / A453 / Kegworth Bypass roundabout that controls the A453 northbound traffic and the circulatory traffic.
2. The signal head to the north-east of the M1 J24 that controls the M1 southbound and circulatory traffic.

2.3.2 These two junctions are forecast to be at or over capacity in Stage 2a and have therefore been optimised to ‘unlock’ the benefits of the mitigation measures, particularly in relation to the two measures listed below:

1. EMGP1 access improvements (see Paragraph 2.2.1 and Figure 2.4).
2. M1 southbound link approaching J24 (see Paragraph 2.2.1 and Figure 2.3).

2.4 Approach to Signal Optimisation

2.4.1 As noted in Section 2.3 two signalised junctions have been optimised to 'unlock' or release the benefits of the proposed mitigation measures that would otherwise not be fully realised, therefore increasing capacity and reducing delay on the Strategic Road Network (SRN). Signals were optimised:

- Such that the demand and delay at congested signalised junctions were better balanced / optimised following the introduction of the additional road capacity provided by the mitigation measures. Note that signal timings for Stage 2a are based on observed signal time data from the EMFM Base Year model (2019), as is the standard approach.
- Based on information or feedback from the detailed Vissim modelling (for example, the minimum / maximum green times). Note that the Vissim model demand was based on outputs from the EMFM.

2.4.2 Optimising these two junctions was performed carefully and systematically such that traffic patterns were not unrealistically changed or distorted due to the additional capacity from the optimised signal timings rather than the mitigation measures themselves. Optimising these junctions was performed over five iterations by carefully reviewing outputs and adjusting green times at each iteration.

2.4.3 A sixth iteration was assessed in EMFM that included optimising the signalised junction at the Hilton Hotel Lane / M1 J24. This signal was optimised based on both forecast traffic demand volumes and feedback provided from the detailed Vissim modelling. The forecast outputs from this sixth iteration were considered localised and have not been documented in this report however outputs have been provided to inform the Vissim modelling.

Section 3 – Forecast Model Results

3.1 Introduction

3.1.1 This section details the forecast model results for the proposed EMGP2 development assessment for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours. The analysis includes:

- routeing of the forecast development traffic in the 2028 and 2038 'With Development (2a)' scenarios (Section 3.2);
- forecast flow changes in 2028 and 2038 between the 'Without Development (1a)' and 'With Development (2a)' scenarios (Section 3.3);
- an assessment of the Area of Influence (AoI) (Section 3.4);
- forecast delay changes in 2028 and 2038 between the 'Without Development (1a)' and 'With Development (2a)' scenarios (Section 3.5);
- forecast maximum node volume-capacity ratios in the 2028 and 2038 'With Development (2a)' scenarios (Section 3.6); and
- forecast turning flows (and volume-capacity ratios for turns) at selected junctions (Section 3.7).

3.1.2 Appendix A provides a comparison between the 'With Development (2a)' and 'With Development (1a)' that includes forecast flow changes, delay changes and node volume-capacity ratios in 2028 and 2038.

3.2 Forecast Development Traffic

3.2.1 It was agreed that the development trip distributions are to be based on the PRTM 'gravity model' approach. The gravity model approach was applied for Stage 1a and the development trip distribution from Stage 1a has been applied to the Stage 2a modelling.

3.2.2 Figure 3.1 to Figure 3.8 show the forecast development trip distribution separately for HGVs and light vehicles on the highway network for the 2028 and 2038 'With Development (2a)' scenarios in passenger car units (PCUs). For information, the PCU factor for HGV is 2.0 and the PCU factor for the other assignment vehicle types (i.e. cars and LGVs) is 1.0.

3.2.3 As expected, the forecast trip distribution for Stage 2a (with mitigation) is very similar to Stage 1a (without mitigation) as reported in the Forecasting Report[4]. How development traffic routes through the network is also very similar.

3.2.4 These figures show that the forecast HGV development traffic has a broadly similar distribution to and from the proposed development in both the AM Peak and PM Peak hours, and both forecast years (2028 and 2038). HGVs are forecast to use the M1, A50 and the A453 Remembrance Way to and from Derby and the north, and the M1 and A42 to and from Leicester, Birmingham and the south.

3.2.5 For light vehicle traffic, most development-related trips during the AM Peak hour in 2028 are forecast to use the M1 southbound and the A42 towards Birmingham. In the northbound direction development trips are forecast to route via the M1 and Castle Donnington Relief Road towards Derby. By 2038 in the AM Peak hour, a higher proportion of trips is forecast to route south from the A453 towards Diseworth to access Gelscoe Lane and the A42.

3.2.6 Light vehicle development trips from the development in the PM Peak hour in 2028 are forecast to route north via the M1, the A50, A453 Remembrance Way and south via the M1 and towards Diseworth to access the A42. This pattern is forecast in the reverse for the AM Peak hour development trips to the proposed development but with fewer trips on the M1 northbound and more trips on Castle Donnington Relief Road to avoid the congested M1 J24.

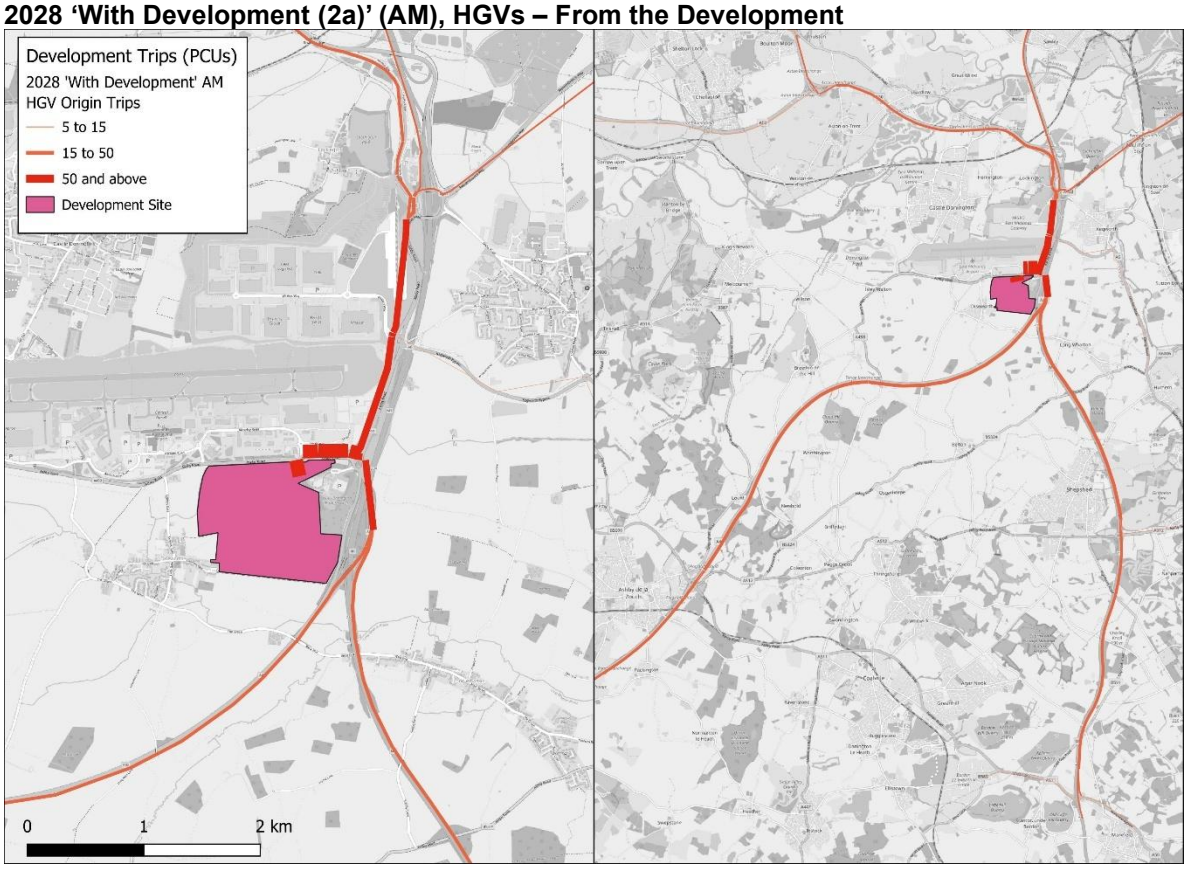
3.2.7 With the M1 northbound to A50 westbound interchange link road included in Stage 2a the development traffic (lights and heavy vehicles combined) on the A50 is forecast to have fewer than 100 vehicles in both directions in either the 2028 or 2038 scenarios for Stage 2a, which are very similar to the equivalent Stage 1a forecasts.

3.2.8 It should be noted that the local networks through Diseworth, Castle Donington and Kegworth have weight restrictions applied. These restrictions are represented in the EMFM, and the HGV

development trips are therefore forecast to route to and from the proposed development site via mainly the SRN.

Figure 3.1: HGV Trip Distribution to and from the Proposed Development for 2028 (AM)

2028 'With Development (2a)' (AM), HGVs – From the Development



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2028 'With Development (2a)' (AM), HGVs – To the Development

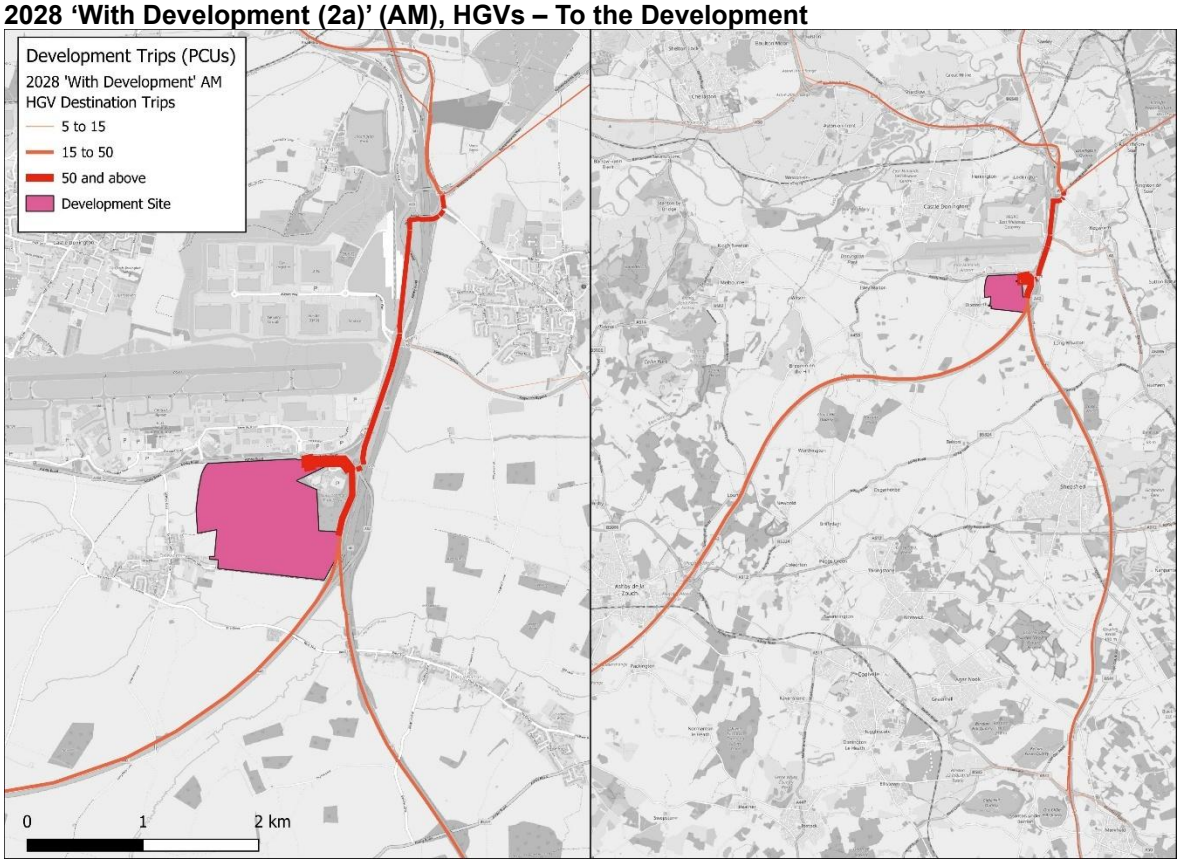

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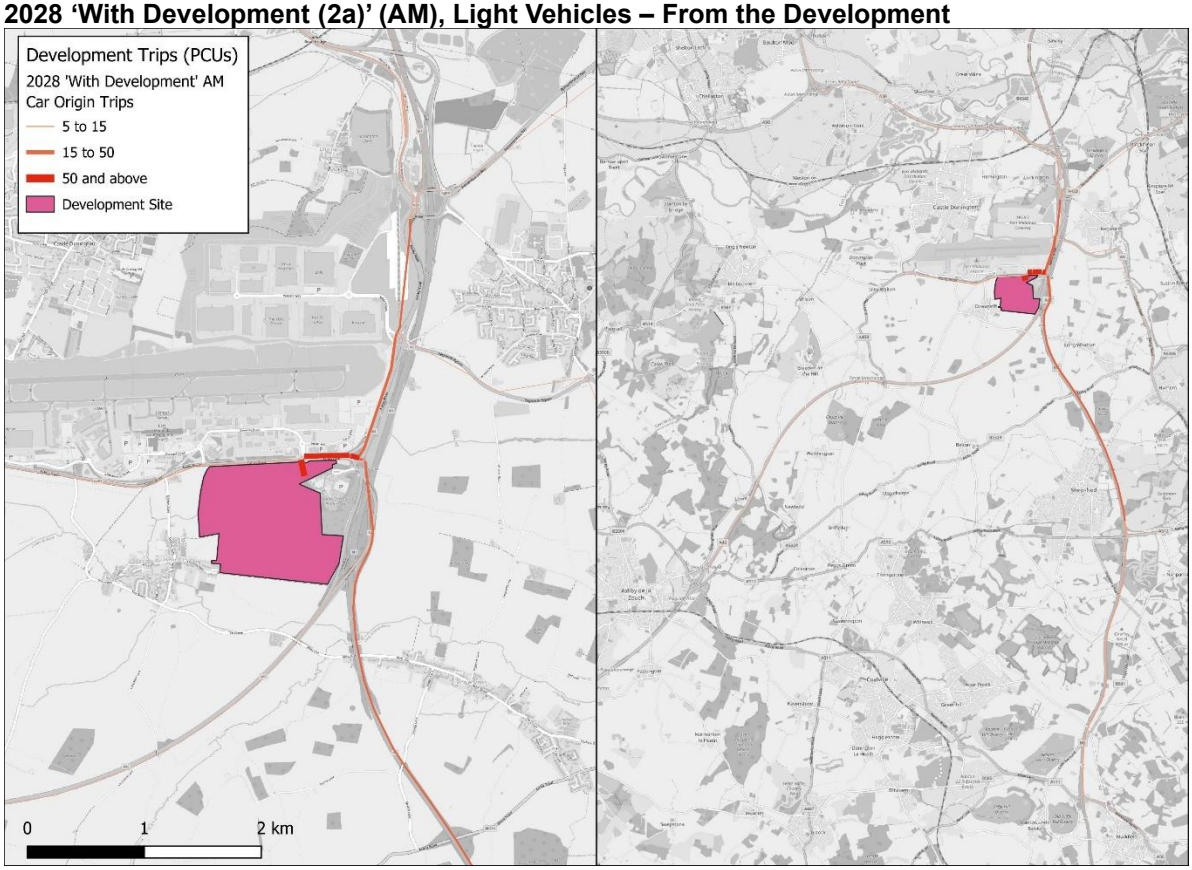
Figure 3.2: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (AM)

2028 'With Development (2a)' (AM), Light Vehicles – From the Development



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2028 'With Development (2a)' (AM), Light Vehicles – To the Development

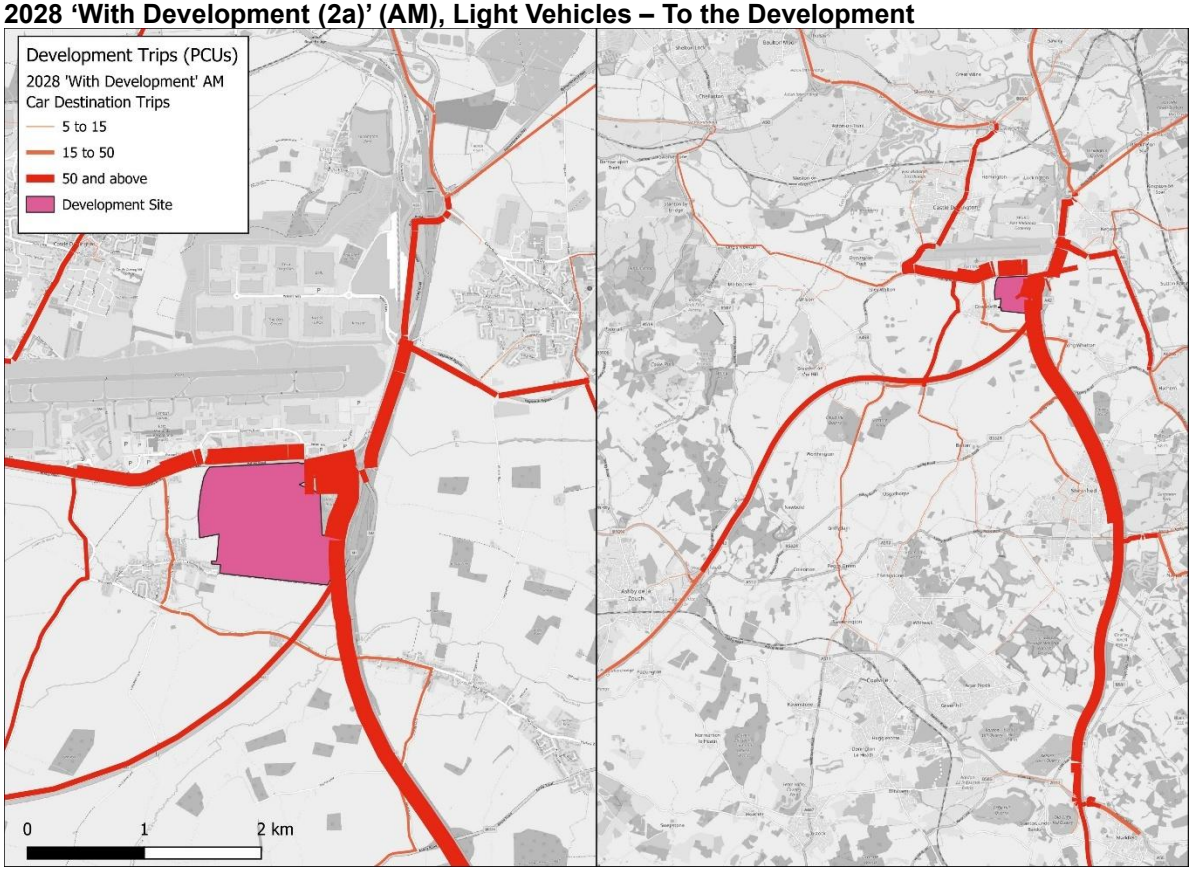

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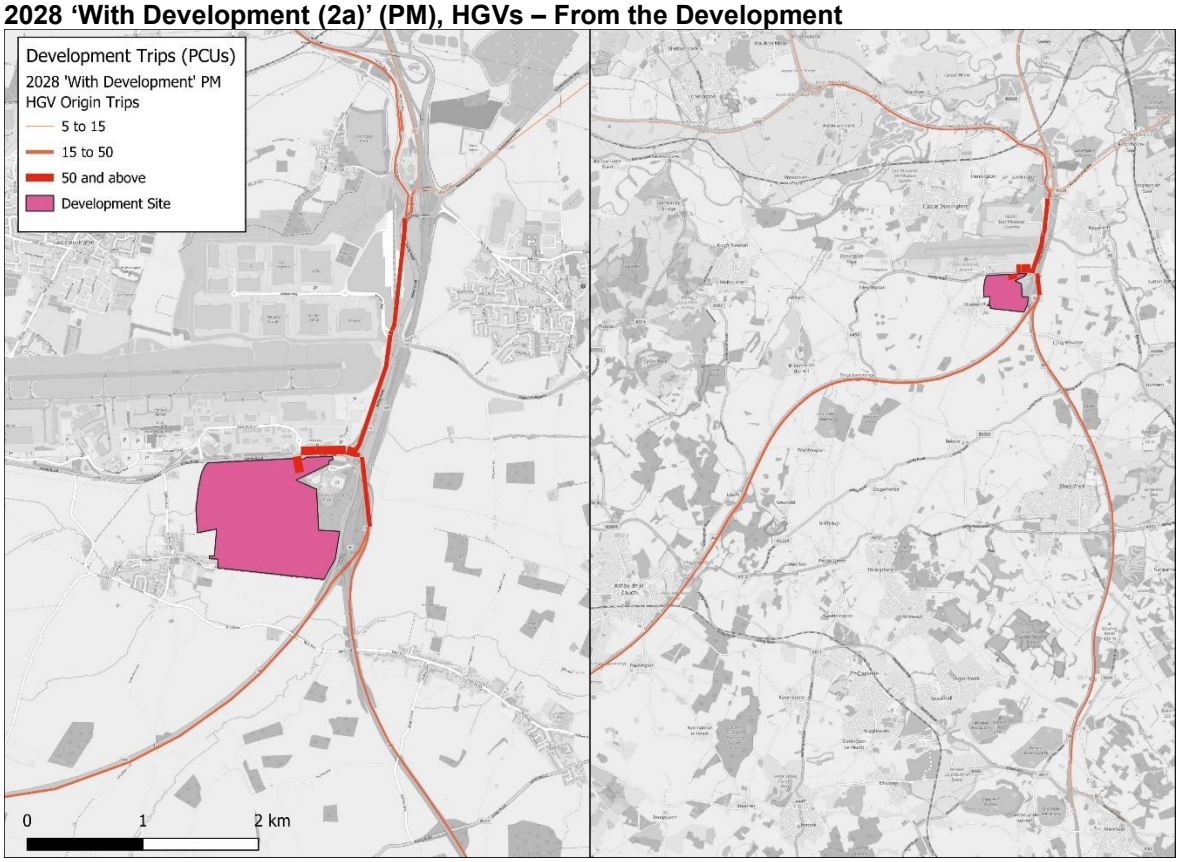
Figure 3.3: HGV Trip Distribution to and from the Proposed Development for 2028 (PM)

2028 'With Development (2a)' (PM), HGVs – From the Development



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2028 'With Development (2a)' (PM), HGVs – To the Development

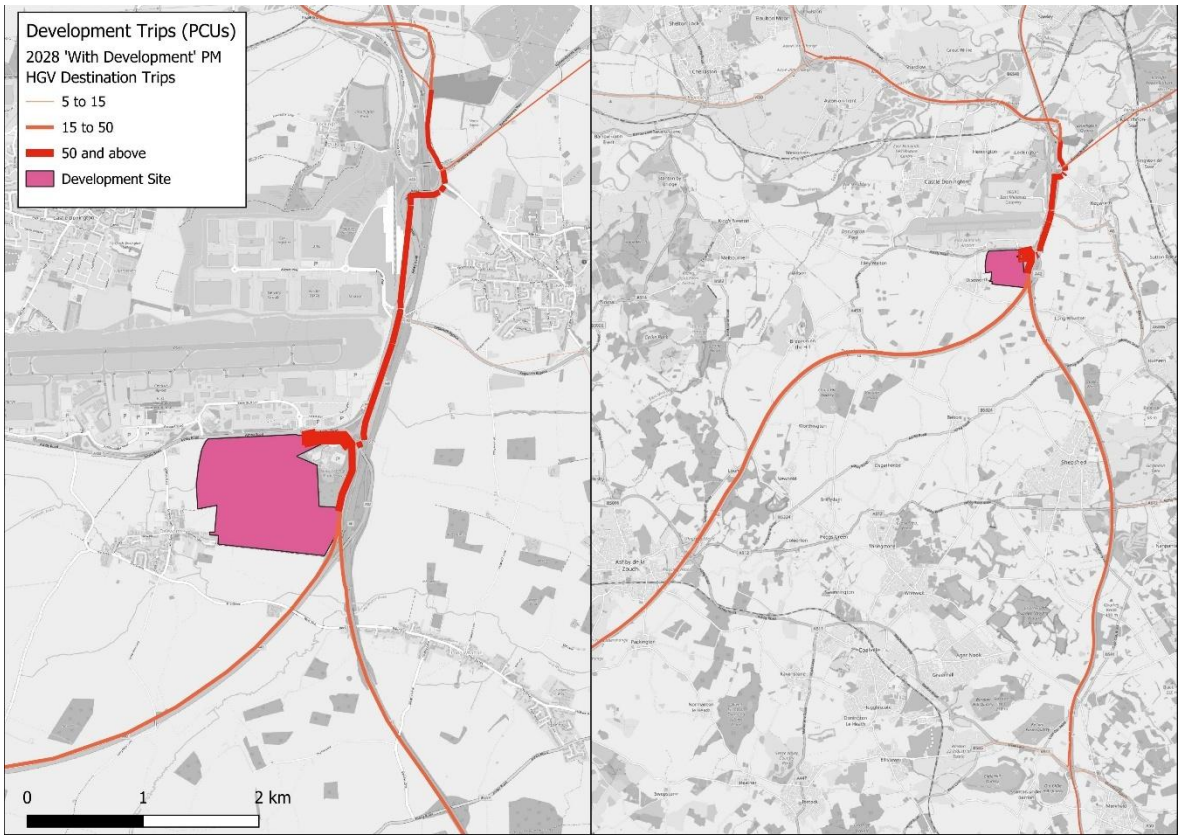

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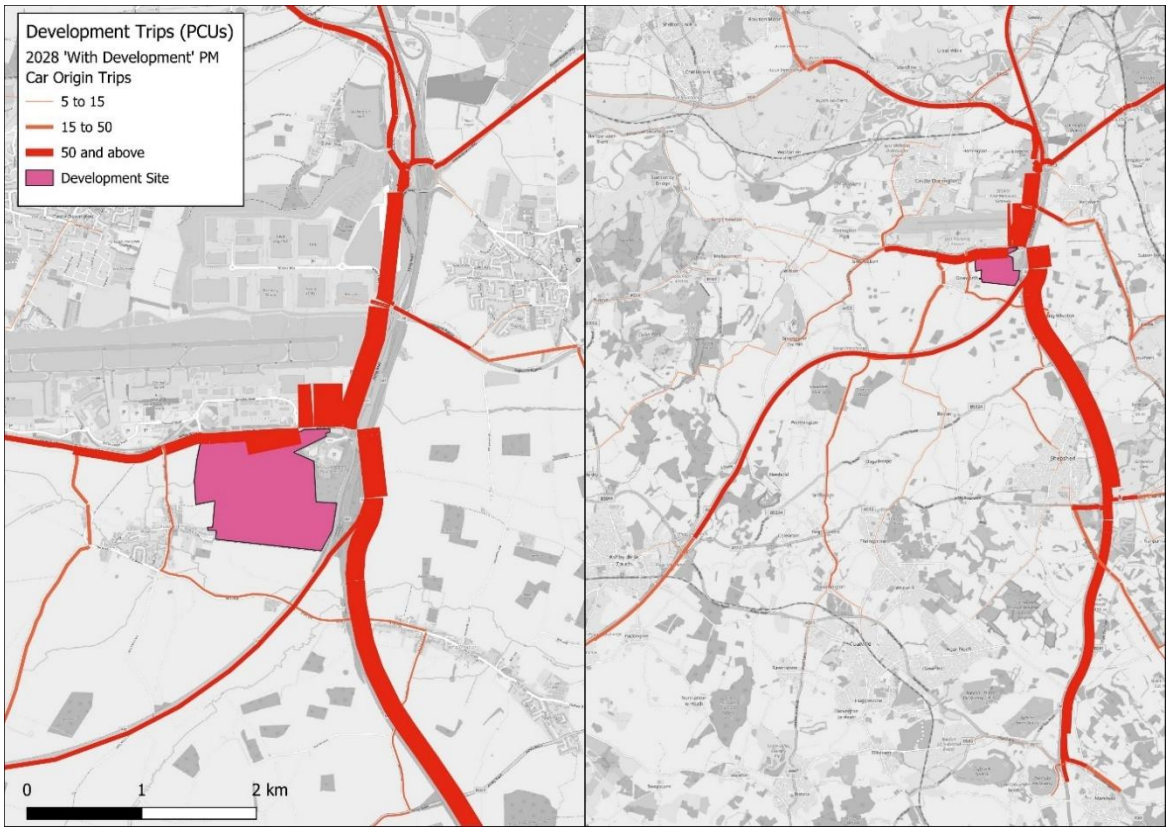
Figure 3.4: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (PM)

2028 'With Development (2a)' (PM), Light Vehicles – From the Development



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2028 'With Development (2a)' (PM), Light Vehicles – To the Development

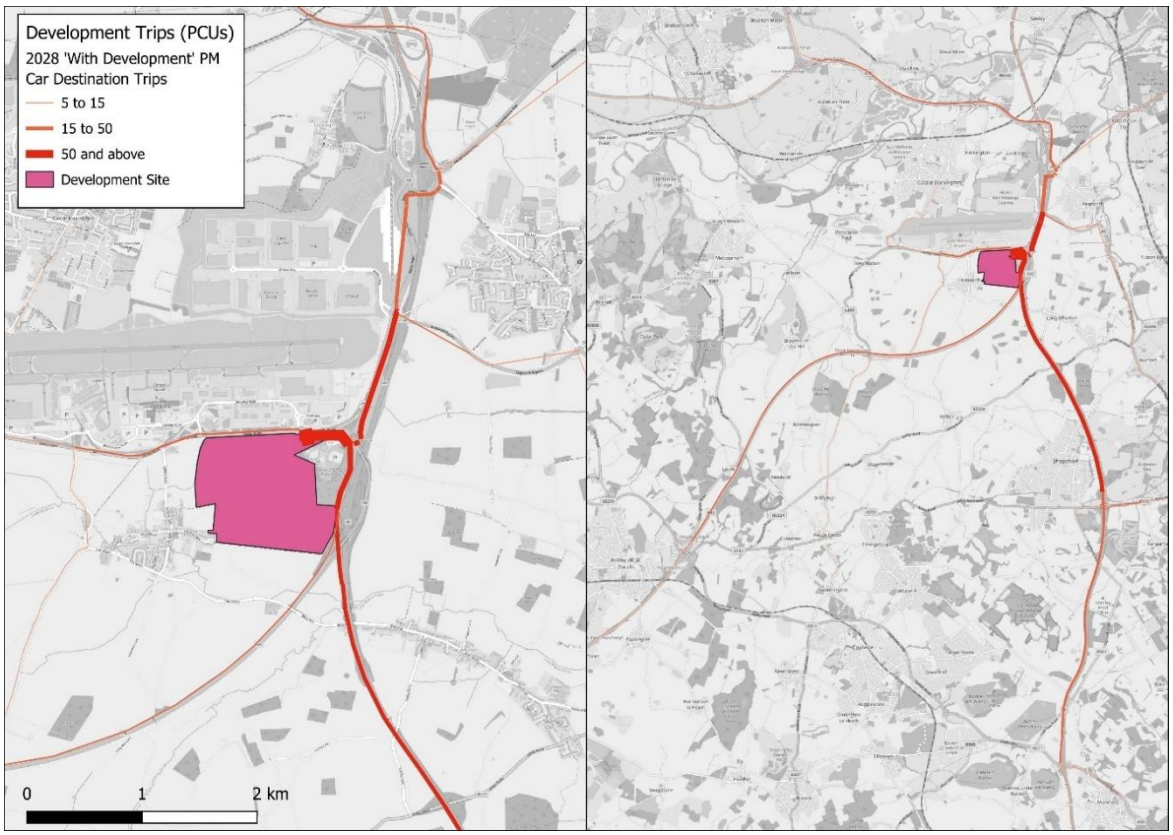

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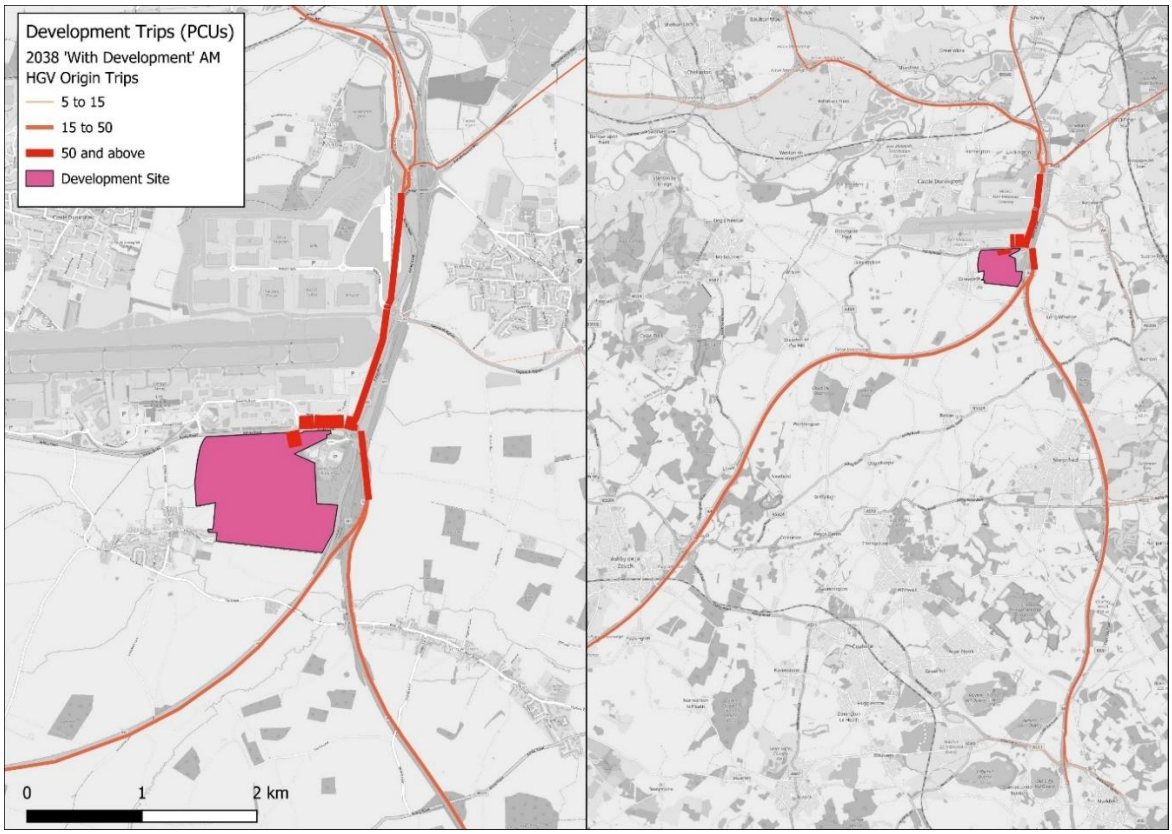
Figure 3.5: HGV Trip Distribution to and from the Proposed Development for 2038 (AM)

2038 'With Development (2a)' (AM), HGVs – From the Development



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2038 'With Development (2a)' (AM), HGVs – To the Development

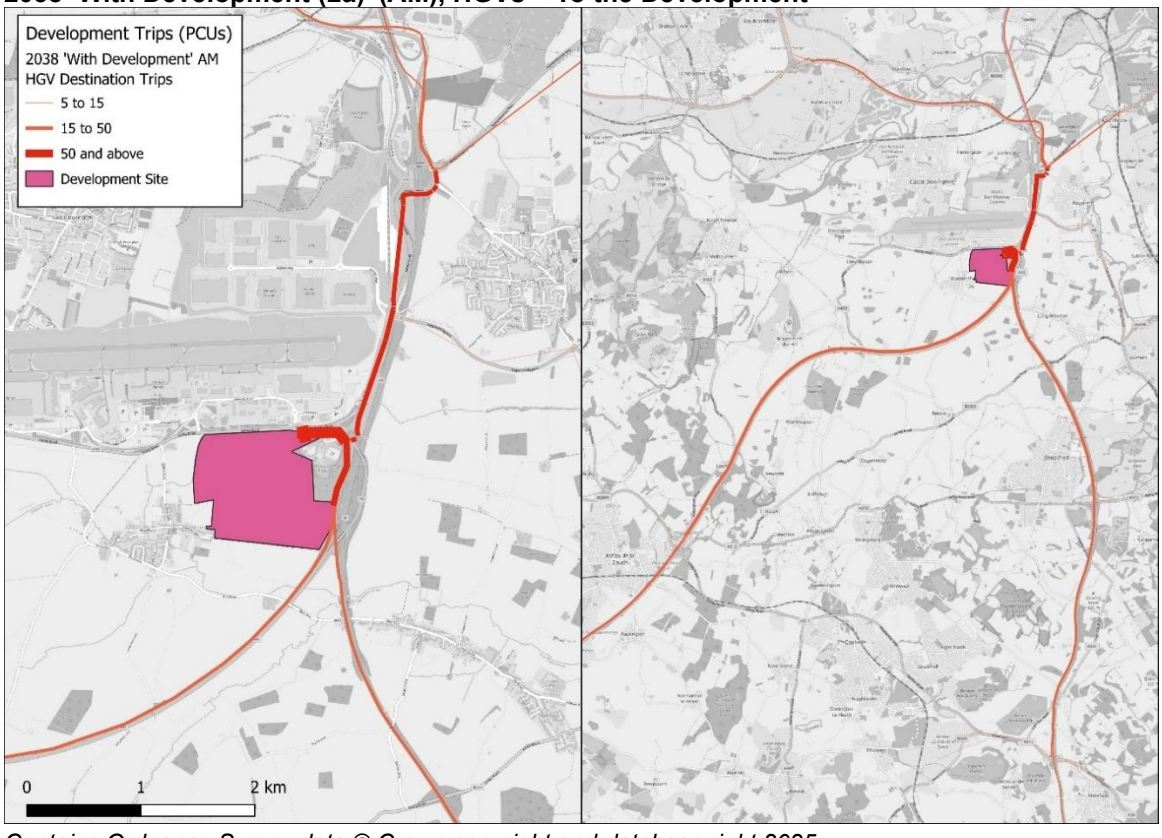

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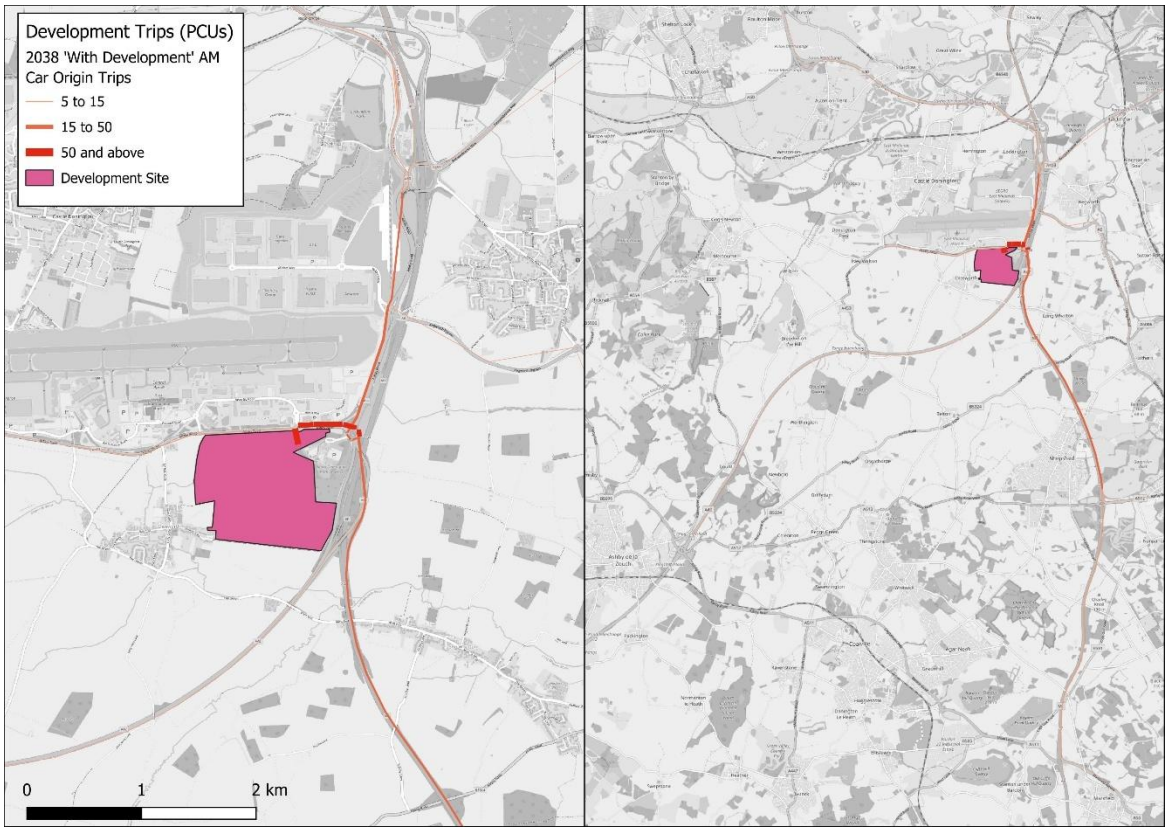
Figure 3.6: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (AM)

2038 'With Development (2a)' (AM), Light Vehicles – From the Development



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2038 'With Development (2a)' (AM), Light Vehicles – To the Development



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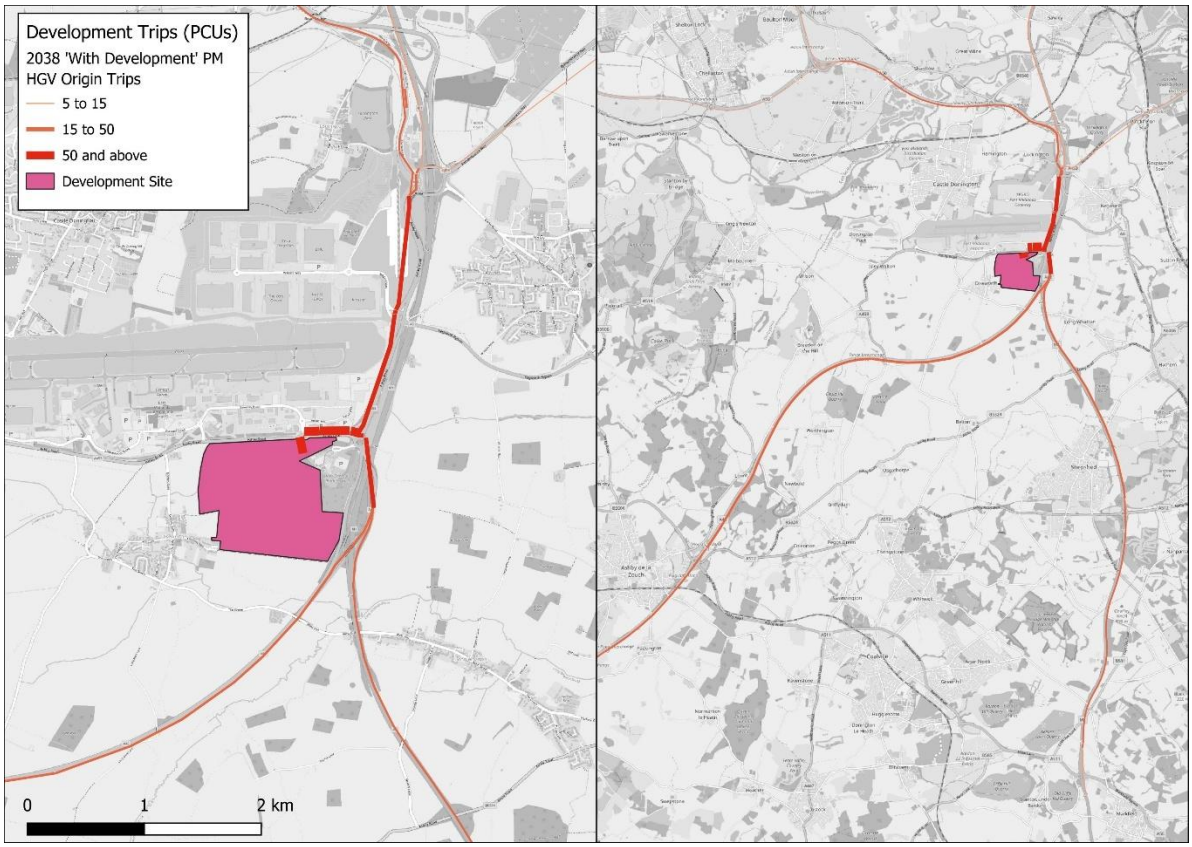
Figure 3.7: HGV Trip Distribution to and from the Proposed Development for 2038 (PM)

2038 'With Development (2a)' (PM), HGVs – From the Development



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2038 'With Development (2a)' (PM), HGVs – To the Development

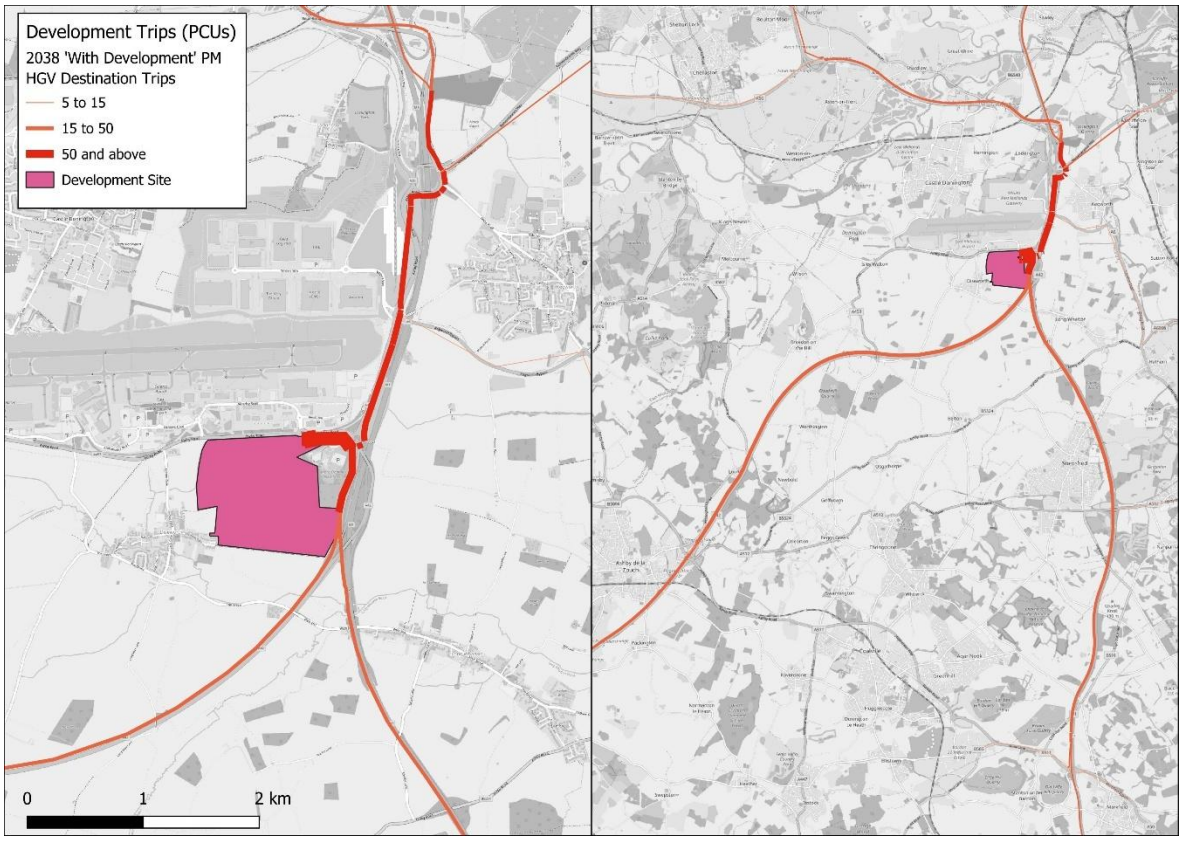

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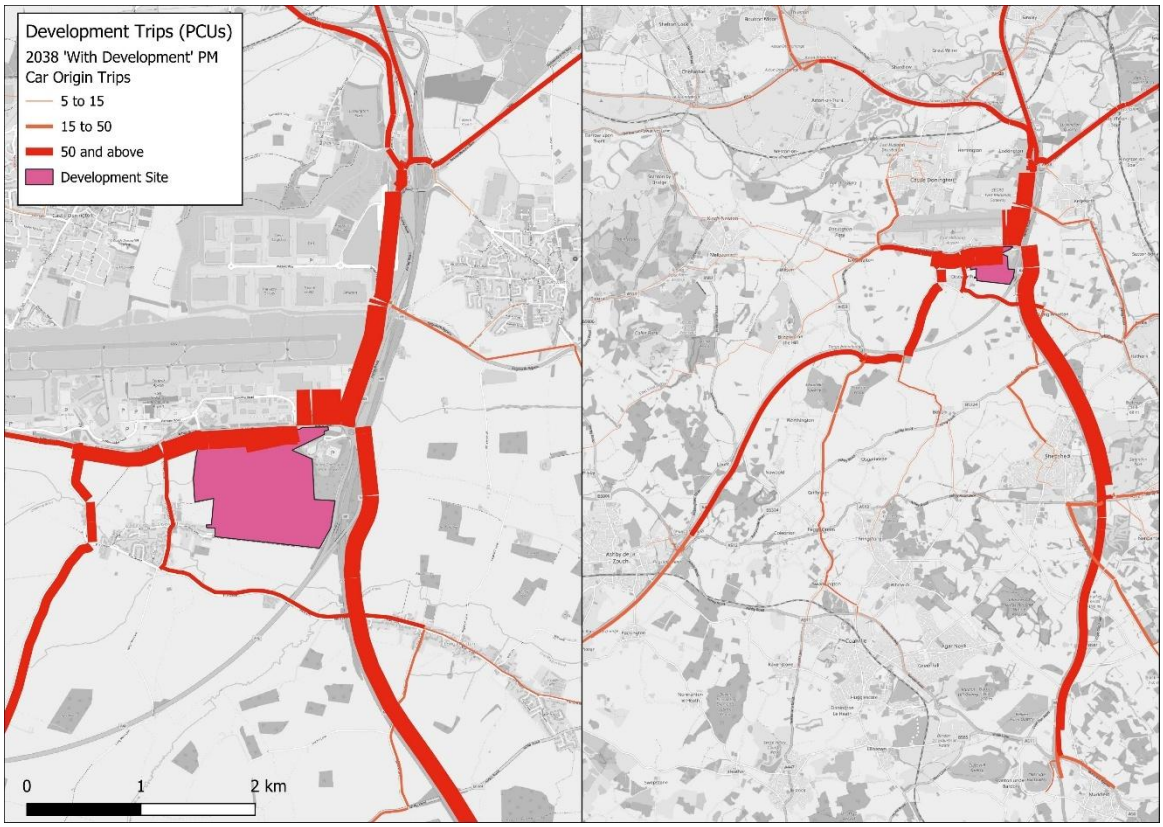
Figure 3.8: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (PM)

2038 'With Development (2a)' (PM), Light Vehicles – From the Development



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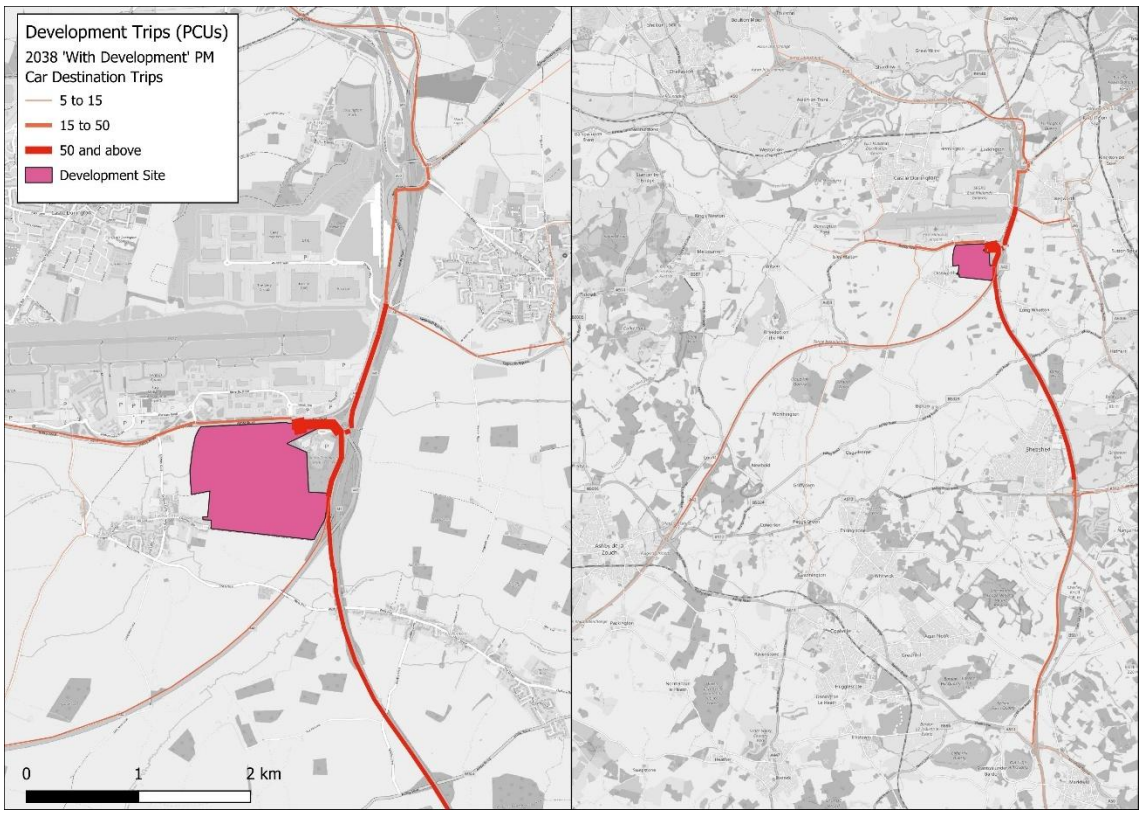
2038 'With Development (2a)' (PM), Light Vehicles – To the Development



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3.3 Forecast Flow Change

3.3.1 Figure 3.9 and Figure 3.10 show the forecast flow changes in 2028 and 2038 between the 'With Development (2a)' and 'Without Development (1a)' scenarios for the AM Peak and PM Peak hours. Red bandwidth represents a proportional increase in traffic flow in the 'With Development (2a)' scenario and green bandwidth represents a decrease.

3.3.2 These figures show that most increases in traffic are forecast on the SRN, namely the A453, M1, A50, A6 Kegworth Bypass and the A42.

New M1 northbound to A50 westbound interchange link

3.3.3 As expected, the largest increase in flow is forecast along the new M1 northbound interchange link road across all modelled forecast scenarios. This traffic has diverted off the A453, Finger Farm Roundabout and M1 J24.

M1 southbound link approaching Junction 24

3.3.4 There is an increase (of approximately 200 and 400 PCUs) in traffic forecast on the M1 southbound towards the M1 J24 with the increase in capacity on the M1 southbound. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

EMGP1 access improvements

3.3.5 This mitigation measure is forecast to reduce delays at this junction leading to a forecast increase in traffic from the A6 Kegworth Bypass. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

A453 Finger Farm Roundabout westbound exit widening

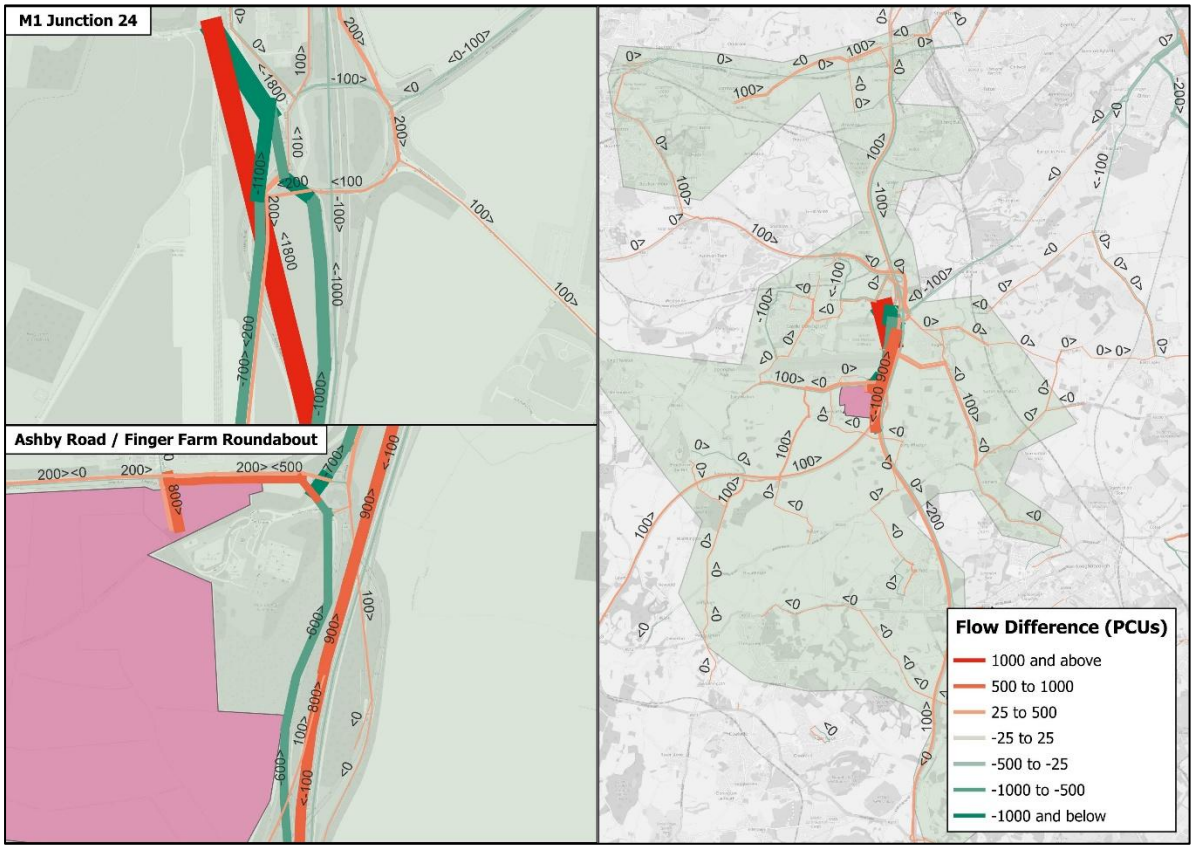
3.3.6 A reduction in northbound traffic on the A453 is forecast at Finger Farm Roundabout primarily as a result of the new link road. There is also an increase (~100 PCUs) on the A453 from the north with the largest increase, as expected, on the A453 to / from the proposed development site.

EMGP2 access roundabout and toucan crossing

3.3.7 As expected, there is an increase in flows along the A453 as traffic accesses the proposed development site. The majority of traffic is forecast to route to and from the east via Finger Farm Roundabout.

Figure 3.9: Forecast Flow Change for 2028 'Without Development (1a)' minus 'With Development (2a)'

AM Peak hour



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PM Peak hour

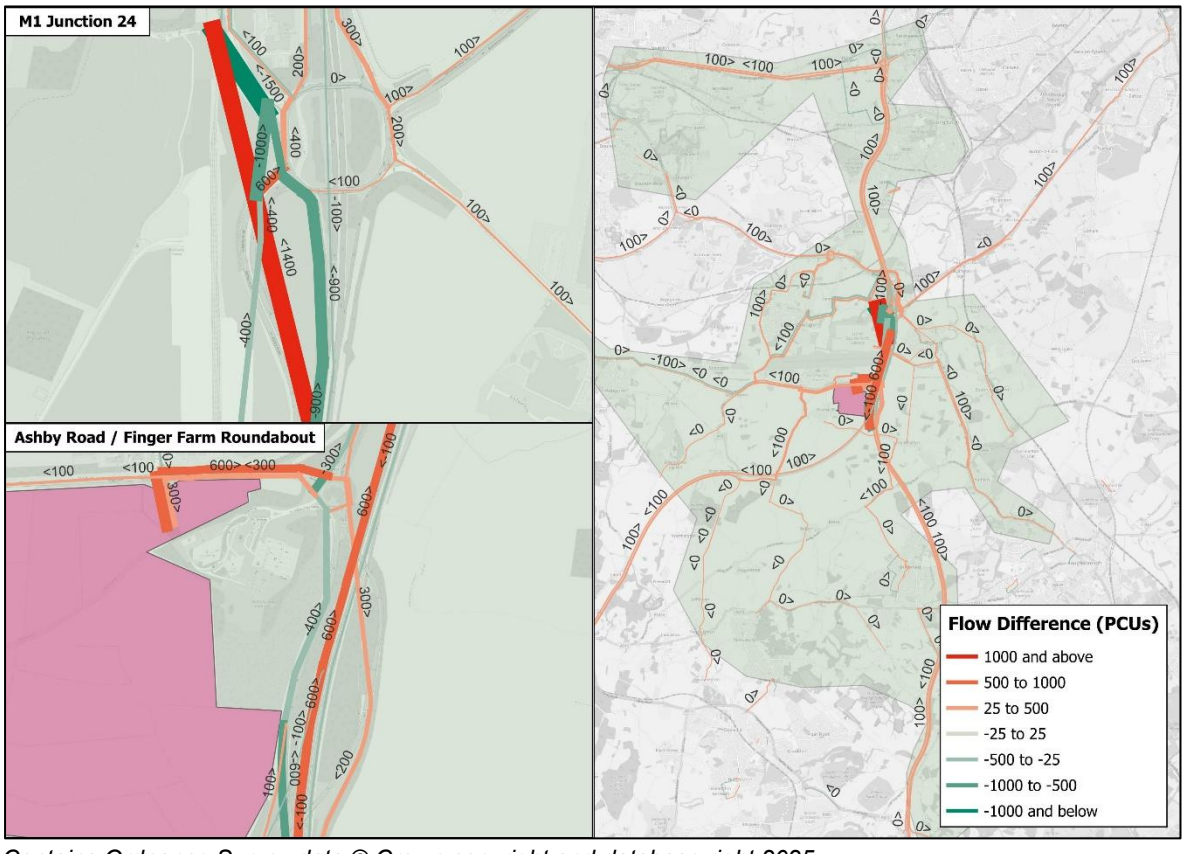

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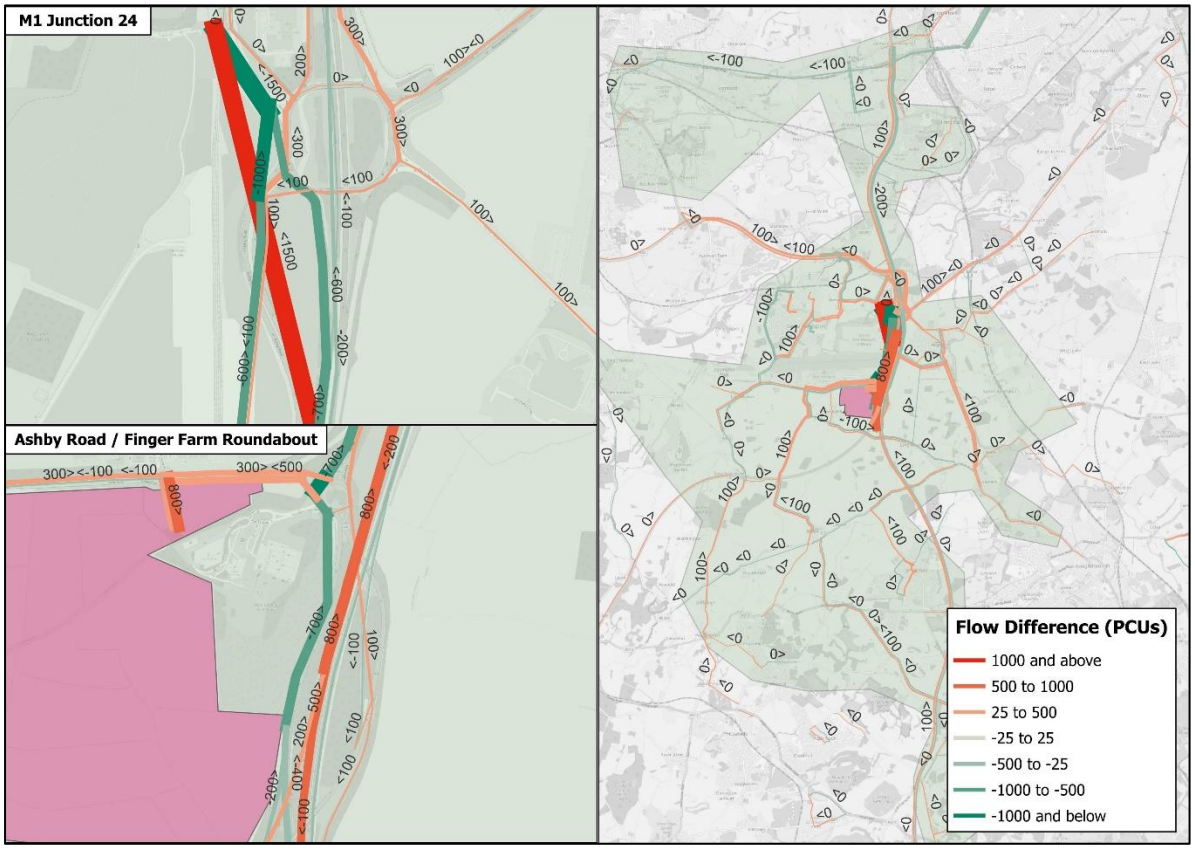
Figure 3.10: Forecast Flow Change for 2038 'Without Development (1a)' minus 'With Development (2a)'

AM Peak hour



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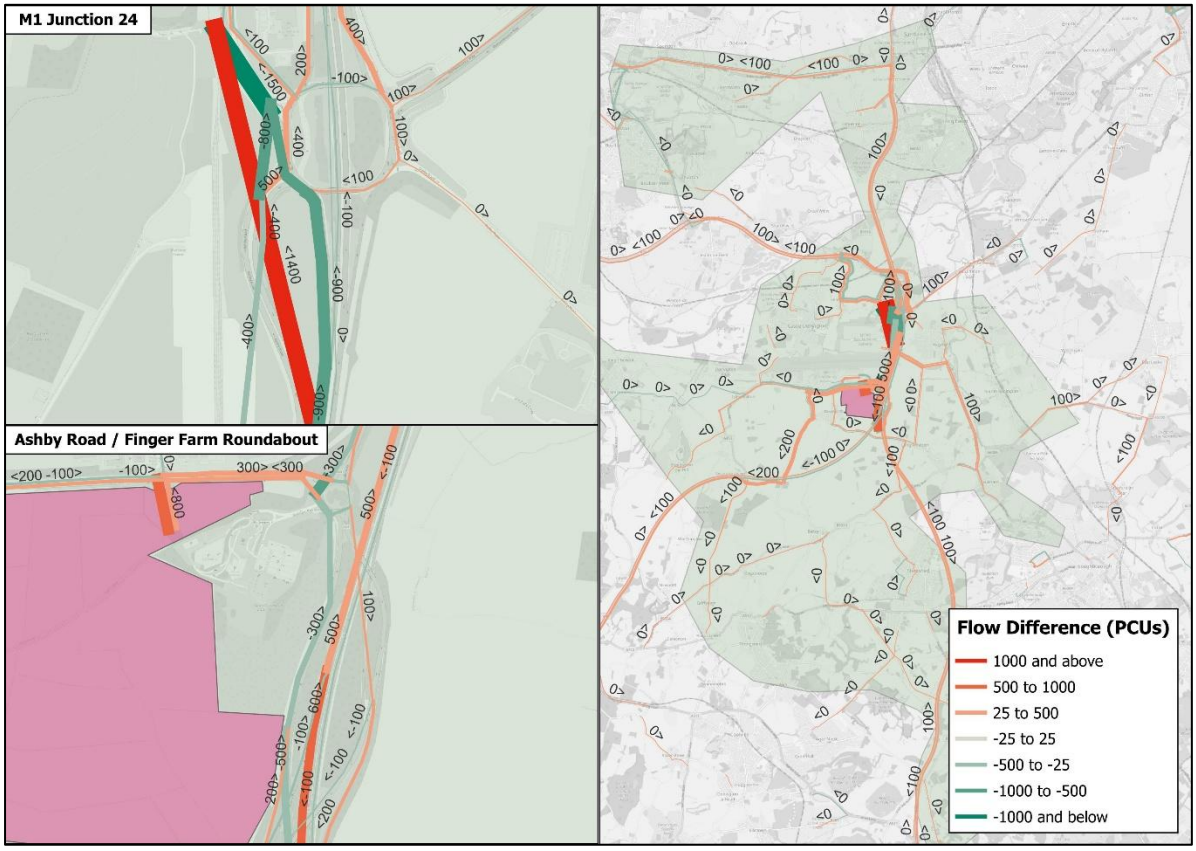
PM Peak hour



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3.4 Area of Influence

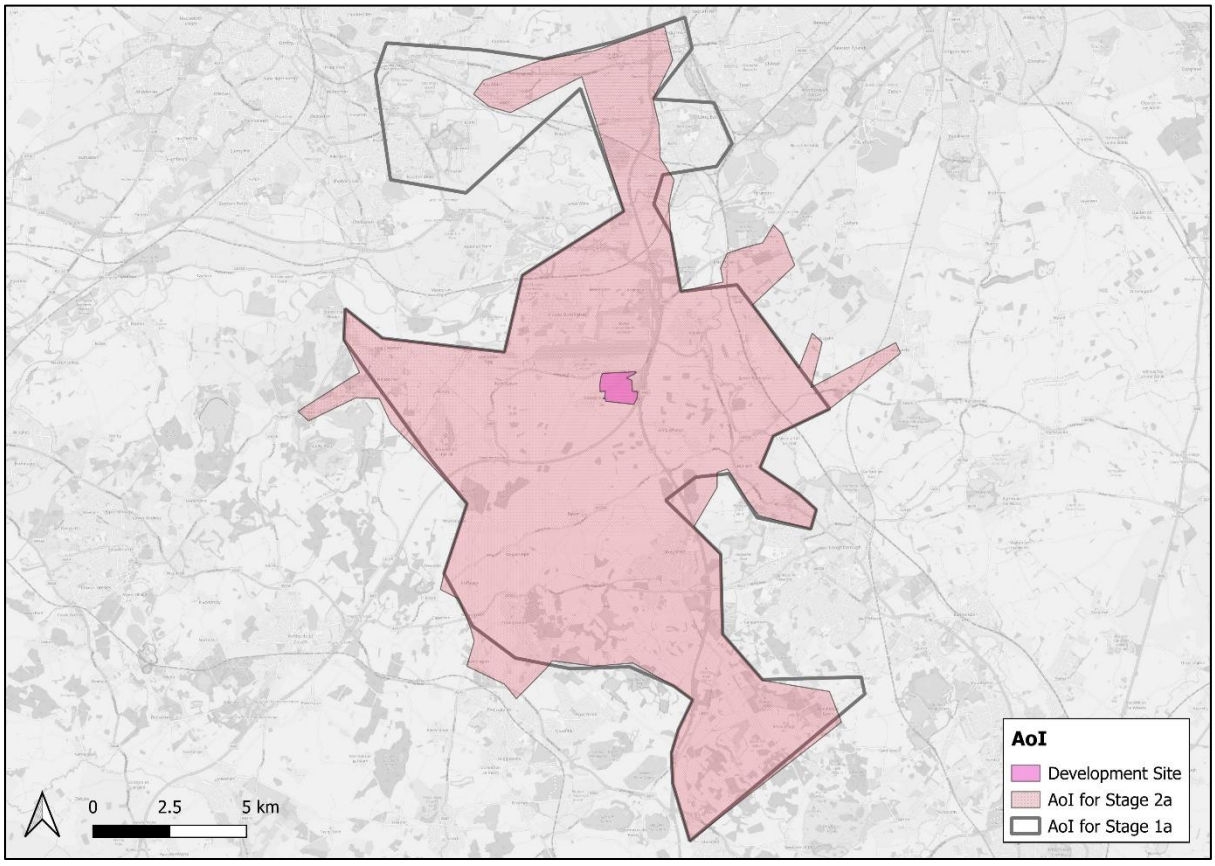
3.4.1 Using the forecast flow changes between the 'With Development (2a)' and 'Without Development (1a)' scenarios, an indication of the AoI in Stage 2a has been defined and is shown in Figure 3.11.

3.4.2 For the proposed development, the AoI has been defined by considering the links which are forecast to change flow by more than ±5% and ±30 PCUs between the 2028 and 2038 'With Development (2a)' and 'Without Development (1a)' scenarios in either the AM Peak or the PM Peak hours. The links which are forecast to meet these criteria are included in the AoI, as shown in Figure 3.11, and contain the following areas / links:

- the A453 including Finger Farm roundabout;
- the M1 between Junction 23 and Junction 24a;
- the M1 Junction 25;
- the A42 Junction 14;
- the A52 Brian Clough Way between the M1 Junction 25 and Victoria Avenue near Borrowash; and
- local roads in and around Castle Donnington; Kegworth; Diseworth; Hathern; Thringston and Shepshed.

3.4.3 For comparison, Figure 3.11 also shows the AoI for Stage 1a (without mitigation) and this shows that the AoIs are similar in both stages. To provide consistency with previous Stage 1a outputs, the AoI in Stage 1a has been retained for use for Stage 2a outputs.

Figure 3.11: Area of Influence



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3.5 Forecast Delay Change

3.5.1 As a result of forecast flow changes in the 'With development (2a)' scenario, there are also changes to the forecast delays on the highway network when compared with the 'Without Development 1a)' scenario. These changes in delay can be generated from two sources: link delay based on the speed-flow curve applied to the link; and the junction delay due to capacity constraints for individual turning

movements. The analysis in this section combines the link and junction delays (taking a flow-weighted average of junction delays) to assess the changes in forecast delays with the proposed development traffic.

3.5.2 Figure 3.12 and Figure 3.13 show the forecast delay changes (in seconds) in 2028 and 2038 between the 'With Development (2a)' and 'Without Development (1a)' scenarios for the AM Peak and PM Peak hours.

New M1 northbound to A50 westbound interchange link

3.5.3 With the new interchange link road included, delay is forecast to occur on the A50 where vehicles join the A50 from the proposed link road. It should be noted that this delay is not an 'increase' compared to the 'Without Development (1a)' scenario as this proposed junction does not exist in without development scenarios. It should also be noted that delays are forecast to reduce at the M1 J24 and Finger Farm Roundabout as this mitigation measure has attracted traffic off these junctions.

M1 southbound link approaching Junction 24

3.5.4 A decrease in delay is forecast on the circulatory lanes of M1 J24 for all forecast scenarios in both the AM Peak and PM Peak hours. In addition, there are decreases in delay on the M1 southbound to the north of M1 J24. These reductions in delay are provided by the additional M1 southbound capacity (i.e. extra lane) and the optimisation of the signals at M1 J24 (see Section 2.3).

EMGP1 access improvements

3.5.5 The Wilders Way / A453 / A6 Kegworth Bypass junction is forecast to have a reduction in delays in all scenarios. This has been provided by the inclusion of the new interchange link road and the EMGP1 access improvements. As noted in Section 2.3, the benefits of the EMGP1 access improvements have been 'unlocked' by the Wilders Way / A453 signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

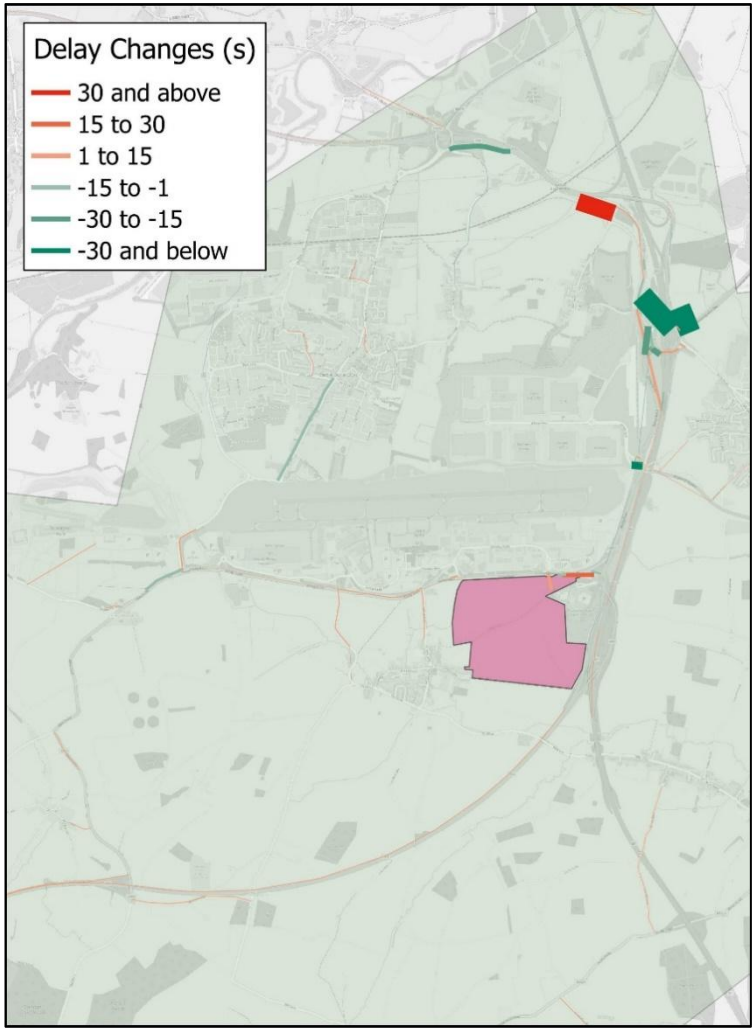
3.5.6 Delays remain largely unchanged across all scenarios when compared with the 'Without Development (1a)' scenarios, except for a reduction in delays on the A453 eastbound approach during the 2038 AM Peak hour.

EMGP2 access roundabout and toucan crossing

3.5.7 There are increases in delay forecast on the A453 near the proposed development access junction and toucan crossing. This increase has been generated from the development traffic routeing to and from the proposed development and the toucan crossing which will generate delay on the A453 to the east of the proposed development site. It should be noted that this delay is not an 'increase' compared to the 'Without Development (1a)' scenario as the toucan crossing has not been included in the without development scenarios. The toucan crossing will generate transient delay as this has been represented as a signalised junction in the EMFM.

Figure 3.12: Forecast Delay Change for 2028 'With Development (2a)' minus 'Without Development (1a)'

AM Peak hour



PM Peak hour

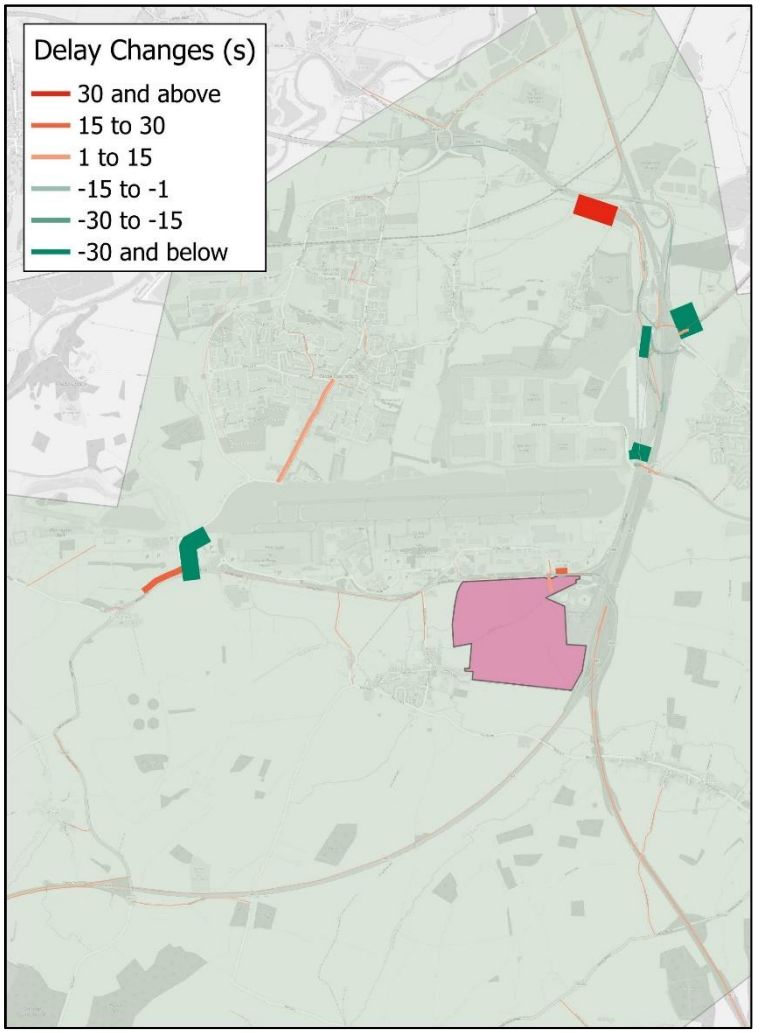


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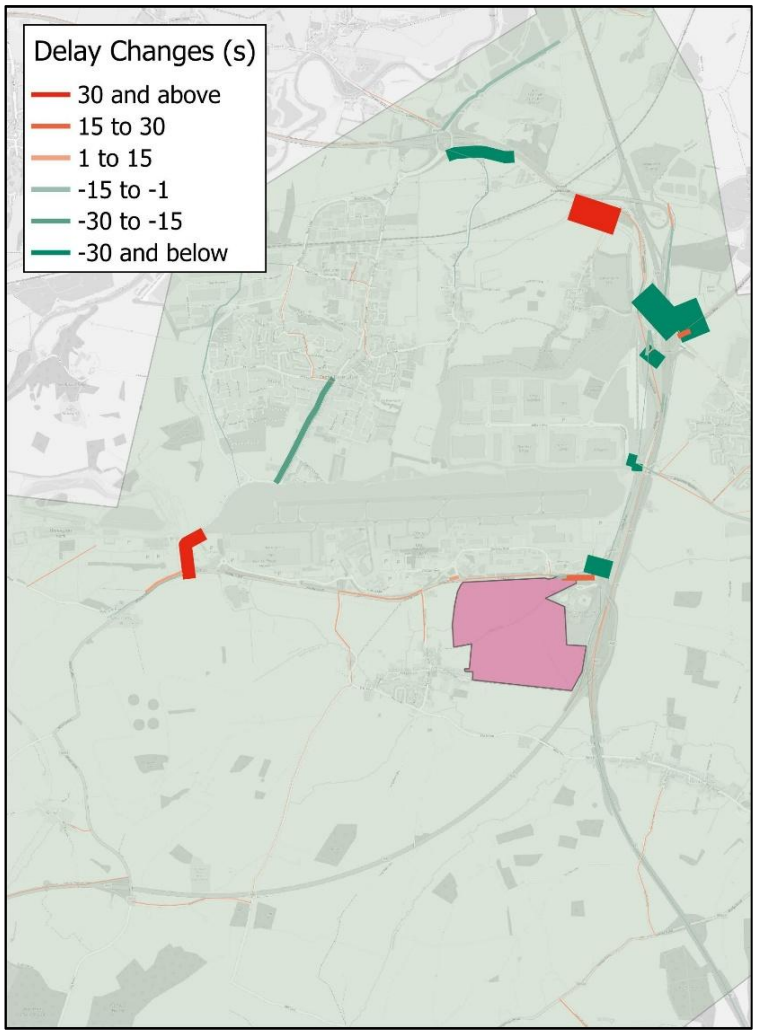
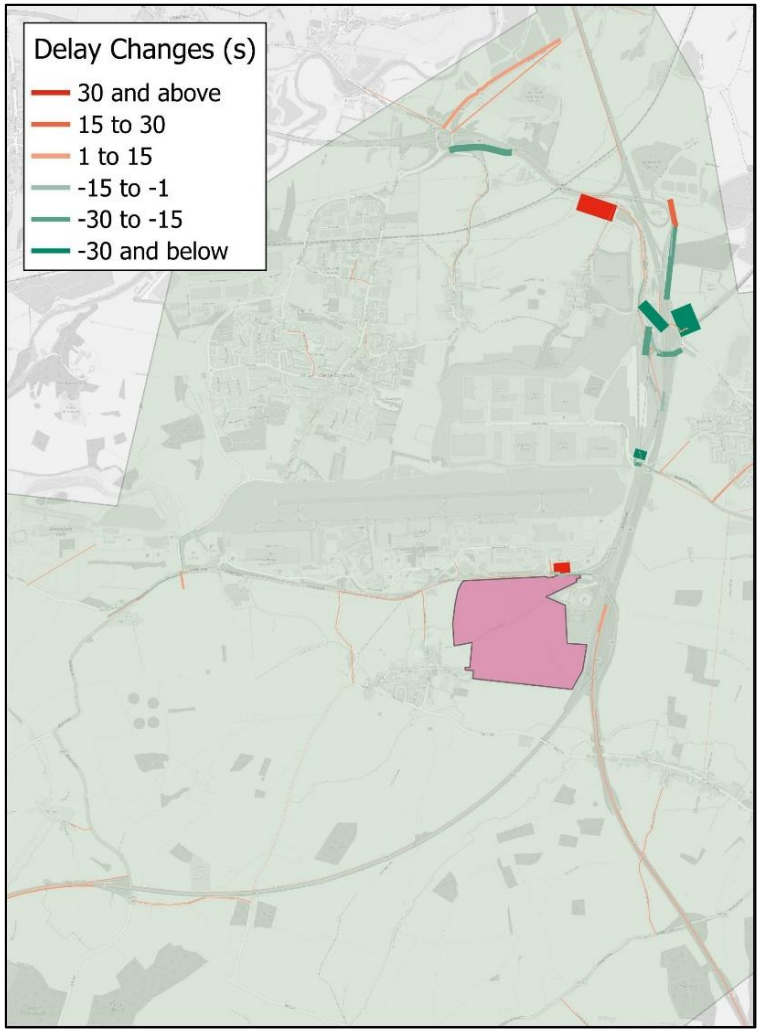
Figure 3.13: Forecast Delay Change for 2038 'With Development (2a)' minus 'Without Development (1a)'

AM Peak hour



PM Peak hour



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3.6 Forecast Node Volume-Capacity Ratios

3.6.1 As a part of the forecast modelling, node / junction capacities are estimated for individual turning movements based on a number of factors including priority of the turn (for example, give-way or merge), the level of green-time at signalised junctions, and the amount of opposing traffic at the junction. Using these calculated capacities and the forecast traffic volumes, node volume-capacity ratios are estimated to identify locations where the forecast flows are approaching or exceeding the forecast capacity.

3.6.2 To summarise the forecast-capacity ratios for the individual turning movements at a node, there are two approaches. These are to calculate the flow-weighted average volume-capacity of the node, or to calculate the maximum volume-capacity ratio for all turns within a node. The average volume-capacity ratio provides an overview of how the individual node is performing but may not highlight locations where a limited number of movements at a node are approaching or exceeding capacity. To highlight these locations, the maximum volume-capacity ratio at each node has been used. Node volume-capacity ratios exceeding 85% indicate that the highway network is under stress, and there is likely to be a reduction in speed and increase in delay.

3.6.3 Figure 3.14 and Figure 3.15 show the forecast maximum node volume-capacity ratios for the 'With Development (2a)' and 'Without Development (1a)' scenarios in 2028 and 2038. For ease of comparison, the symbology has been designed to show the data for 'With Development (2a)' and 'Without Development (1a)' scenarios on the same plot.

3.6.4 The reader should note that Figure 3.14 and Figure 3.15 show a subset of all nodes within the EMFM to reduce the number of data points within the plots. Nodes which do not fall within the AoI, as defined in Figure 3.11, are not shown. Nodes with maximum volume-capacity ratios below 85% in all forecast scenarios are not shown, except for the node which is located at the proposed site access on the A453.

3.6.5 The forecast maximum node volume-capacity ratio plots show that the EMGP1 access junction, EMGP2 access junction, M1 J24, and the Finger Farm Roundabout are most affected by the proposed mitigation measures. EMFM forecasts that volume-capacity ratios at these junctions will broadly improve in the 'With Development (2a)' scenarios.

New M1 northbound to A50 westbound interchange link

3.6.6 The node volume-capacity ratios forecasts for the M1 J24 are at or approaching capacity in the 'Without Development (1a)' scenarios, with multiple nodes at this junction exceeding 85% in 2028 and 100% in 2038. With the inclusion of the proposed mitigation measures included in the 'With Development (2a)' scenarios the node volume-capacity decrease slightly overall. These improvements are a result of vehicles diverting off the M1 J24 to use the new link road and the additional capacity on the M1 southbound (and the accompanying signal optimisation (see Section 2.3)).

3.6.7 Figure 3.14 shows that in the AM Peak hour there are two nodes on the M1 J24 that are forecast to have higher node volume-capacity ratios in the 'With Development (2a)' scenario. These two nodes are located at J24 / A453 Remembrance Way and J24 / M1 northbound off-slip. As noted in Paragraph 3.6.2, the maximum volume-capacity for a turning movement within a node has been reported. In the case of J24 / A453 Remembrance Way this is the turn that continues on the gyratory and in the case of the J24 / M1 northbound off-slip the maximum volume-capacity ratio is from the gyratory towards the A453 southbound.

3.6.8 In the case of the J24 / A453 Remembrance Way node the forecast increase is caused by the additional road capacity provided by the mitigation measures, namely the additional lane on the M1 southbound. In the case of the J24 / M1 northbound off-slip node the forecast increase is caused by development traffic routeing towards the proposed site as indicated by the increase in flow shown in Figure 3.9 and the distribution of development traffic shown in Figure 3.1and Figure 3.2

EMGP1 access improvements

3.6.9 The node volume-capacity ratios at Wilders Way / A453 / A6 Kegworth Bypass junction are forecast to generally decrease in both forecast years in the 'With Development (2a)' scenarios. This improvement is caused by traffic diverting off the A453 and onto the new link road and the EMGP1 access improvements and associated signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

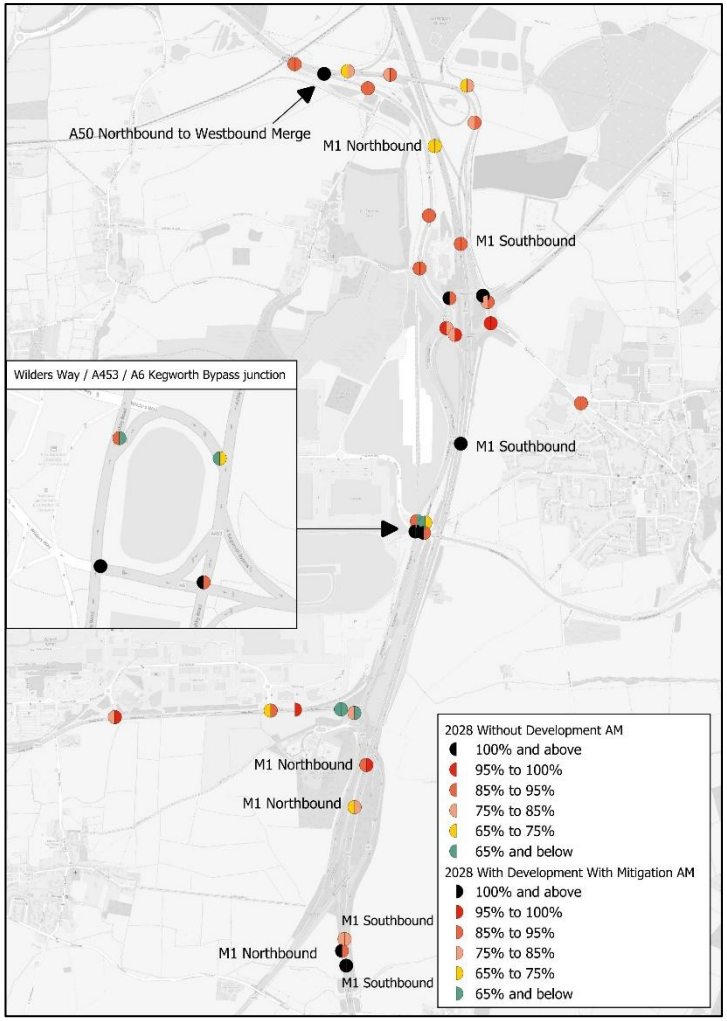
3.6.10 The node volume-capacity ratios for Finger Farm Roundabout are forecast to decrease in the AM Peak hour in both forecast years as a result of the proposed mitigation measures. The PM Peak is forecast to have nodes with higher node volume-capacity ratios in the 'With Development (2a)' and as shown in Figure 3.9 and Figure 3.10 there are higher volumes of traffic forecast on the A453 to the west of Finger Farm Roundabout.

EMGP2 access roundabout and toucan crossing

3.6.11 The node volume-capacity ratios at EMGP2 access junction are forecast to increase in the AM Peak hour for both forecast years but remain the same in the PM Peak hour in 2028 and decrease in 2038. The proposed toucan crossing on the A453 is forecast to have a node volume-capacity ratio between 95% and 100% in both peaks and both forecast years. However, it should be noted that the toucan crossing is demand dependant and this demand dependency cannot be accurately reflected in the EMFM.

Figure 3.14: Forecast Node Volume-Capacity Ratio for 2028 'Without Development (1a)' and 2028 'With Development (2a)'

AM Peak hour



PM Peak hour

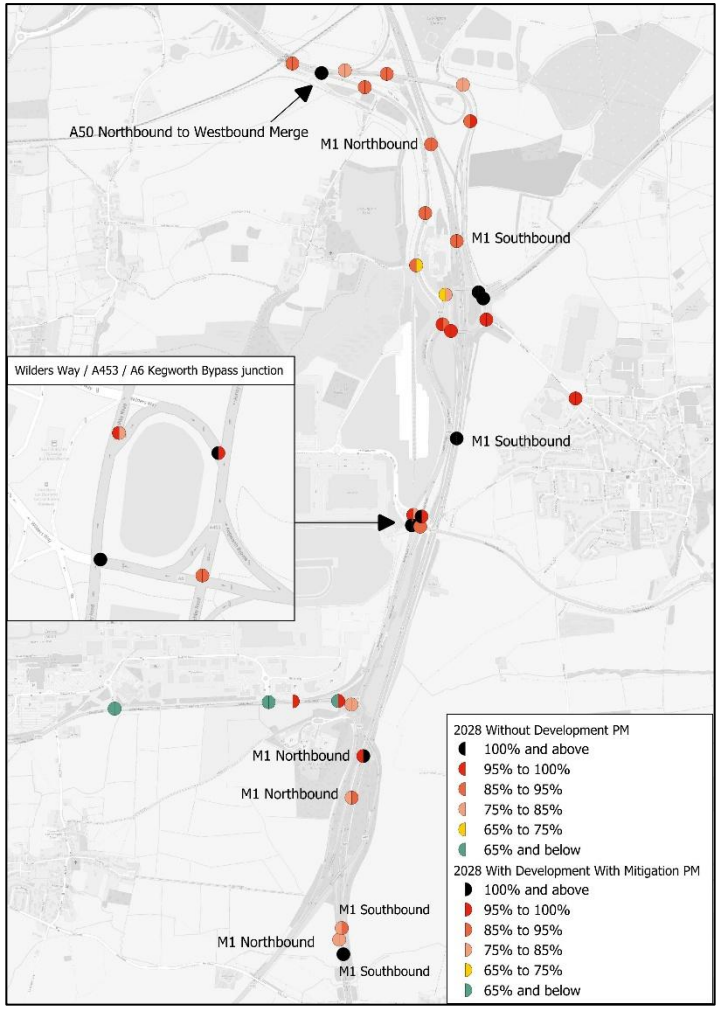


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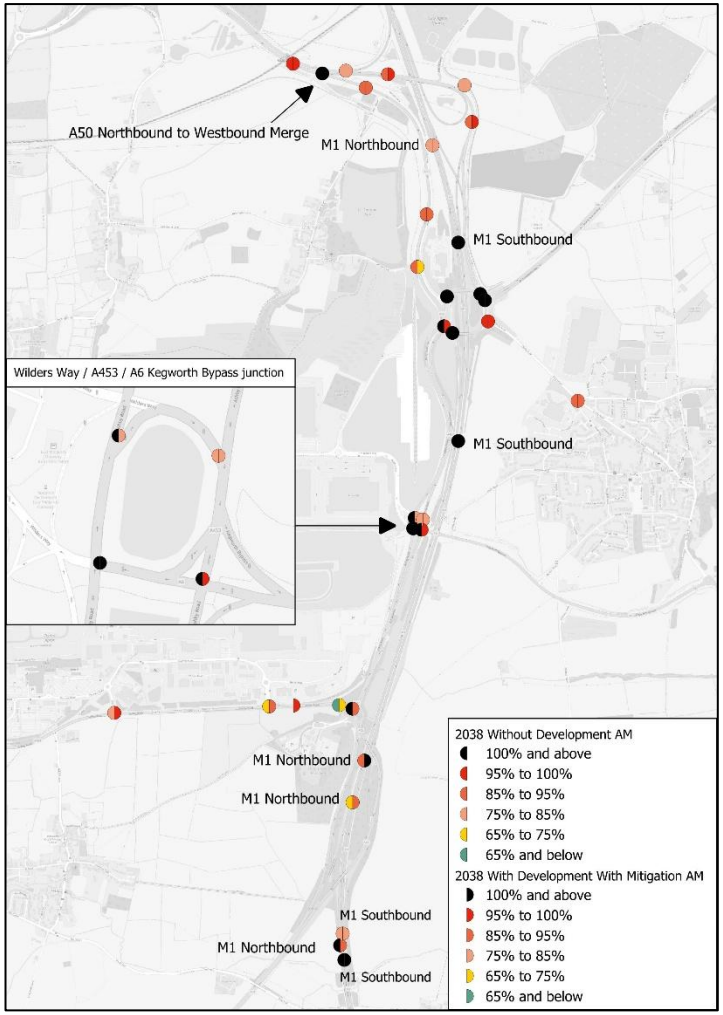
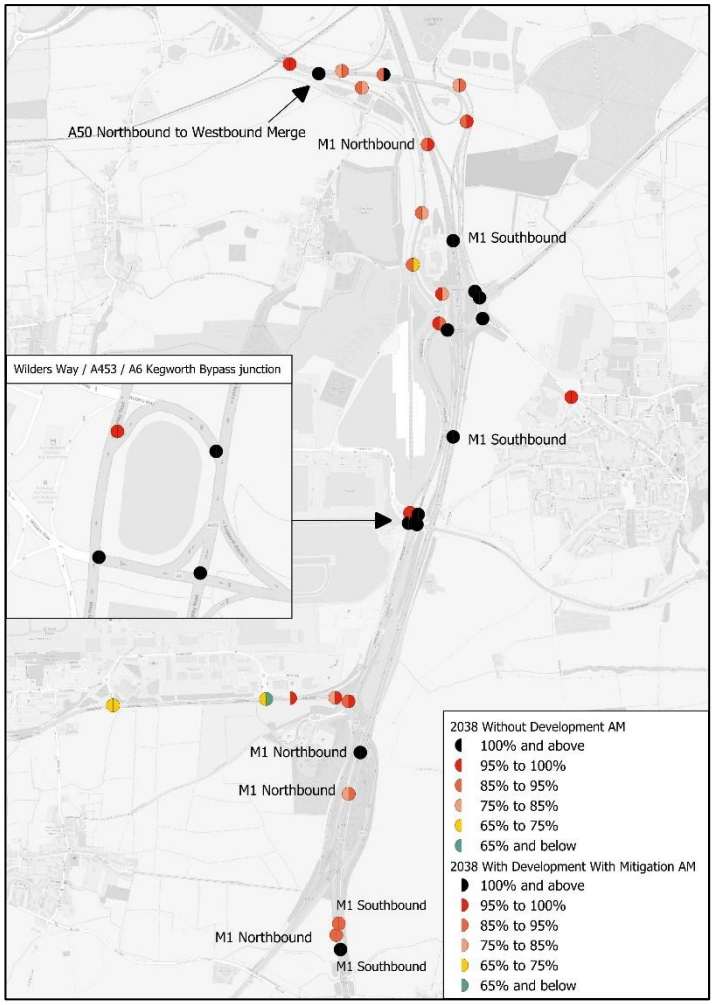
Figure 3.15: Forecast Node Volume-Capacity Ratio for 2038 'Without Development (1a)' and 2038 'With Development (2a)'

AM Peak hour



PM Peak hour



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3.7 Forecast Junction Turning Flows

3.7.1 Forecast turning flows have been extracted for the following 16 junctions (also shown in Figure 3.16) in the vicinity of the proposed development:

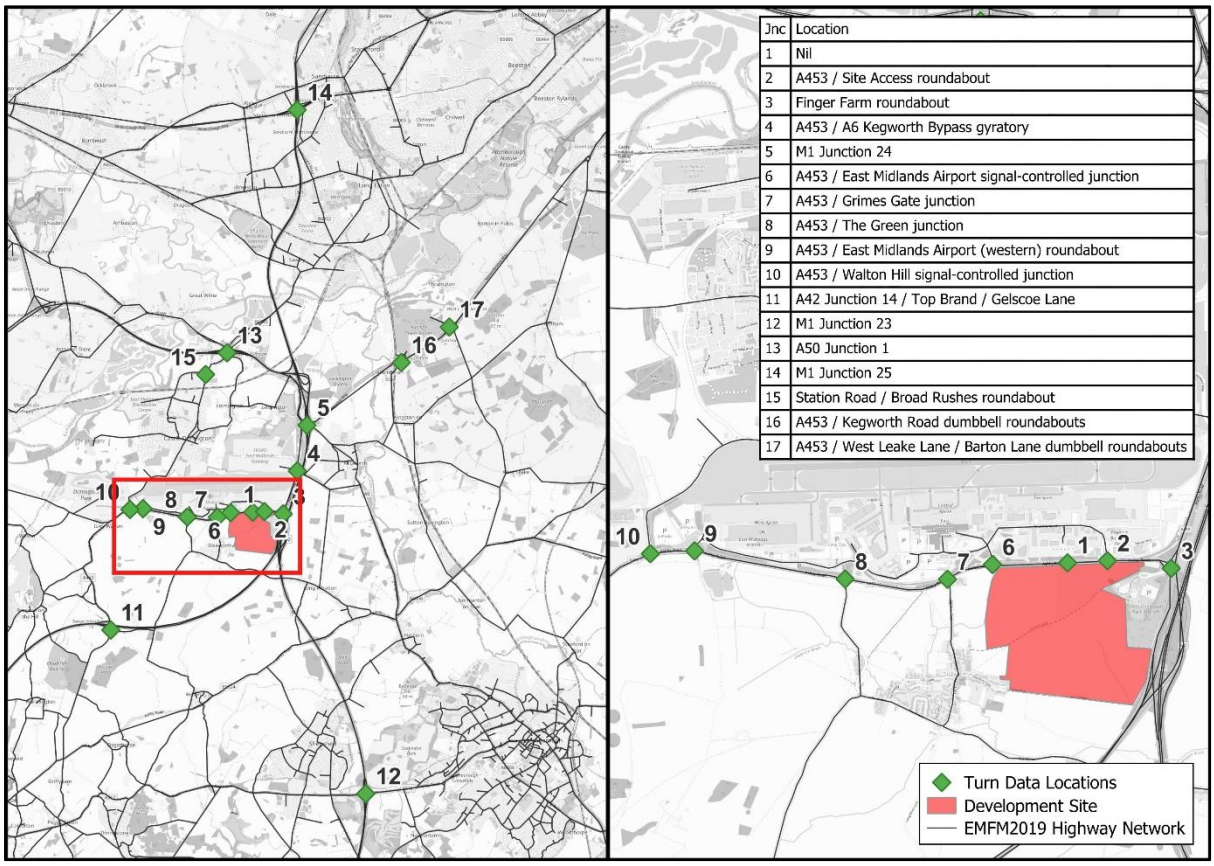
- A453 /Site access Roundabout (Junction 2);
- Finger Farm Roundabout (Junction 3);
- A453 / A6 Kegworth Bypass gyratory (Junction 4);
- M1 Junction 24 (Junction 5);
- A453 / East Midlands Airport signal-controlled junction (Junction 6);
- A453 / Grimes Gate junction (Junction 7);
- A453 / The Green junction (Junction 8);
- A453 / East Midlands Airport (western) roundabout (Junction 9);
- A453 / Walton Hill signal-controlled junction (Junction 10);
- A42 Junction 14 / Top Brand / Gelscoe Lane (Junction 11);
- M1 Junction 23 (Junction 12);
- A50 Junction 1 (Junction 13);
- M1 Junction 25 (Junction 14);
- Station Road / Broad Rushes roundabout (Junction 15);
- A453 / Kegworth Road dumbbell roundabouts (Junction 16); and
- A453 / West Leake Lane / Barton Lane dumbbell roundabouts (Junction 17).

3.7.2 The data have been provided separately in MS Excel spreadsheet format[6] which contains the forecast turning flows for the AM Peak and PM Peak hours for light and heavy vehicles. Data are provided for the 2028 and 2038 'With Development (2a)' scenarios. In addition to the turning flows, turn volume-capacity ratios have also been provided where available.

3.7.3 By design the EMFM highway model has not been calibrated or validated for individual turning movements, so care should be taken when using forecasts of flows and volume-capacity ratios at this level.

[6] EMGP2 - Junction Turning Flows (Stage 2a) v1.0 - For Issue.xlsx (provided via email on 16th May 2025)

Figure 3.16: Location of Forecast Turning Flow Data



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Section 4 – Summary of the Mitigation Assessment

4.1 Summary of Assessment

4.1.1 The East Midlands Freeport Model (EMFM) has been used for the strategic assessment of Stage (2a) for both 2028 and 2038 for the AM Peak and PM Peak hours ('With Development (2a)' scenarios). Stage 2a includes the proposed East Midlands Gateway Phase 2 development and the proposed mitigation measures and accompanying signal optimisation at two junctions adjacent to the mitigation measures.

4.1.2 The client has provided mitigation measures that have been included in the EMFM at the following locations:

- New M1 northbound to A50 westbound interchange link road.
- M1 southbound link approaching Junction 24.
- EMGP1 access improvements.
- A453 Finger Farm Roundabout westbound exit widening.
- EMGP2 access roundabout and toucan crossing.
- M1 J24 Minor Works.

4.1.3 The following is a summary of the key findings for the assessment of the mitigation measures.

- The trip distribution for the proposed development traffic is, as expected, very similar to the 'With Development (1a)' (without mitigation) scenarios. How development traffic routes through the network is also very similar.
- The forecast flow changes in 2028 and 2038 between the 'With Development (2a)' and 'Without Development (1a)' scenarios show that the largest increases in flows are forecast along the new interchange link road. With this proposed interchange link included traffic is forecast to divert off the A453 northbound, the Finger Farm Roundabout, the Wilders Way / A453 / A6 Kegworth Bypass roundabout and the M1 J24.
- There is an increase in traffic forecast on the M1 southbound towards the M1 J24 with the increase in capacity (additional lane) on the M1 southbound and associated signal optimisation (as noted in Section 2.3).
- As expected, there is an increase in flows along the A453 adjacent to the proposed development site as traffic accesses the development site with most traffic routeing to and from the east via Finger Farm Roundabout.
- An Area of Influence has been defined. A comparison between the AoIs for Stage 1a and Stage 2a shows that they are broadly similar but with Stage 2a AoI not extending into Derbyshire as much as Stage 1a.
- The forecast delay changes in 2028 and 2038 between the 'With Development (2a)' and 'Without Development (1a)' scenarios show delays are forecast to slightly increase along the A453 in the immediate vicinity of the proposed development in all forecast scenarios due to the proposed development traffic and the proposed toucan crossing.
- With the new interchange link road included, delays are expected to occur on the A50 where vehicles join the A50 from the proposed link road. No delays exist in the 'Without Development (1a)' scenario as this junction does not exist in this scenario. However, delays are forecast to reduce at the M1 J24 and Finger Farm Roundabout as this mitigation measure has reduced traffic volumes at these junctions.
- A decrease in delay is forecast on the circulatory lanes of M1 J24 for all forecast scenarios in both the AM Peak and PM Peak hours. In addition, there are decreases in delays on the M1 southbound to the north of M1 J24. These reductions in delay are caused by the additional M1 southbound capacity (i.e. extra lane) and the optimisation of the signals at M1 J24 (see Section 2.3).
- The node volume-capacity ratios forecasts for the M1 J24 are at or approaching capacity in the 'Without Development (1a)' scenarios, with multiple nodes at this junction exceeding 85% in

2028 and 100% in 2038. With the inclusion of the proposed mitigation measures included in the 'With Development (2a)' scenarios the node volume-capacity overall reduce slightly. These improvements are a result of vehicles diverting off the M1 J24 to use the new link road and the additional capacity on the M1 southbound.

- The node volume-capacity ratios at Finger Farm Roundabout and Wilders Way / A453 / A6 Kegworth Bypass junctions are forecast to generally improve in both forecast years in the 'With Development (2a)' scenarios. This improvement is caused by traffic diverting off the A453 and onto the new link road and the EMGP1 access improvements and associated signal optimisation.
- The node volume-capacity ratios at EMGP2 access junction are forecast to increase in the AM Peak hour for both forecast years but remain the same in the PM Peak hour in 2028 and decrease in 2038. The proposed toucan crossing on the A453 is forecast to have a node volume-capacity ratio between 95% and 100% in both peaks and both forecast years. However, it should be noted that the toucan crossing is demand dependant and this demand dependency cannot be accurately reflected in the EMFM.

4.1.4 The forecasts undertaken reflect the forecast impact of the proposed development at East Midlands Gateway Phase 2 with the proposed mitigation measures included. It should be noted that the results provided in this report are at a high level. Due to the strategic nature of the EMFM, not all roads are modelled, and the results should be interpreted with that in mind.

4.1.5 Although the EMFM modelling provides the strategic impact and form part of the proposed East Midlands Gateway Phase 2 assessment evidence packs, the overall assessment should be complemented by local operational assessment and analysis.

Appendix A Comparison of Stage 2a (with mitigation included) and Stage 1a (no mitigation)

Introduction

A.1.1 Appendix A compares Stage 2a, which includes the proposed mitigation measures ('With Development (2a)'), with Stage 1a that does not include the proposed mitigation measures ('With Development (1a)). This comparison therefore assesses the impact of the proposed mitigation measures being included on the network. Appendix A should be read in conjunction with Section 2 of this report that details the proposed mitigation measures.

Forecast Flow Change

A.1.2 Figure A.1 and Figure A.2 show the forecast flow changes in 2028 and 2038 between the 'With Development (2a)' and 'With Development (1a)' scenarios for the AM Peak and PM Peak hours. Red bandwidth represents an increase in traffic flow in the 'With Development (2a)' scenario and green bandwidth represents a decrease.

New M1 northbound to A50 westbound interchange link

A.1.3 As expected, the largest increase in flow is forecast along the new M1 northbound interchange link road across all modelled forecast scenarios. Traffic has diverted off the A453, the Finger Farm Roundabout, the Wilders Way / A453 / A6 Kegworth Bypass and the M1 J24.

M1 southbound link approaching Junction 24

A.1.4 There is an increase in traffic forecast on the M1 southbound towards the M1 J24 with the increase in capacity on the M1 southbound. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

EMGP1 access improvements

A.1.5 This mitigation measure is forecast to reduce delays at this junction leading to an increase in traffic from the A6 Kegworth Bypass. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

A453 Finger Farm Roundabout westbound exit widening

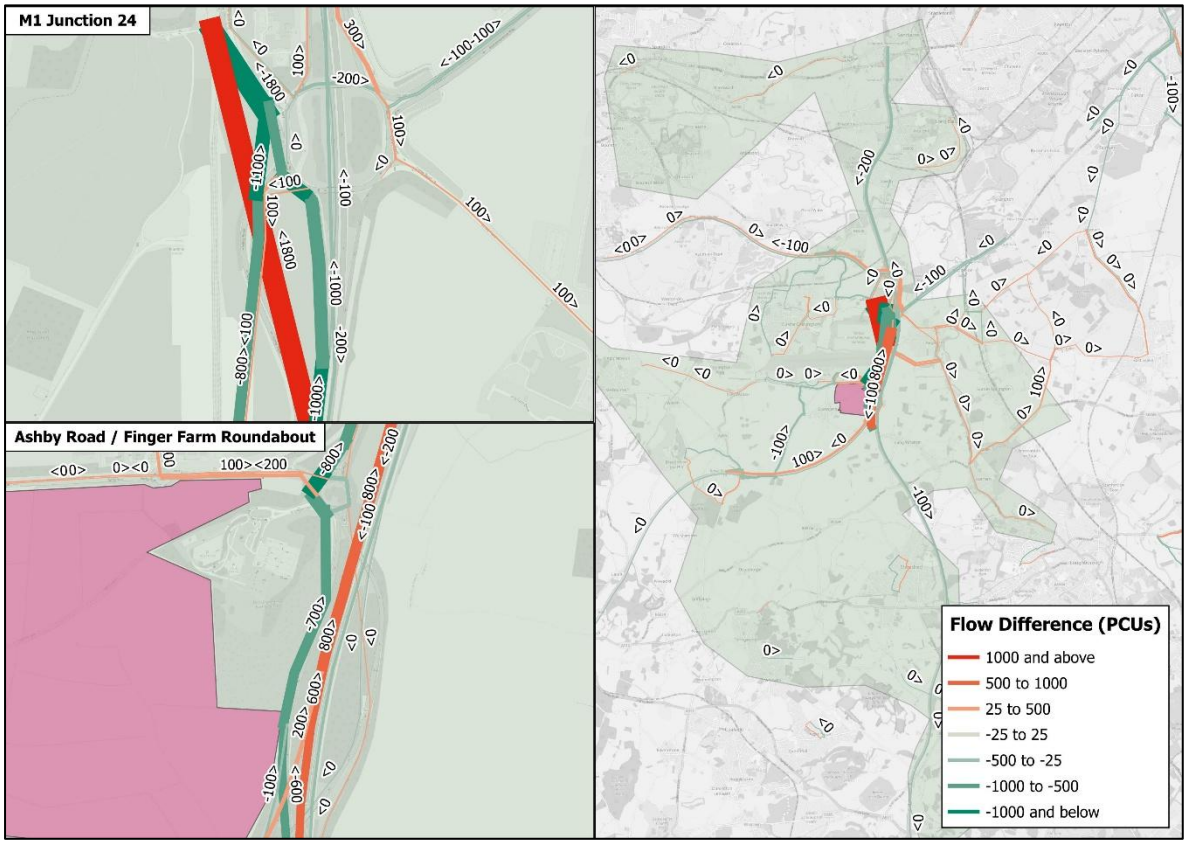
A.1.6 A reduction in northbound traffic on the A453 is forecast at Finger Farm Roundabout primarily as a result of the new link road that is forecast to divert traffic off the A453 northbound.

EMGP2 access roundabout and toucan crossing

A.1.7 There is an increase in traffic forecast on the A453 to the east of the proposed site in the 'With Development (2a)' scenario in the AM Peak hours. This increase in traffic is caused by the proposed mitigation measures providing additional capacity at the EMGP2 access roundabout and Finger Farm Roundabout, allowing development traffic to divert off local roads and on to the A453 and more strategic corridors.

Figure A.1: Forecast Flow Change for 2028 'With Development (2a)' minus 'With Development (1a)'

AM Peak hour



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PM Peak hour

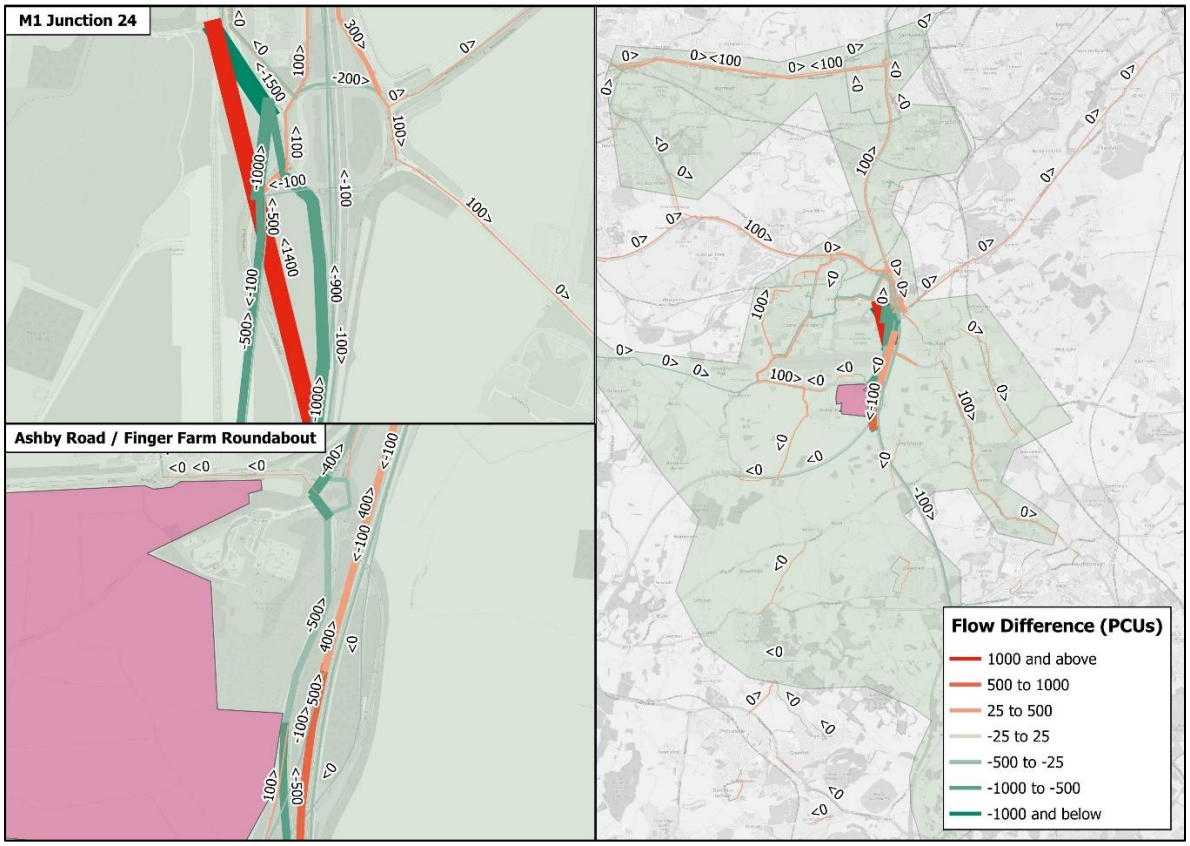

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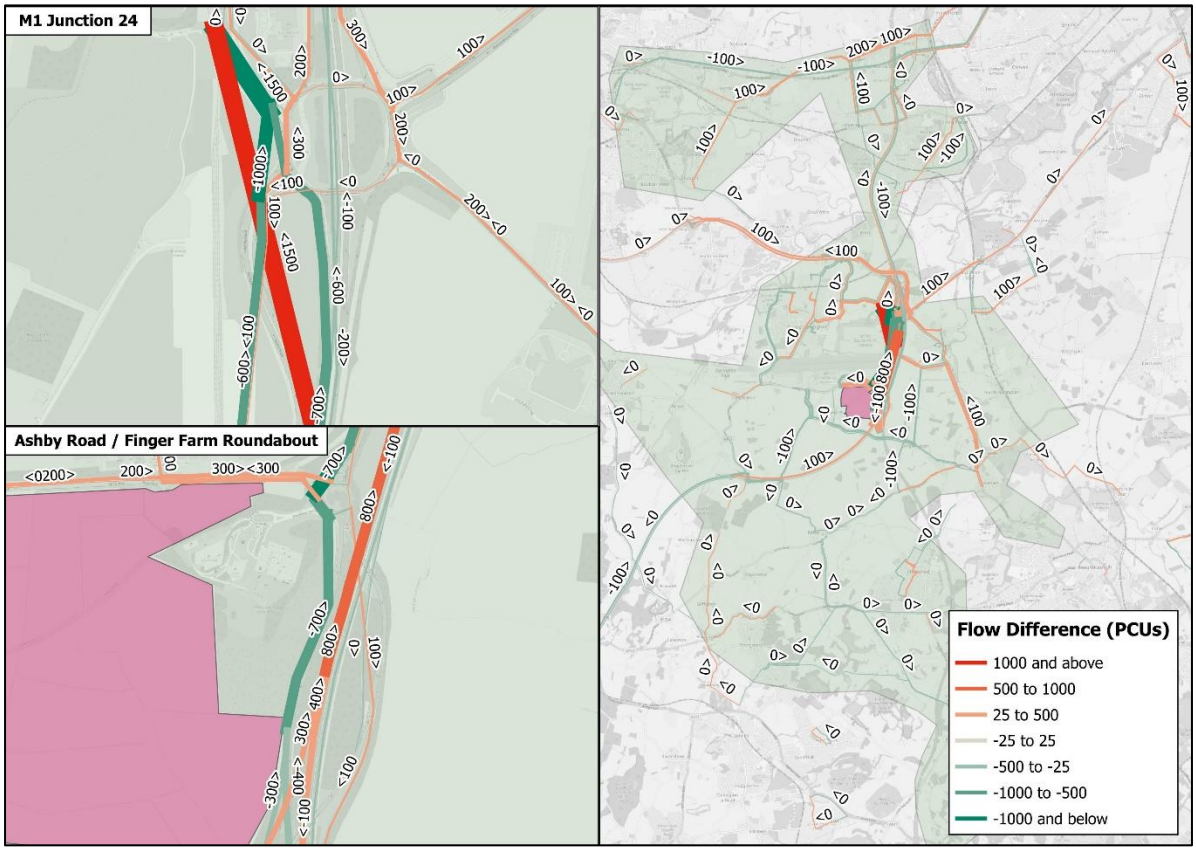
Figure A.2: Forecast Flow Change for 2038 'With Development (2a)' minus 'With Development (1a)'

AM Peak hour



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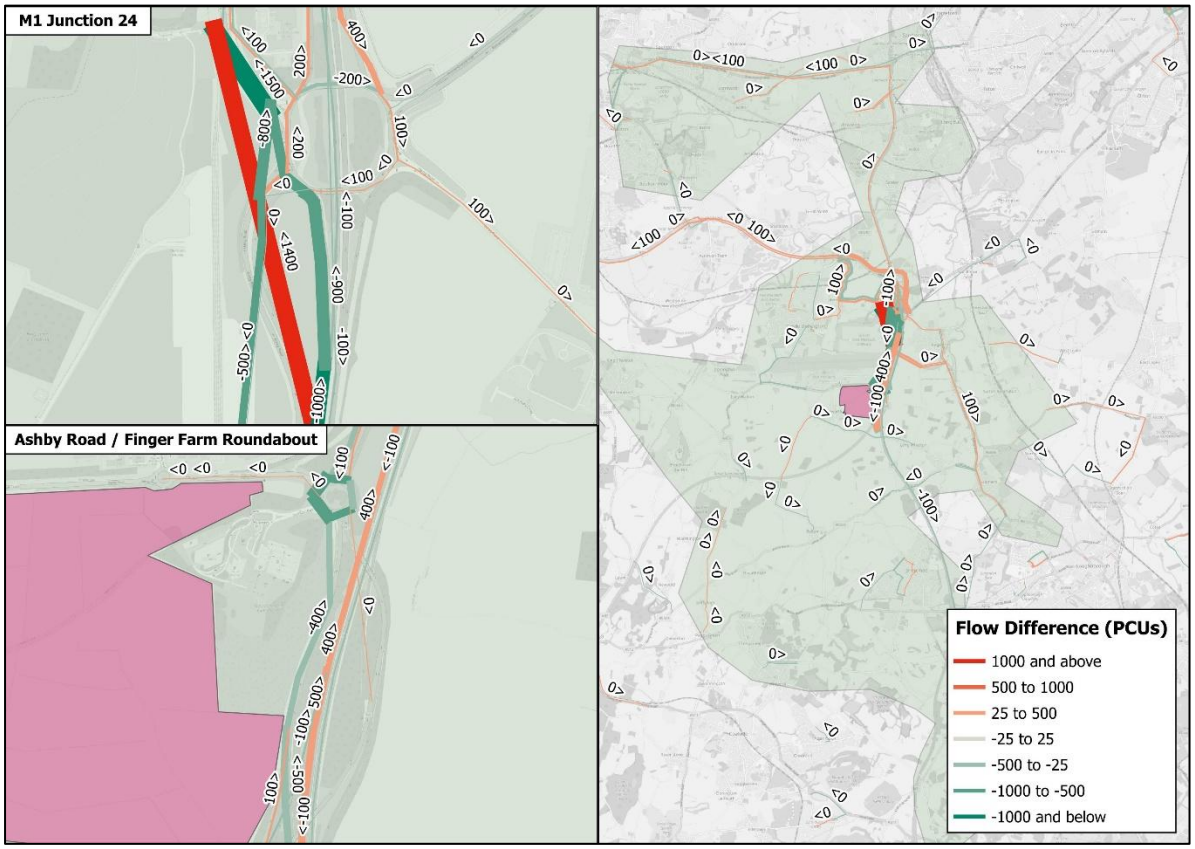
PM Peak hour



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Forecast Delay Change

A.1.8 As a result of forecast flow changes in the 'With development (2a)' scenario, there are also changes to the forecast delays on the highway network. These changes in delay can be generated from two sources: link delay based on the speed-flow curve applied to the link; and the junction delay due to capacity constraints for individual turning movements. The analysis in this section combines the link and junction delays (taking a flow-weighted average of junction delays) to assess the changes in forecast delays with the proposed development traffic.

A.1.9 Figure A.3 and Figure A.4 show the forecast delay changes (in seconds) in 2028 and 2038 between the 'With Development (2a)' and 'With Development (1a)' scenarios for the AM Peak and PM Peak hours.

New M1 northbound to A50 westbound interchange link

A.1.10 With the new interchange link road included, delays are expected to occur on the A50 where vehicles join the A50 from the proposed link road. No delays exist in the 'Without Development (1a)' scenario as this junction does not exist in this scenario. However, delays are forecast to reduce at the J24 and Finger Farm Roundabout as this mitigation measure has attracted traffic off these junctions.

M1 southbound link approaching Junction 24

A.1.11 A decrease in delay is forecast on the circulatory lanes of M1 J24 for all forecast scenarios in both the AM Peak and PM Peak hours. In addition, there are decreases in delays on the M1 southbound to the north of J24. These reductions in delay are provided by the additional M1 southbound capacity (i.e. extra lane) and the optimisation of the signals at M1 J24 (see Section 2.3).

EMGP1 access improvements

A.1.12 The Wilders Way / A453 / A6 Kegworth Bypass junction is forecast to have a reduction in delays in all scenarios. This has been provided by the inclusions of the new interchange link road and the EMGP1 access improvements. As noted in Section 2.3, the benefits of the EMGP1 access improvements have been 'unlocked' by the Wilders Way / A453 signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

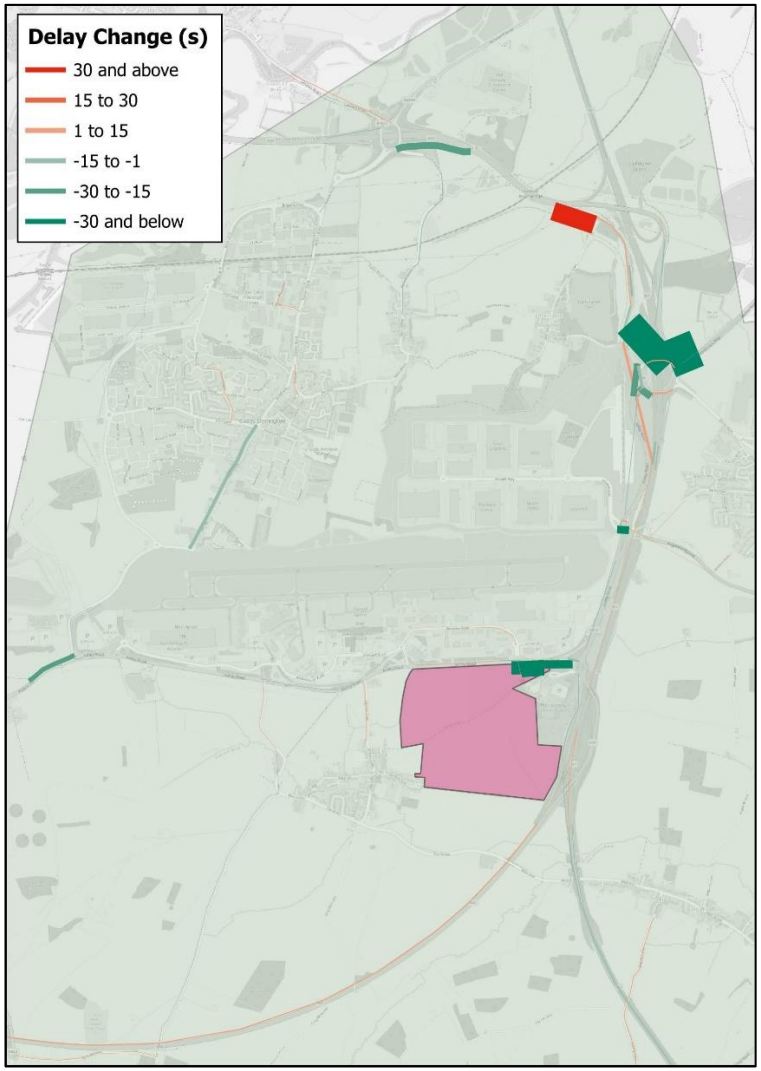
A.1.13 Delays have generally reduced in the 'With Development (2a) scenario with the proposed mitigation measures included that reduce traffic off the A453 and provide additional capacity at Finger Farm Roundabout.

EMGP2 access roundabout and toucan crossing

A.1.14 There are reductions in delay forecast in all 'With Development (2a)' scenarios except in 2028 PM Peak hour. These reductions in delay are caused by the proposed mitigation measures, in particular the additional capacity (extended flares) on either side of the proposed site access roundabout.

Figure A.3: Forecast Delay Change for 2028 'With Development (2a)' minus 'With Development (1a)'

AM Peak hour



PM Peak hour

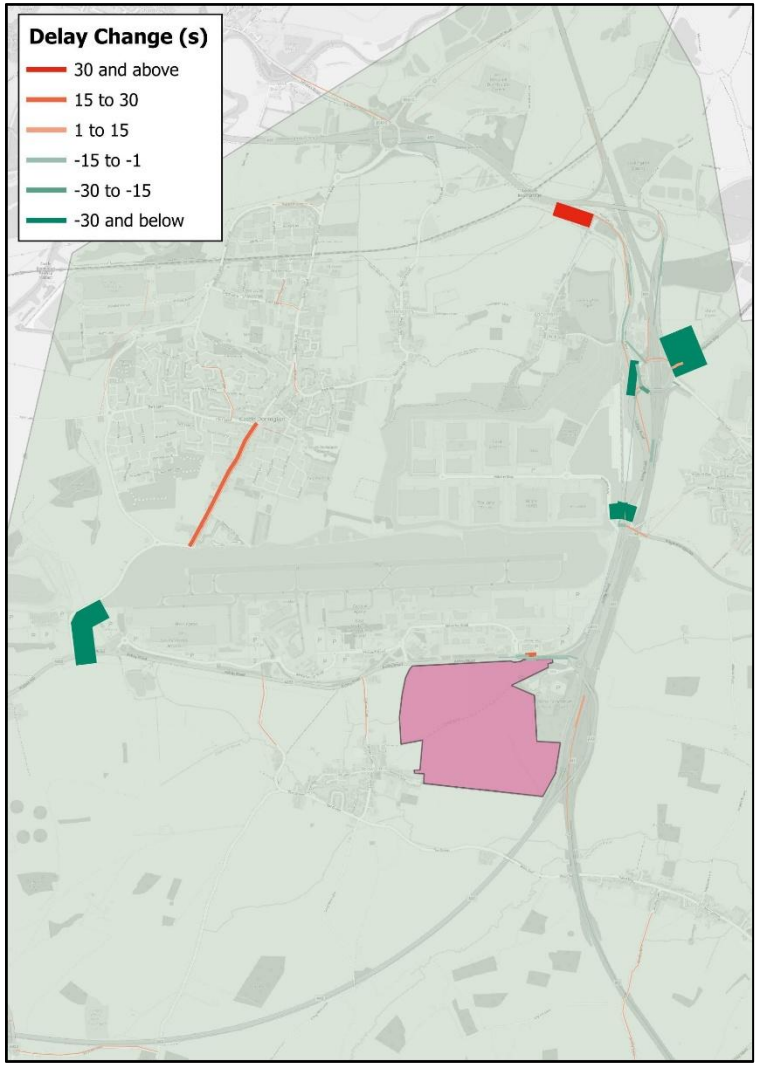


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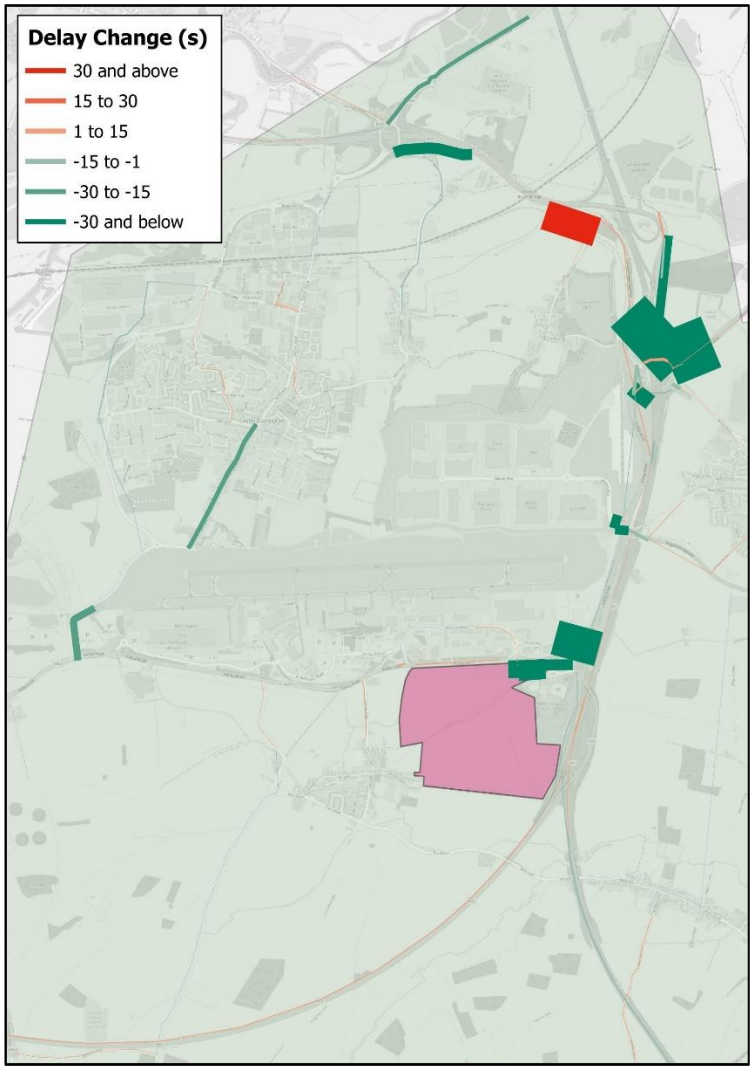
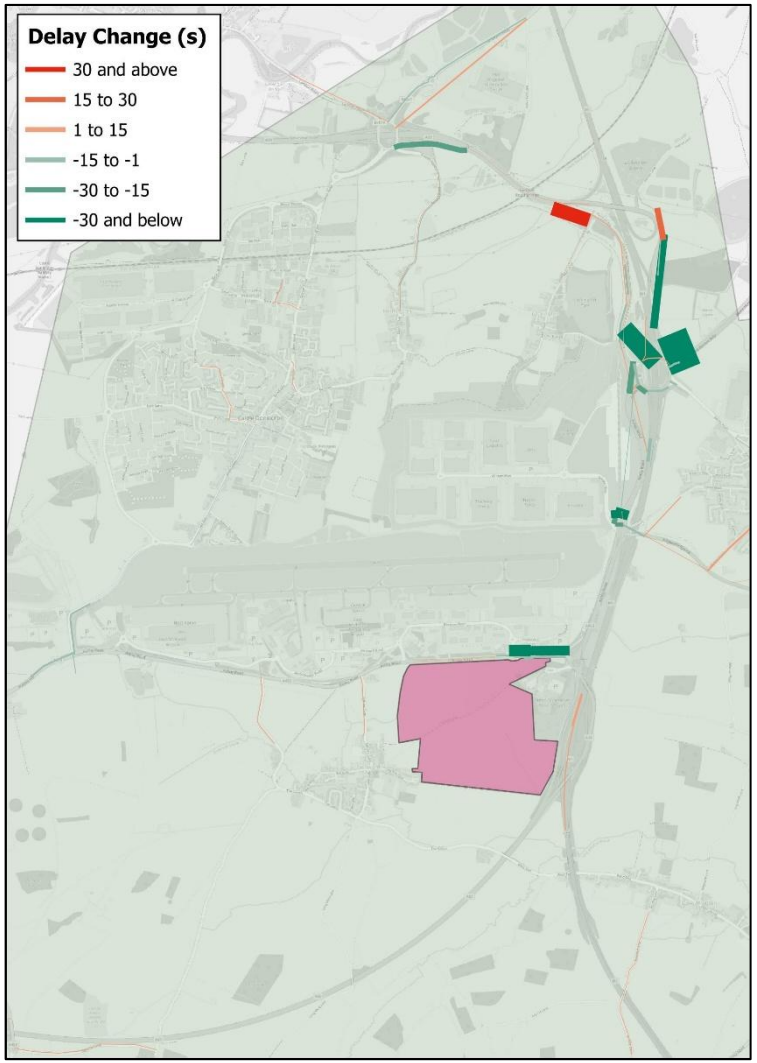
Figure A.4: Forecast Delay Change for 2038 'With Development (2a)' minus 'With Development (1a)'

AM Peak hour



PM Peak hour



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Forecast Node Volume-Capacity Ratios

A.1.15 As a part of the forecast modelling, node / junction capacities are estimated for individual turning movements based on a number of factors including priority of the turn (for example, give-way or merge), the level of green-time at signalised junctions, and the amount of opposing traffic at the junction. Using these calculated capacities and the forecast traffic volumes, node volume-capacity ratios are estimated to identify locations where the forecast flows are approaching or exceeding the forecast capacity.

A.1.16 To summarise the forecast-capacity ratios for the individual turning movements at a node, there are two approaches. These are to calculate the flow-weighted average volume-capacity of the node, or to calculate the maximum volume-capacity ratio for all turns within a node. The average volume-capacity ratio provides an overview of how the individual node is performing but may not highlight locations where a limited number of movements at a node are approaching or exceeding capacity. To highlight these locations, the maximum volume-capacity ratio at each node has been used. Node volume-capacity ratios exceeding 85% indicate that the highway network is under stress, and there is likely to be a reduction in speed and increase in delay.

A.1.17 Figure A.5 and Figure A.6 show the forecast maximum node volume-capacity ratios for 2028 and 2038, ‘With Development (2a)’ and ‘With Development (1a)’ scenarios. For ease of comparison, the symbology has been designed to show the data for ‘With Development (2a)’ and ‘With Development (1a)’ scenarios on the same plot.

A.1.18 The reader should note that these two figures show a subset of all nodes within the EMFM to reduce the number of data points within the plots. Nodes which do not fall within the AoI, as defined in Figure 3.11, are not shown. Nodes with maximum volume-capacity ratios below 85% in all forecast scenarios are not shown, except for the node which is located at the proposed site access on the A453.

A.1.19 The forecast maximum node volume-capacity ratios for 2028 and 2038 are similar in both the ‘With Development (2a)’ and ‘With Development (1a) scenarios. However, the forecast maximum node volume-capacity ratio plots show that the EMGP1 access roundabout junction, EMGP2 access junction, M1 Junction 24, and Finger Farm Roundabout are the most affected by the proposed mitigation measures and have seen mostly improvements in the node volume-capacity ratios in the ‘With Development (2a)’ scenarios.

New M1 northbound to A50 westbound interchange link

A.1.20 With the inclusion of the proposed mitigation measures included in the 'With Development (2a)' scenarios the node volume-capacity decrease slightly overall, particularly on the western side of the junction. These improvements are a result of traffic diverting off the M1 J24 to use the new link road.

EMGP1 access improvements

A.1.21 The node volume-capacity ratios at Wilders Way / A453 / A6 Kegworth Bypass junction are forecast to generally decrease in both forecast years in the 'With Development (2a)' scenarios. This improvement is caused by traffic diverting off the A453 and onto the new link road and the EMGP1 access improvements and associated signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

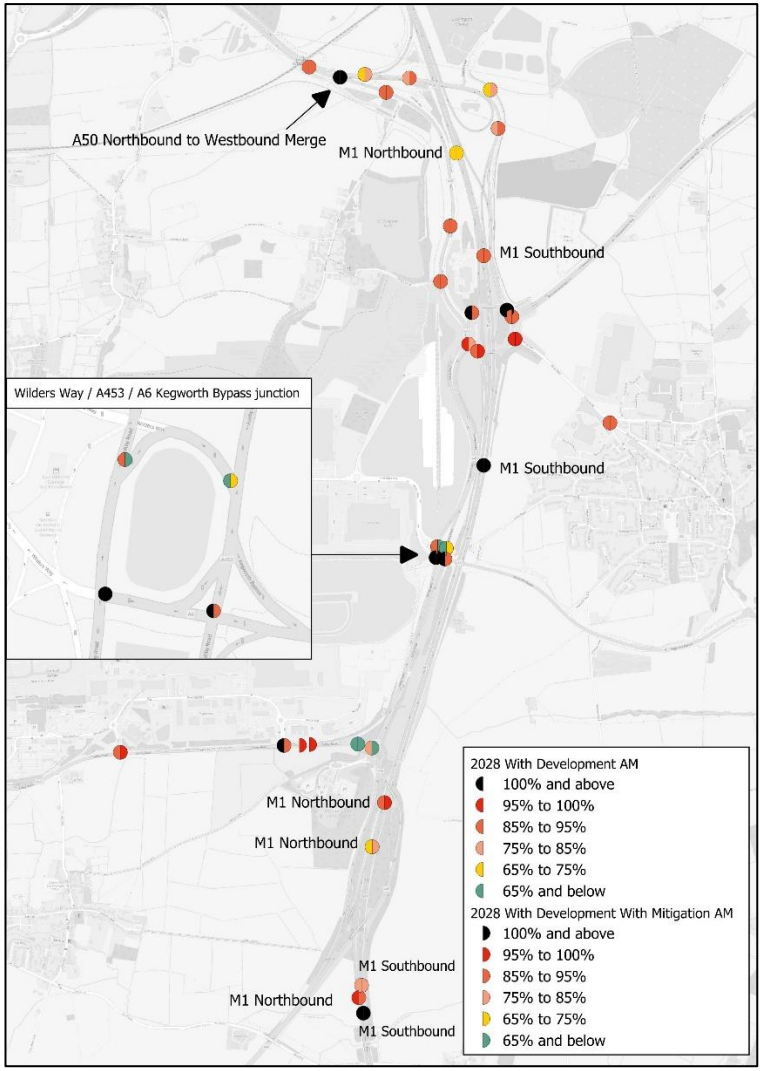
A.1.22 The node volume-capacity ratios for Finger Farm Roundabout are forecast to have increases and decreases in Stage 2a with the proposed mitigation measures included, reflecting the increase in flow on the A453 in the AM Peak hours in 2028 and 2038 and the reduction in flow on the roundabout itself.

EMGP2 access roundabout and toucan crossing

A.1.23 The node volume-capacity ratios at EMGP2 access roundabout are forecast to reduce in all scenarios. The proposed toucan (represented by the semi-circle closest to Finger Farm Roundabout) is forecast to be between 95% and 100% volume-capacity ratios in all Stage 2a scenarios.

Figure A.5: Forecast Node Volume-Capacity Ratio for 2028 'With Development (1a)' and 2028 'With Development (2a)' Scenarios

AM Peak hour



PM Peak hour

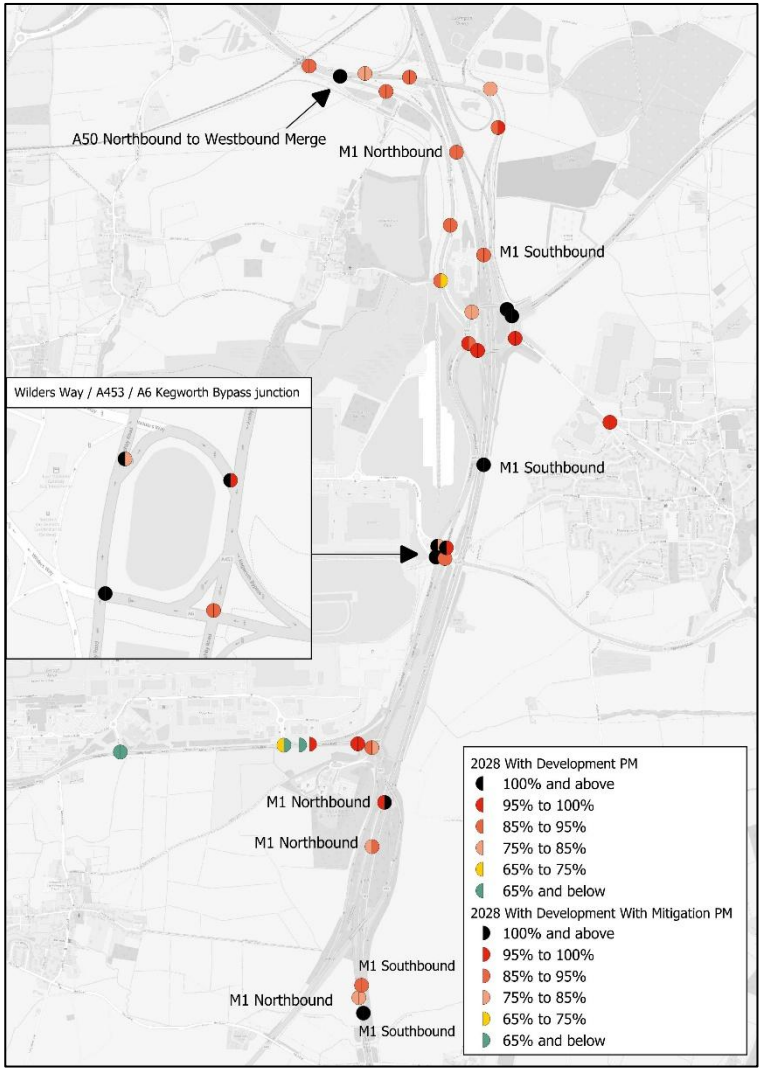


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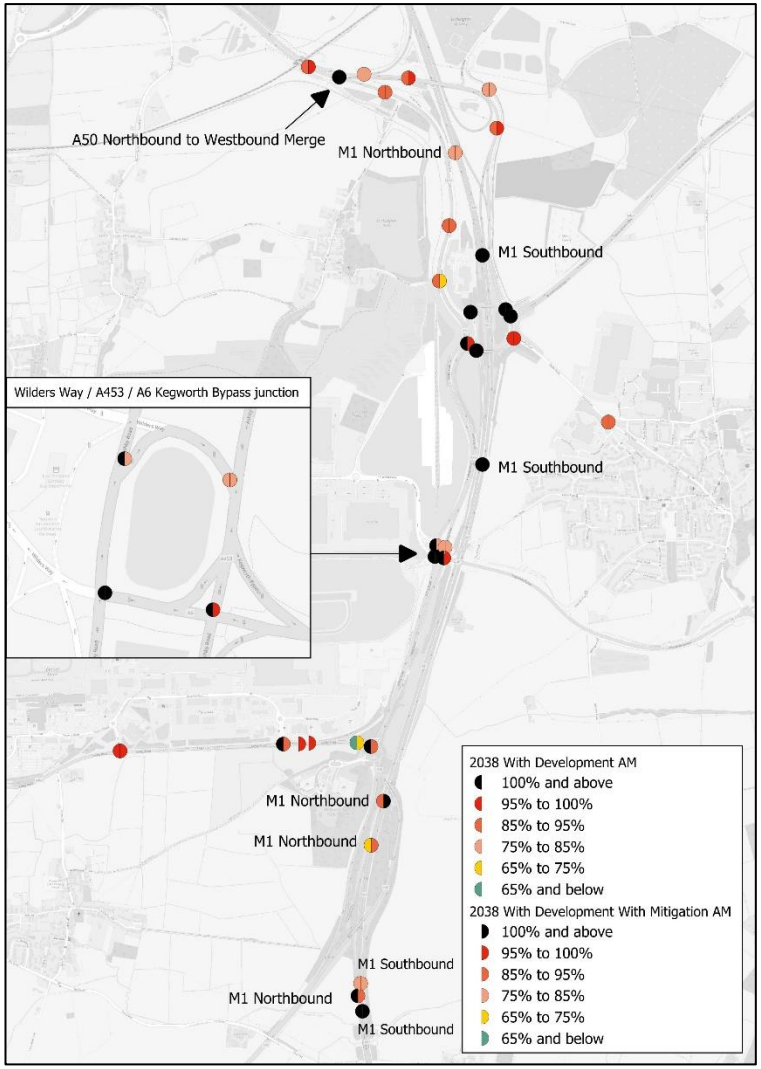
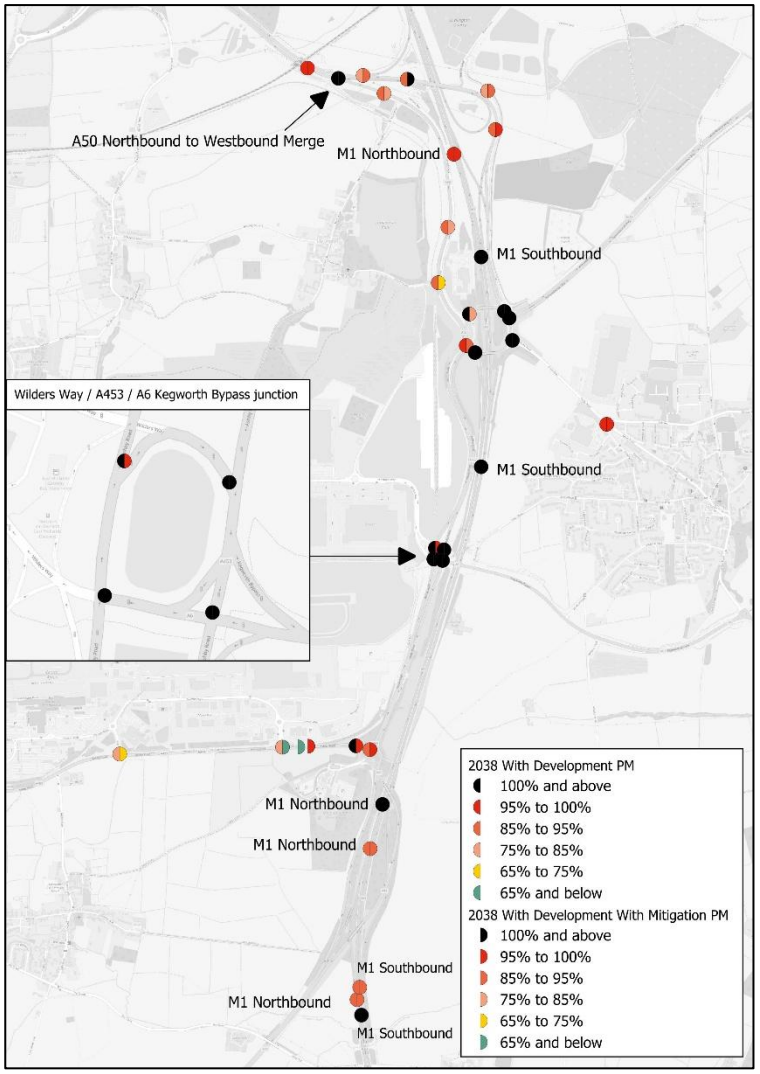
Figure A.6: Forecast Node Volume-Capacity Ratio for 2038 'With Development (1a)' and 2038 'With Development (2a)' Scenarios

AM Peak hour



PM Peak hour



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Appendix B EMFM Indicative Network Statistics

B.1.1 Table B.1 and Table B.2 presents the model network statistic within the AoI (see Figure 3.11). It should be noted that these statistics are high-level and should be considered as indicative only.

B.1.2 The statistics include vehicle kilometre travelled (km), network speed (mph) and junction delay (hours) between 2038 'Without Development (1a)', 2038 'With Development (1a)' and 2038 'With Development (2a) scenarios for both AM Peak and PM Peak hour by motorway and non-motorway roads.

B.1.3 As expected, the forecast vehicle kilometres increase in the 'With Development (1a)' scenario compared to the 'Without Development (1a)' scenario for both motorway and non-motorway links. Vehicle kilometres increase further in the 'With development (2a)' scenario on motorway links as the mitigation measures provide additional network capacity on motorways, while vehicle kilometres are forecast to decrease on non-motorway links indicating that the mitigation measures are attracting traffic on to motorway links and off non-motorway links.

B.1.4 The forecast speeds in the 'With Development (1a)' scenario are slower than speeds forecast in the 'Without Development (1a)' for both motorway and non-motorway links. Overall speeds are forecast to reduce by -1.7% on motorway links and -1.2% for non-motorway links. Speeds are forecast to reduce by -0.5% and -0.4% on motorway and non-motorway links respectively in the 'With Development (2a)' scenario compared to the 'Without Development (1a)' scenario, indicating lower delay in this with development scenario.

B.1.5 Junction delays on motorway links are forecast to increase in both with development scenarios compared to the 'Without Development (1a)' scenario, with the 'With Development (2a)' scenario forecast to have the lowest increase (+3.3%) on motorway links. Junction delays on non-motorway links follow a similar pattern with forecast difference in junction delays in the 'With Development (2a)' forecast to have slightly higher delay (2.2%) than the 'Without Development (1a)' scenario.

Table B.1 Indicative Network Statistic within the AoI for Motorway Links

Scenario	Model Year/ Peak	Veh/km (demand[7])	Speed (mph)	Junction Delay (Hours)
'Without Development (1a)'	2038 AM	299,175	40.1	1,670
'With Development (1a)'		302,665	39.3	1,781
'With Development (2a)'		306,610	40.0	1,722
'Without Development (1a)'	2038 PM	308,352	43.1	1,386
'With Development (1a)'		312,102	42.5	1,469
'With Development (2a)'		313,111	42.9	1,435
'Without Development (1a)'	2038 AM + PM	607,527	41.6	3,056
'With Development (1a)'		614,767	40.9	3,250
'With Development (2a)'		619,721	41.4	3,157
Percentage difference compared to 'Without Development (1a)'				
'With Development (1a)'	2038 AM + PM	1.2%	-1.7%	6.3%
'With Development (2a)'		2.0%	-0.5%	3.3%

[7] 'Demand flow' is the initial flow, taking into account capacity constraint, delay, etc., considered to pass through a selected link. Whereas 'actual flow' is what reaches the selected, link within the modelled hour, and is reduced whenever the path passes through an over-capacity link or turn. 'Queued flow' is essentially the difference between the demand and the actual flow.

Table B.2 Indicative Network Statistic within the AoI for Non-Motorway Links

Scenario	Model Year/ Peak	Veh/km (demand[7])	Speed (mph)	Junction Delay (Hours)
'Without Development (1a)'	2038 AM	509,055	26.6	5,167
'With Development (1a)'		517,258	26.1	5,441
'With Development (2a)'		514,276	26.6	5,205
'Without Development (1a)'	2038 PM	539,729	25.5	5,711
'With Development (1a)'		548,366	25.3	5,911
'With Development (2a)'		547,102	25.3	5,910
'Without Development (1a)'	2038 AM + PM	1,048,784	26.0	10,878
'With Development (1a)'		1,065,624	25.7	11,352
'With Development (2a)'		1,061,378	25.9	11,115
Percentage difference compared to 'Without Development (1a)'				
'With Development (1a)'	2038 AM + PM	1.6%	-1.2%	4.4%
'With Development (2a)'		1.2%	-0.4%	2.2%

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EMFM

East Midlands Gateway Phase 2

Mitigation Measures and Optimisation Summary

5 June 2025

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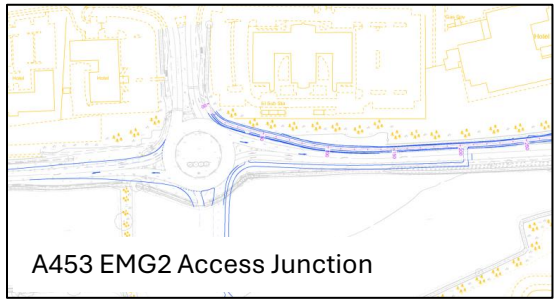
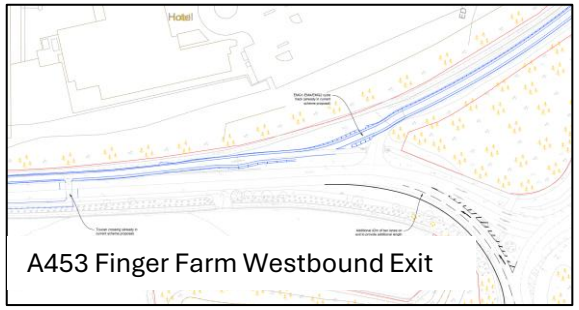
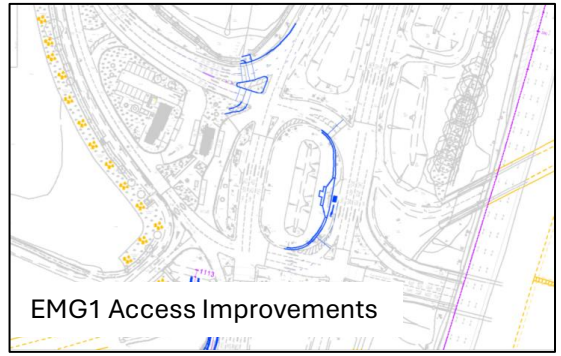
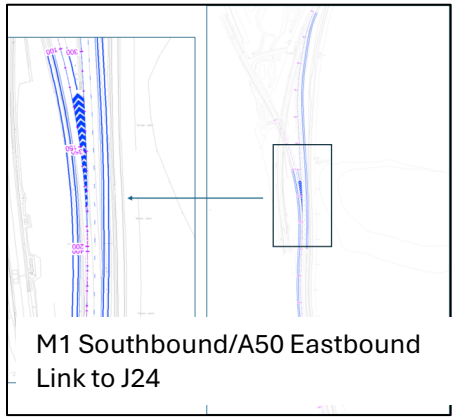
Summary of Mitigation Measures

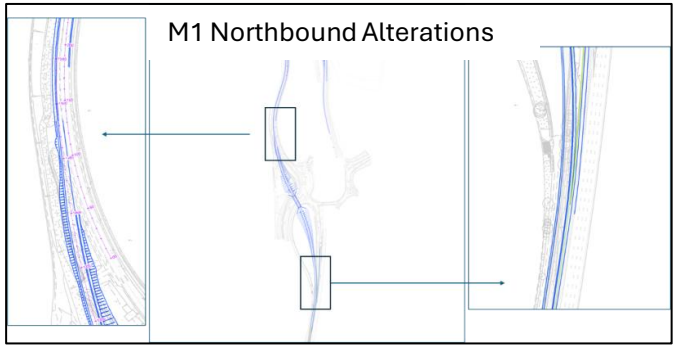
- **A453 EMG2 Access Junction**
  - Additional flare length at the EMGP2 access roundabout
  - Tucson crossing signal phase
- **A453 Finger Farm Westbound Exit**
  - Additional two-lane widening on exit
- **EMG1 Access Improvements**
  - No change in Wilders Way signal timings
  - **Optimised signal timings to improve flow from the gyratory to EMGP1**
- **M1 Northbound Alterations**
  - Single lane operates as a free-flowing interchange link
  - Mandatory 50 mph speed limit
- **M1 Northbound to A50 Westbound Link**
  - Lane diverges from existing four-lane carriageway
  - Slip road to J24 becomes two lanes
  - **Optimised signal timings for M1 southbound approach**
- **M1 Southbound/A50 Eastbound Link to J24**
  - Existing link widened to three lanes
- **M1 J24 Minor Works**
  - Middle lane converted to shared use at A453 NB to M1 NB


A453 EMG2 Access Junction


A453 Finger Farm Westbound Exit


EMG1 Access Improvements


M1 Southbound/A50 Eastbound Link to J24



Reasons for Optimising Signals affected by Mitigation

1. EMFM signal timings are based on observed data in the Base Year model (2019), as is standard approach.

2. Some signals should be optimised to ‘unlock’ or release the benefits following the implementation of the proposed mitigation measures – keeping traffic on to the SRN. This needs performed carefully without unrealistically changing the traffic patterns / routing (especially on a congested network).

3. To ‘balance’ the delay / volume over capacity at congested junctions.

4. Feedback from VISSIM modelling (min / max green times, etc).

Summary of EMFM Mitigation Measures and Optimisation Iterations

1. **2a/2b mitigation measures with no-optimisation (Iteration 1)**

2. **2a/2b full/over optimisation (iteration 2)**
   - Optimised signal time based with the objective of maintaining the volume-to-capacity ratio below one.

3. **2a/2b optimisation (iteration 3)**
   - 1 additional second of green time from the gyratory towards EMGP1.
   - 2 additional seconds at J24 from the M1 southbound on to the gyratory.
   - Additional flare length at the EMGP2 access roundabout and improve the saturation flow on all 4 arms

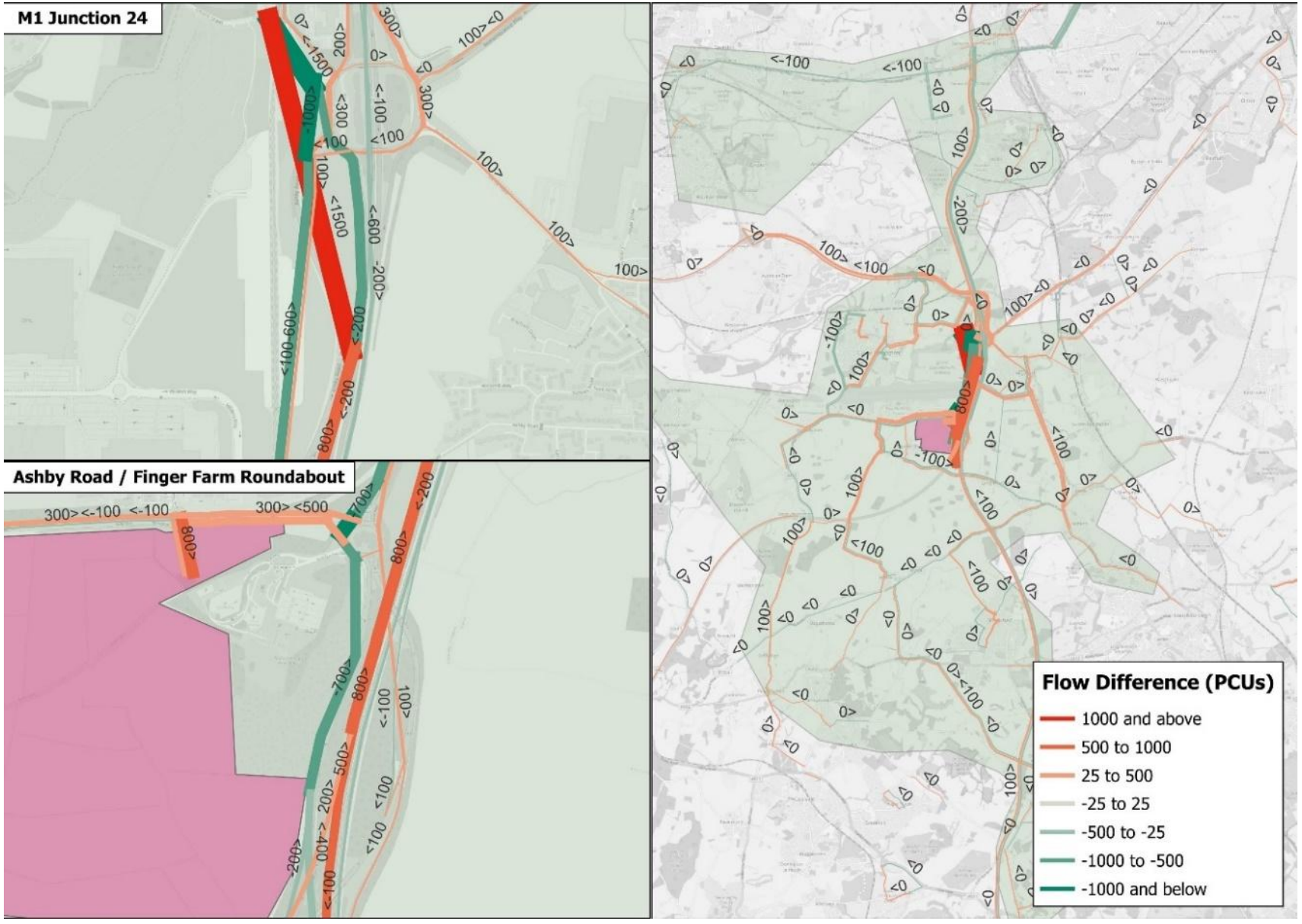
4. **2a/2b optimisation (iteration 4) A453 Sensitivity Test**
   - 3 additional second at J24 from the M1 southbound on to the gyratory.
   - Increased the link capacity on the A453 east of the EMGP2 access (dualled), in both directions

5. **2a/2b optimisation (iteration 5)**
   - 3 additional second at J24 from the M1 southbound on to the gyratory

6. **2a optimisation (iteration 6) Hilton Hotel Lane Sensitivity Test**
   - Based on VISSIM model, Improved the signal time on Hilton Hotel Lane approach at M1 Junction 24

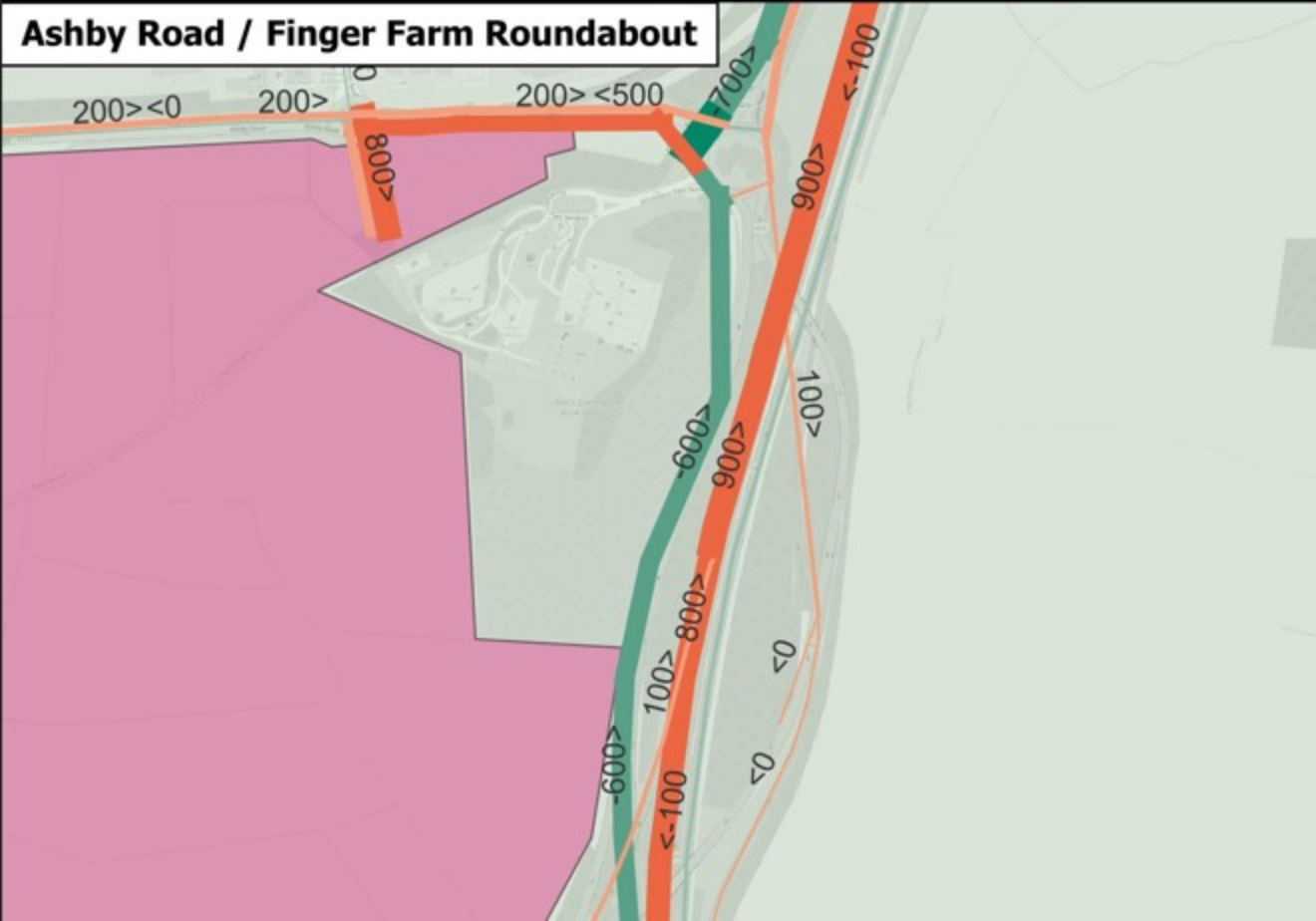
Forecast Flow Change for 2038 'Without Development (1a)' minus 'With Development with Mitigation (2a) – Iteration 5'

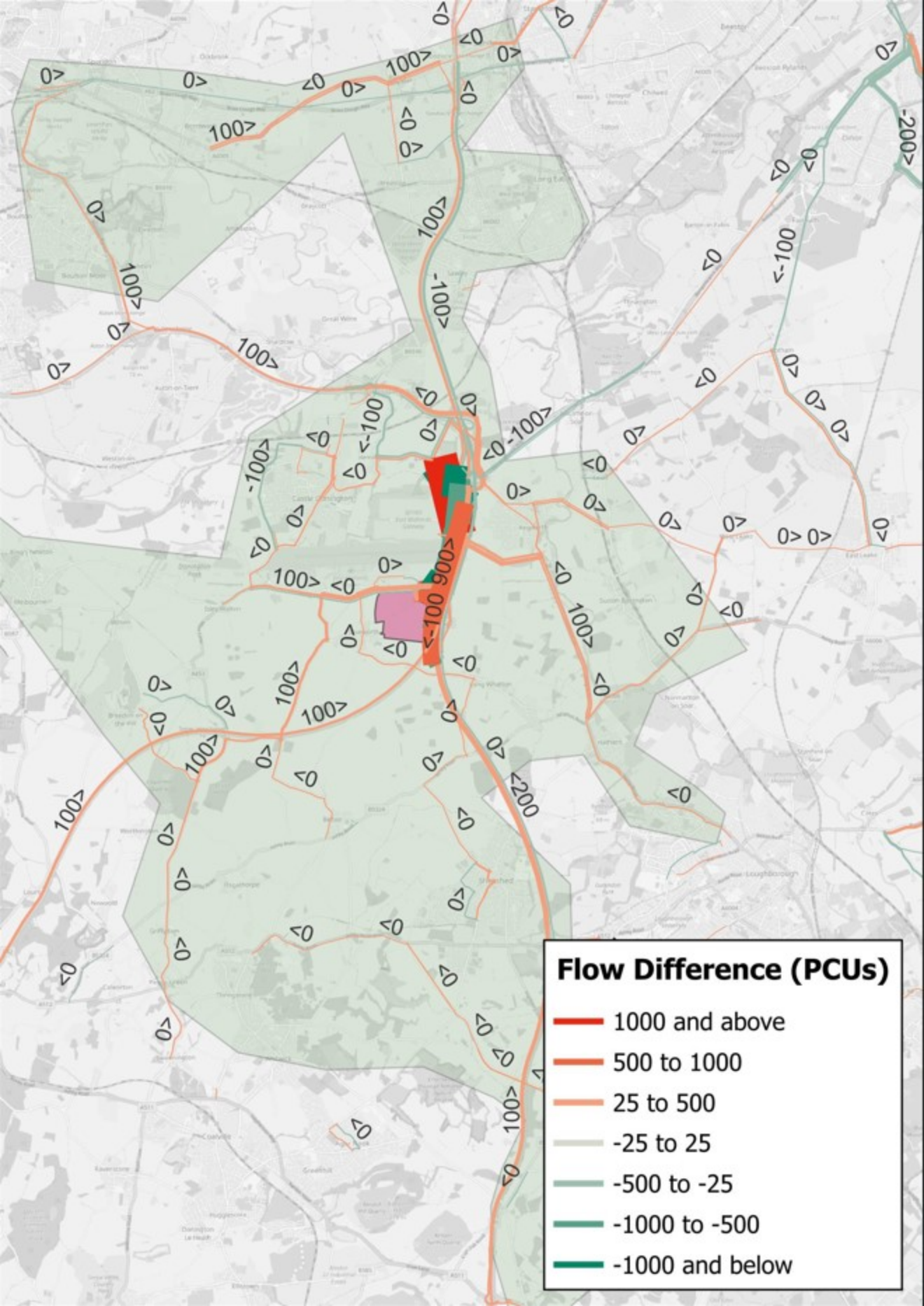
AM Peak hour

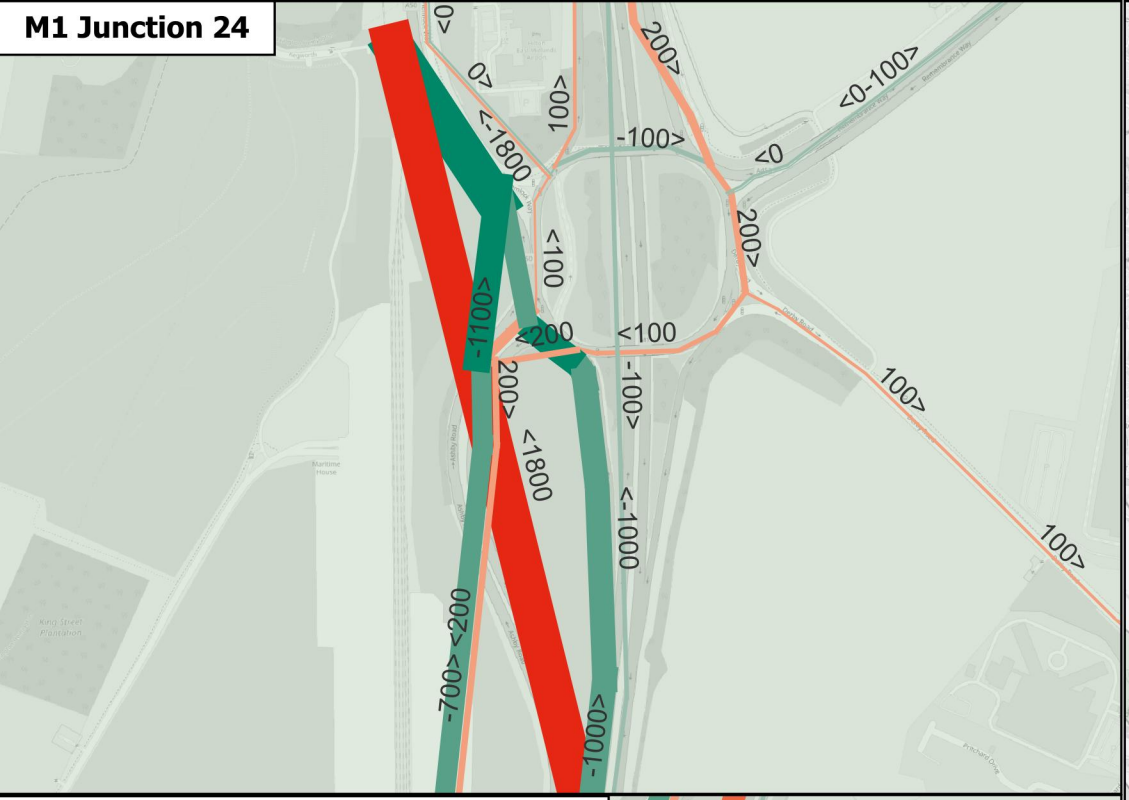


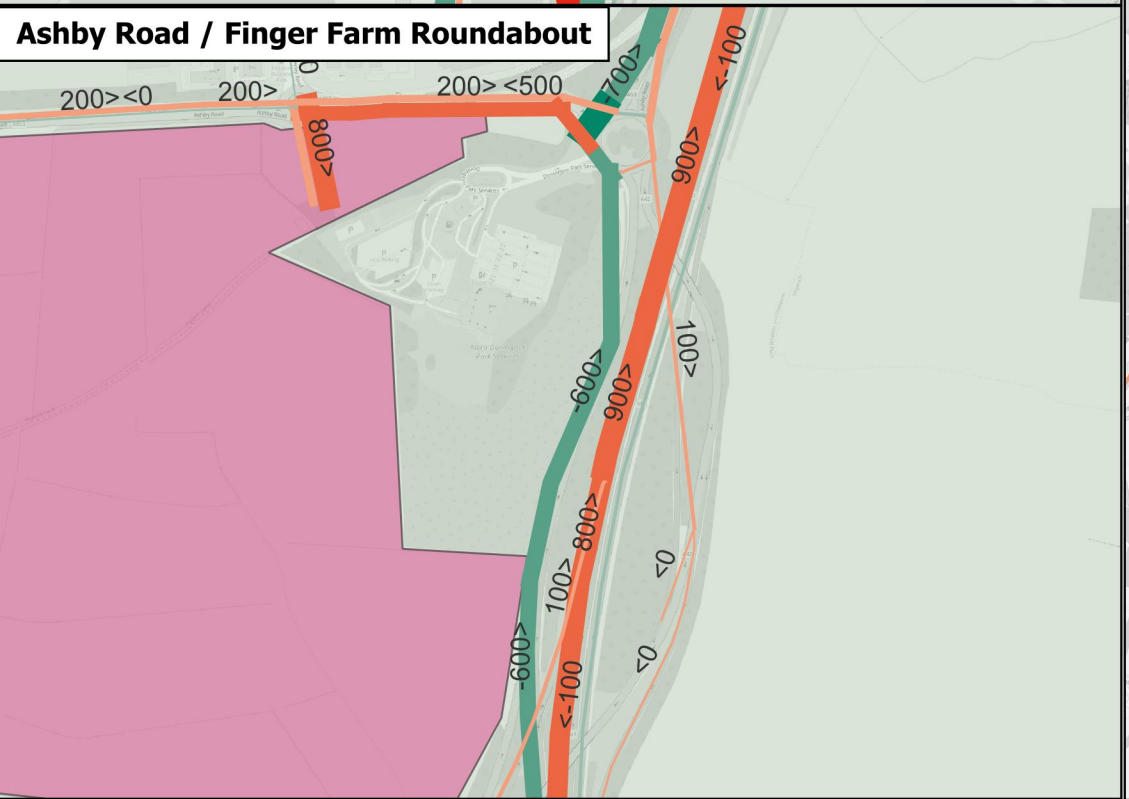

M1 Junction 24
<0
0>
100>
200>
<0-100>
<-1800
-100>
<0
200>
<100
-1100>
<200
<100
200>
-100>
100>
<1800
<-1000
100>
-700> <200
-1000>

Ashby Road / Finger Farm Roundabout




Flow Difference (PCUs)
1000 and above
500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below


M1 Junction 24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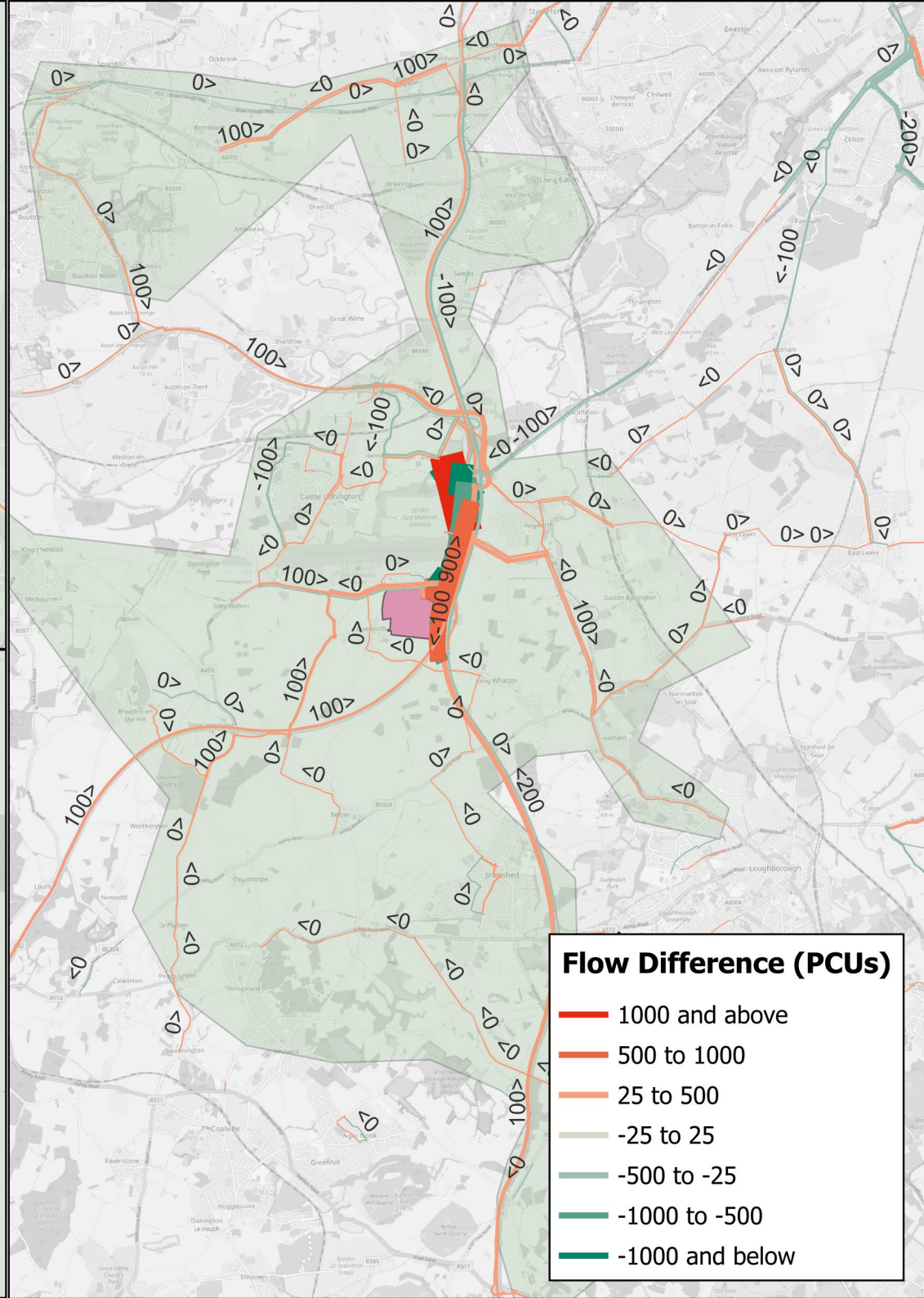
Flow Difference (PCUs)
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500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below


M1 Junction 24
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300>
0>
100>
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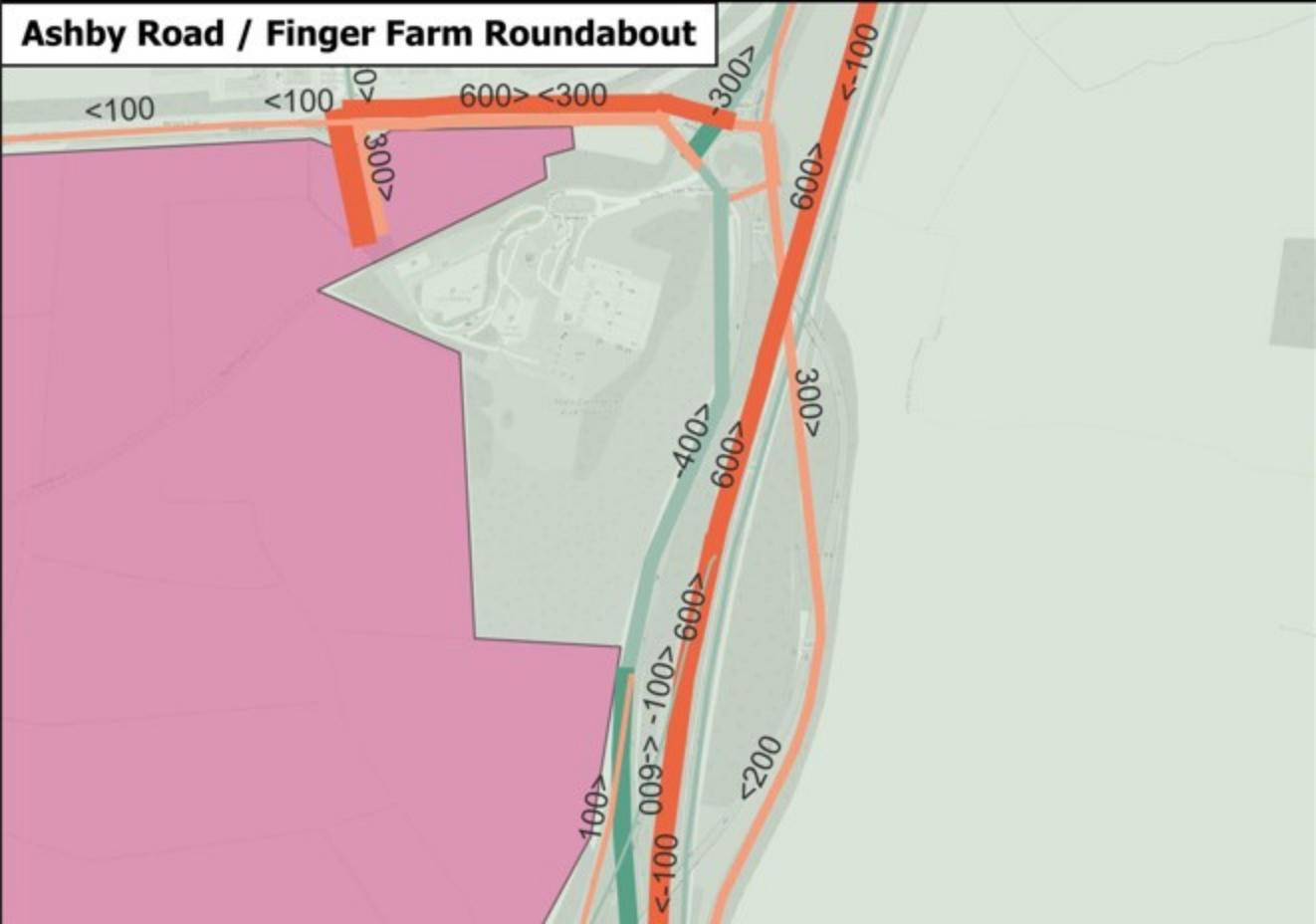
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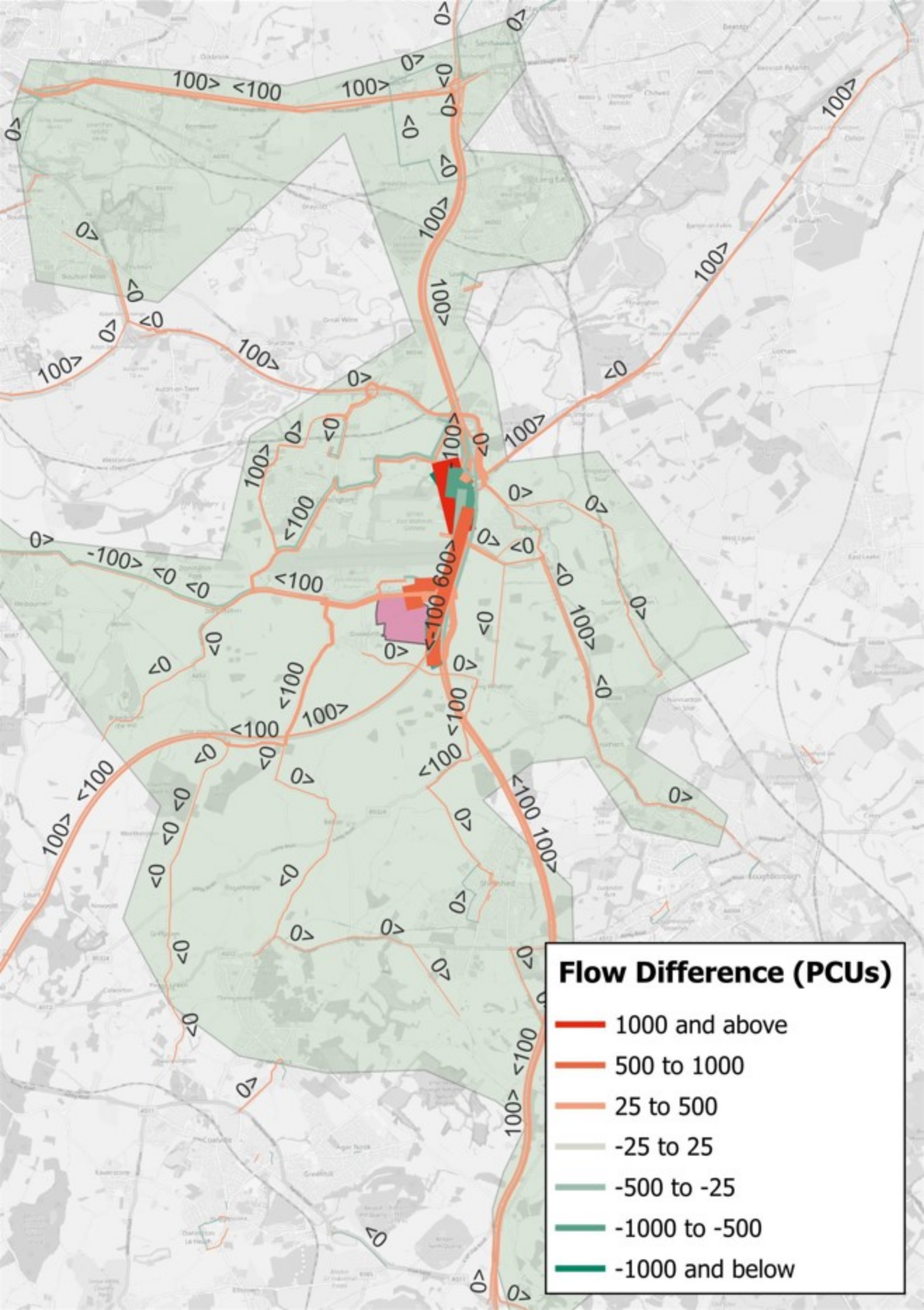
Flow Difference (PCUs)
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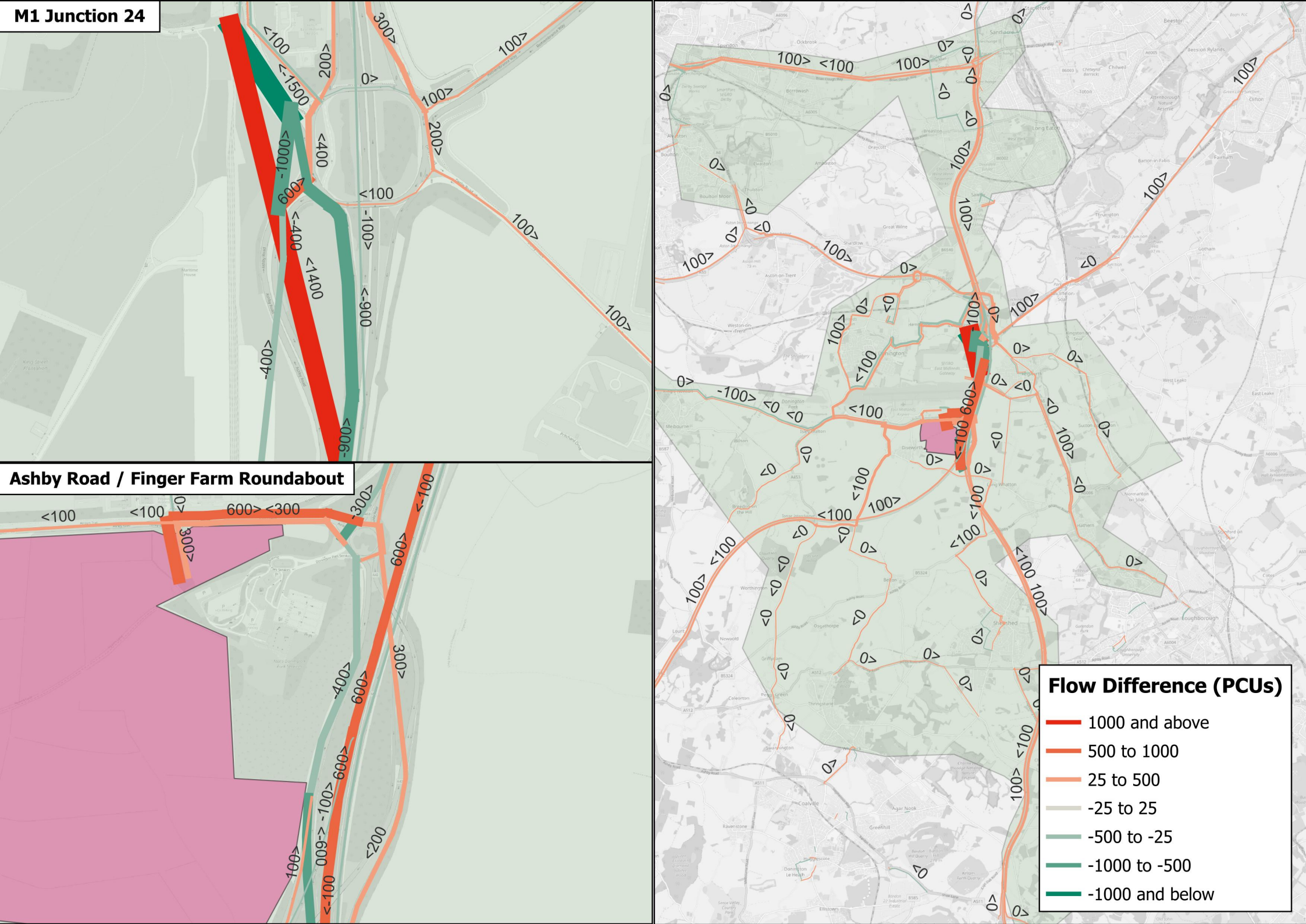
500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below


M1 Junction 24
Ashby Road / Finger Farm Roundabout
Flow Difference (PCUs)
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500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below


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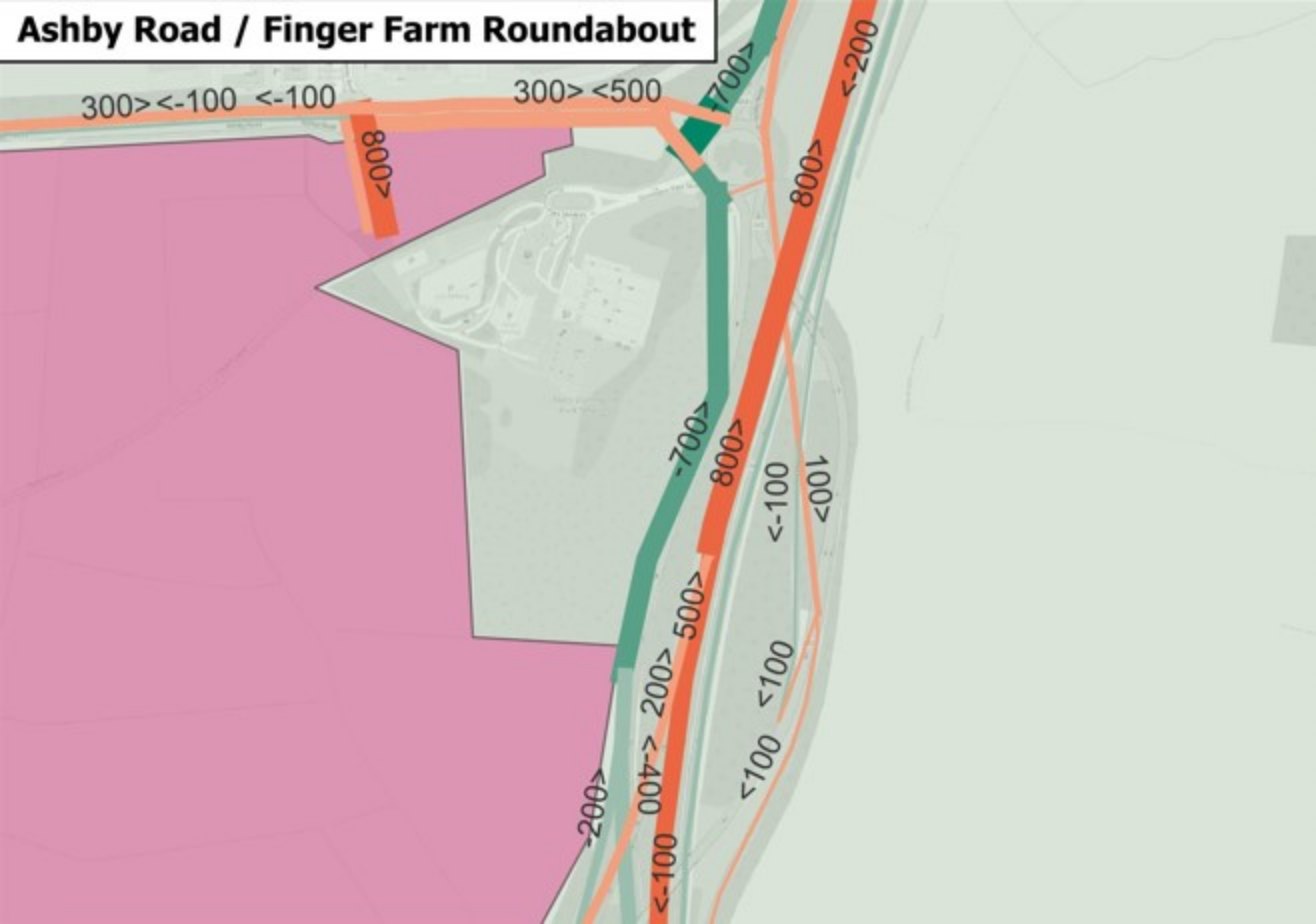
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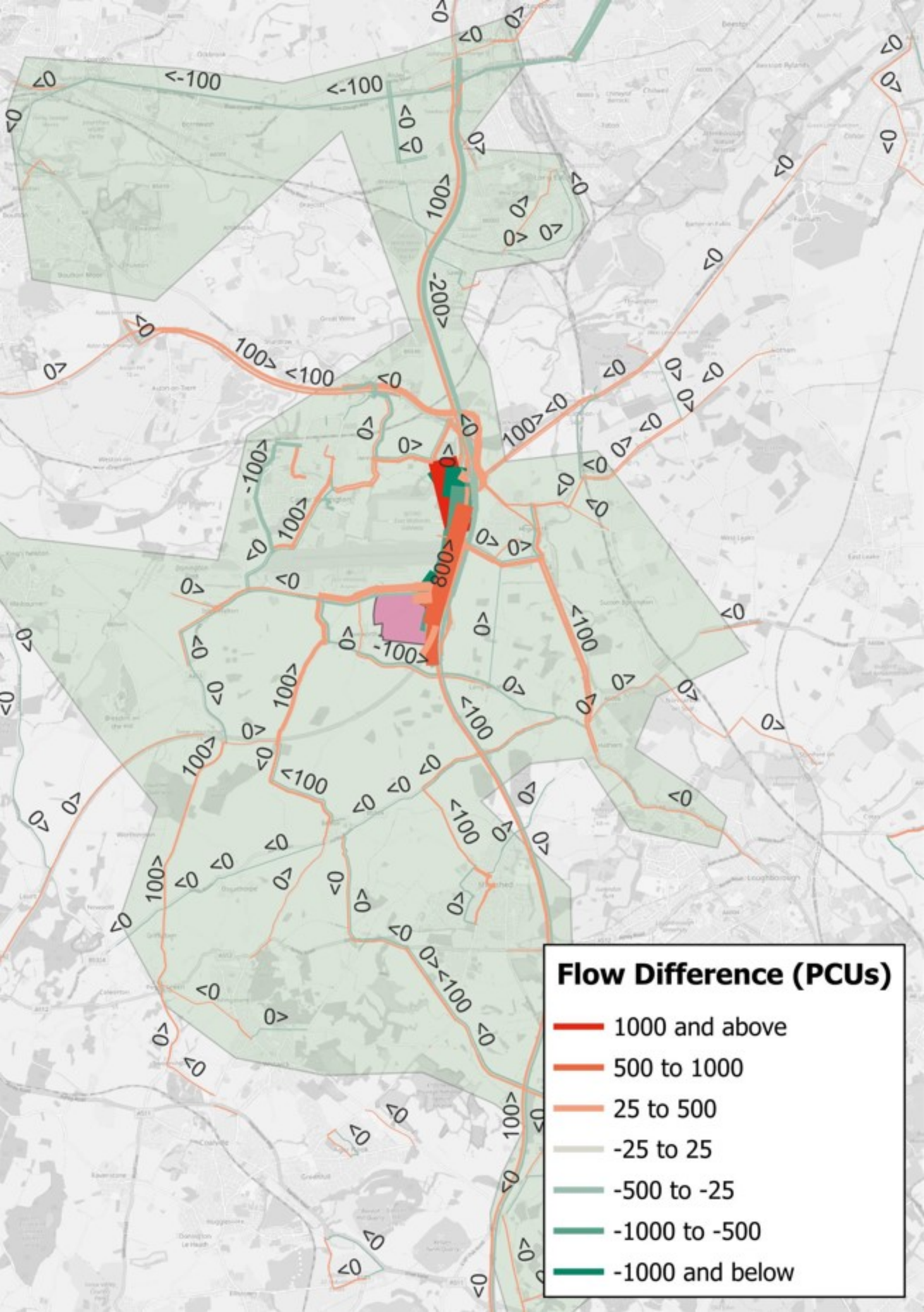
Flow Difference (PCUs)
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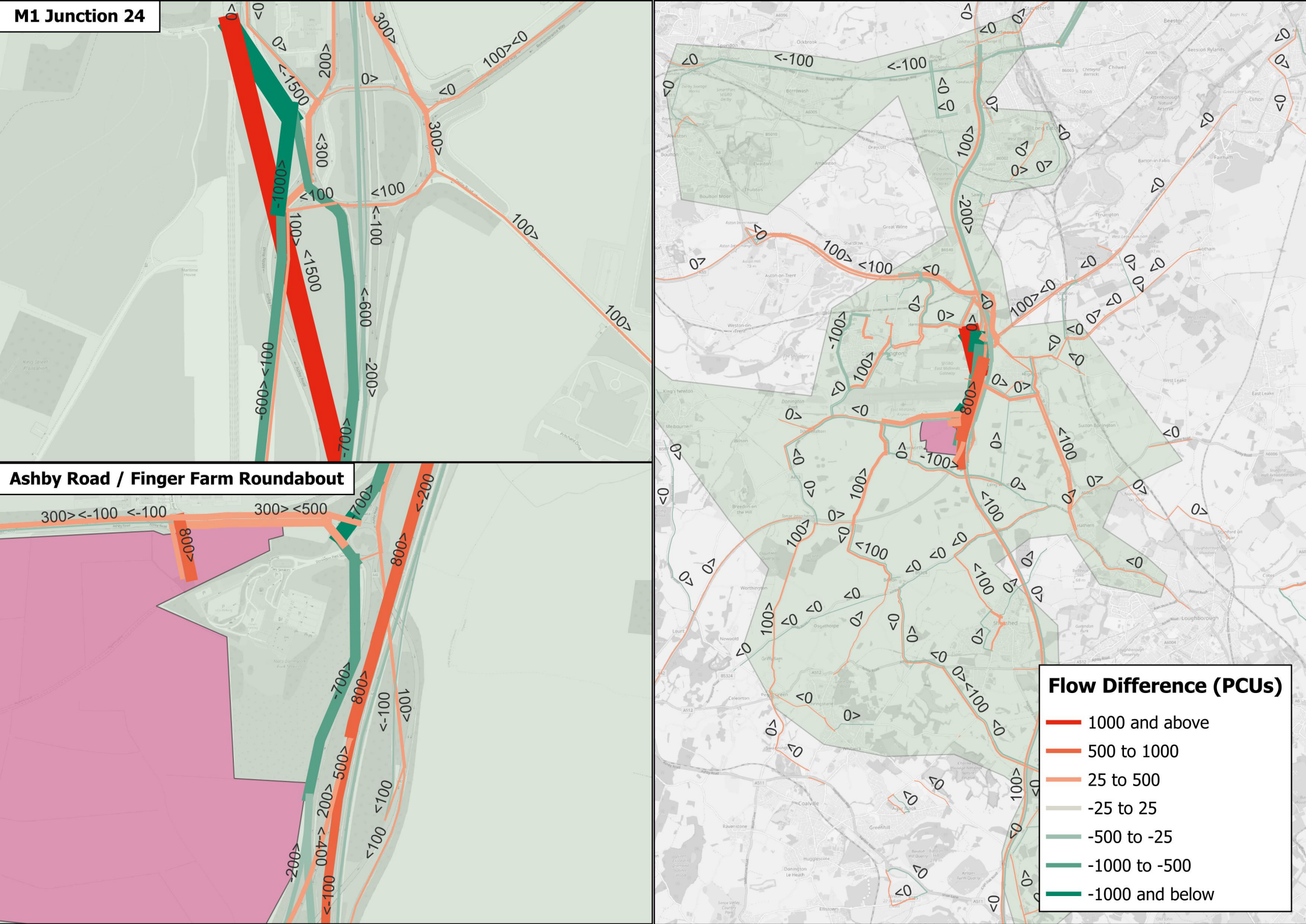
500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below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Ashby Road / Finger Farm Roundabout
Flow Difference (PCUs)
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500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below


M1 Junction 24
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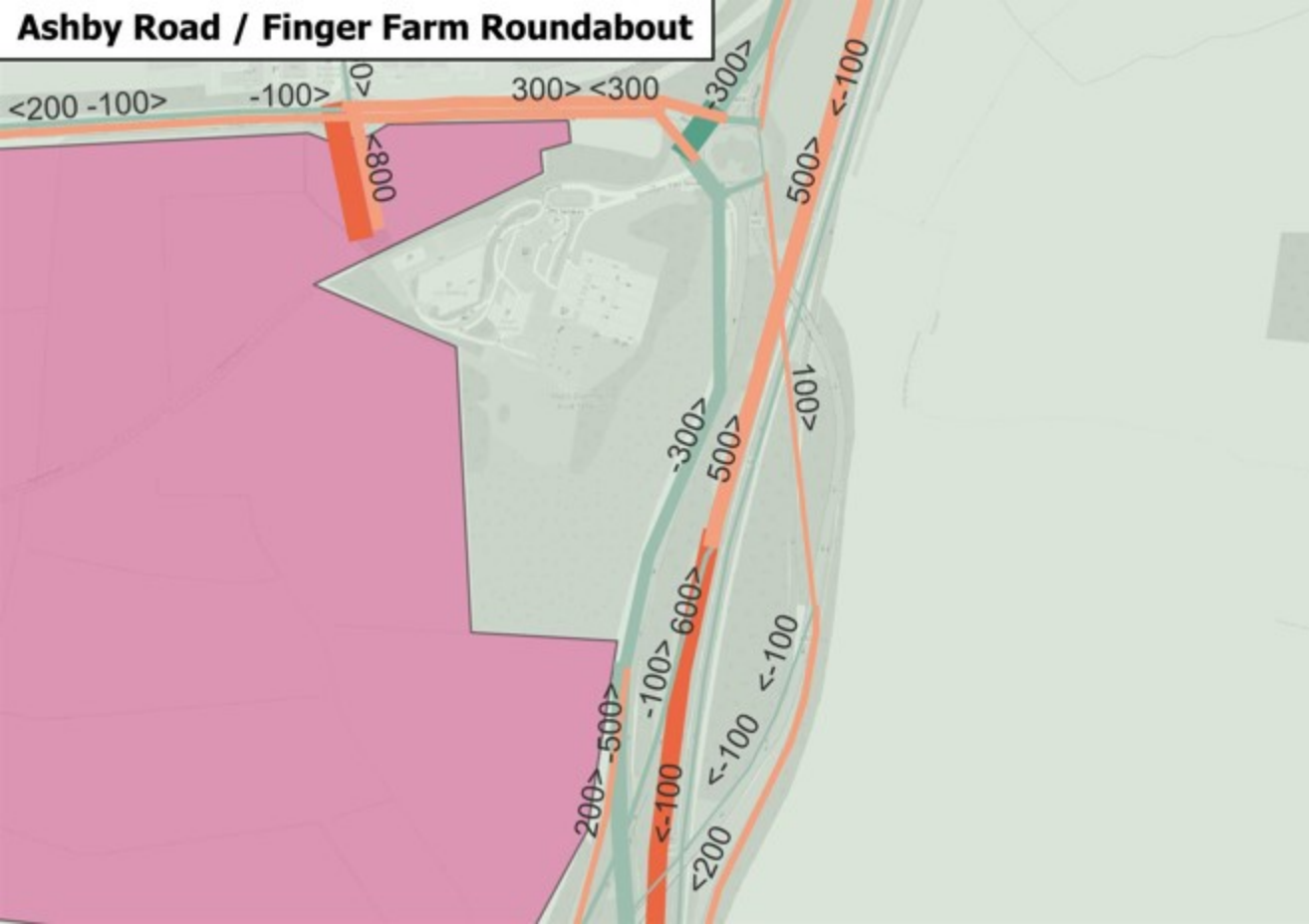
Ashby Road / Finger Farm Roundabout
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-100> 600>
<-100
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<-100
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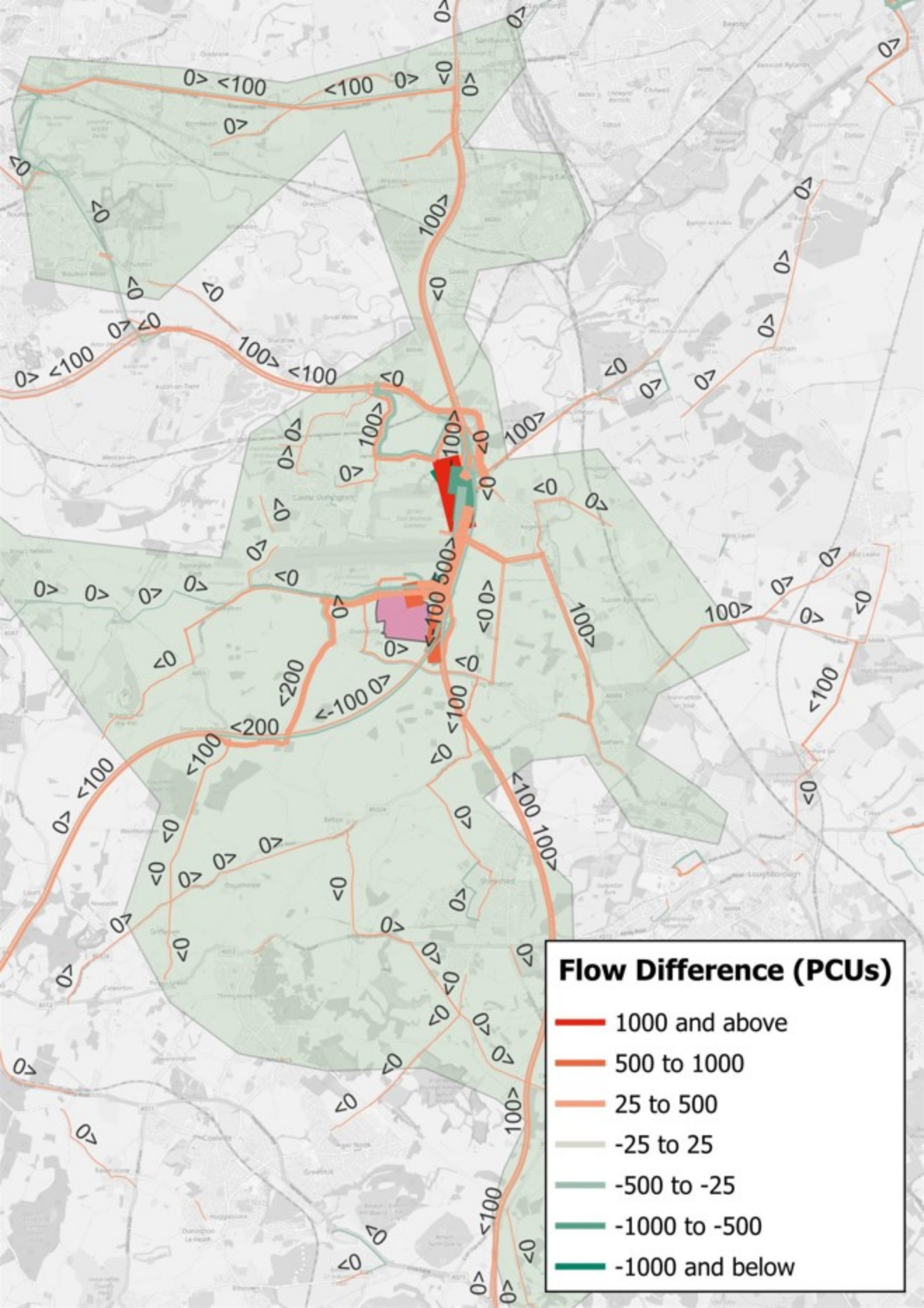
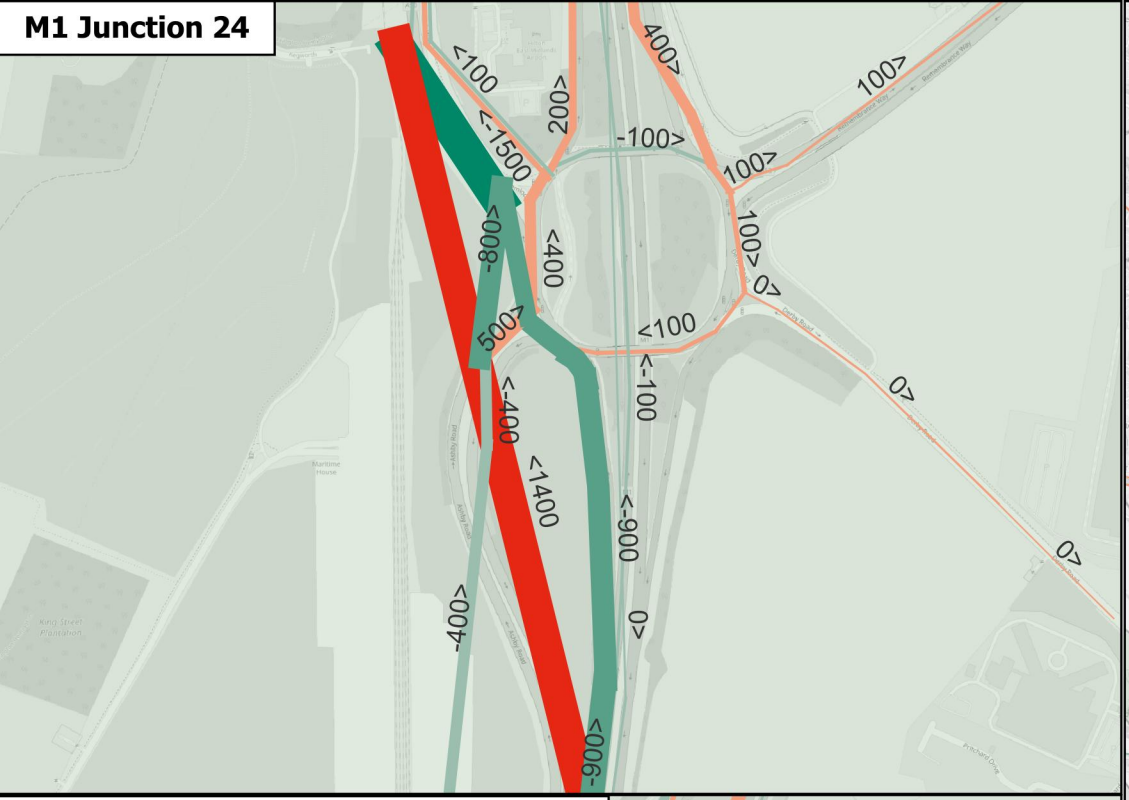
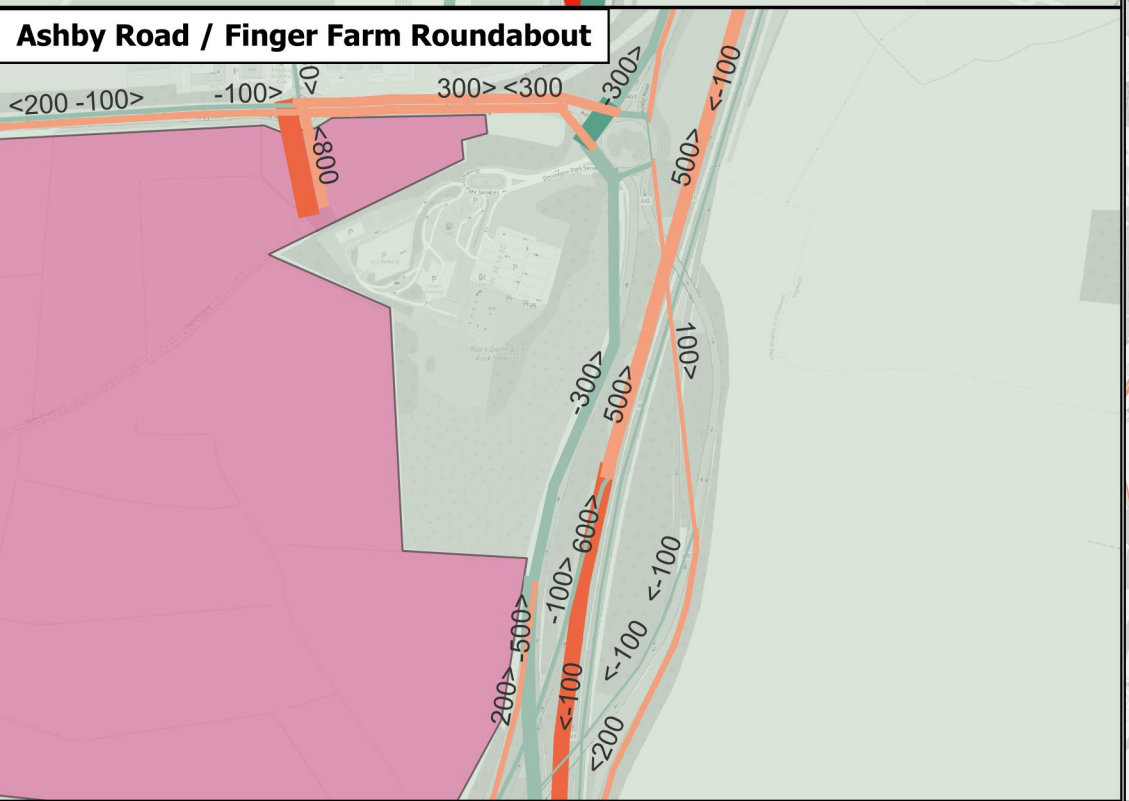
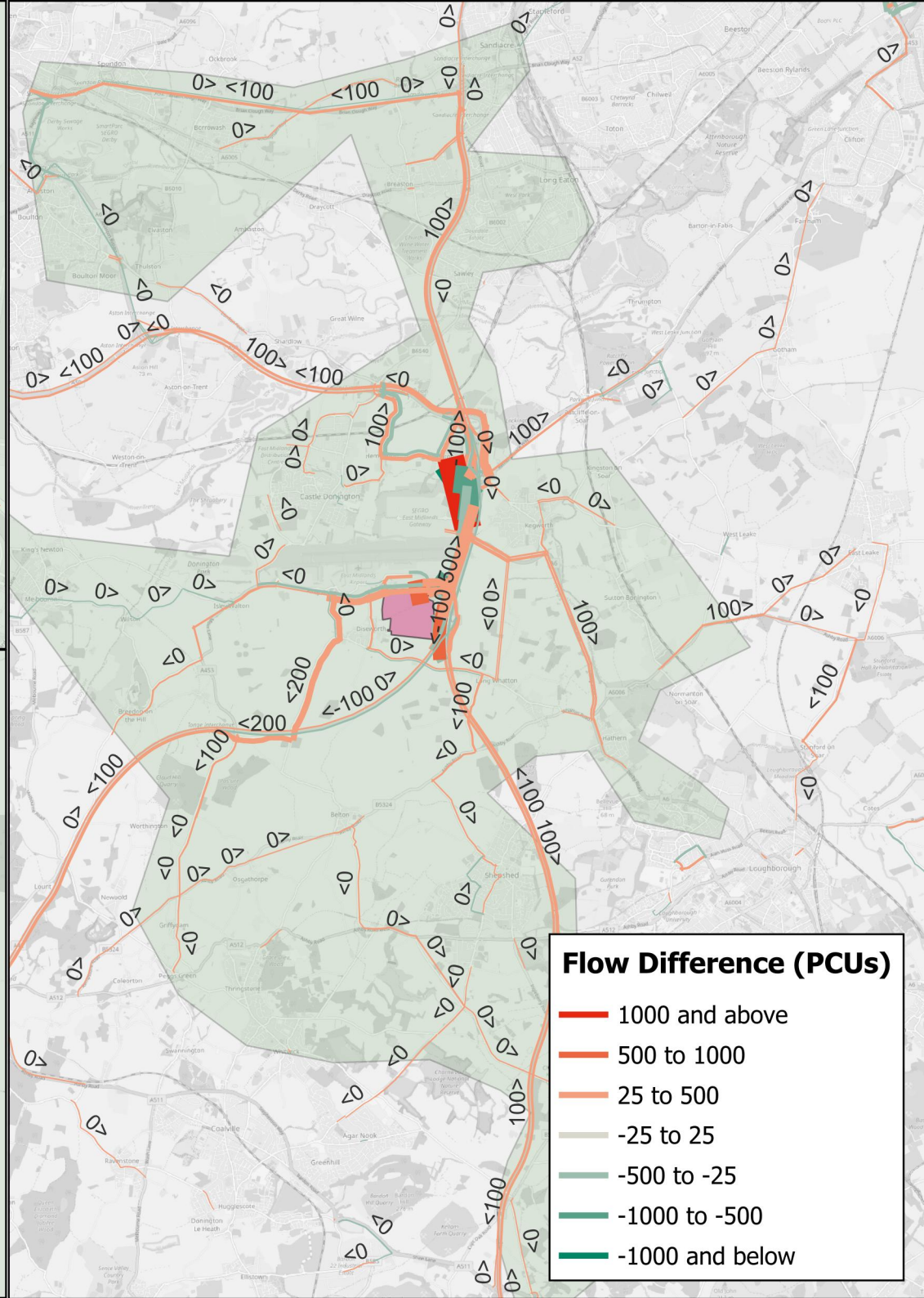

Flow Difference (PCUs)
1000 and above
500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below


M1 Junction 24


Ashby Road / Finger Farm Roundabout


Flow Difference (PCUs)
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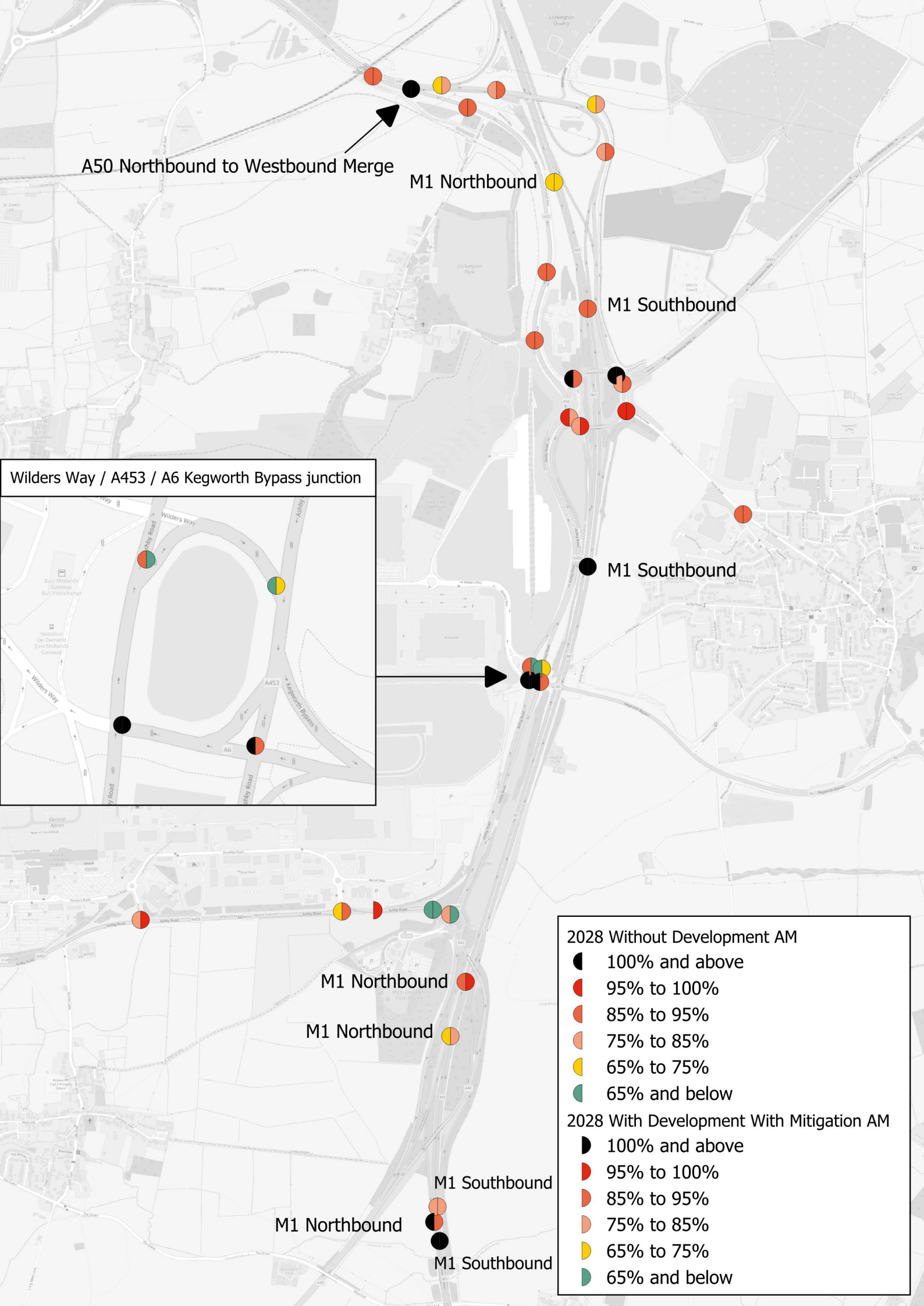
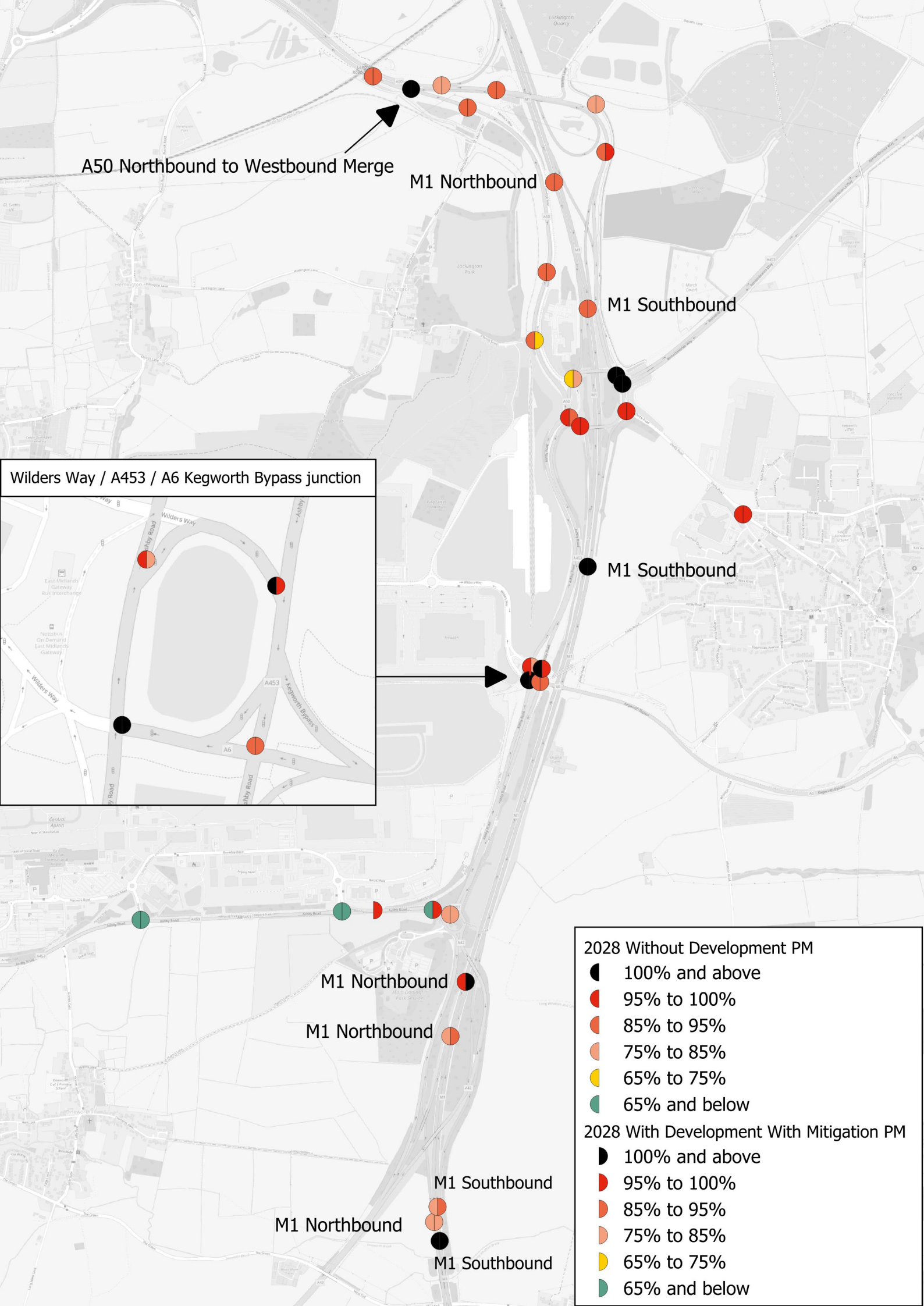
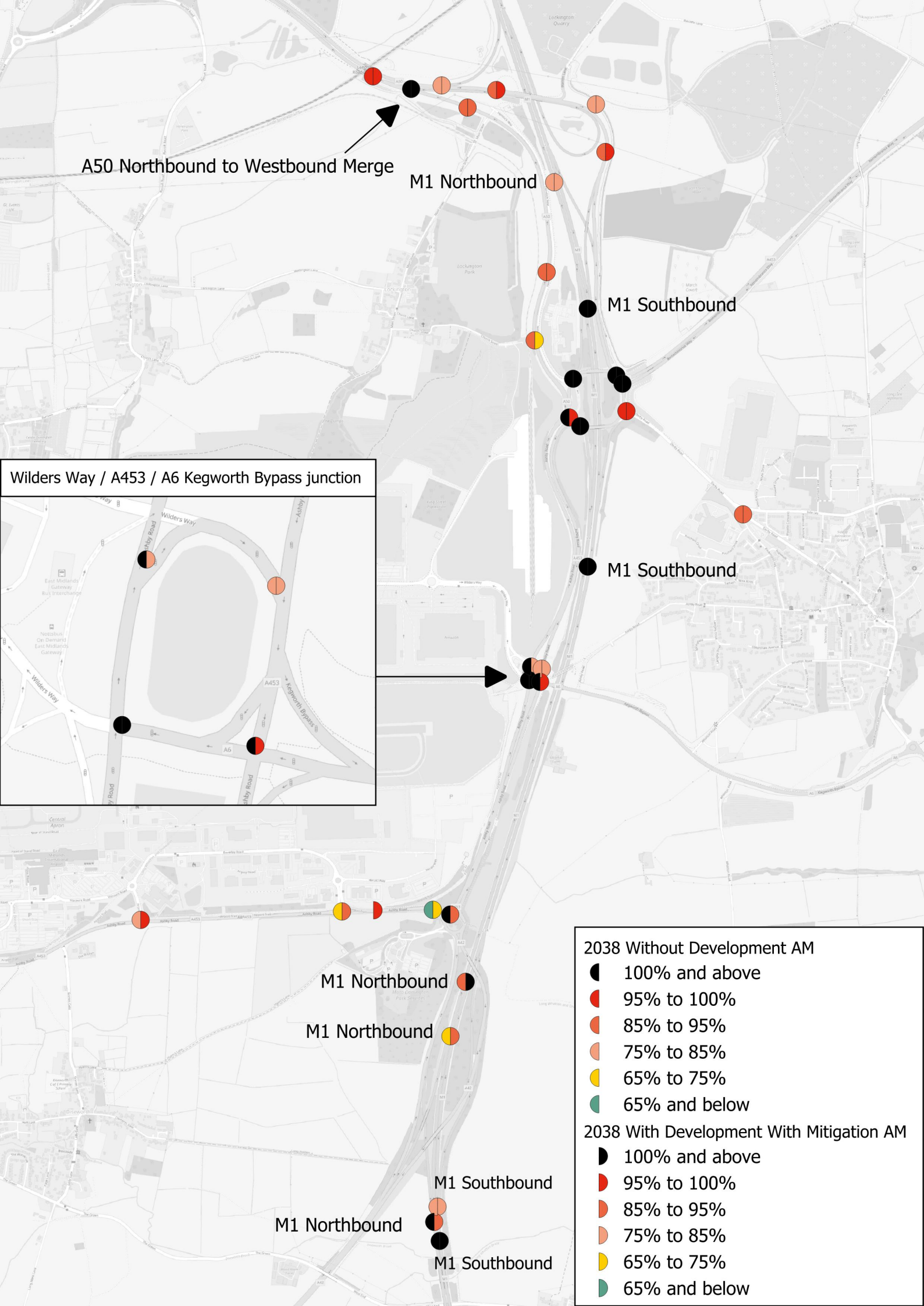
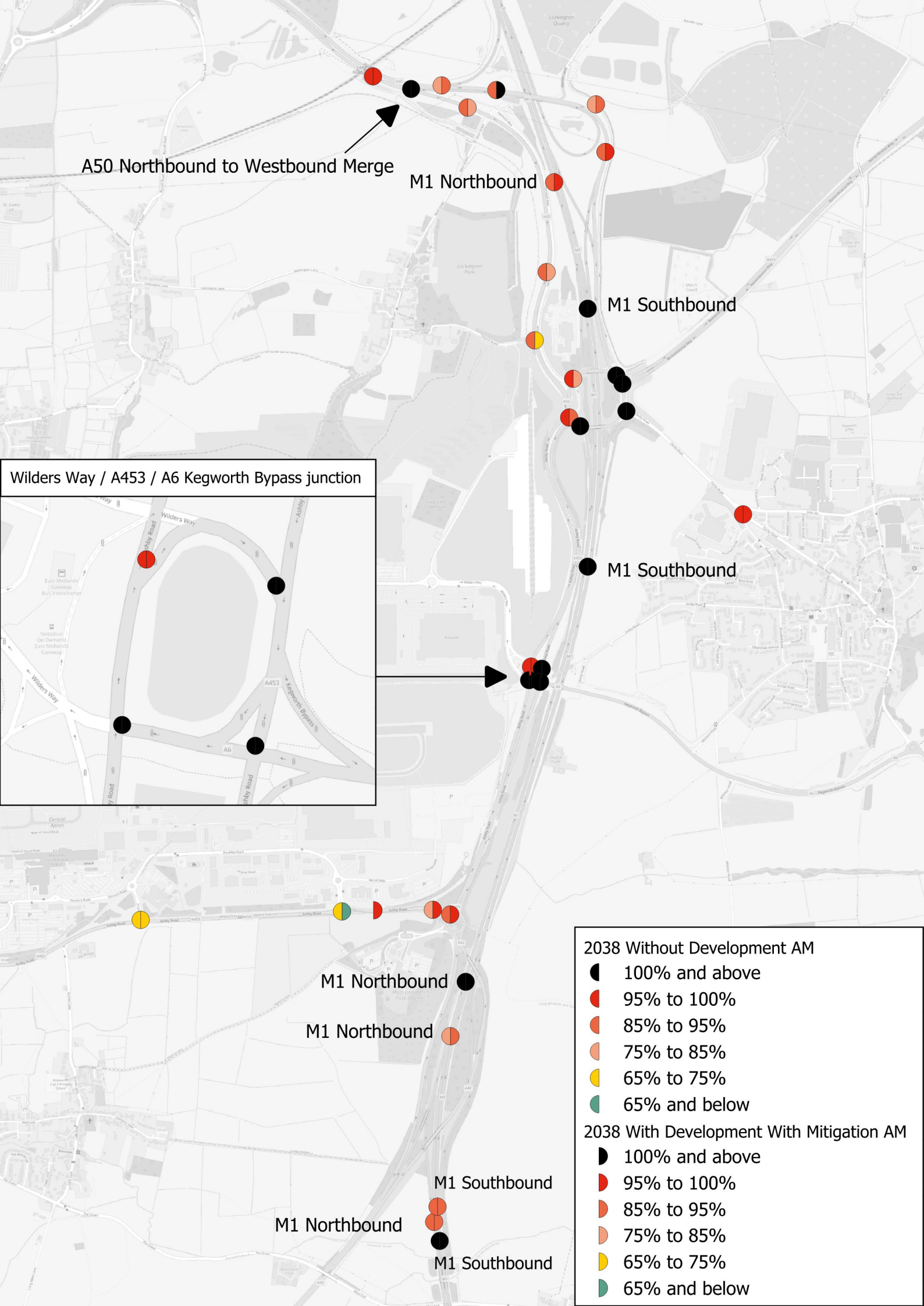
500 to 1000
25 to 500
-25 to 25
-500 to -25
-1000 to -500
-1000 and below


A50 Northbound to Westbound Merge
M1 Northbound
M1 Southbound
Wilders Way / A453 / A6 Kegworth Bypass junction
M1 Southbound
M1 Northbound
M1 Northbound
M1 Southbound
M1 Northbound
M1 Southbound
2028 Without Development AM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below
2028 With Development With Mitigation AM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below


A50 Northbound to Westbound Merge
M1 Northbound
M1 Southbound
Wilders Way / A453 / A6 Kegworth Bypass junction
M1 Southbound
M1 Northbound
M1 Northbound
M1 Southbound
M1 Northbound
M1 Southbound
2028 Without Development PM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below
2028 With Development With Mitigation PM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below


A50 Northbound to Westbound Merge
M1 Northbound
M1 Southbound
Wilders Way / A453 / A6 Kegworth Bypass junction
M1 Southbound
M1 Northbound
M1 Northbound
M1 Southbound
M1 Northbound
M1 Southbound
2038 Without Development AM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below
2038 With Development With Mitigation AM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below


A50 Northbound to Westbound Merge
M1 Northbound
M1 Southbound
Wilders Way / A453 / A6 Kegworth Bypass junction
M1 Southbound
M1 Northbound
M1 Northbound
M1 Southbound
M1 Northbound
M1 Southbound
2038 Without Development AM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below
2038 With Development With Mitigation AM
100% and above
95% to 100%
85% to 95%
75% to 85%
65% to 75%
65% and below

APPENDIX 71: Updated Study Area Spreadsheet using Stage 2A Modelling Outputs

No.	Junction	2038 VoC (%)						Traffic Flows (Total Vehicles)									
		AM			PM			AM					PM				
		Without Dev	With Dev	With Dev With Mit	Without Dev	With Dev	With Dev With Mit	Without Dev	With Dev	2-1 Difference	With Dev w/ Mit	Difference	Without Dev	With Dev	2-1 Difference	With Dev w/ Mit	Difference
1	A453 Site Access Roundabout, Leics	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	A453 / Hunter Road Roundabout, Leics	73.77%	101.36%	86.00%	65.77%	84.83%	64.00%	2458	3057	599	2767	309	1993	3186	1193	2847	854
3	Finger Farm Roundabout, Leics	101.36%	104.95%	89.00%	86.91%	85.77%	95.00%	4646	4854	208	4277	-369	4212	4620	408	4072	-141
4	A453 / EMGP1 Signal Junction, Leics	103.07%	102.54%	102.00%	101.92%	101.90%	102.00%	4779	4875	96	4027	-751	4977	5260	283	4524	-453
5	M1 J24, Leics (SRN)	117.82%	119.79%	114.00%	108.09%	108.78%	107.00%	11823	11842	19	10117	-1706	12215	12639	424	10823	-1393
6	A453 / East Midlands Airport Signal Junction, Leics	82.81%	95.96%	100.00%	68.72%	75.25%	74.00%	1878	1823	-55	1777	-101	1898	2099	201	2015	117
7	A453 / Grimes Gate, Leics	54.86%	68.40%	69.00%	41.77%	57.34%	59.00%	1485	1657	172	1617	132	1325	1496	171	1487	162
8	A453 / The Green, Leics	38.43%	55.43%	48.00%	32.60%	40.55%	42.00%	1904	2102	198	1981	77	1833	2003	170	1956	123
9	A453 / East Midlands Airport Roundabout, Leics	73.51%	77.07%	77.00%	55.18%	60.30%	59.00%	2112	2049	-62	2013	-98	2199	2452	253	2358	158
10	A453 / Walton Hill, Leics	106.27%	109.76%	109.00%	59.62%	100.17%	99.00%	3198	3194	-4	3119	-79	3367	3478	111	3369	2
11	A42 J14 Eastbound off slip, Leics (SRN)	28.32%	27.22%	25.00%	34.28%	36.66%	35.00%	1208	1367	159	1137	-71	1203	1256	53	1199	-4
12	A42 J14 Roundabout with Top Brand / Gelscoe Lane, Leics (SRN)	37.15%	47.35%	36.00%	17.47%	40.39%	40.00%	1157	1343	186	1149	-8	1198	1386	188	1370	172
13	M1 J23, Leics (SRN)	102.28%	102.35%	102.00%	76.06%	75.51%	100.00%	6040	6104	63	5713	-327	6211	6355	145	6006	-205
14	A50 Junction 1, Leics (SRN)	101.62%	101.35%	97.00%	99.45%	98.69%	100.00%	5191	5285	94	4759	-431	5107	5196	89	4961	-146
15	A50 Junction 2, Derbys (SRN)	N/A	N/A		N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
16	M1 J25, Notts (SRN)	120.54%	106.15%	109.00%	114.04%	113.39%	113.00%	7222	7276	54	6965	-256	7655	7763	108	7513	-142
17	Beacon Road / Shepshed Road Priority Crossroads, Woodhouse Eaves. Leics	97.27%	96.52%	0.96%	92.67%	93.29%	94.00%	2668	2693	25	2700	32	3039	3099	60	3100	60
18	A6 Derby Road / Whatton Road / Zouch Road Signal Junction, Hathern, Leics	107.50%	109.07%	103.00%	78.91%	83.79%	81.00%	2695	2725	30	2706	10	3015	3126	111	3031	16
19	Station Road / Broad Rushes Roundabout, Castle Donington, Leics	87.33%	88.90%	85.00%	81.86%	83.43%	83.00%	2629	2716	87	2466	-163	2359	2440	81	2314	-45
20	High Street / Park Lane / Delven Lane Signal Junction, Castle Donington, Leics	96.84%	96.73%	94.00%	98.01%	98.18%	99.00%	1063	1116	53	1149	86	939	955	16	950	11
21	A453 / Kegworth Road Slip Roads, Ratcliffe on Soar, Notts	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
22	A453 / Barton Lane / West Leake Lane Slip Roads, Ratcliffe on Soar, Notts	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
23	B591 / Whitewick Road Signal Junction, Copt Oak, Leics	#N/A	#N/A	98%	#N/A	#N/A	105%	2089	2109	20	2086	-3	1692	1727	35	1705	14
24	A6/London Road, Kegworth	42.34%	44.21%	50.00%	44.06%	66.38%	72.00%	1639	1687	48	1708	69	1920	2008	88	1989	69
25	The Green/Lady Gate, Diseworth	15.30%	17.65%	16.00%	17.55%	17.94%	16.00%	600	726	126	578	-22	634	717	83	652	18
26	Tamworth Road/Fields Farm Road roundabout, Long Eaton	81.81%	82.64%	82.00%	84.70%	102.23%	102.00%	2316	2311	-5	2266	-50	2436	2438	2	2378	-58
27	Nottingham Road/Draycott Road, Borrowash	62.17%	51.85%	63.00%	87.56%	91.57%	94.00%	1738	1704	-34	1667	-71	1525	1539	14	1540	15

Junction	AM			PM			Assessment Required?	Comments
	Stage 1A V/C WoD	Stage 2A V/C	Difference	Stage 1A V/C WoD	Stage 2A V/C	Difference		
Nottingham Road/Willowcroft Road, Spondon, Derby	429%	424%	-5.00%	397%	392%	-5.00%	No	Betterment in v/c ratios of 5% in AM and PM peaks
Derby Road/Nottingham Road Gyratory, Derby (city centre)	93.70%	94.20%	0.50%	108.30%	108.50%	0.20%	No	Negligible change of 0.5% in the AM and 0.2% in the PM
High Street/Park Lane, Castle Donington	96.80%	93.70%	-3.10%	96.80%	93.70%	-3.10%	No	Betterment in v/c ratios of 3.1% in AM and PM
A6 Derby Road/Whatton Road, Loughborough	107.50%	103.30%	-4.20%	<90%			No	Betterent in v/c ratios of 4.2% in AM, with junction operating within capacity in PM
Derby Road/Bishop Meadow Road, Loughborough	<90%			93.20%	95.10%	1.90%	No	Negligible change of 1.9% in PM, with junction operating within capacity in AM

APPENDIX 72: EMFM Stage 2B Modelling **Forecasting Report A**ddendum **(document reference EMFM 2019 East Midlands Gateway Phase 2: Forecasting Report Addendum Stage 2b**, v1.2**)**



EMFM 2019

East Midlands Gateway Phase 2: Forecasting Report Addendum Stage 2b

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Graduate Consultant	Associate Director	Regional Director
Billy Wong		
Principal Consultant		

Revision History

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v1.1	2025-07-04	Definition of 'demand flow' included in Appendix B	Yes	Mark Dazeley	Regional Director
v1.2	2025-07-10	Update to paragraph 3.3.4	Yes	Mark Dazeley	Regional Director

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Figure A.6: Forecast Node Volume-Capacity Ratio for 2038 ‘With Development (1b)’ and 2038 ‘With Development (2b)’ Scenarios 46

Section 1 – Overview

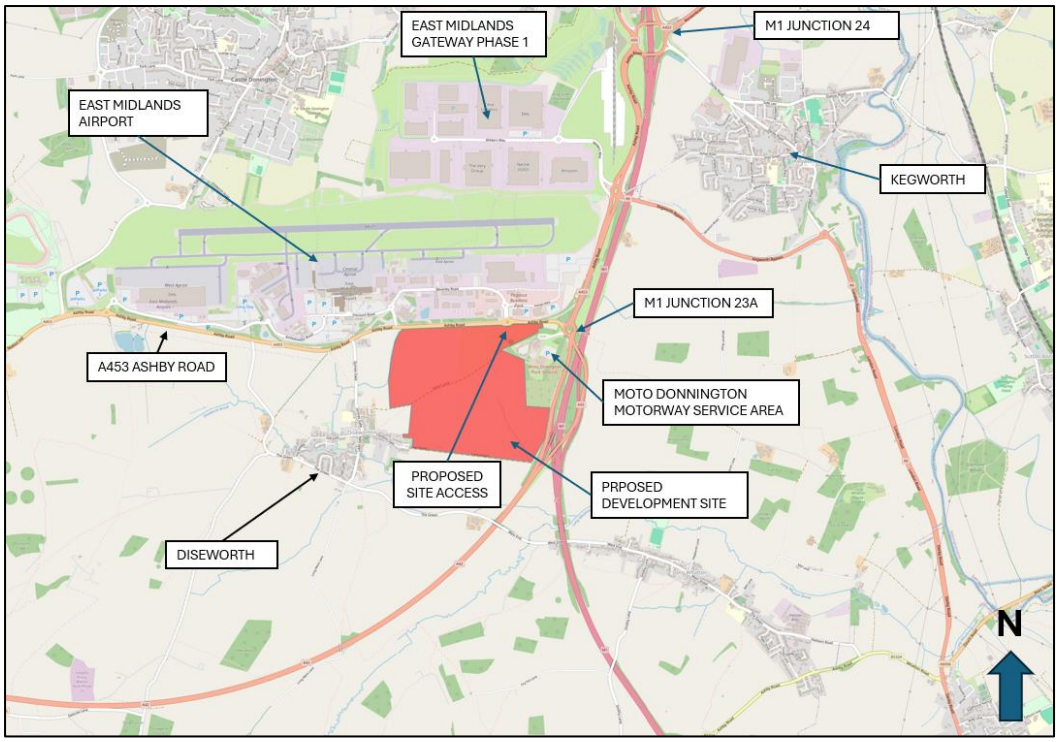
1.1 Introduction

1.1.1 The East Midlands Gateway Phase 2 (EMGP2) development is a proposed employment development of mixed B2 (general industrial) and B8 (storage or distribution) use, with 400,000sqm floorspace (300,000sqm ground floorspace and 100,000sqm of B8 mezzanine floorspace) for industrial use, comprising 340,000sqm B8 and 60,000sqm B2. In addition to this, 30,000sqm of B8 floorspace is proposed on EMG Phase 1 (EMGP1) (Plot 16).

1.1.2 The development site is located to the south of East Midlands Airport and west of the A42 and is expected to build out by 2031.

1.1.3 Figure 1.1 shows an indication of the location of the proposed EMGP2 development, denoted by the area shaded in red. The proposed development has a total area of circa 250 acres located to the south of the A453 and East Midlands Airport itself, to the east of Diseworth village. M1 Junction 23a lies to the east of the site with the Moto Donnington Motorway Service Area (MSA) directly abutting to the north-east.

Figure 1.1: Location of Proposed Development1



© OpenStreetMap Contributors

1.1.4 The proposed EMGP2 development will access the highway network via a single point of access:

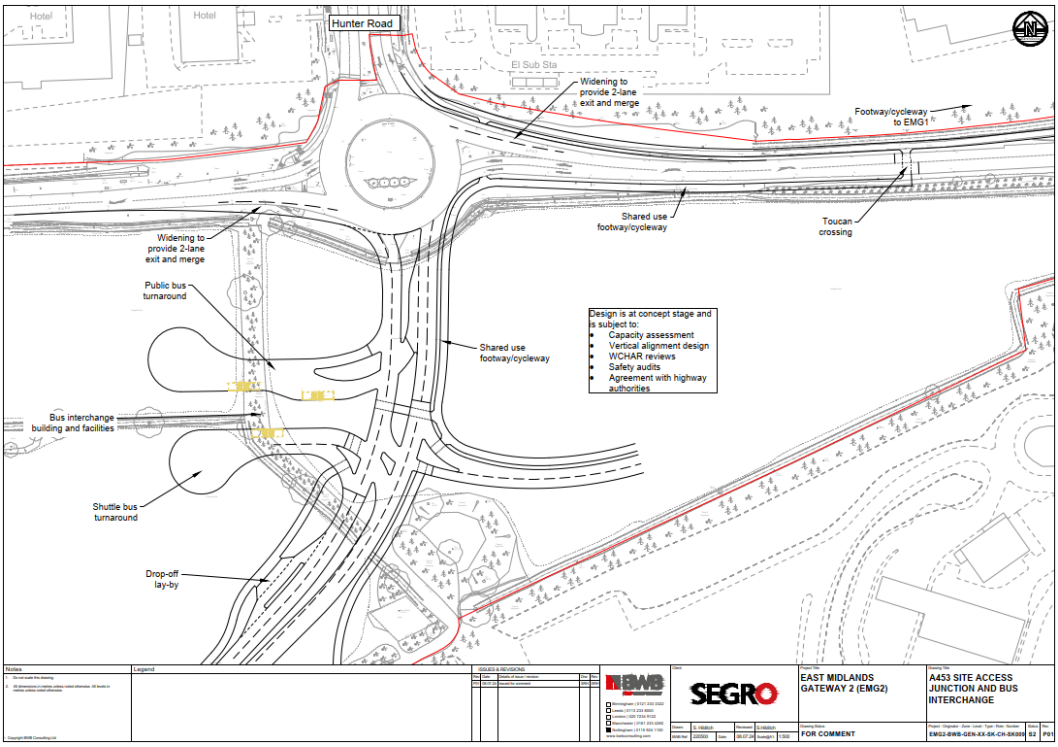
- a fourth arm off the existing A453 / Hunter Road roundabout, as indicatively shown in Figure 1.2.

1.1.5 The proposed EMGP1 (Plot 16) development will access the highway network via:

- the existing access via Wilder's Way.

[1] Location of Proposed Development adapted from Technical Note 1 – Transport Scoping Note, East Midlands Gateway Phase 2 (EMG-BWB-GEN-XX-RP-TR-0001_TN1 Transport Scoping Note-S1-P3.pdf). Provided as part of the information pack with the PRTM Development Form for East Midlands Gateway Phase 2.

Figure 1.2: Site Access Junction[2]



Shown indicatively for the purposes of the figure – further changes made are set out in Figure 2.6 later in this report.

1.1.6 AECOM has been commissioned to undertake strategic modelling to assess the potential traffic impacts of the proposed development using the East Midlands Freeport Model (EMFM) for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours.

1.1.7 The strategic modelling assessment for the proposed EMGP2 development has been undertaken in four stages, as follows:

Stage 1a modelling (Proforma 14)

2022/2023/2024 'Without Development'.

2028/2038 'Without Development (1a)'. Without EMGP2 development (with all Freeport and Local Plan sites).

2028/2038 'With Development (1a)'. With EMGP2 development (with all Freeport and Local Plan sites).

Stage 1b modelling (Proforma 14a)

2028/2038 'Without Development (1b)'. Without EMGP2 development (without Local Plan sites).

2028/2038 'With Development (1b)'. With EMGP2 development (without Local Plan sites).

Stage 2a modelling with mitigation (Proforma 14)

2028/2038 'With Development (2a)'. With EMGP2 and with mitigation measures (with all Freeport and Local Plan sites).

Stage 2b modelling with mitigation (Proforma 14a)

2028/2038 'With Development (2b)'. With EMGP2 and with mitigation measures (without Local Plan sites).

1.1.8 This report follows the East Midlands Gateway Phase 2 Base Year Model Review Addendum report[3], which details the calibrated 2019 base year model review and performance in the vicinity of the

[2] EMG2-BWB-GEN-XX-SK-CH-SK009 S2 P01
[3] EMFM 2019 – East Midlands Gateway Phase 2: Base Year Model Review Addendum v1.0 (2024-08-19)

proposed development site. It forms an addendum to the Stage 1a forecast results documented in the Forecasting Report[4] and should be read in conjunction with the East Midlands Gateway Phase 2: Forecasting Report Addendum (Stage 1b)[5]. This addendum documents the forecast model results for Stage 2b of the EMFM strategic modelling assessment of the proposed development.

1.2 Report Structure

1.2.1 Following the introduction, this report contains the following sections:

- Section 2 – Forecast Approach and Assumptions: this section details the forecast assumptions applied alongside the mitigation measure assumptions.
- Section 3 – Forecast Model Results: this section details the forecast results with the proposed development and mitigation measures included and assigned using EMFM.
- Section 4 – Summary of the Mitigation Assessment: this section provides a summary of the assessment with the proposed development and mitigation measures included.
- Appendix A: Compares the forecast model results for Stage 2b (with mitigation included) with Stage 1b (no mitigation).
- Appendix B: Presents indicative network statistics within the AoI for motorway and non-motorway links.

[4] EMFM 2019 – East Midlands Gateway Phase 2: Forecasting Report v1.0 (2025-02-04)
[5] EMFM 2019 – East Midlands Gateway Phase 2: Forecasting Report Addendum (Stage 1b) v1.0 (2025-03-13)

Section 2 – Forecast Approach and Assumptions

2.1 Introduction

2.1.1 This section sets out the forecast assumptions applied for this application of the EMFM, and the methodology adopted to create the required model forecasts.

2.1.2 The following forecast model scenarios have been produced for this version of the addendum:

Stage 2b modelling with mitigation included (Proforma 14)

2028/2038 'With Development (2b)'. With EMGP2 and with mitigation measures included (without Local Plan sites). Signal timings at junctions adjacent to mitigation measures have been optimised.

2.1.3 To produce the Stage 2b forecasts, the highway mitigation measures for the proposed development have been added to the 'With Development (1b)' scenario and assigned in the EMFM to create the required model forecasts for Stage 2b.

2.1.4 Section 2.2 provides the mitigation measures assumptions applied to the Stage 2b modelling in EMFM. Section 2.3 lists the signal timings at junctions adjacent to the mitigation measures have been optimised in the EMFM assessment and Section 2.4 outlines the methodology applied to optimise signal timings.

2.2 Mitigation Measures

2.2.1 The following list of mitigation measures were provided by the client and included in the Stage 2b EMFM assessment:

1. New M1 northbound to A50 westbound interchange link road and A50 westbound merge (as shown Figure 2.1 and Figure 2.2).
   - A single lane link road between the M1 northbound and the A50, bypassing M1 J24. This has been represented with a 50 mph speed limit in the EMFM.
   - One lane will diverge from the existing four-lane carriageway on the M1 northbound.
2. M1 southbound link approaching J24 (as shown Figure 2.3).
   - An additional M1 southbound lane, from one lane to two lanes, and merging with the A50 eastbound to form three lanes approaching J24.
3. EMGP1 access improvements (as shown Figure 2.4).
   - An additional circulatory lane on the eastern side of the Wilders Way / A453 / A6 Keyworth Bypass roundabout.
   - Signal timing adjustment to allow for a pedestrian phase at Wilders Way to improve access to EMGP2. No changes were applied in EMFM as the existing red phase was sufficiently long to allow for the pedestrian phase.
4. A453 Finger Farm Roundabout westbound exit widening (as shown Figure 2.5).
   - An additional 42 metres of two lanes widening on exit.
5. EMGP2 access junction and toucan crossing (as shown Figure 2.6).
   - Additional flare length has been included at the EMGP2 access roundabout on both the east and west arms.
   - A toucan crossing has been included on the A453 to the east of the proposed access roundabout.
6. M1 J24 minor works (as shown Figure 2.7).
   - The central lane reallocated for shared use for both M1 northbound traffic and traffic towards the A453. Currently this lane is for A453 traffic only.

Figure 2.1: M1 Northbound to A50 Westbound Interchange Link Road

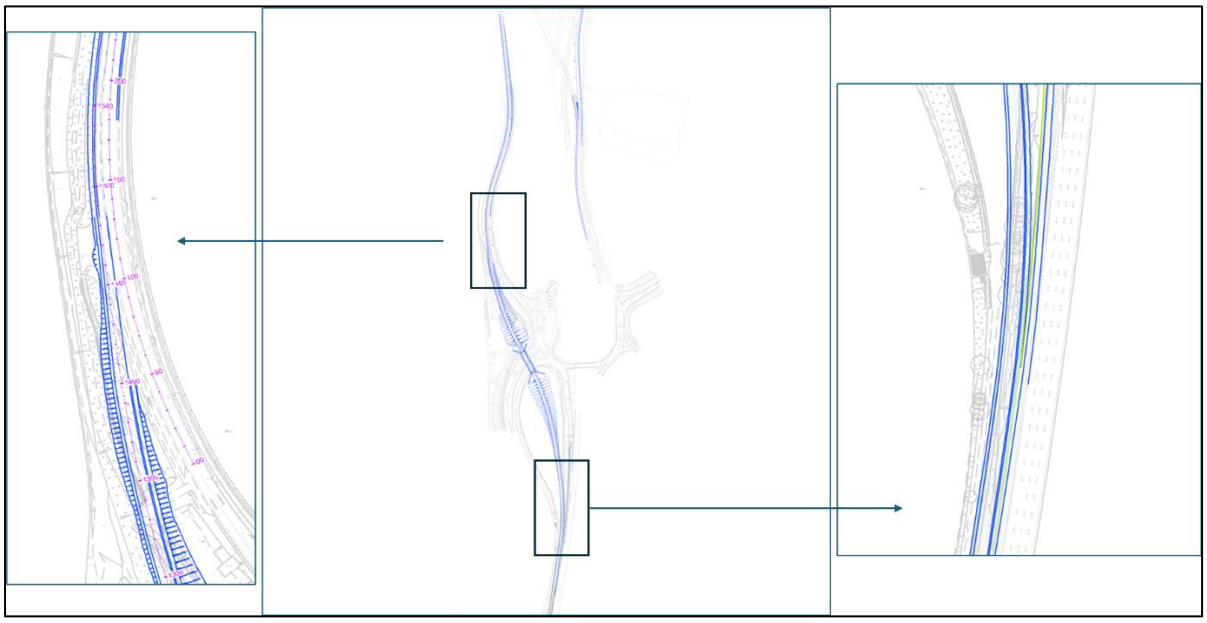


Figure 2.2: M1 Northbound to A50 Westbound Interchange Link Road Diverge Layout

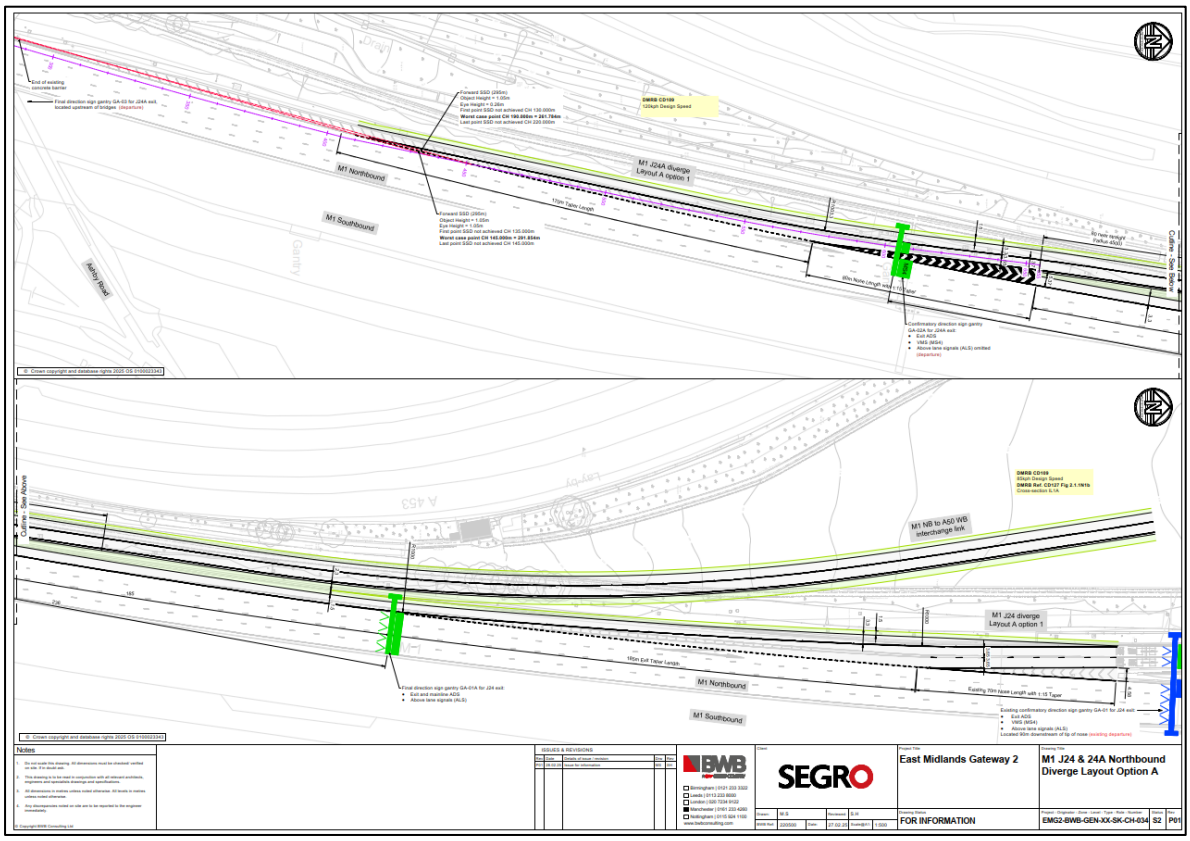


Figure 2.3: M1 Southbound Widening on Approach to J24

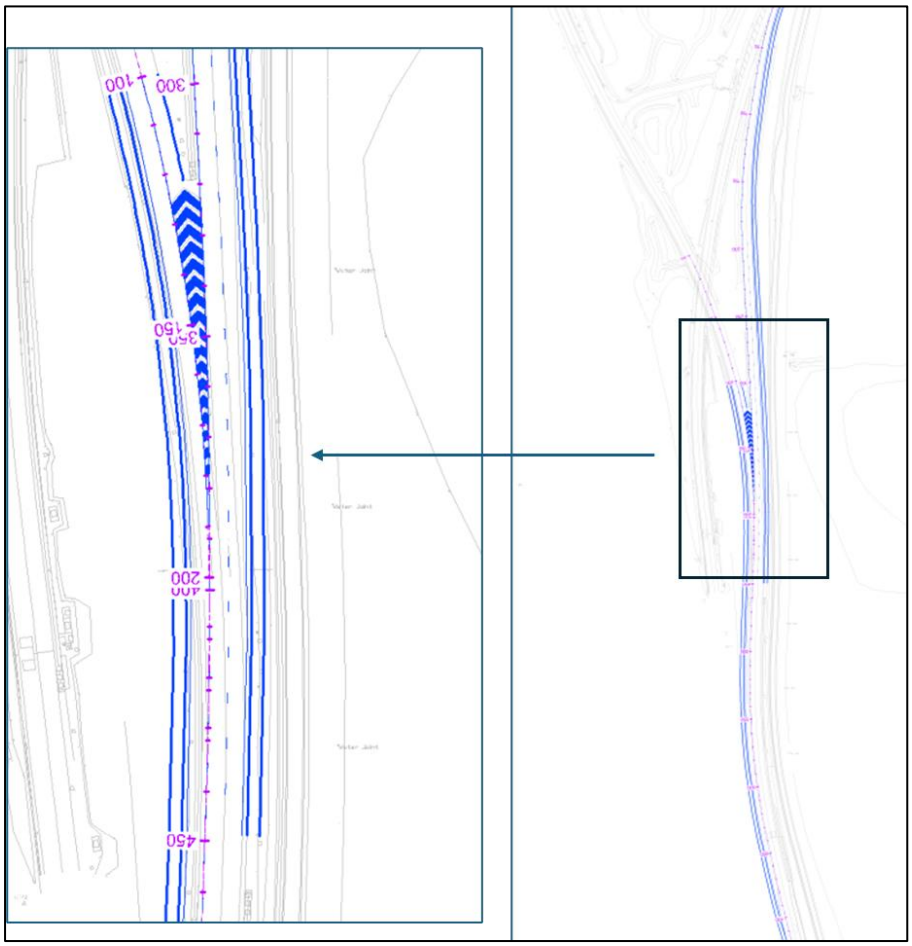


Figure 2.4: EMGP1 Access Improvements

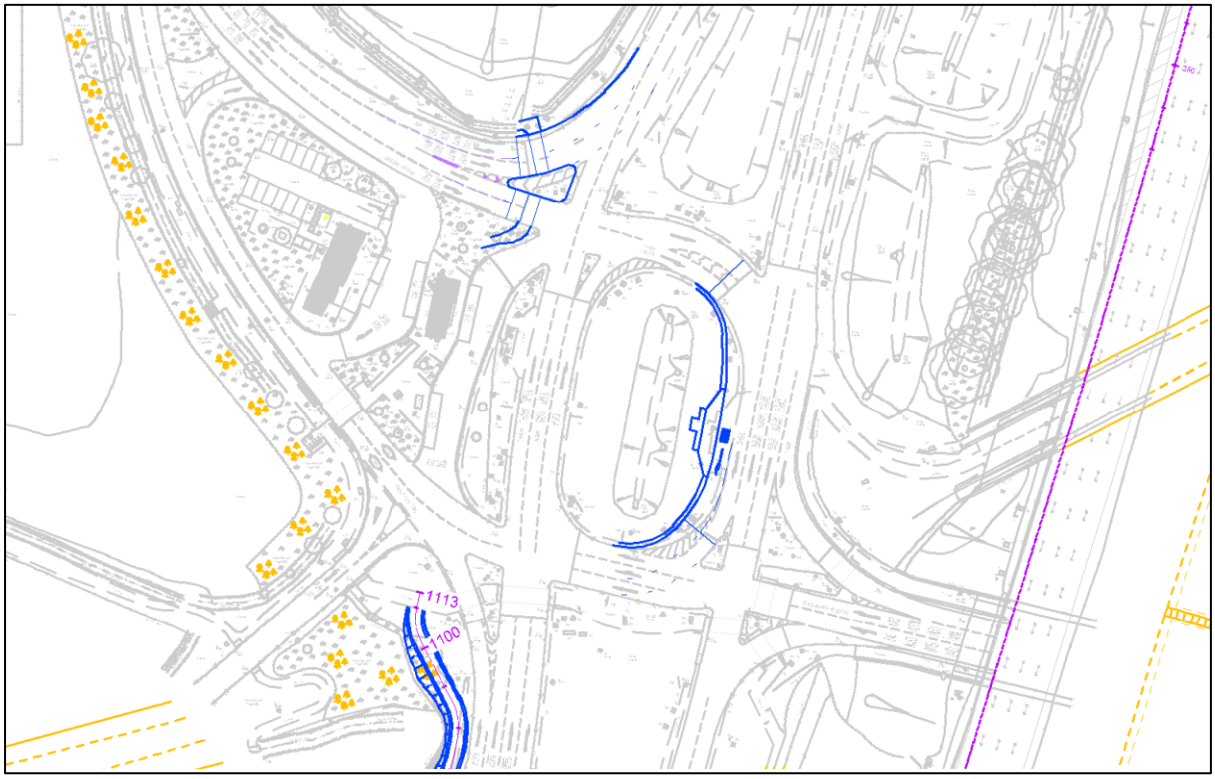


Figure 2.5: A453 Finger Farm Westbound Exit Widening

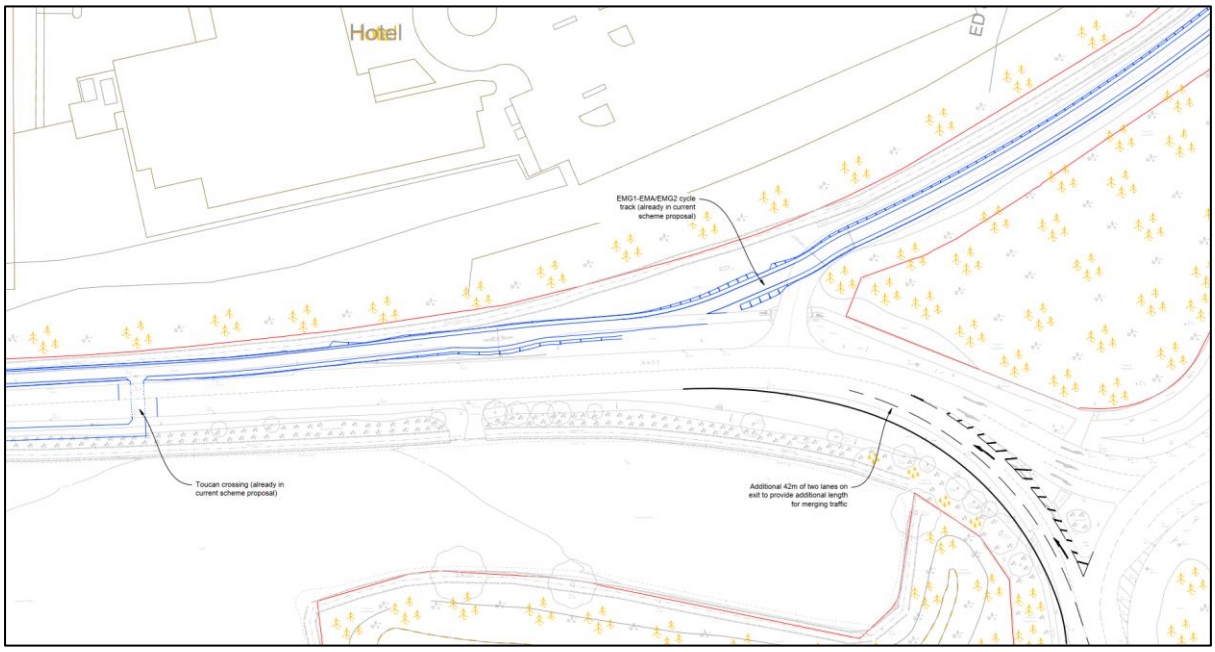
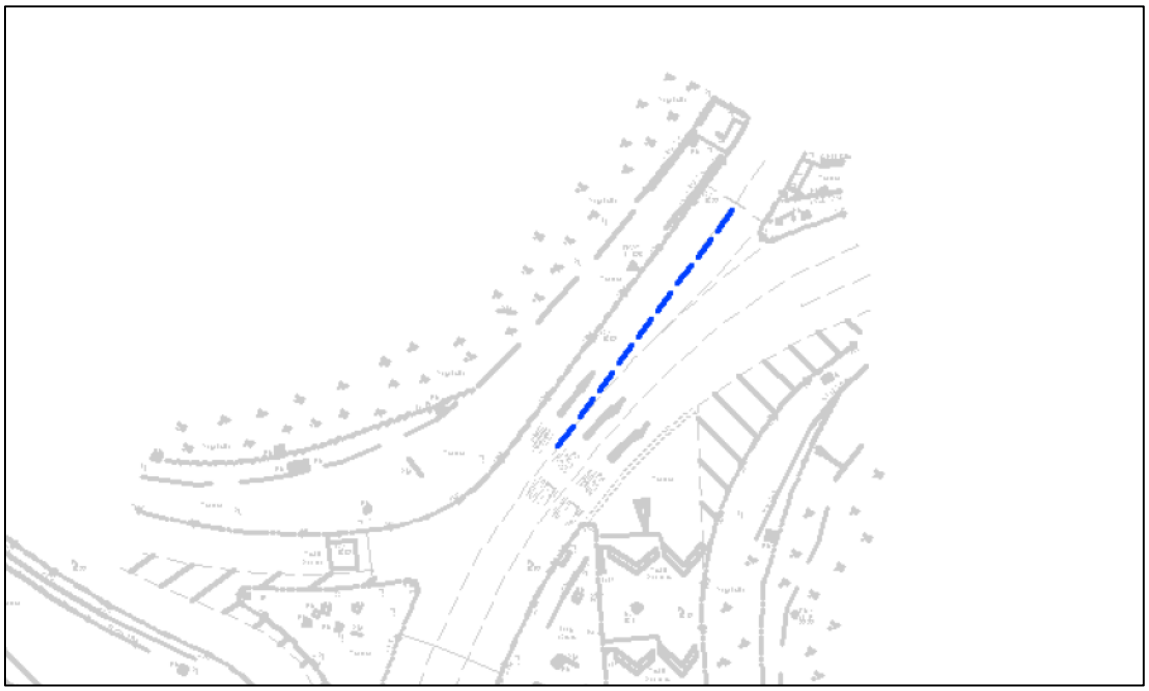


Figure 2.6: A453 EMGP2 Access Junction and Toucan Crossing



Figure 2.7: M1 J24 Minor Works (with Shared Central Lane)



2.3 Signal Optimised with Mitigation Included

2.3.1 Signal timings at two junctions adjacent to the mitigation measures have been optimised in the EMFM assessment at the following locations:

1. The signal head to the south-west of the Wilders Way / A453 / Kegworth Bypass roundabout that controls the A453 northbound traffic and the circulatory traffic.
2. The signal head to the north-east of the M1 J24 that controls the M1 southbound and circulatory traffic.

2.3.2 These two junctions are forecast to be at or over capacity in Stage 2b and have therefore been optimised to ‘unlock’ the benefits of the mitigation measures, particularly in relation to the two measures listed below:

1. EMGP1 access improvements (see Paragraph 2.2.1 and Figure 2.4).
2. M1 southbound link approaching J24 (see Paragraph 2.2.1 and Figure 2.3).

2.4 Approach to Signal Optimisation

2.4.1 As noted in Section 2.3 two signalised junctions have been optimised to 'unlock' or release the benefits of the proposed mitigation measures that would otherwise not be fully realised, therefore increasing capacity and reducing delay on the Strategic Road Network (SRN). Signals were optimised such that:

- demand and delay at congested signalised junctions were better balanced / optimised following the introduction of the additional road capacity provided by the mitigation measures (note that signal timings for Stage 2b are based on observed signal time data from the EMFM Base Year model (2019), as is the standard approach); and
- information or feedback from the detailed Vissim modelling has been used (for example, the minimum / maximum green times (note that the Vissim model demand was based on outputs from the EMFM).

2.4.2 The optimisation of these two junctions were performed carefully and systematically such that traffic patterns were not unrealistically changed or distorted due to the additional capacity released from the optimised signal timings, rather than the mitigation measures themselves. Optimising these junctions was performed over five iterations by carefully reviewing outputs and adjusting green times after each iteration.

2.4.3 A sixth iteration was assessed in EMFM that included optimising the signalised junction at the Hilton Hotel Lane / M1 J24. This signal was optimised based on both forecast traffic demand volumes and feedback provided from the detailed Vissim modelling. The forecast impacts from this sixth iteration were considered to be localised and have not been documented in this report. However, outputs have been provided to inform the Vissim modelling.

Section 3 – Forecast Model Results

3.1 Introduction

3.1.1 This section details the forecast model results for the proposed EMGP2 development assessment for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours. The analysis includes:

- routeing of the forecast development traffic in the 2028 and 2038 'With Development (2b)' scenarios (Section 3.2);
- forecast flow changes in 2028 and 2038 between the 'Without Development (1b)' and 'With Development (2b)' scenarios (Section 3.3);
- an assessment of the Area of Influence (AoI) (Section 3.4);
- forecast delay changes in 2028 and 2038 between the 'Without Development (1b)' and 'With Development (2b)' scenarios (Section 3.5);
- forecast maximum node volume-capacity ratios in the 2028 and 2038 'With Development (2b)' scenarios (Section 3.6); and
- forecast turning flows (and volume-capacity ratios for turns) at selected junctions (Section 3.7).

3.1.2 Appendix A provides a comparison between the 'With Development (2b)' and 'With Development (1b)' that includes forecast flow changes, delay changes, and node volume-capacity ratios in 2028 and 2038.

3.2 Forecast Development Traffic

3.2.1 It was agreed that the development trip distributions are to be based on the PRTM 'gravity model' approach. The gravity model approach was applied for Stage 1b and the development trip distribution from Stage 1b has been applied to the Stage 2b modelling.

3.2.2 Figure 3.1 to Figure 3.8 show the forecast development trip distribution separately for HGVs and light vehicles on the highway network for the 2028 and 2038 'With Development (2b)' scenarios in passenger car units (PCUs). For information, the PCU factor for HGV is 2.0 and the PCU factor for the other assignment vehicle types (i.e. cars and LGVs) is 1.0.

3.2.3 As expected, the forecast trip distribution for Stage 2b (with mitigation) is very similar to Stage 1b (without mitigation) as reported in the Forecasting Report[4]. How development traffic routes through the network is also very similar.

3.2.4 These figures show that the forecast HGV development traffic has a broadly similar distribution to and from the proposed development in both the AM Peak and PM Peak hours, and for both forecast years (2028 and 2038). HGVs are forecast to use the M1, A50 and the A453 Remembrance Way to and from Derby and the north, and the M1 and A42 to and from Leicester, Birmingham and the south.

3.2.5 For light vehicle traffic, most development-related trips during the AM Peak hour in 2028 are forecast to use the M1 southbound and the A42 towards Birmingham. In the northbound direction development trips are forecast to route via the M1 and Castle Donnington Relief Road towards Derby. By 2038 in the AM Peak hour, a higher proportion of trips is forecast to route south from the A453 towards Diseworth to access Gelscoe Lane and the A42.

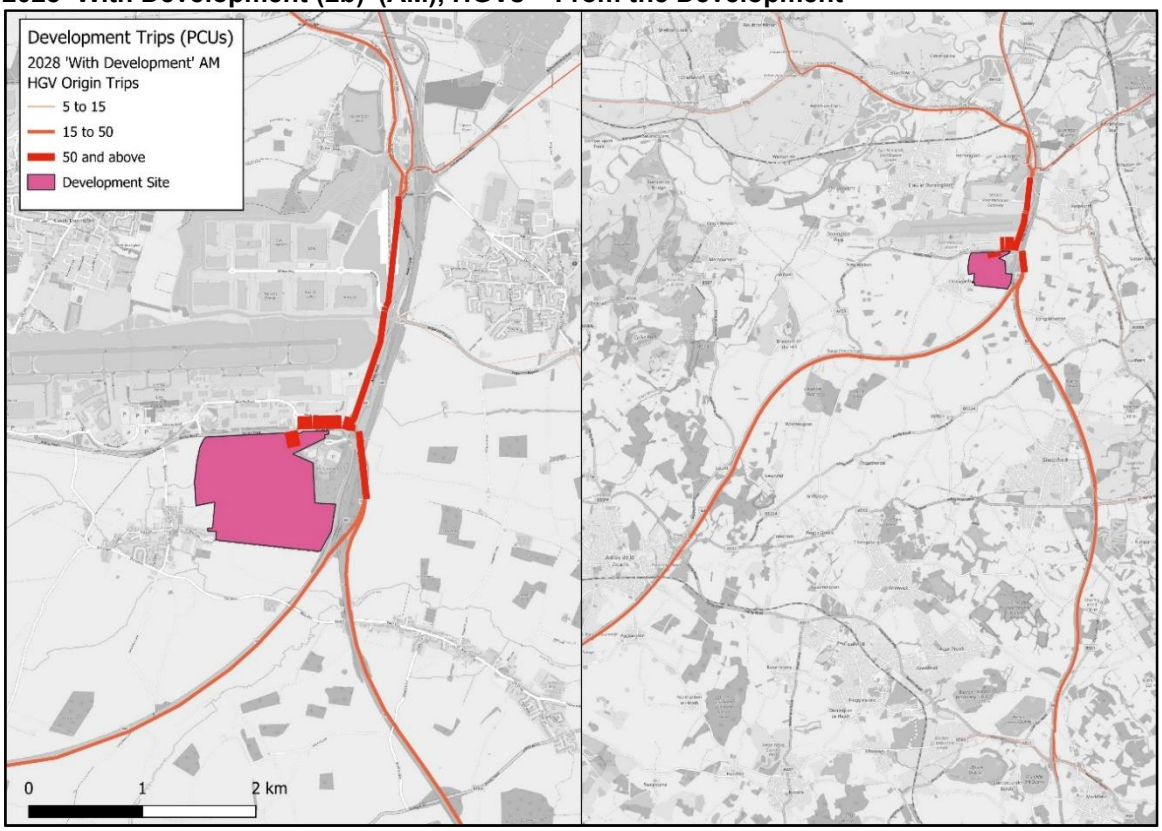
3.2.6 Light vehicle development trips from the development in the PM Peak hour in 2028 are forecast to route north via the M1, the A50, A453 Remembrance Way and south via the M1 and towards Diseworth to access the A42. This pattern is forecast in the reverse for the AM Peak hour development trips to the proposed development but with fewer trips on the M1 northbound and more trips on Castle Donnington Relief Road to avoid the congested M1 J24.

3.2.7 With the M1 northbound to A50 westbound interchange link road included in Stage 2b the development traffic (lights and heavy vehicles combined) on the A50 is forecast to have fewer than 100 vehicles in both directions in either the 2028 or 2038 scenarios for Stage 2b, which are very similar to the equivalent Stage 1b forecasts.

3.2.8 It should be noted that the local networks through Diseworth, Castle Donington and Kegworth have weight restrictions applied. These restrictions are represented in the EMFM, and the HGV development trips are therefore forecast to route to and from the proposed development site via mainly the SRN.

Figure 3.1: HGV Trip Distribution to and from the Proposed Development for 2028 (AM)

2028 'With Development (2b)' (AM), HGVs – From the Development



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2028 'With Development (2b)' (AM), HGVs – To the Development

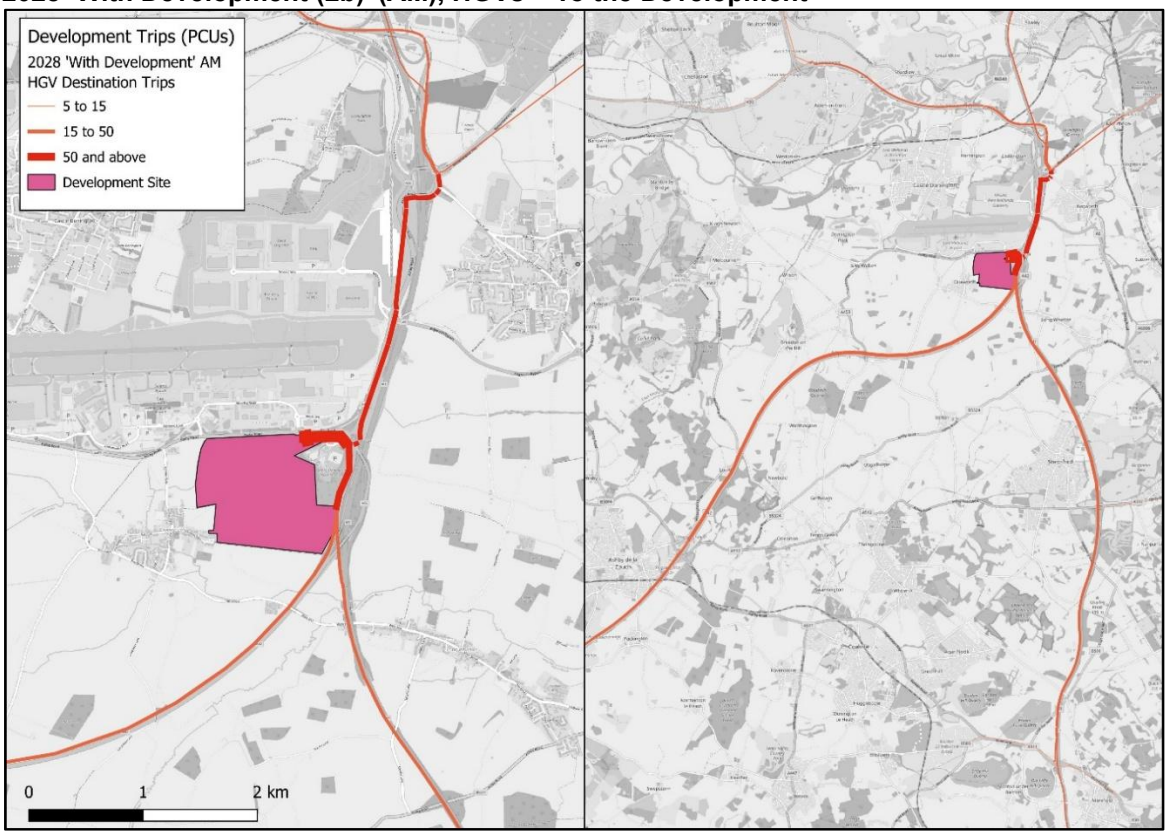

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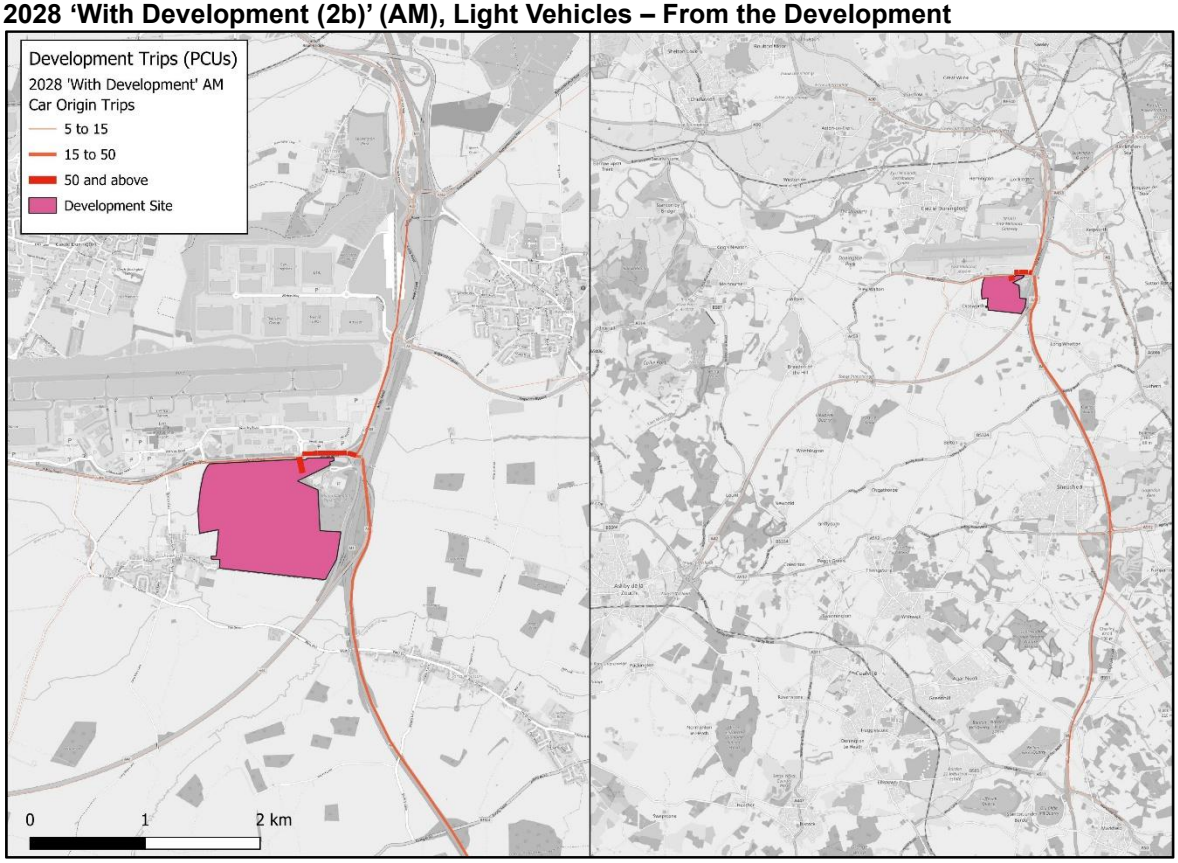
Figure 3.2: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (AM)

2028 'With Development (2b)' (AM), Light Vehicles – From the Development



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2028 'With Development (2b)' (AM), Light Vehicles – To the Development

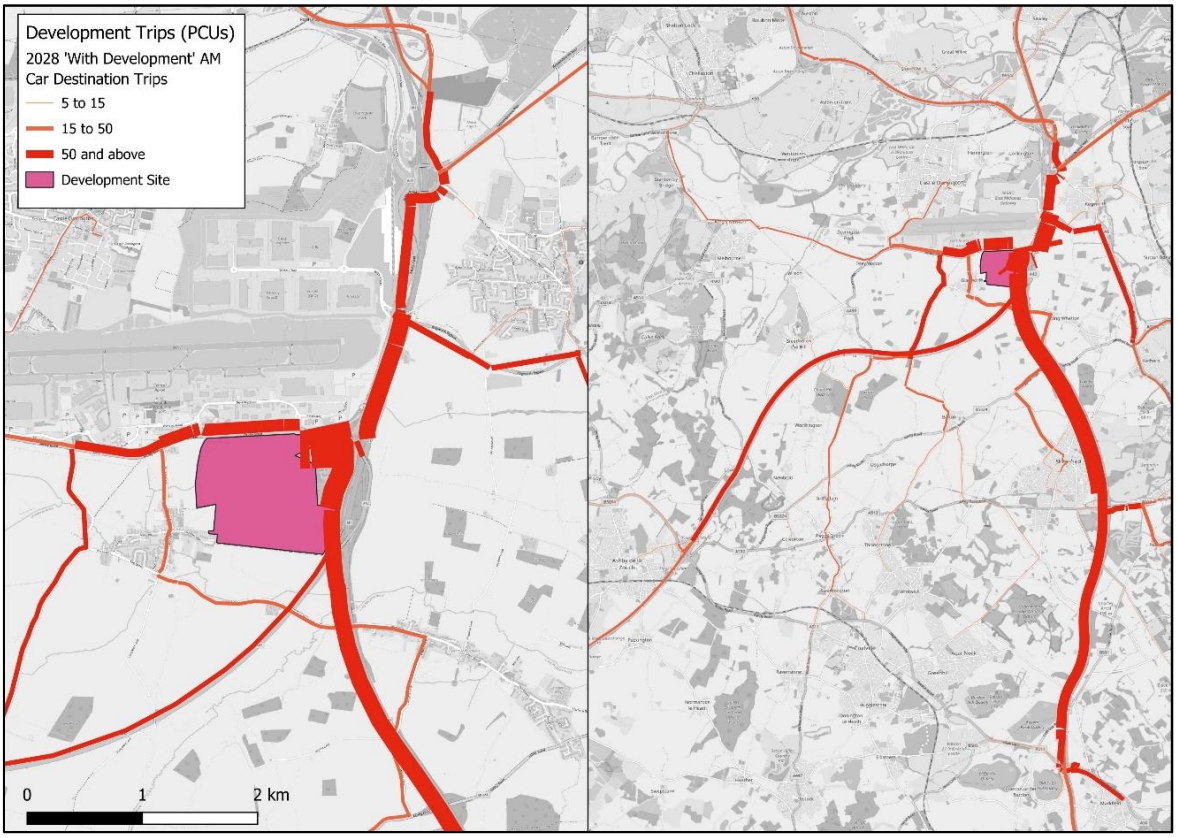

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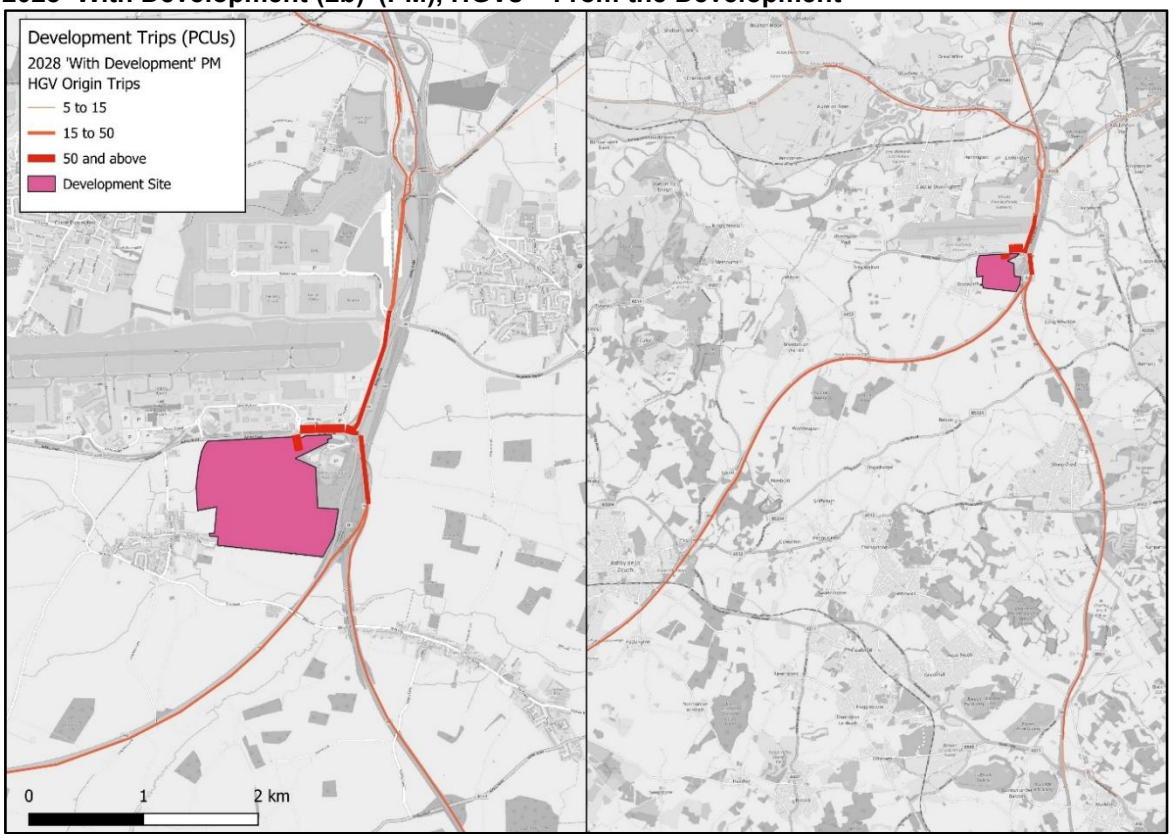
Figure 3.3: HGV Trip Distribution to and from the Proposed Development for 2028 (PM)

2028 'With Development (2b)' (PM), HGVs – From the Development



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2028 'With Development (2b)' (PM), HGVs – To the Development

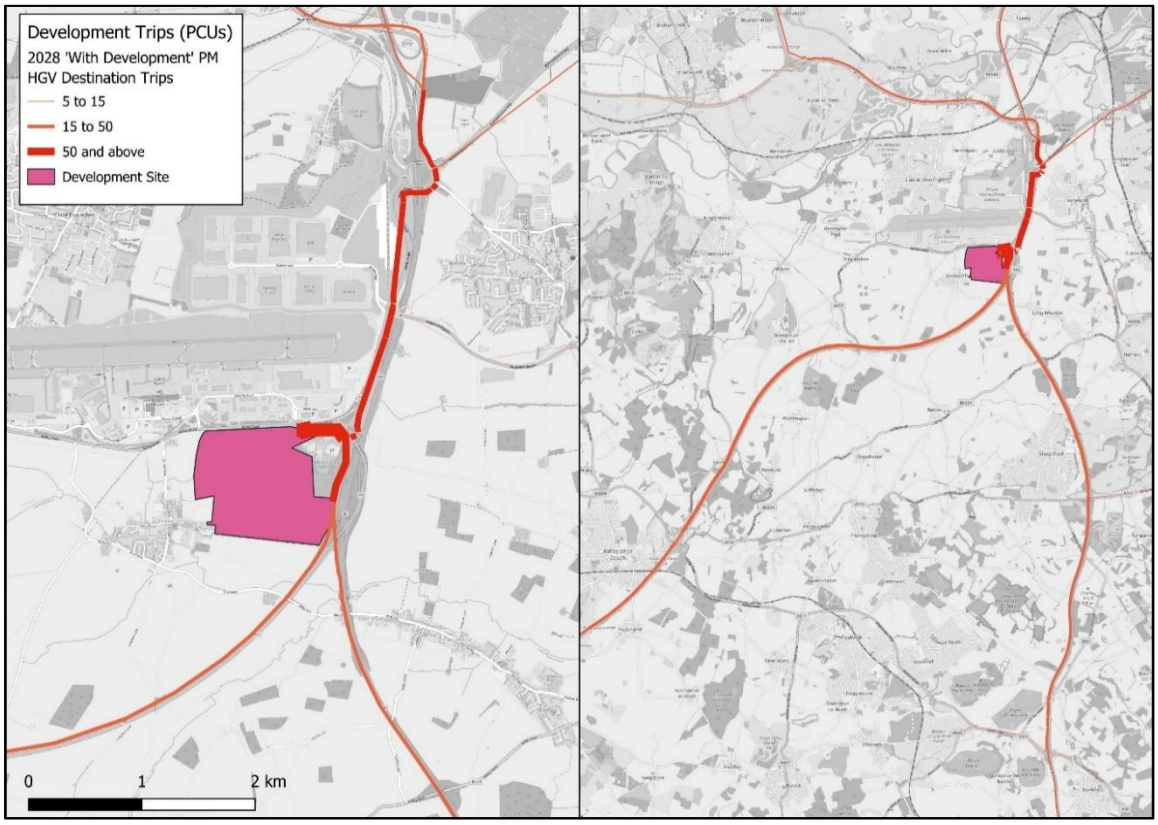

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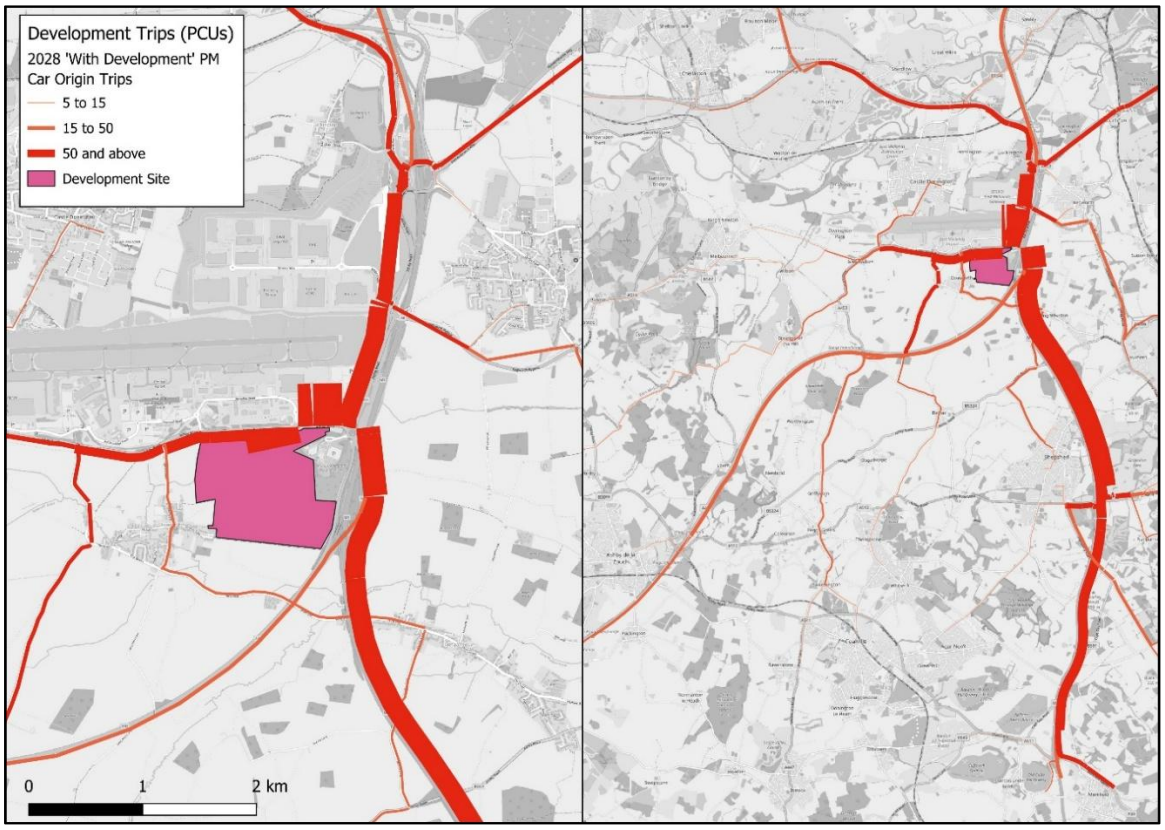
Figure 3.4: Light Vehicle Trip Distribution to and from the Proposed Development for 2028 (PM)

2028 'With Development (2b)' (PM), Light Vehicles – From the Development



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2028 'With Development (2b)' (PM), Light Vehicles – To the Development

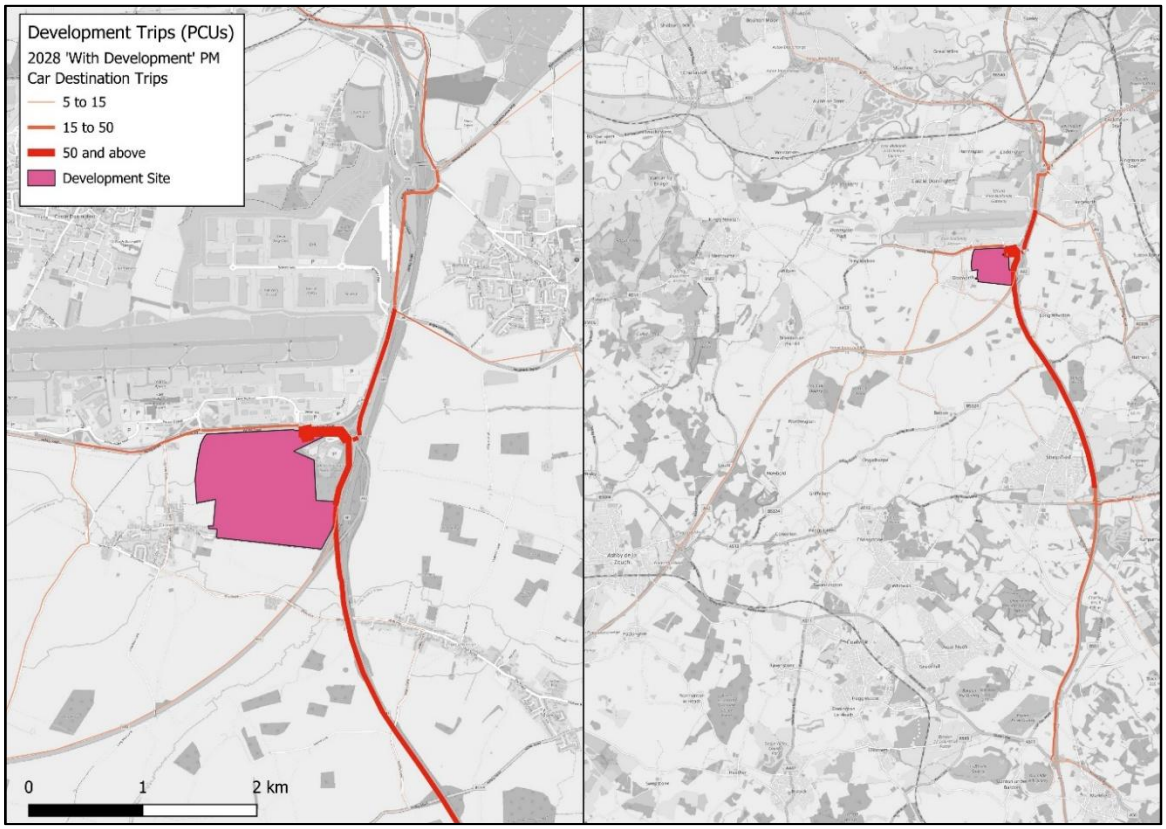

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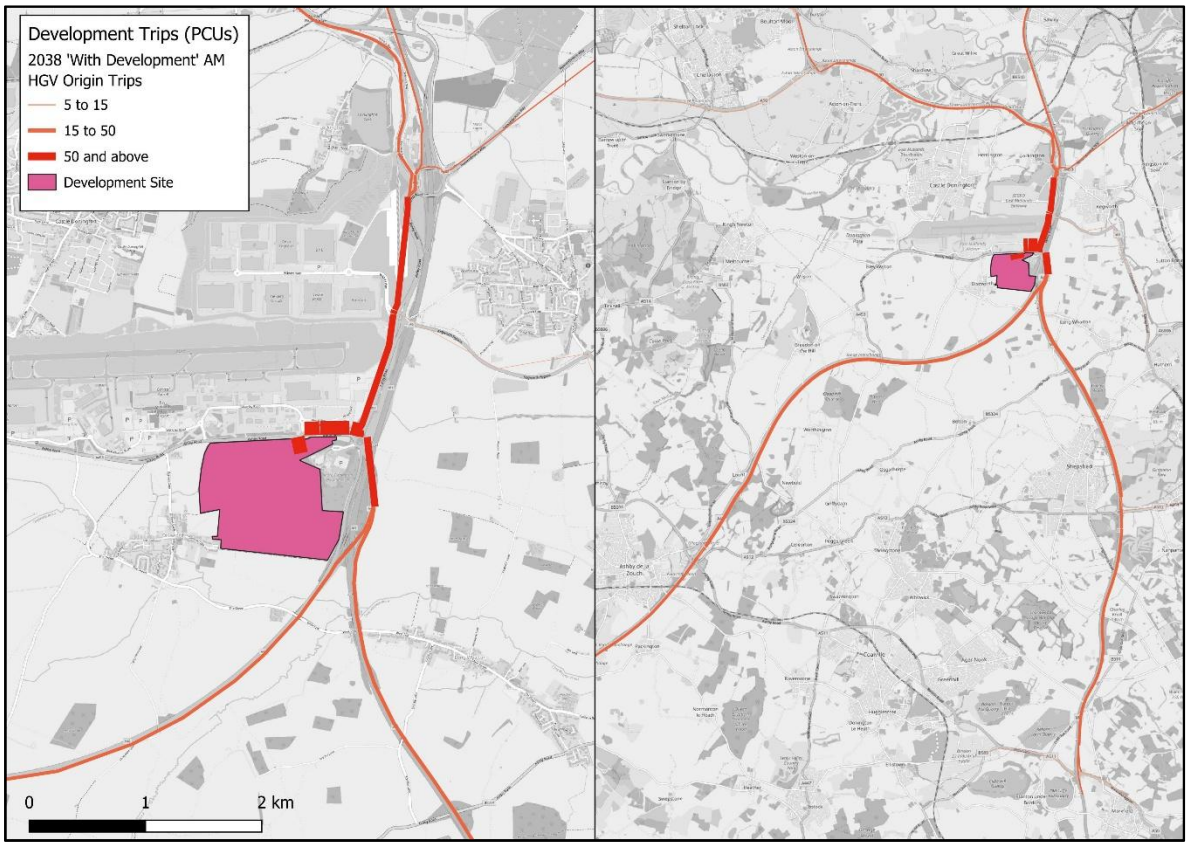
Figure 3.5: HGV Trip Distribution to and from the Proposed Development for 2038 (AM)

2038 'With Development (2b)' (AM), HGVs – From the Development



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2038 'With Development (2b)' (AM), HGVs – To the Development

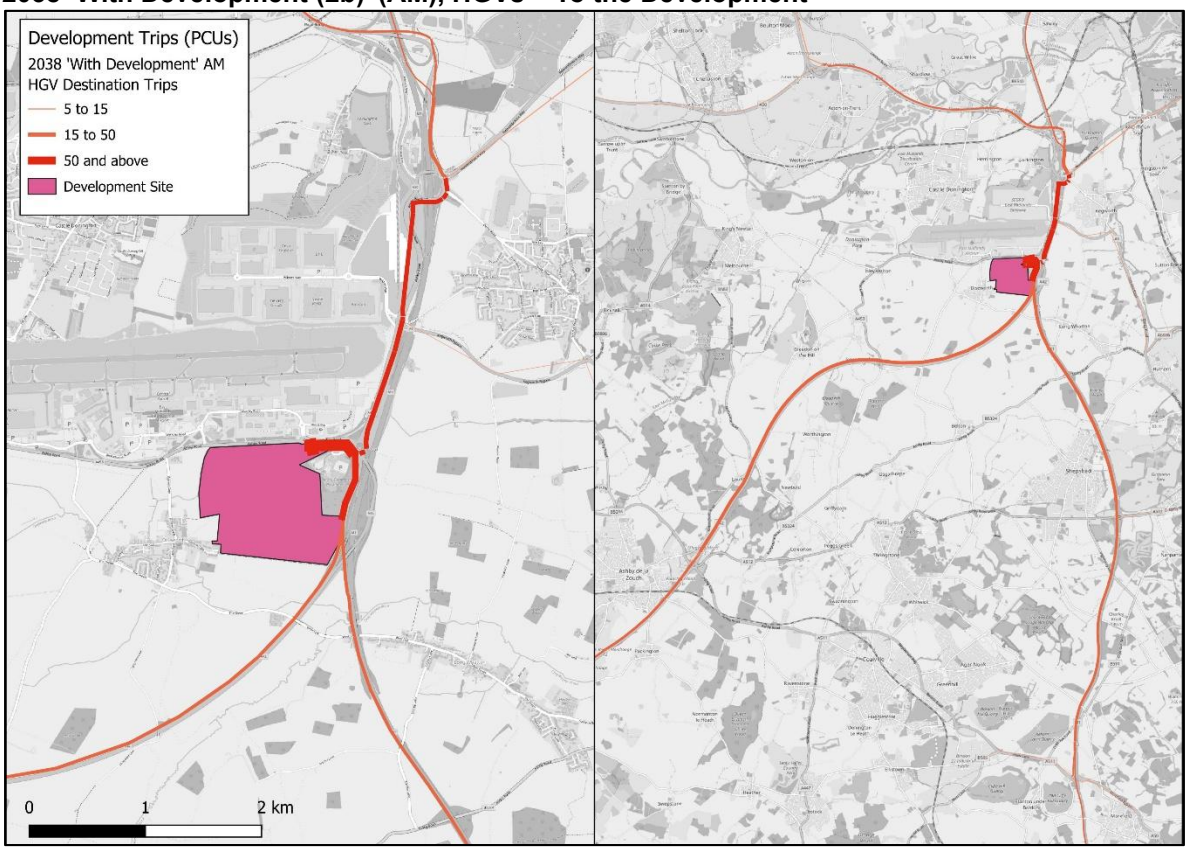

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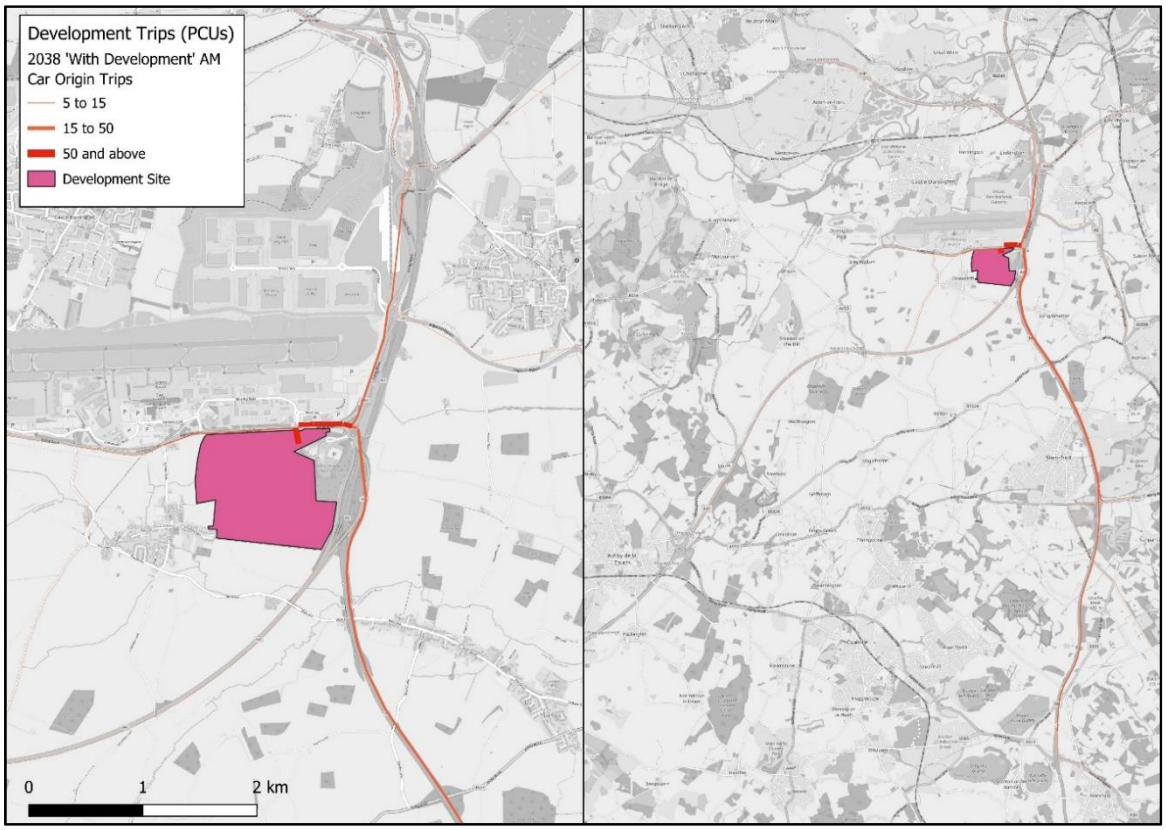
Figure 3.6: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (AM)

2038 'With Development (2b)' (AM), Light Vehicles – From the Development



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2038 'With Development (2b)' (AM), Light Vehicles – To the Development

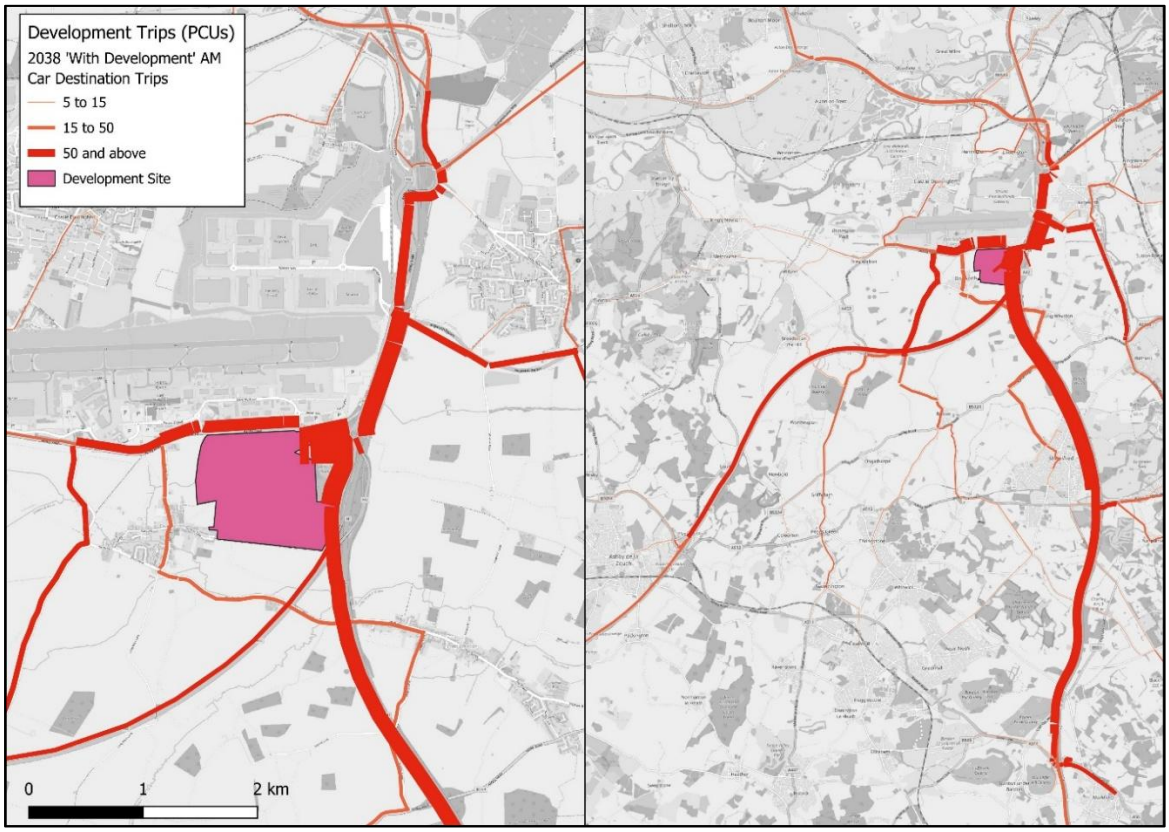

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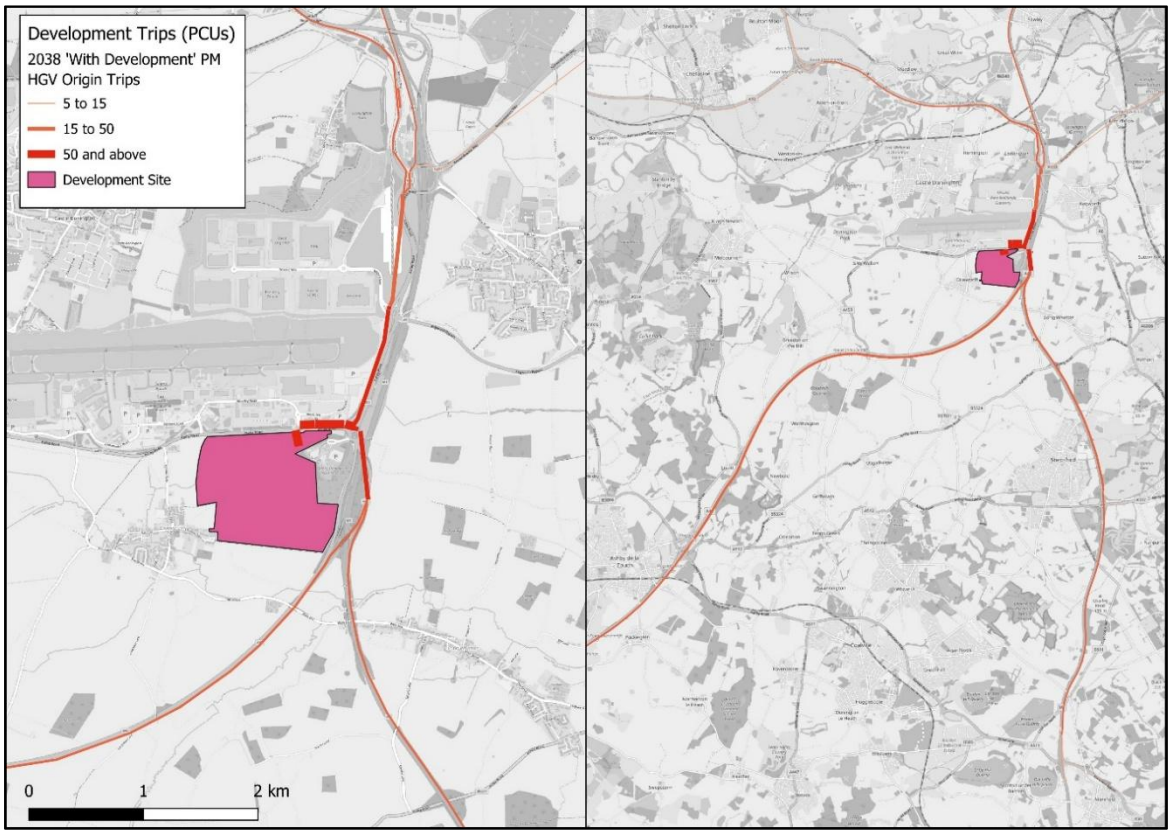
Figure 3.7: HGV Trip Distribution to and from the Proposed Development for 2038 (PM)

2038 'With Development (2b)' (PM), HGVs – From the Development



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2038 'With Development (2b)' (PM), HGVs – To the Development

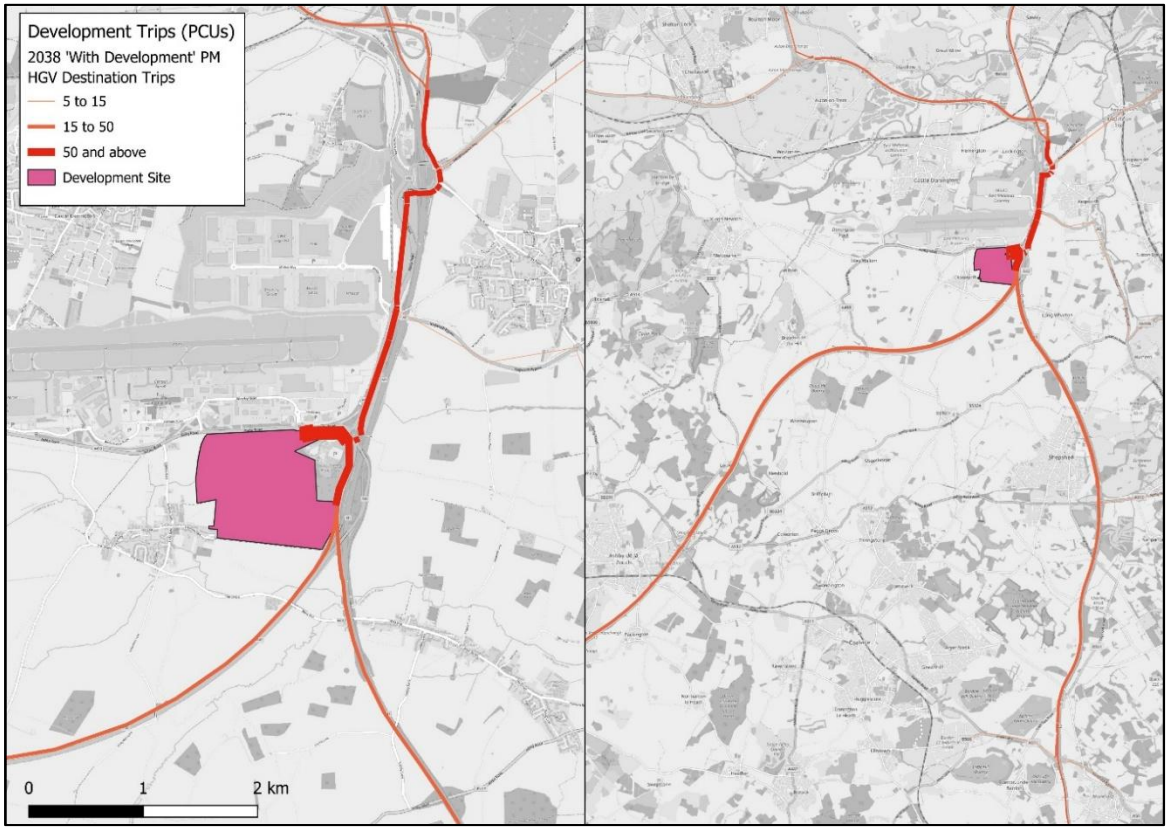

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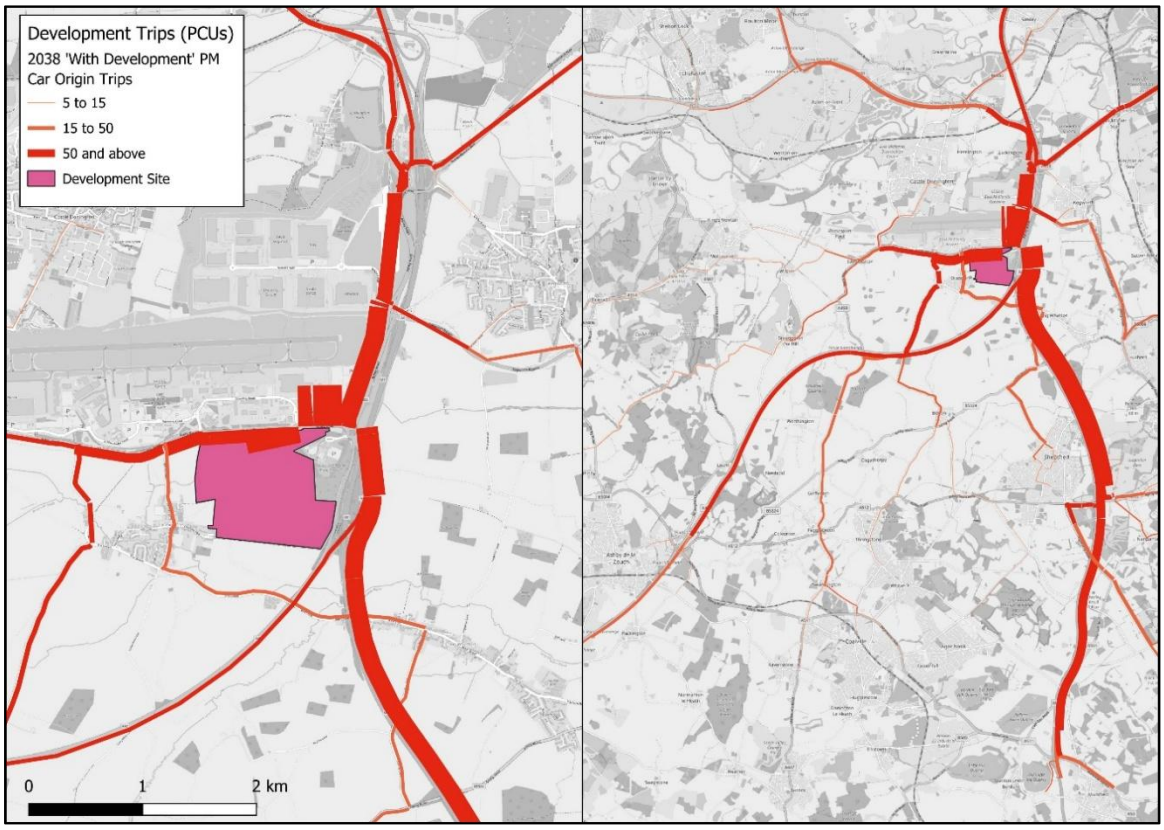
Figure 3.8: Light Vehicle Trip Distribution to and from the Proposed Development for 2038 (PM)

2038 'With Development (2b)' (PM), Light Vehicles – From the Development



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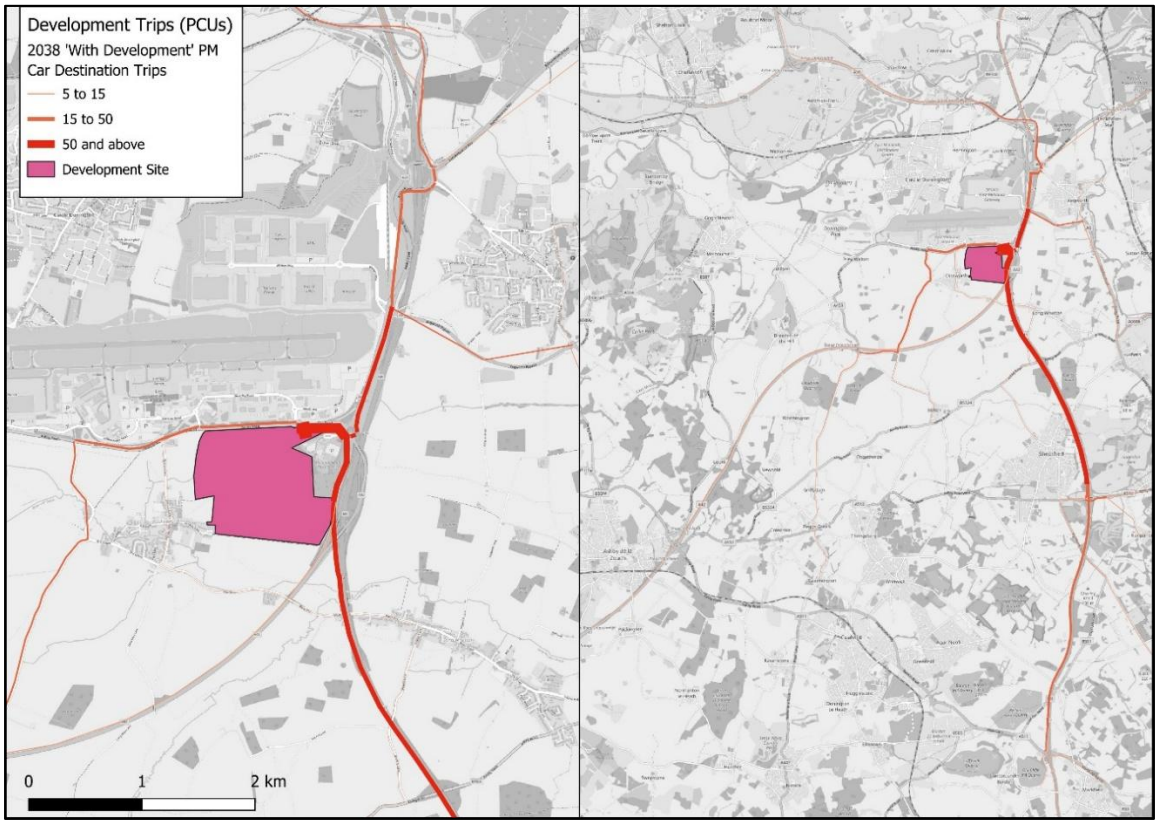
2038 'With Development (2b)' (PM), Light Vehicles – To the Development



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3.3 Forecast Flow Changes

3.3.1 Figure 3.9 and Figure 3.10 show the forecast flow changes in 2028 and 2038 between the 'With Development (2b)' and 'Without Development (1b)' scenarios for the AM Peak and PM Peak hours. Red bandwidth represents a proportional increase in traffic flow in the 'With Development (2b)' scenario and green bandwidth represents a decrease.

3.3.2 These figures show that most increases in traffic are forecast on the SRN, namely the A453, M1, A50, A6 Kegworth Bypass and the A42.

New M1 northbound to A50 westbound interchange link

3.3.3 As expected, the largest increase in flow is forecast along the new M1 northbound interchange link road across all modelled forecast scenarios. This traffic has diverted off the A453, Finger Farm Roundabout and M1 J24.

M1 southbound link approaching Junction 24

3.3.4 There is an increase (of approximately 300 and 400 PCUs) in traffic forecast on the M1 southbound towards the M1 J24 with the increase in capacity on the M1 southbound. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

EMGP1 access improvements

3.3.5 This mitigation measure is forecast to reduce delays at this junction leading to a forecast increase in traffic from the A6 Kegworth Bypass. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

A453 Finger Farm Roundabout westbound exit widening

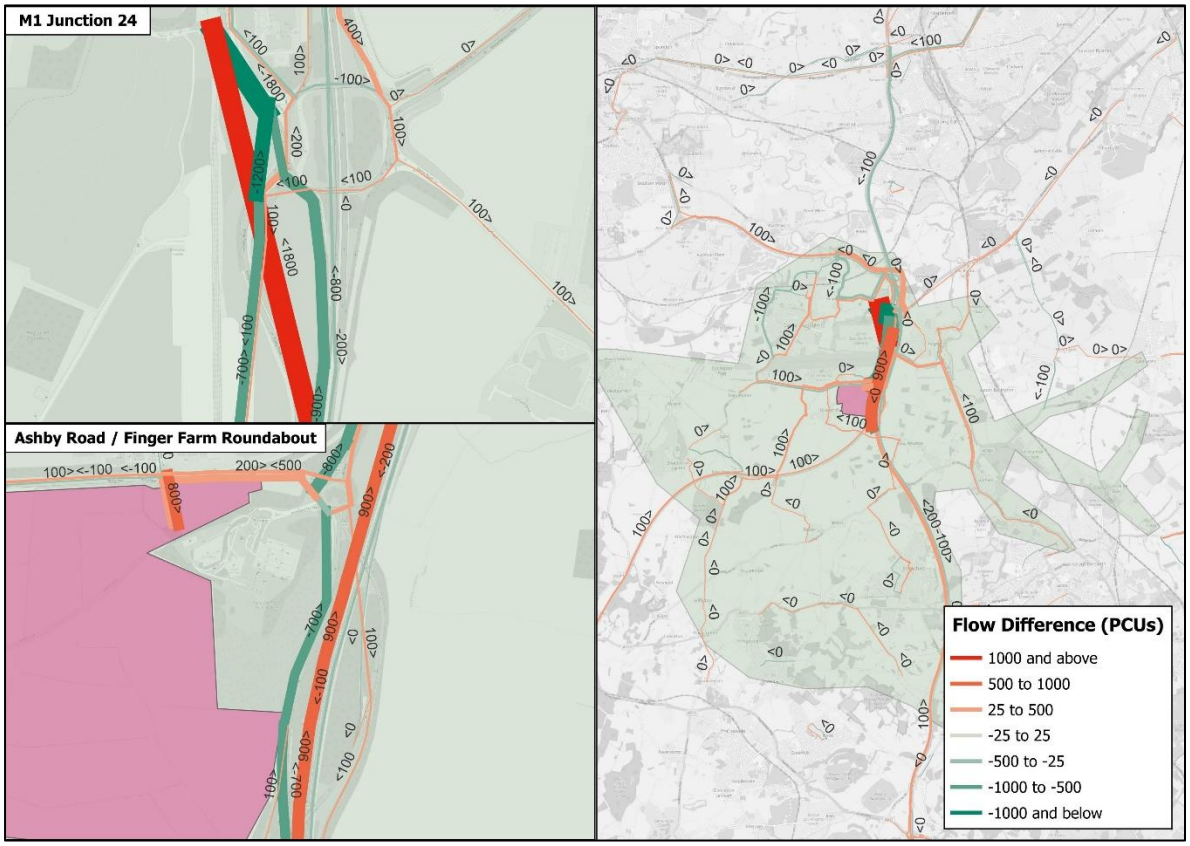
3.3.6 A reduction in northbound traffic on the A453 is forecast at Finger Farm Roundabout primarily attributable to the new link road. There is also an increase (~50 PCUs) on the A453 from the north with the largest increase, as expected, on the A453 to / from the proposed development site.

EMGP2 access roundabout and toucan crossing

3.3.7 As expected, there is an increase in flows along the A453 as traffic accesses the proposed development site. Most traffic is forecast to route to and from the east via Finger Farm Roundabout.

Figure 3.9: Forecast Flow Change for 2028 'Without Development (1b)' minus 'With Development (2b)'

AM Peak hour



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PM Peak hour

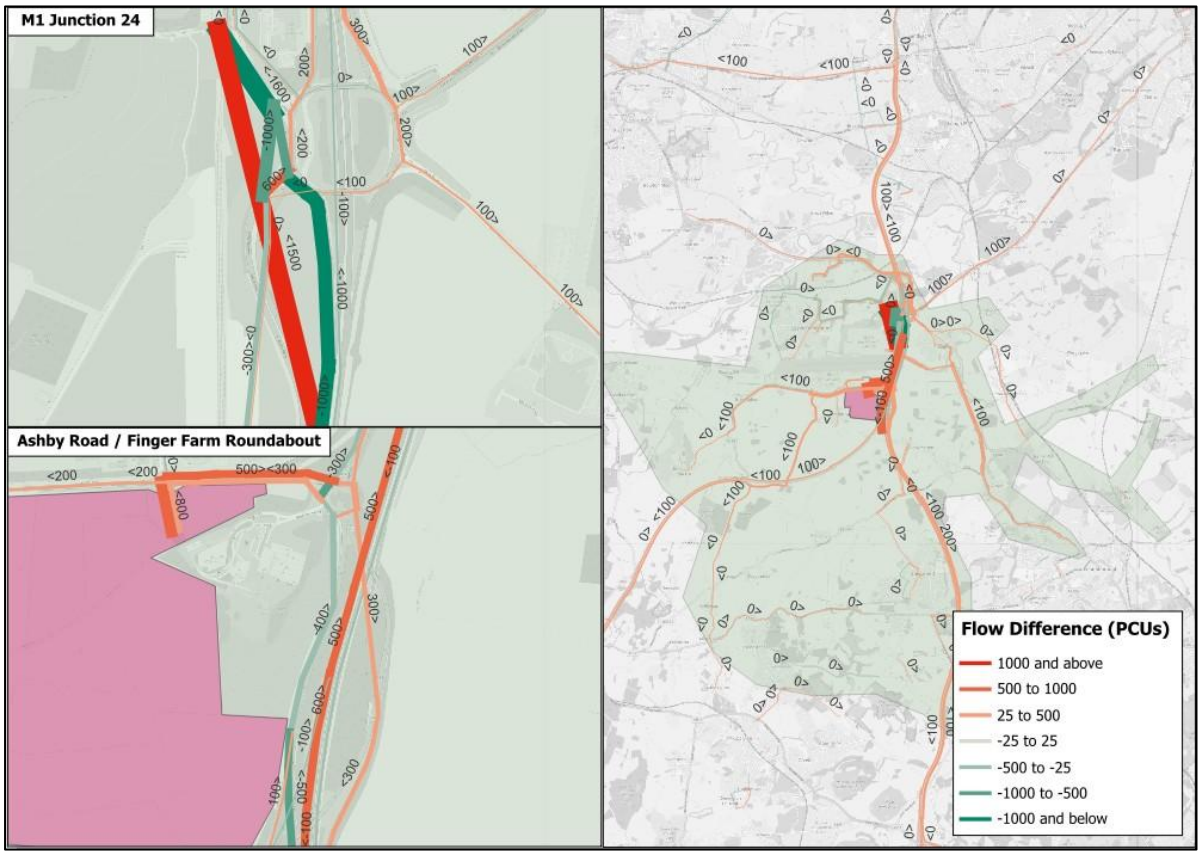

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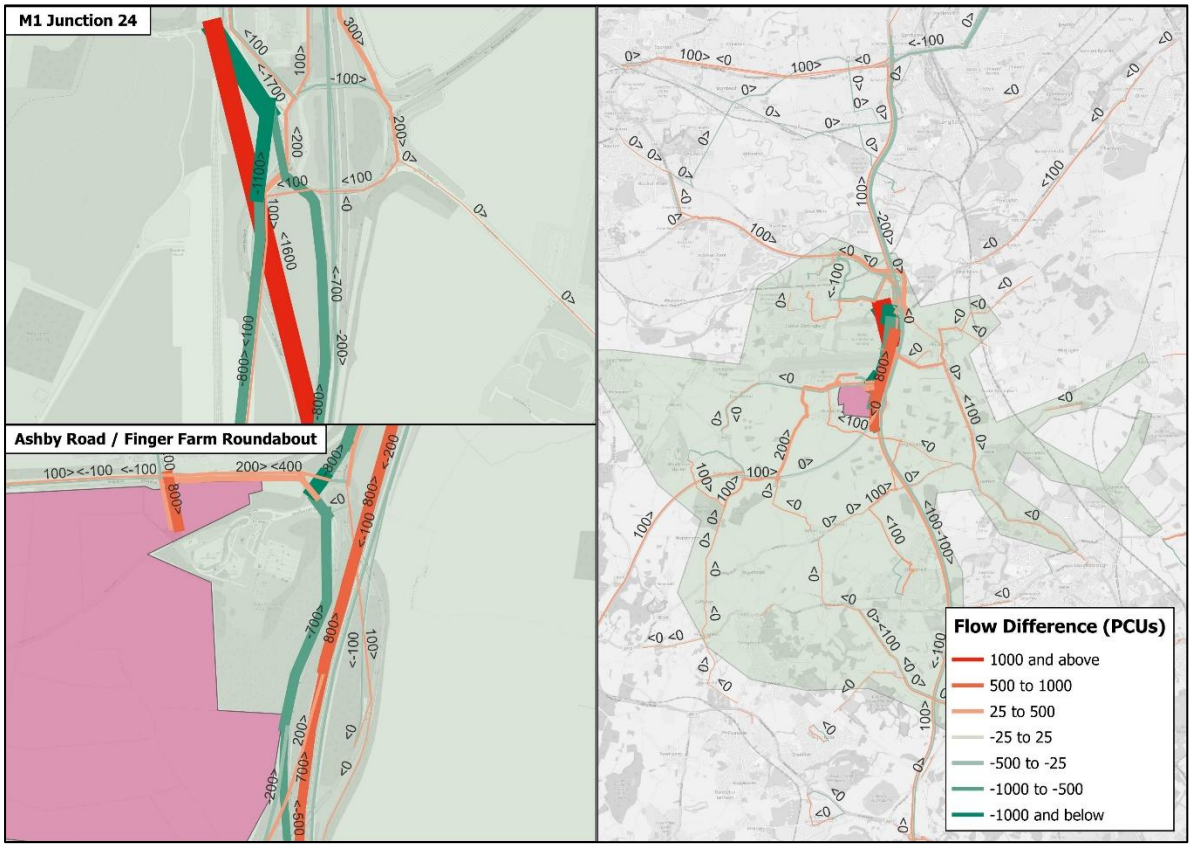
Figure 3.10: Forecast Flow Change for 2038 'Without Development (1b)' minus 'With Development (2b)'

AM Peak hour



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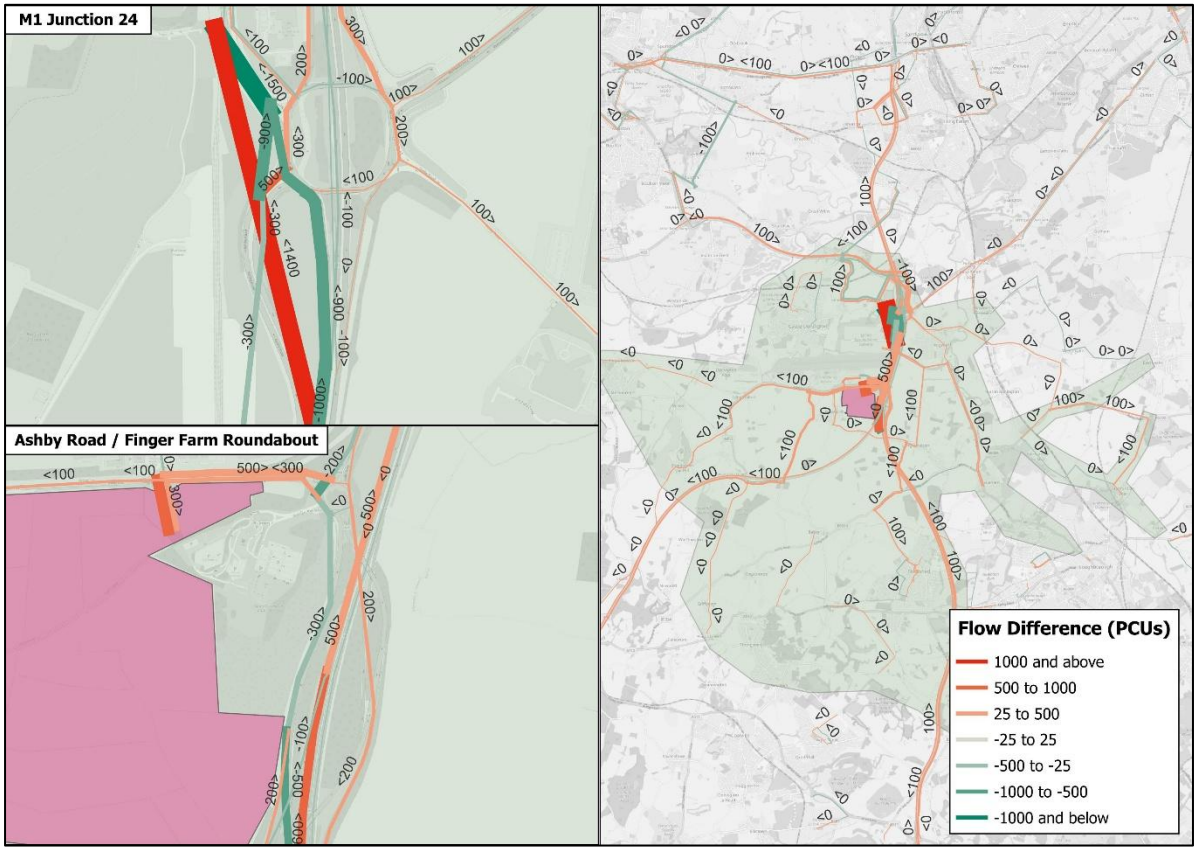
PM Peak hour



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3.4 Area of Influence

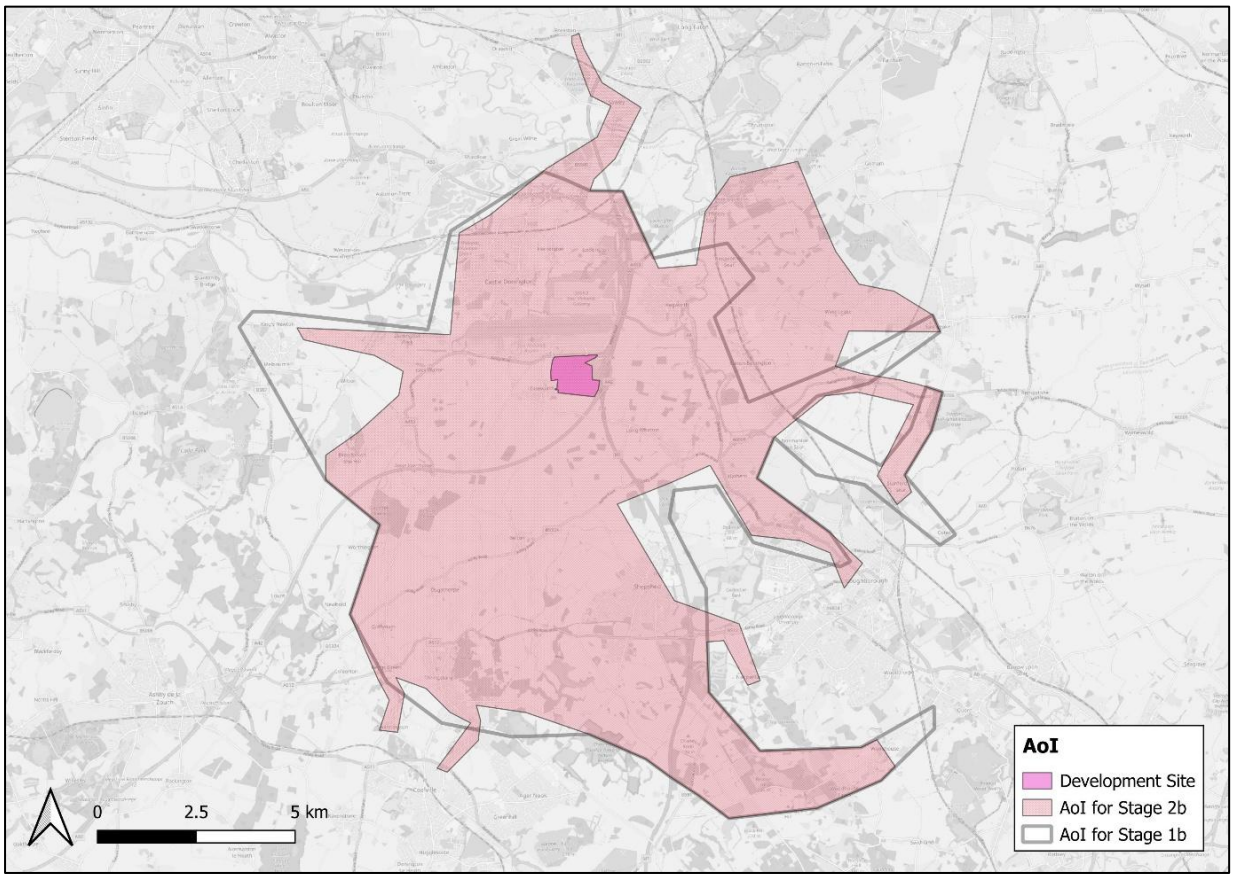
3.4.1 Using the forecast flow changes between the 'With Development (2b)' and 'Without Development (1b)' scenarios, an indication of the AoI in Stage 2b has been defined and is shown in Figure 3.11.

3.4.2 For the proposed development, the AoI has been defined by considering the links which are forecast to change flow by more than ±5% and ±30 PCUs between the 2028 and 2038 'With Development (2b)' and 'Without Development (1b)' scenarios in either the AM Peak or the PM Peak hours. The links which are forecast to meet these criteria are included in the AoI, as shown in Figure 3.11, and contain the following areas / links:

- the A453 including Finger Farm roundabout;
- the M1 between Junction 23 and Junction 24a;
- the A42 Junction 14; and
- local roads in and around Castle Donnington; Kegworth; Diseworth; Hathern; Thringston and Shepshed.

3.4.3 For comparison, Figure 3.11 also shows the AoI for Stage 1b (without mitigation) and this shows that the AoIs are similar in both stages. To provide consistency with previous Stage 1b outputs, the AoI in Stage 1b has been retained for use for Stage 2b outputs.

Figure 3.11: Area of Influence



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3.5 Forecast Delay Change

3.5.1 As a result of forecast flow changes in the 'With Development (2b)' scenario, there are also changes to the forecast delays on the highway network when compared with the 'Without Development 1b' scenario. These changes in delay can be generated from two sources: link delay based on the speed-flow curve applied to the link; and the junction delay due to capacity constraints for individual turning movements. The analysis in this section combines the link and junction delays (taking a flow-weighted average of junction delays) to assess the changes in forecast delays with the proposed development traffic.

3.5.2 Figure 3.12 and Figure 3.13 show the forecast delay changes (in seconds) in 2028 and 2038 between the ‘With Development (2b)’ and ‘Without Development (1b)’ scenarios for the AM Peak and PM Peak hours.

3.5.3 Figure 3.13 shows forecast difference in delay on the B6540 Tamworth Road in the PM Peak hour. The decrease in delay (green bandwidth) is forecast in the northbound and an increase in delay in the southbound direction (red bandwidth). The increase in delay is caused by a relatively small increase in flow (as shown in Figure 3.10) causing a large delay as the B6540 Tamworth Road was approaching capacity in the ‘Without Development (1b)’ scenario is forecast to exceed capacity in the ‘With Development (2b)’. Optimising the green time at this junction on Sawley Junction would be likely to mitigate this increase in delay.

New M1 northbound to A50 westbound interchange link

3.5.4 With the new interchange link road included, delay is forecast to occur on the A50 where vehicles join the A50 from the proposed link road. It should be noted that this delay is not an ‘increase’ compared with the ‘Without Development (1b)’ scenario as this proposed junction does not exist in the without development scenarios. It should also be noted that delays are forecast to generally reduce at the M1 J24 and Finger Farm Roundabout as this mitigation measure has attracted traffic from these junctions.

M1 southbound link approaching Junction 24

3.5.5 Delays on the M1 J24 are forecast to decrease overall for all forecast scenarios in both the AM Peak and PM Peak hours. In addition, there are decreases in delay on the M1 southbound to the north of M1 J24. These reductions in delay are provided by the additional M1 southbound capacity (i.e. extra lane) and the optimisation of the signals at M1 J24 (see Section 2.3).

EMGP1 access improvements

3.5.6 The Wilders Way / A453 / A6 Kegworth Bypass junction is forecast to have a reduction in delays in all scenarios, most notably the PM Peak. This has been provided by the inclusion of the new interchange link road and the EMGP1 access improvements. As noted in Section 2.3, the benefits of the EMGP1 access improvements have been ‘unlocked’ by the Wilders Way / A453 signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

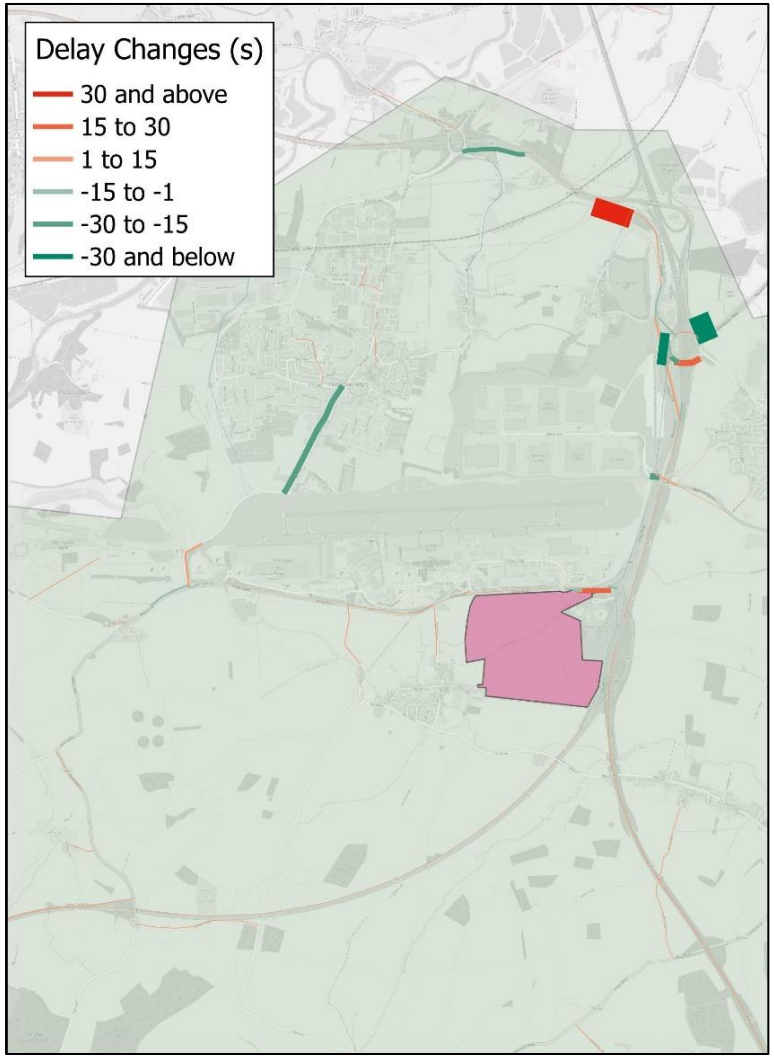
3.5.7 Delays remain largely unchanged across all scenarios when compared with the 'Without Development (1b)' scenarios.

EMGP2 access roundabout and toucan crossing

3.5.8 There are increases in delay forecast on the A453 near the proposed development access junction and toucan crossing. This increase has been generated from the development traffic routeing to and from the proposed development and the toucan crossing which will generate delay on the A453 to the east of the proposed development site. It should be noted that delay at the toucan crossing is not an ‘increase’ compared with the ‘Without Development (1b)’ scenario as the toucan crossing has not been included in the without development scenarios. The toucan crossing will generate transient delay as this has been represented as a signalised junction in the EMFM.

Figure 3.12: Forecast Delay Change for 2028 'With Development (2b)' minus 'Without Development (1b)'

AM Peak hour



PM Peak hour

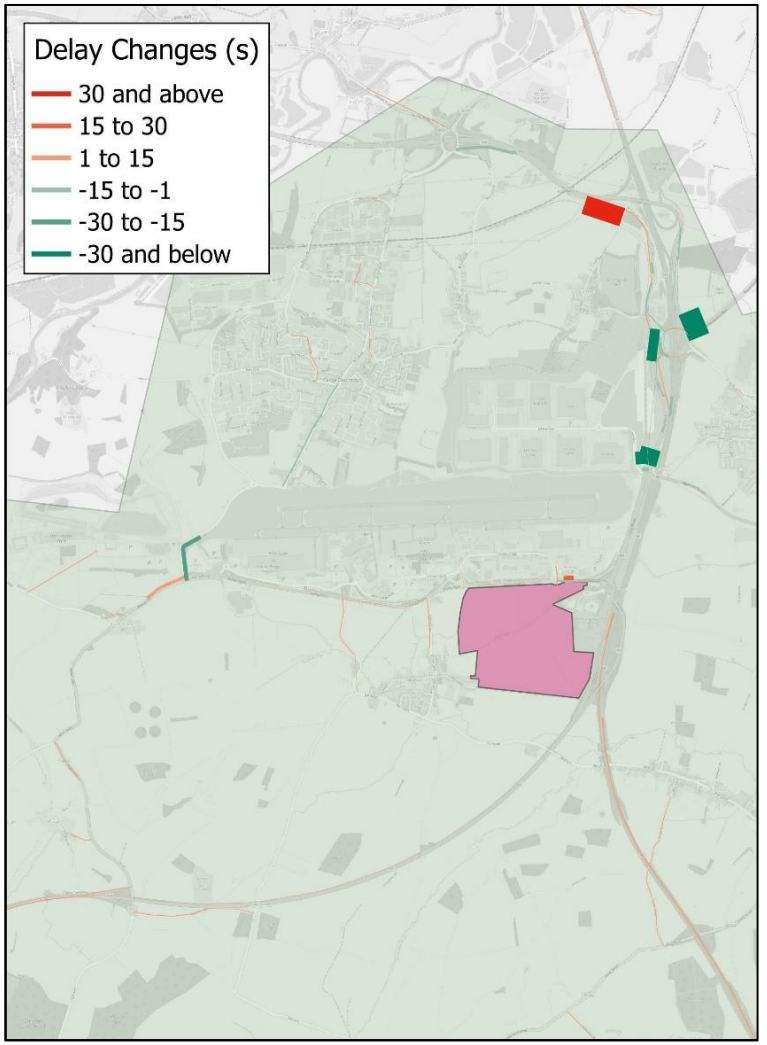


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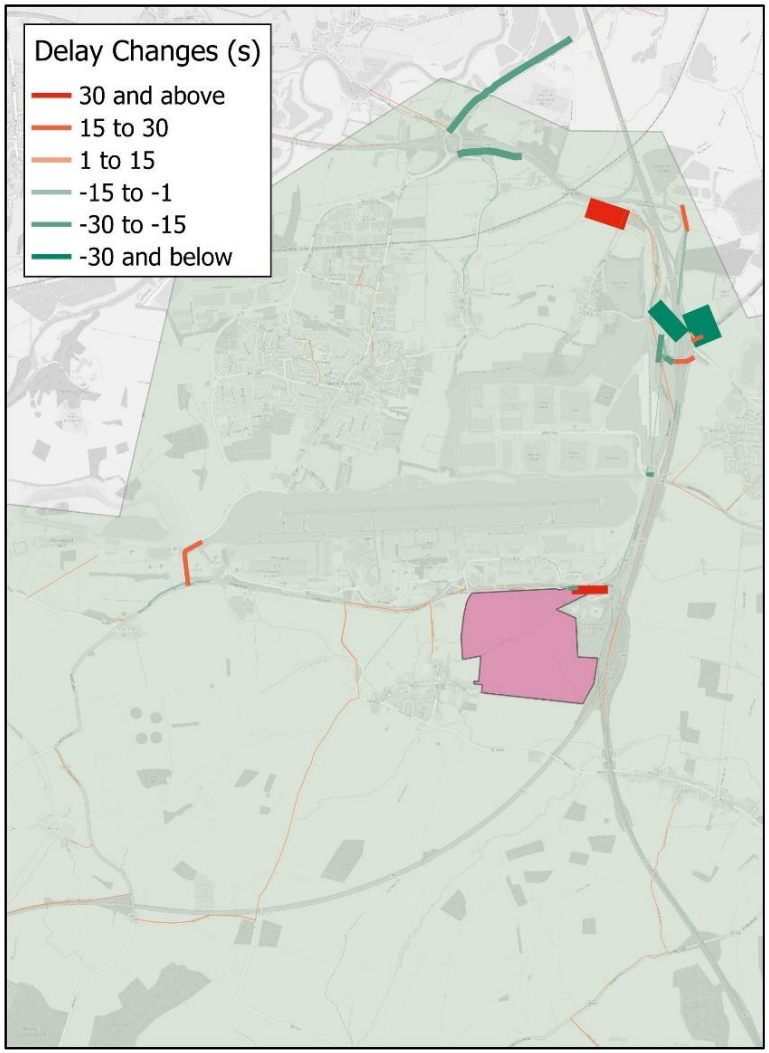
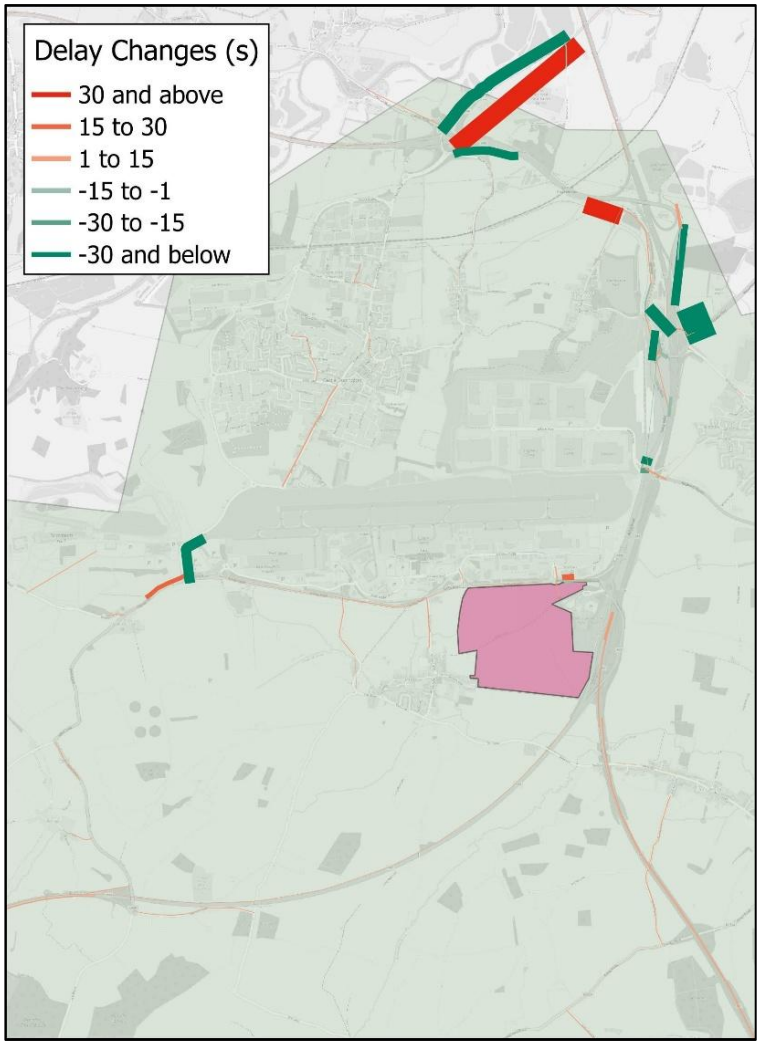
Figure 3.13: Forecast Delay Change for 2038 'With Development (2b)' minus 'Without Development (1b)'

AM Peak hour



PM Peak hour



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3.6 Forecast Node Volume-Capacity Ratios

3.6.1 As a part of the forecast modelling, node / junction capacities are estimated for individual turning movements based on several factors including priority of the turn (for example, give-way or merge), the level of green-time at signalised junctions, and the amount of opposing traffic at the junction. Using these calculated capacities and the forecast traffic volumes, node volume-capacity ratios are estimated to identify locations where forecast flows are approaching or exceeding forecast capacity.

3.6.2 To summarise the forecast-capacity ratios for the individual turning movements at a node, there are two approaches. These are to calculate the flow-weighted average volume-capacity of the node, or to calculate the maximum volume-capacity ratio for all turns within a node. The average volume-capacity ratio provides an overview of how the individual node is performing but may not highlight locations where a limited number of movements at a node are approaching or exceeding capacity. To highlight these locations, the maximum volume-capacity ratio at each node has been used. Node volume-capacity ratios exceeding 85% indicate that the highway network is under stress, and there is likely to be a reduction in speed and increase in delay.

3.6.3 Figure 3.14 and Figure 3.15 show the forecast maximum node volume-capacity ratios for the 'With Development (2b)' and 'Without Development (1b)' scenarios in 2028 and 2038. For ease of comparison, the symbology has been designed to show the data for 'With Development (2b)' and 'Without Development (1b)' scenarios on the same plot.

3.6.4 The reader should note that Figure 3.14 and Figure 3.15 show a subset of all nodes within the EMFM to reduce the number of data points within the plots. Nodes which do not fall within the AoI, as defined in Figure 3.11, are not shown. Nodes with maximum volume-capacity ratios below 85% in all forecast scenarios are not shown, except for the node which is located at the proposed site access on the A453.

3.6.5 The forecast maximum node volume-capacity ratio plots show that the EMGP1 access junction, EMGP2 access junction, M1 J24, and the Finger Farm Roundabout are most affected by the proposed mitigation measures. EMFM forecasts that volume-capacity ratios at these junctions will broadly improve in the 'With Development (2b)' scenarios.

New M1 northbound to A50 westbound interchange link

3.6.6 The annotated node volume-capacity ratios forecasts for the M1 J24 are at or approaching capacity in the 'Without Development (1b)' scenarios, with multiple nodes at this junction exceeding 85% in 2028 and 100% in 2038. With the inclusion of the proposed mitigation measures included in the 'With Development (2b)' scenarios the node volume-capacity generally remain consistent, however a decrease is forecast in both forecast years and Peak hours on the western side of the M1 J24 at the A453 / A50 junction. This improvement is a result of vehicles diverting off the M1 J24 to use the new link road.

EMGP1 access improvements

3.6.7 The node volume-capacity ratios at Wilders Way / A453 / A6 Kegworth Bypass junction are forecast to generally decrease in both forecast years in the 'With Development (2b)' scenarios. This improvement is caused by traffic diverting off the A453 and onto the new link road and the EMGP1 access improvements and associated signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

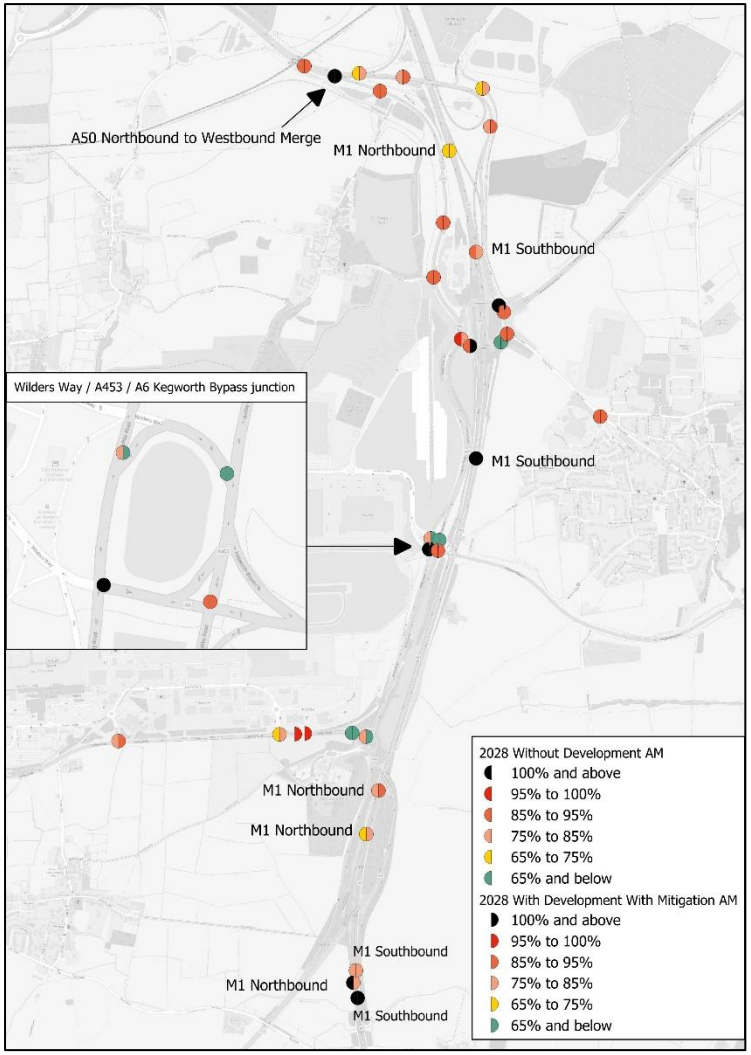
3.6.8 The node volume-capacity ratios for Finger Farm Roundabout are forecast to decrease in the AM Peak hour in both forecast years due to the proposed mitigation measures. The PM Peak is forecast to have nodes with higher node volume-capacity ratios in the 'With Development (2b)' and as shown in Figure 3.9 and Figure 3.10 there are higher volumes of traffic forecast on the A453 to the west of Finger Farm Roundabout.

EMGP2 access roundabout and toucan crossing

3.6.9 The node volume-capacity ratios at EMGP2 access junction are forecast to increase in the 2038 AM and PM Peak hours and the 2028 AM Peak hour, however these scenarios are forecast to have a volume-capacity ratio of less than 85%. The proposed toucan crossing on the A453 (represented by the semi-circle closest to Finger Farn roundabout) is forecast to have a node volume-capacity ratio between 95% and 100% except in the 2038 AM Peak hour where the volume-capacity ratio is forecast to be over 100% (and on further investigation is 100%). However, it should be noted that the toucan crossing is demand dependant and this demand dependency cannot be accurately reflected in the EMFM.

Figure 3.14: Forecast Node Volume-Capacity Ratio for 2028 'Without Development (1b)' and 2028 'With Development (2b)'

AM Peak hour



PM Peak hour

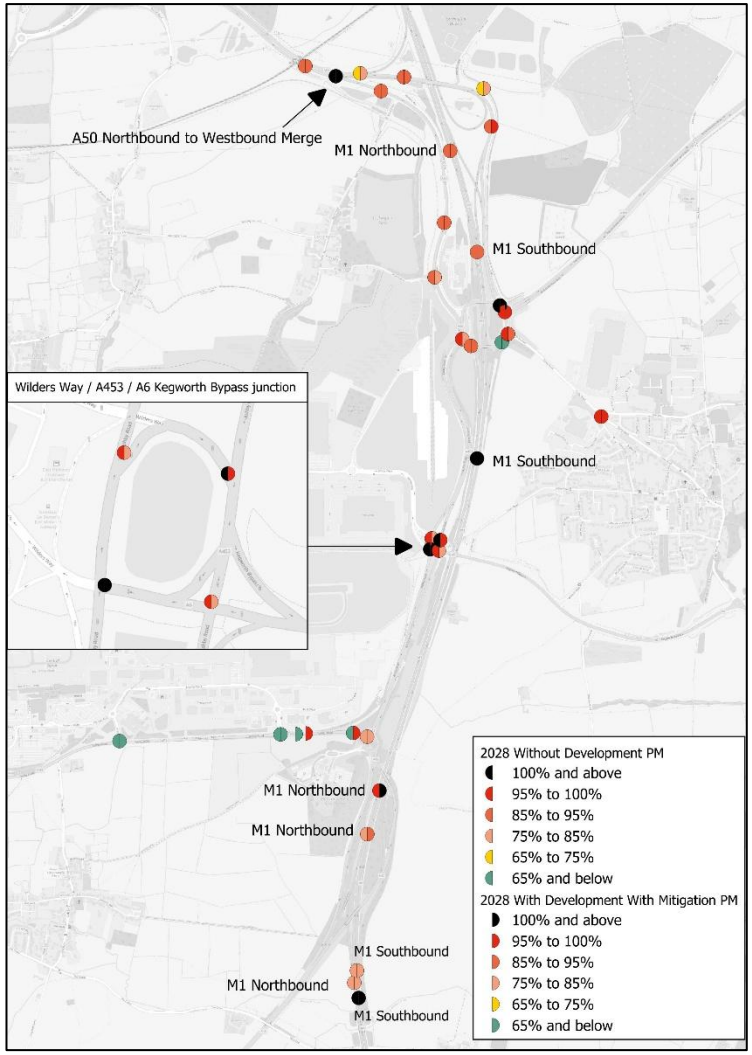


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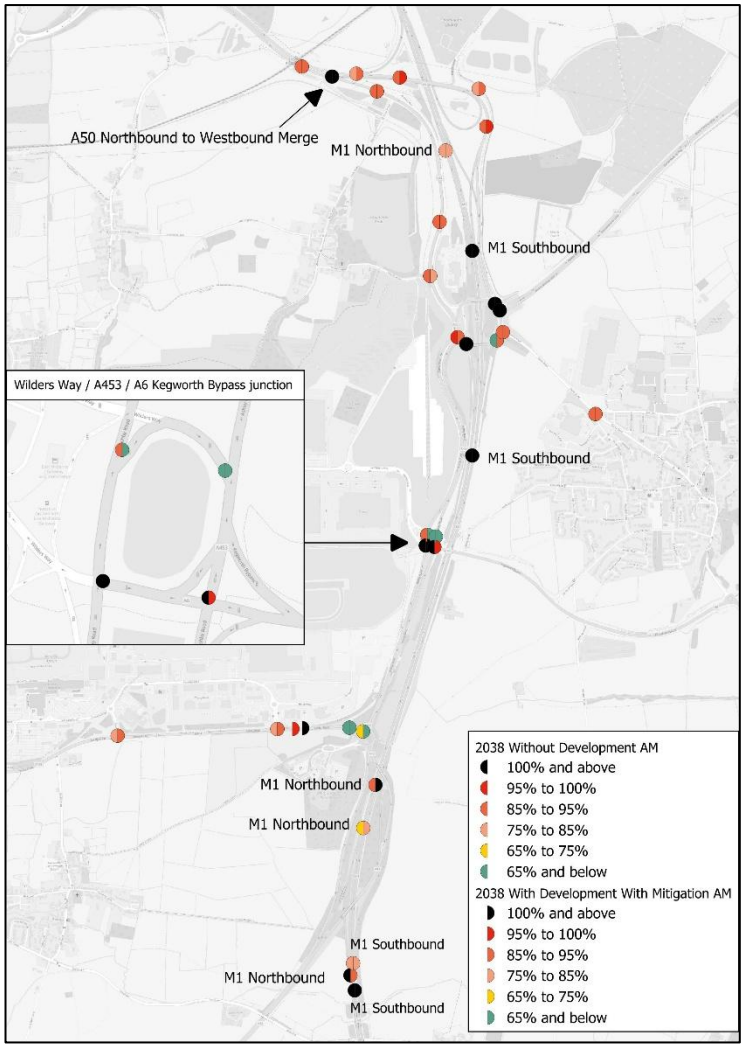
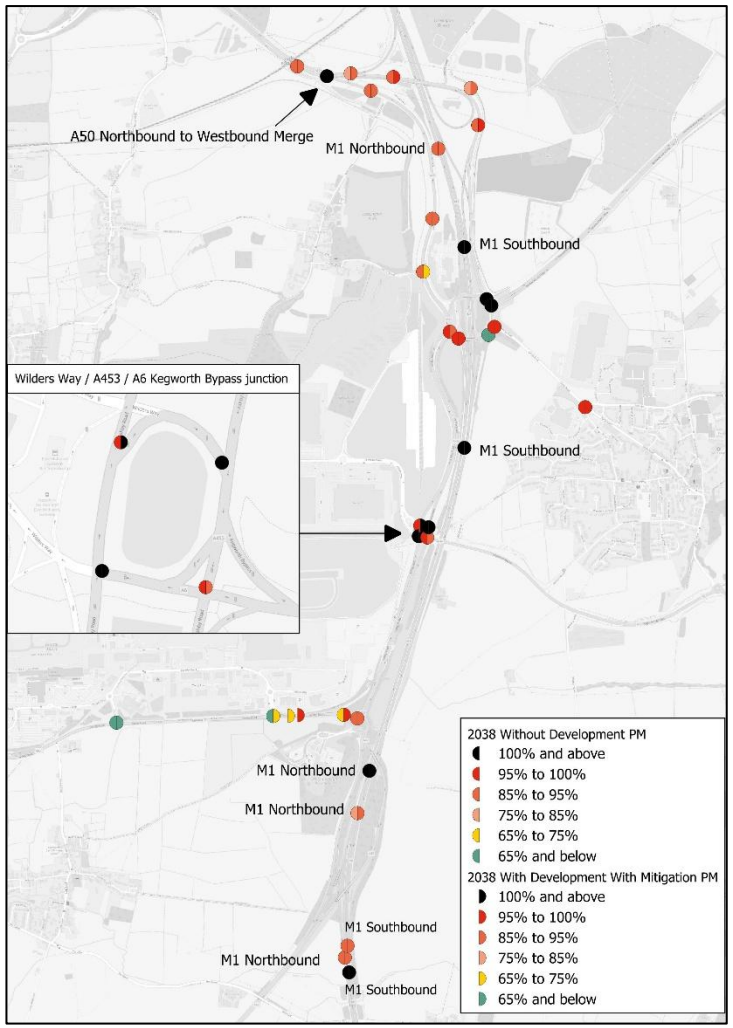
Figure 3.15: Forecast Node Volume-Capacity Ratio for 2038 'Without Development (1b)' and 2038 'With Development (2b)'

AM Peak hour



PM Peak hour



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3.7 Forecast Junction Turning Flows

3.7.1 Forecast turning flows have been extracted for the following 16 junctions (also shown in Figure 3.16) in the vicinity of the proposed development:

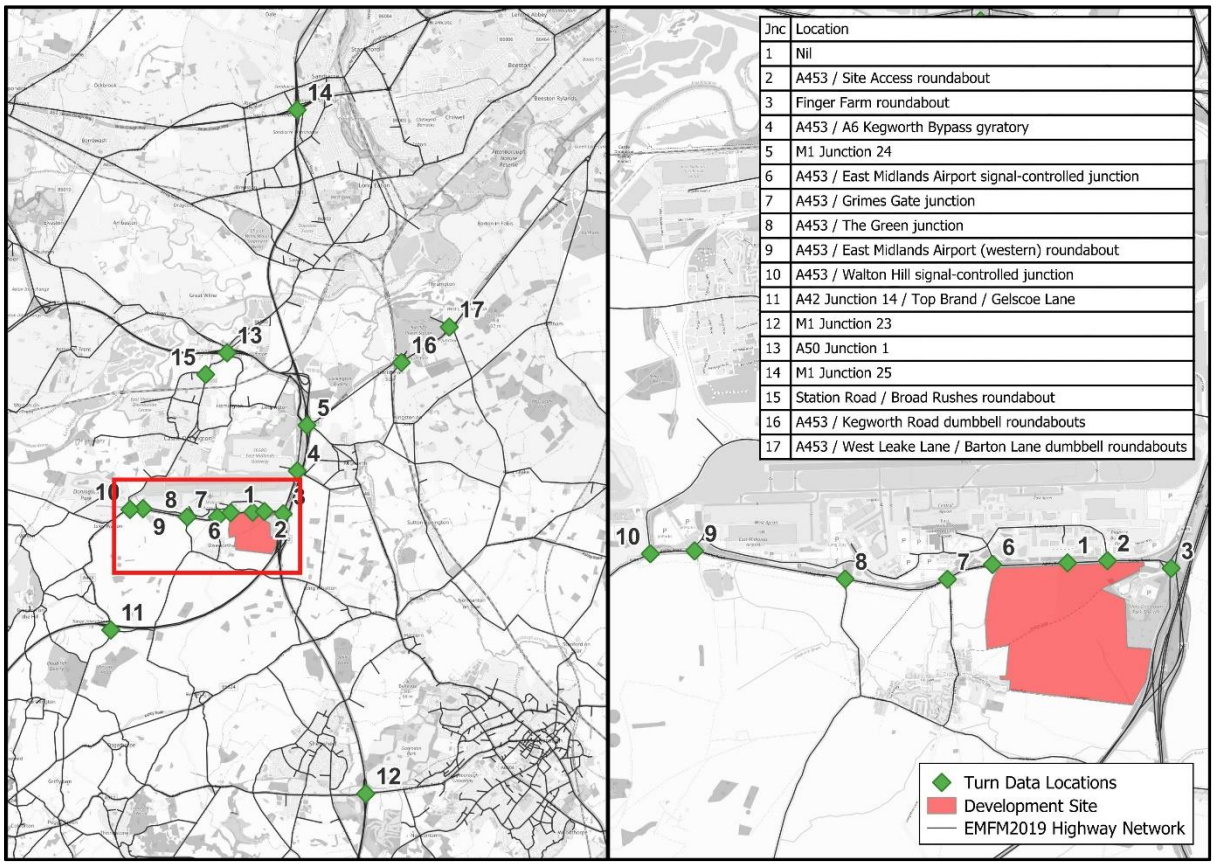
- A453 /Site access Roundabout (Junction 2);
- Finger Farm Roundabout (Junction 3);
- A453 / A6 Kegworth Bypass gyratory (Junction 4);
- M1 Junction 24 (Junction 5);
- A453 / East Midlands Airport signal-controlled junction (Junction 6);
- A453 / Grimes Gate junction (Junction 7);
- A453 / The Green junction (Junction 8);
- A453 / East Midlands Airport (western) roundabout (Junction 9);
- A453 / Walton Hill signal-controlled junction (Junction 10);
- A42 Junction 14 / Top Brand / Gelscoe Lane (Junction 11);
- M1 Junction 23 (Junction 12);
- A50 Junction 1 (Junction 13);
- M1 Junction 25 (Junction 14);
- Station Road / Broad Rushes roundabout (Junction 15);
- A453 / Kegworth Road dumbbell roundabouts (Junction 16); and
- A453 / West Leake Lane / Barton Lane dumbbell roundabouts (Junction 17).

3.7.2 The data have been provided separately in MS Excel spreadsheet format[6] which contains the forecast turning flows for the AM Peak and PM Peak hours for light and heavy vehicles. Data are provided for the 2028 and 2038 'With Development (2b)' scenarios. In addition to the turning flows, turn volume-capacity ratios have also been provided where available.

3.7.3 By design the EMFM highway model has not been calibrated or validated for individual turning movements, so care should be taken when using forecasts of flows and volume-capacity ratios at this level.

[6] EMGP2 - Junction Turning Flows (Stage 2b) v1.0 - For Issue.xlsx (provided via email)

Figure 3.16: Location of Forecast Turning Flow Data



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Section 4 – Summary of the Mitigation Assessment

4.1 Summary of Assessment

4.1.1 The East Midlands Freeport Model (EMFM) has been used for the strategic assessment of Stage (2b) for both 2028 and 2038 for the AM Peak and PM Peak hours ('With Development (2b)' scenarios). Stage 2b includes the proposed East Midlands Gateway Phase 2 development and the proposed mitigation measures and accompanying signal optimisation at two junctions adjacent to the mitigation measures.

4.1.2 The client has provided mitigation measures that have been included in the EMFM at the following locations:

- New M1 northbound to A50 westbound interchange link road.
- M1 southbound link approaching Junction 24.
- EMGP1 access improvements.
- A453 Finger Farm Roundabout westbound exit widening.
- EMGP2 access roundabout and toucan crossing.
- M1 J24 Minor Works.

4.1.3 The following is a summary of the key findings for the assessment of the mitigation measures.

- The trip distribution for the proposed development traffic is, as expected, very similar to the 'With Development (1b)' (without mitigation) scenarios. How development traffic routes through the network is also very similar.
- The forecast flow changes in 2028 and 2038 between the 'With Development (2b)' and 'Without Development (1b)' scenarios show that the largest increases in flows are forecast along the new interchange link road. With this proposed interchange link included traffic is forecast to divert off the A453 northbound, the Finger Farm Roundabout, the Wilders Way / A453 / A6 Kegworth Bypass roundabout and the M1 J24.
- There is an increase in traffic forecast on the M1 southbound towards the M1 J24 with the increase in capacity (additional lane) on the M1 southbound and associated signal optimisation (as noted in Section 2.3).
- As expected, there is an increase in flow along the A453 adjacent to the proposed development site as traffic accesses the development site with most traffic routeing to and from the east via Finger Farm Roundabout.
- An Area of Influence (AoI) has been defined. A comparison between the AoIs for Stage 1b and Stage 2b shows that they are broadly similar.
- The forecast delay changes in 2028 and 2038 between the 'With Development (2b)' and 'Without Development (1b)' scenarios show delays are forecast to slightly increase along the A453 in the immediate vicinity of the proposed development in all forecast scenarios due to the proposed development traffic and the proposed toucan crossing.
- With the new interchange link road included, delays are expected to occur on the A50 where vehicles join the A50 from the proposed link road. No delays exist in the 'Without Development (1b)' scenario as this junction does not exist in this scenario. However, delays are forecast to reduce at the M1 J24 and Finger Farm Roundabout as this mitigation measure has reduced traffic volumes at these junctions.
- Delays on the M1 J24 are forecast to decrease overall for all forecast scenarios in both the AM Peak and PM Peak hours. In addition, there are decreases in delay on the M1 southbound to the north of M1 J24. These reductions in delay are caused by the additional M1 southbound capacity (i.e. extra lane) and the optimisation of the signals at M1 J24 (see Section 2.3).
- The node volume-capacity ratios forecasts as shown in Figure 3.14 and Figure 3.15 for the M1 J24 are at or approaching capacity in the 'Without Development (1b)' scenarios, with multiple nodes at this junction exceeding 85% in 2028 and 100% in 2038. With the inclusion of the proposed mitigation measures included in the 'With Development (2b)' scenarios the node

volume-capacity general remain consistent, however a decrease is forecast in both forecast years and both peak hours on the western side of the M1 J24 at the A453 / A50 junction. This improvement is a result of vehicles diverting off the M1 J24 to use the new link road.

- The node volume-capacity ratios for Finger Farm Roundabout are forecast to decrease in the AM Peak hour in both forecast years due to the proposed mitigation measures. The PM Peak is forecast to have nodes with higher node volume-capacity ratios in the 'With Development (2b)' due to higher volumes of traffic forecast on the A453 to the west of Finger Farm Roundabout.
- The node volume-capacity ratios at EMGP2 access junction are forecast to increase in the 2038 AM and PM Peak hours and the 2028 AM Peak hour, however these scenarios are forecast to have a volume-capacity ratio of less than 85%. The proposed toucan crossing on the A453 is forecast to have a node volume-capacity ratio between 95% and 100% except in the 2038 AM Peak hour where the volume-capacity ratio is forecast to be 100%. However, it should be noted that the toucan crossing is demand dependant and this demand dependency cannot be accurately reflected in the EMFM.
- The forecasts undertaken reflect the forecast impact of the proposed development at East Midlands Gateway Phase 2 with the proposed mitigation measures included. It should be noted that the results provided in this report are at a high level. Due to the strategic nature of the EMFM, not all roads are modelled, and the results should be interpreted with that in mind.
- Although the EMFM modelling provides the strategic impact and form part of the proposed East Midlands Gateway Phase 2 assessment evidence packs, the overall assessment should be complemented by local operational assessment and analysis.

Appendix A Comparison of Stage 2b (with mitigation included) and Stage 1b (no mitigation)

Introduction

A.1.1 Appendix A compares Stage 2b, which includes the proposed mitigation measures ('With Development (2b)'), with Stage 1b that does not include the proposed mitigation measures ('With Development (1b)). This comparison therefore assesses the impact of the proposed mitigation measures being included on the network. Appendix A should be read in conjunction with Section 2 of this report that details the proposed mitigation measures.

Forecast Flow Change

A.1.2 Figure A.1 and Figure A.2 show the forecast flow changes in 2028 and 2038 between the 'With Development (2b)' and 'With Development (1b)' scenarios for the AM Peak and PM Peak hours. Red bandwidth represents an increase in traffic flow in the 'With Development (2b)' scenario and green bandwidth represents a decrease.

New M1 northbound to A50 westbound interchange link

A.1.3 As expected, the largest increase in flow is forecast along the new M1 northbound interchange link road across all modelled forecast scenarios. Traffic has diverted off the A453, the Finger Farm Roundabout, the Wilders Way / A453 / A6 Kegworth Bypass and the M1 J24.

M1 southbound link approaching Junction 24

A.1.4 There is an increase in traffic forecast on the M1 southbound towards the M1 J24 with the increase in capacity on the M1 southbound. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

EMGP1 access improvements

A.1.5 This mitigation measure is forecast to reduce delays at this junction leading to an increase in traffic from the A6 Kegworth Bypass. As noted in Section 2.3 the signalised junction at the M1 southbound / J24 has been optimised to 'unlock' the benefit of this mitigation measure.

A453 Finger Farm Roundabout westbound exit widening

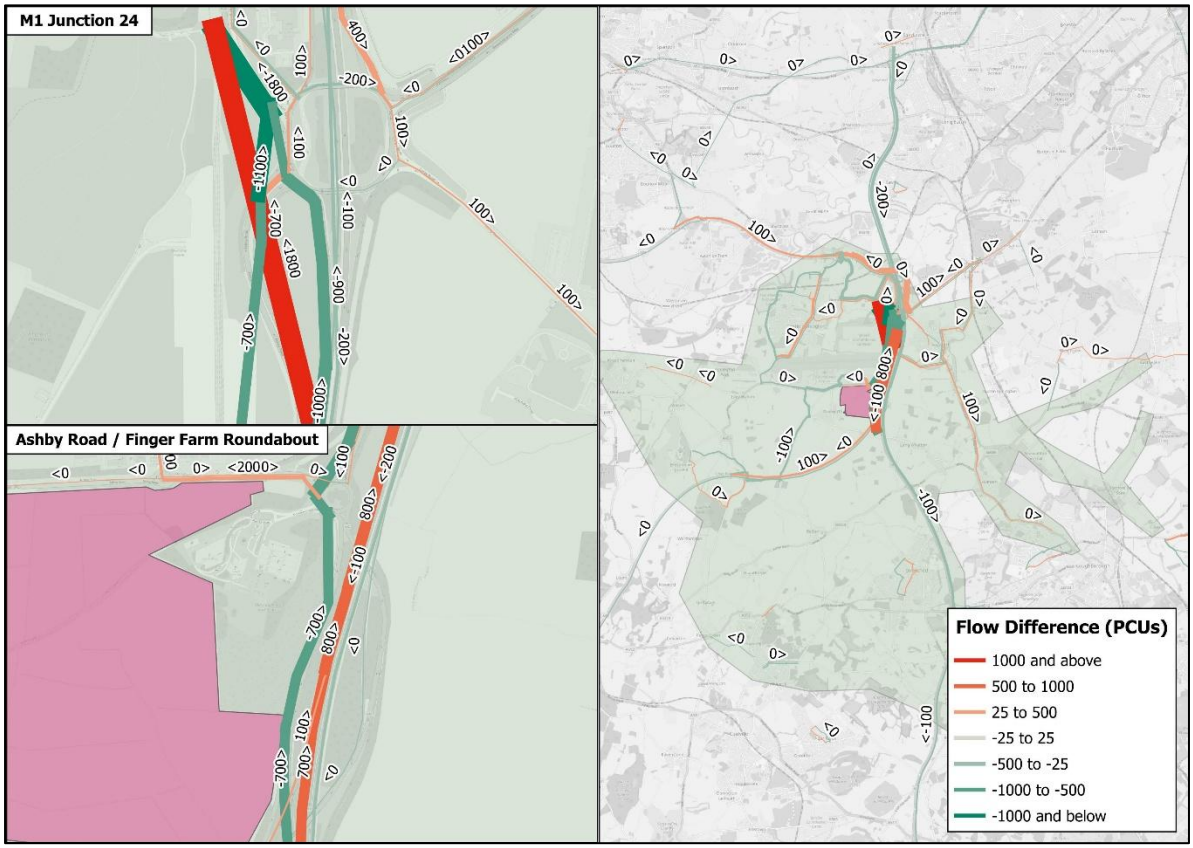
A.1.6 A reduction in northbound traffic on the A453 is forecast at Finger Farm Roundabout primarily as a result of the new link road that is forecast to divert traffic off the A453 northbound.

EMGP2 access roundabout and toucan crossing

A.1.7 There is an increase in traffic forecast on the A453 to the east of the proposed site in the 'With Development (2b)' scenario in the AM Peak hours. This increase in traffic is caused by the proposed mitigation measures providing additional capacity at the EMGP2 access roundabout and Finger Farm Roundabout, allowing development traffic to divert off local roads and on to the A453 and more strategic corridors.

Figure A.1: Forecast Flow Change for 2028 'With Development (2b)' minus 'With Development (1b)'

AM Peak hour



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PM Peak hour

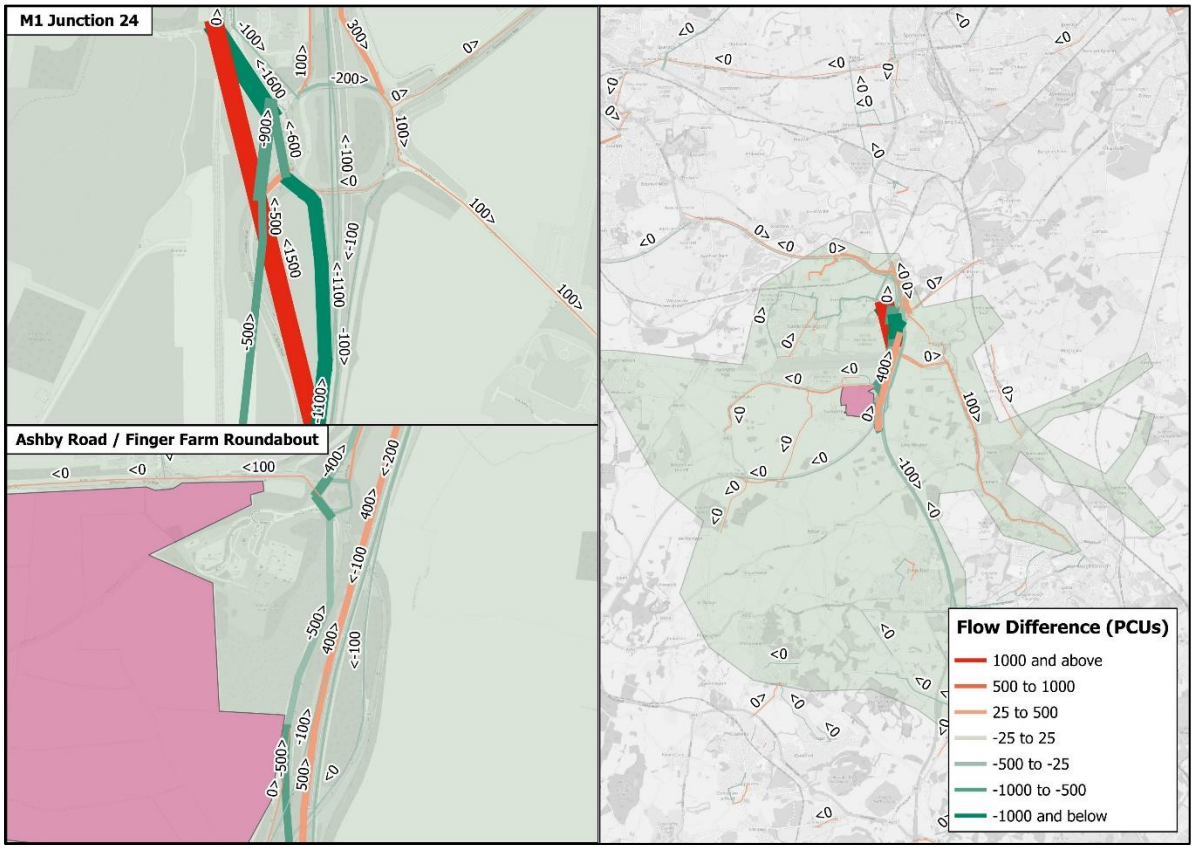

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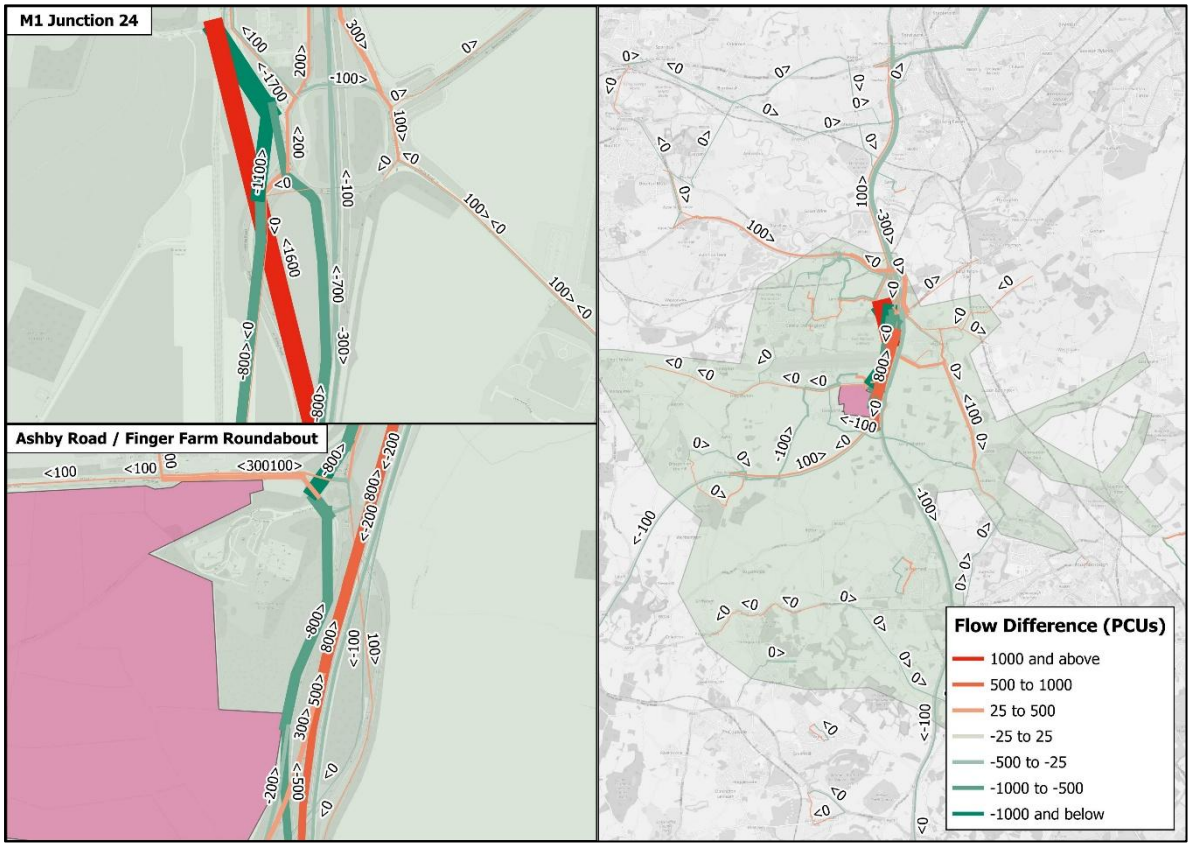
Figure A.2: Forecast Flow Change for 2038 'With Development (2b)' minus 'With Development (1b)'

AM Peak hour



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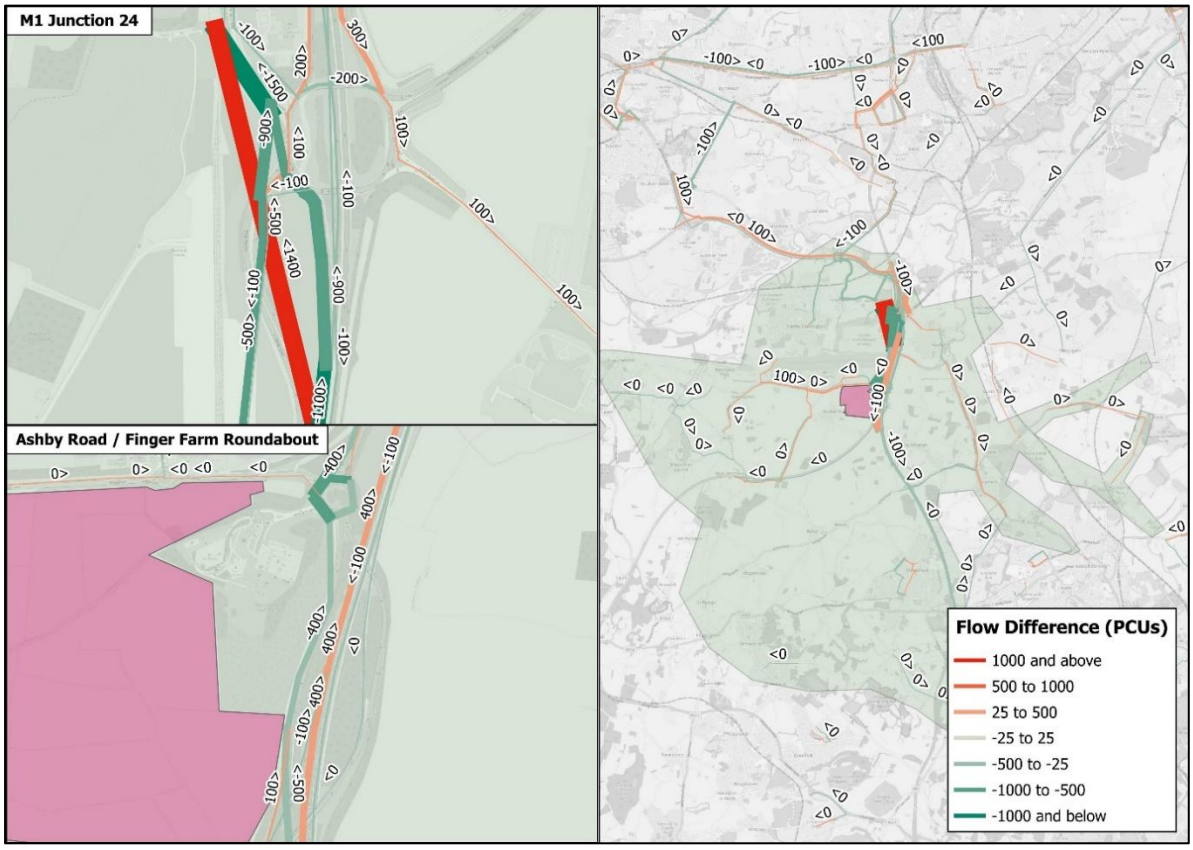
PM Peak hour



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Forecast Delay Change

A.1.8 As a result of forecast flow changes in the 'With development (2b)' scenario, there are also changes to the forecast delays on the highway network. These changes in delay can be generated from two sources: link delay based on the speed-flow curve applied to the link; and the junction delay due to capacity constraints for individual turning movements. The analysis in this section combines the link and junction delays (taking a flow-weighted average of junction delays) to assess the changes in forecast delays with the proposed development traffic.

A.1.9 Figure A.3 and Figure A.4 show the forecast delay changes (in seconds) in 2028 and 2038 between the 'With Development (2b)' and 'With Development (1b)' scenarios for the AM Peak and PM Peak hours.

A.1.10 Figure A.4 shows forecast difference in delay on the B6540 Tamworth Road in the PM Peak hour. The decrease in delay (green bandwidth) is forecast in the northbound and an increase in delay in the southbound direction (red bandwidth). The increase in delay is caused by a relatively small increase in flow (as shown in Figure 3.10) causing a large delay as the B6540 Tamworth Road was approaching capacity in the 'With Development (1b)' scenario is forecast to exceed capacity in the 'With Development (2b)'. Optimising the green time at this junction on Sawley Junction would very likely eliminate this increase in delay.

New M1 northbound to A50 westbound interchange link

A.1.11 With the new interchange link road included, delays are expected to occur on the A50 where vehicles join the A50 from the proposed link road. No delays exist in the 'With Development (1b)' scenario as this junction does not exist in this scenario. However, delays are forecast to reduce at the J24 and Finger Farm Roundabout as this mitigation measure has attracted traffic off these junctions.

M1 southbound link approaching Junction 24

4.1.4 Delays on the M1 J24 are forecast to decrease overall for all forecast scenarios in both the AM Peak and PM Peak hours. In addition, there are decreases in delay on the M1 southbound to the north of M1 J24. These reductions in delay are provided by the additional M1 southbound capacity (i.e. extra lane) and the optimisation of the signals at M1 J24 (see Section 2.3).

EMGP1 access improvements

A.1.12 The Wilders Way / A453 / A6 Kegworth Bypass junction is forecast to have a reduction in delays in all scenarios, most notably the PM Peak. This has been provided by the inclusions of the new interchange link road and the EMGP1 access improvements. As noted in Section 2.3, the benefits of the EMGP1 access improvements have been 'unlocked' by the Wilders Way / A453 signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

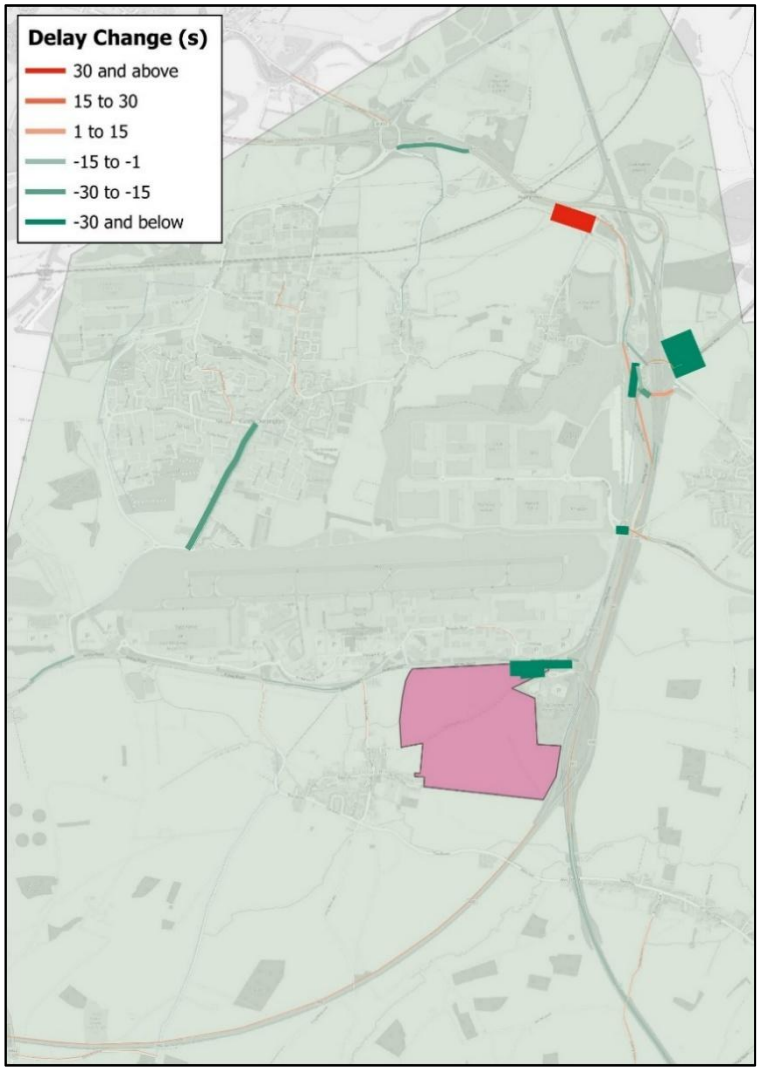
A.1.13 Delays remain largely unchanged across all scenarios when compared with the 'With Development (1b)' scenarios.

EMGP2 access roundabout and toucan crossing

A.1.14 There are reductions in delay forecast in all 'With Development (2b)' scenarios except in 2028 PM Peak hour. These reductions in delay are caused by the proposed mitigation measures, in particular the additional capacity (extended flares) on either side of the proposed site access roundabout.

Figure A.3: Forecast Delay Change for 2028 'With Development (2b)' minus 'With Development (1b)'

AM Peak hour



PM Peak hour

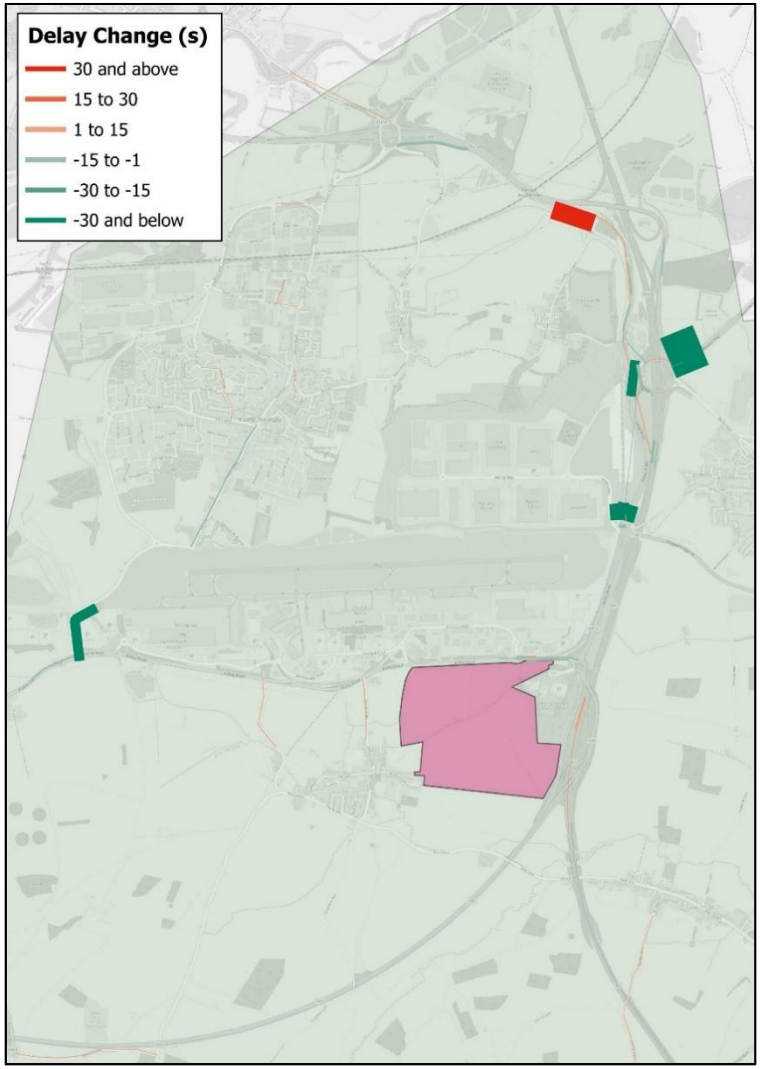


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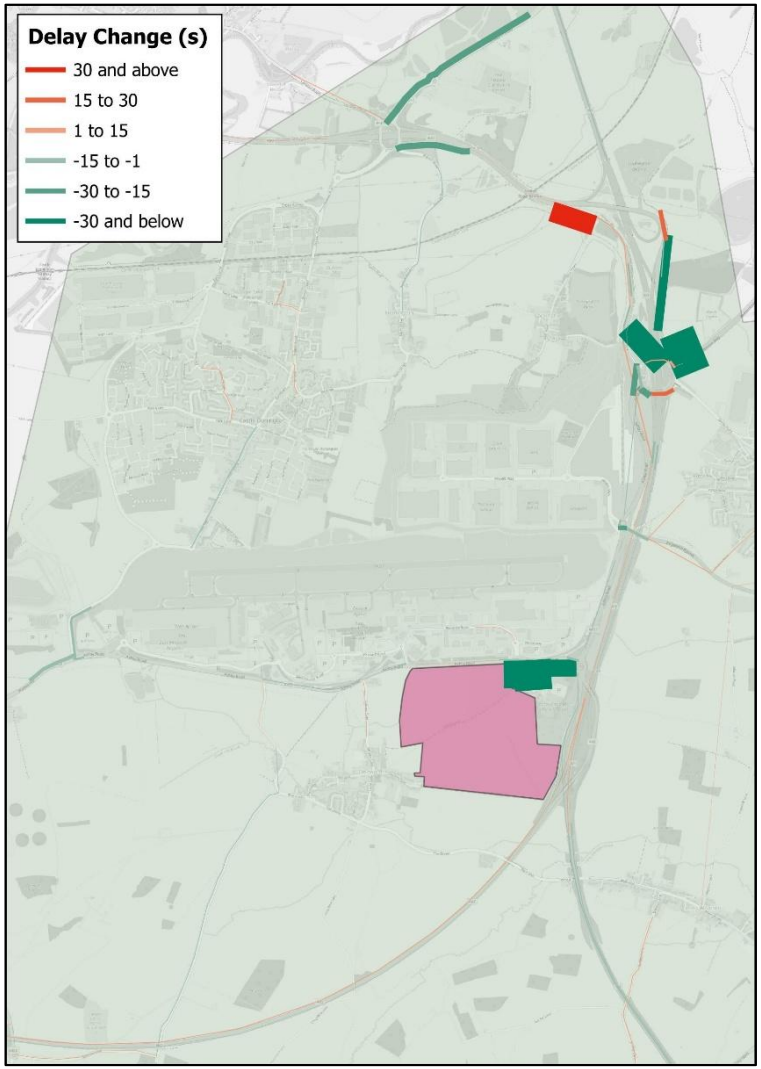
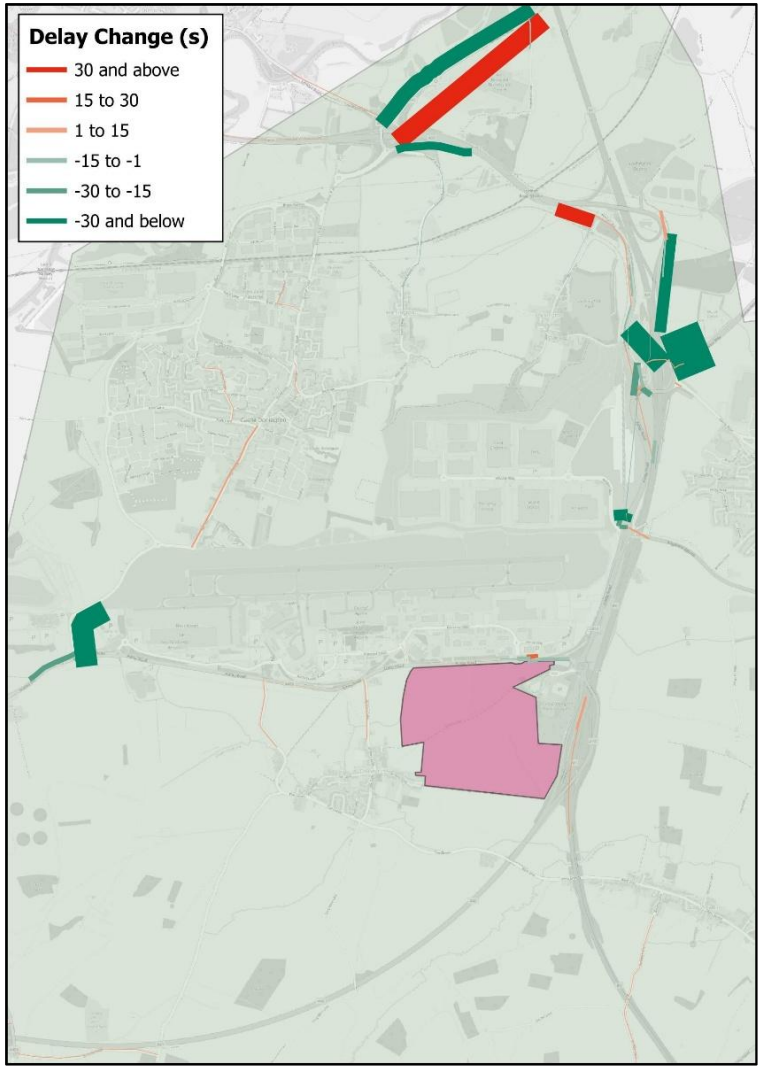
Figure A.4: Forecast Delay Change for 2038 'With Development (2b)' minus 'With Development (1b)'

AM Peak hour



PM Peak hour



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Forecast Node Volume-Capacity Ratios

A.1.15 As a part of the forecast modelling, node / junction capacities are estimated for individual turning movements based on several factors including priority of the turn (for example, give-way or merge), the level of green-time at signalised junctions, and the amount of opposing traffic at the junction. Using these calculated capacities and the forecast traffic volumes, node volume-capacity ratios are estimated to identify locations where the forecast flows are approaching or exceeding the forecast capacity.

A.1.16 To summarise the forecast-capacity ratios for the individual turning movements at a node, there are two approaches. These are to calculate the flow-weighted average volume-capacity of the node, or to calculate the maximum volume-capacity ratio for all turns within a node. The average volume-capacity ratio provides an overview of how the individual node is performing but may not highlight locations where a limited number of movements at a node are approaching or exceeding capacity. To highlight these locations, the maximum volume-capacity ratio at each node has been used. Node volume-capacity ratios exceeding 85% indicate that the highway network is under stress, and there is likely to be a reduction in speed and increase in delay.

A.1.17 Figure A.5 and Figure A.6 show the forecast maximum node volume-capacity ratios for 2028 and 2038, ‘With Development (2b)’ and ‘With Development (1b)’ scenarios. For ease of comparison, the symbology has been designed to show the data for ‘With Development (2b)’ and ‘With Development (1b)’ scenarios on the same plot.

A.1.18 The reader should note that these two figures show a subset of all nodes within the EMFM to reduce the number of data points within the plots. Nodes which do not fall within the AoI, as defined in Figure 3.11, are not shown. Nodes with maximum volume-capacity ratios below 85% in all forecast scenarios are not shown, except for the node which is located at the proposed site access on the A453.

A.1.19 The forecast maximum node volume-capacity ratios for 2028 and 2038 are similar in both the ‘With Development (2b)’ and ‘With Development (1b) scenarios. However, the forecast maximum node volume-capacity ratio plots show that the EMGP1 access roundabout junction, EMGP2 access junction, M1 Junction 24, and Finger Farm Roundabout are the most affected by the proposed mitigation measures and have seen mostly improvements in the node volume-capacity ratios in the ‘With Development (2b)’ scenarios.

New M1 northbound to A50 westbound interchange link

A.1.20 The annotated node volume-capacity ratios forecasts for the M1 J24 are at or approaching capacity in the ‘With Development (1b)’ scenarios, with multiple nodes at this junction exceeding 85% in 2028 and 100% in 2038. With the inclusion of the proposed mitigation measures included in the ‘With Development (2b)’ scenarios the node volume-capacity generally remain consistent; however a decrease is forecast in both forecast years and Peak hours on the western side of the M1 J24 at the A453 / A50 junction. This improvement is a result of vehicles diverting off the M1 J24 to use the new link road.

EMGP1 access improvements

A.1.21 The node volume-capacity ratios at Wilders Way / A453 / A6 Kegworth Bypass junction are forecast to generally decrease in both forecast years in the 'With Development (2b)' scenarios. This improvement is caused by traffic diverting off the A453 and onto the new link road and the EMGP1 access improvements and associated signal optimisation.

A453 Finger Farm Roundabout westbound exit widening

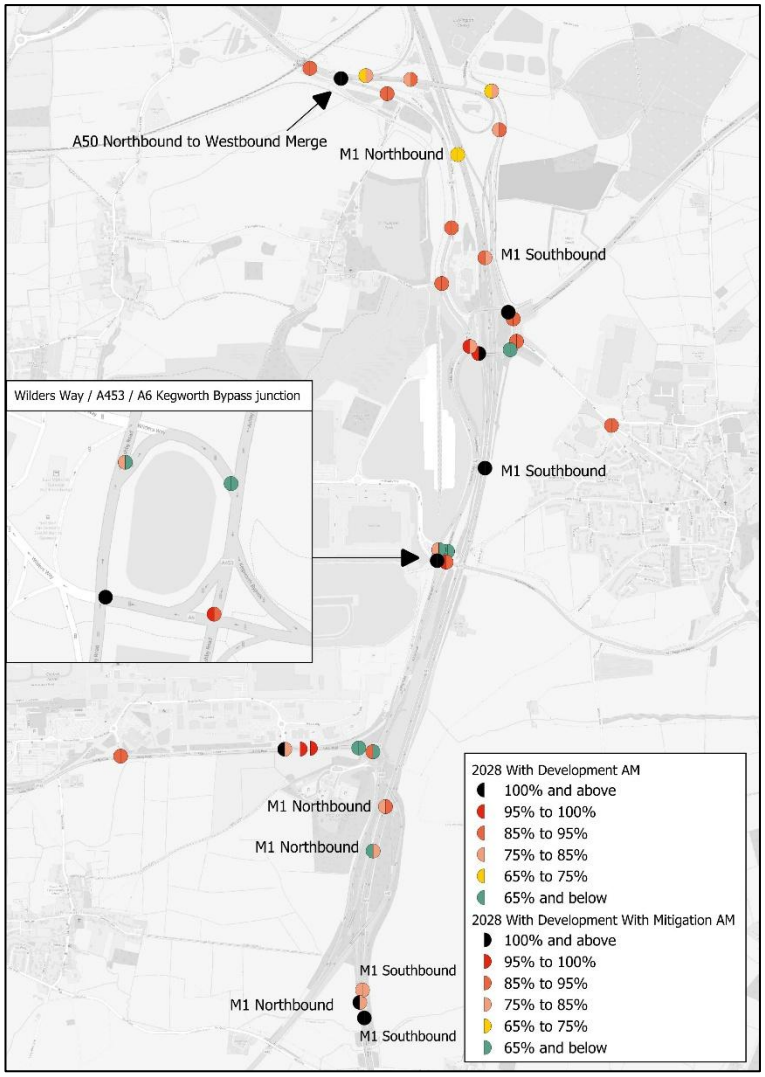
A.1.22 The node volume-capacity ratios for Finger Farm Roundabout are forecast to decrease in the ‘With Development (2b)’ scenarios except in the 2038 PM Peak scenario where it is forecast to remain within the same range as the ‘With Development (1b)’ scenario.

EMGP2 access roundabout and toucan crossing

A.1.23 The node volume-capacity ratios at EMGP2 access roundabout are forecast to reduce in all 'With Development (2b)' scenarios except in the 2038 PM Peak hour forecast volume-capacity ratios remain within the same range. The proposed toucan (represented by the semi-circle closest to Finger Farm Roundabout) is forecast to be between 95% and 100% volume-capacity ratios in all 'With Development (2b)' scenarios except in the 2038 AM Peak hour where the volume-capacity ratio is forecast to be over 100% (and on further investigation is 100%).

Figure A.5: Forecast Node Volume-Capacity Ratio for 2028 'With Development (1b)' and 2028 'With Development (2b)' Scenarios

AM Peak hour



PM Peak hour

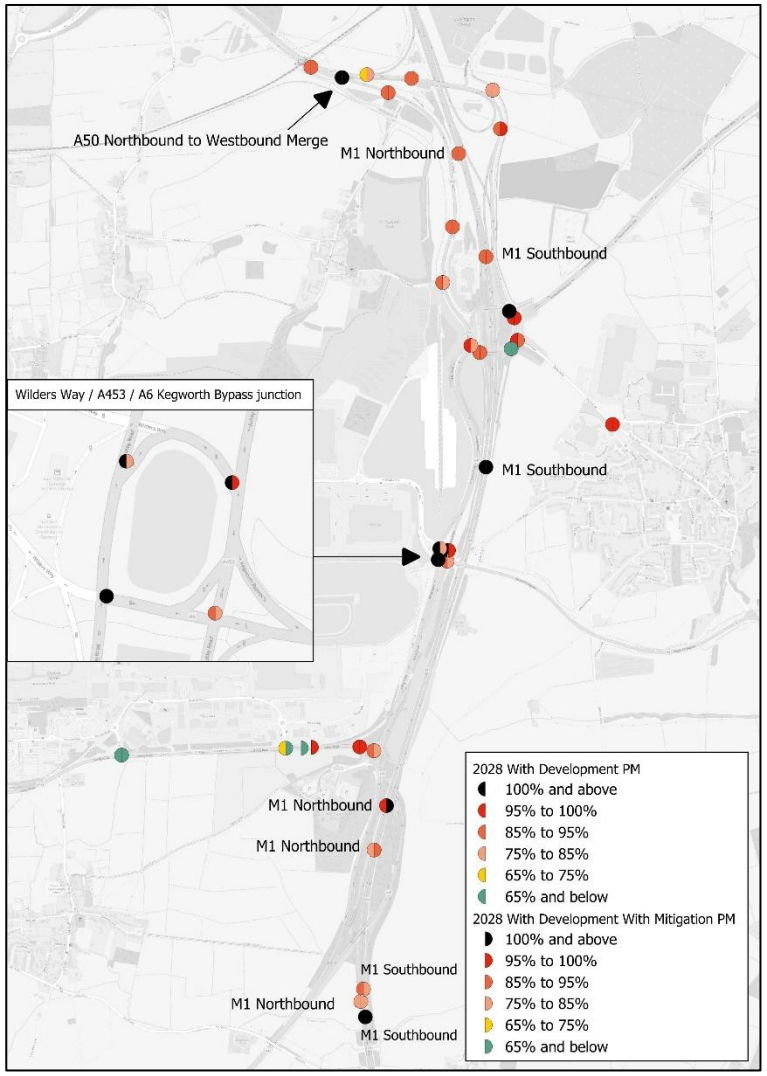


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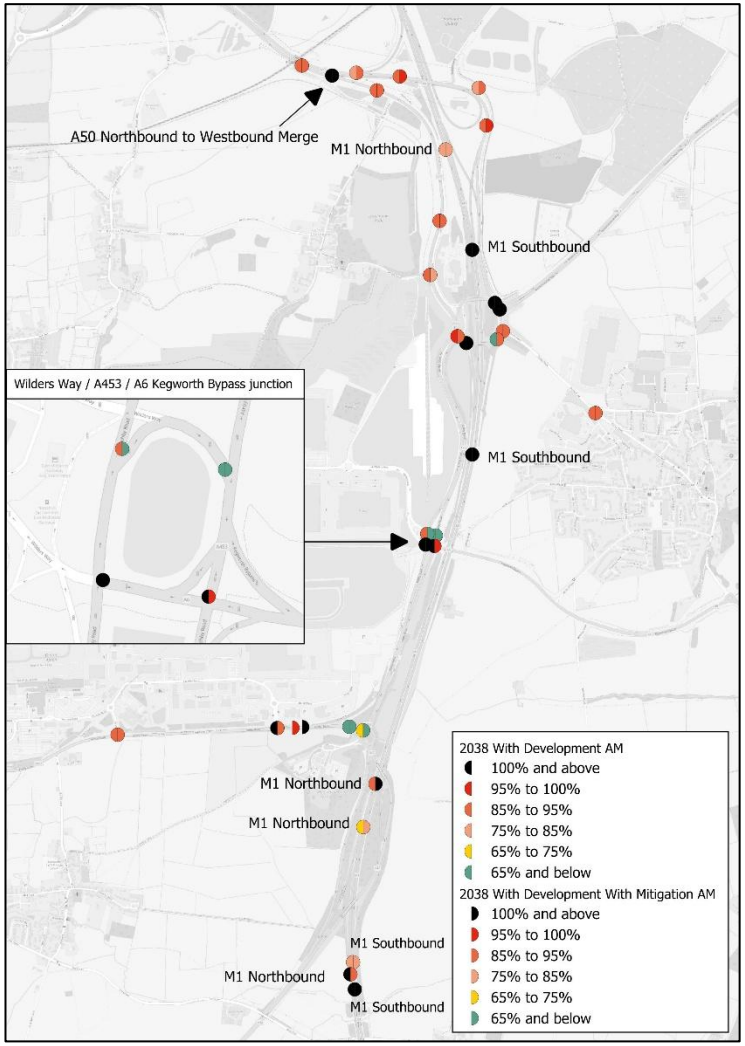
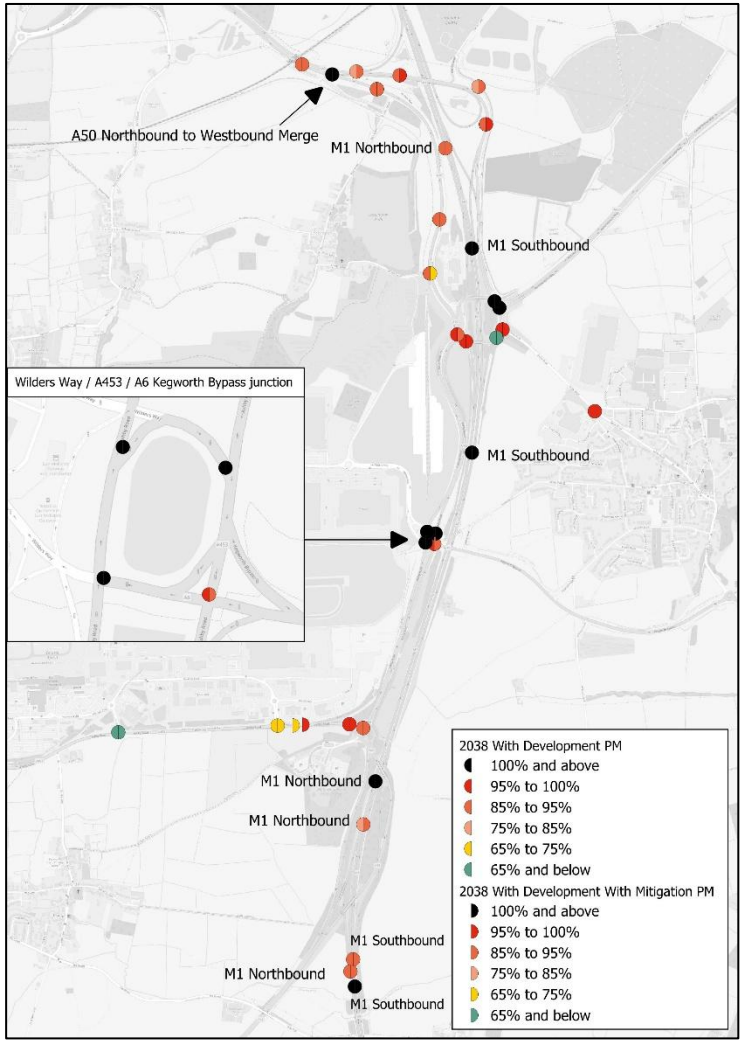
Figure A.6: Forecast Node Volume-Capacity Ratio for 2038 'With Development (1b)' and 2038 'With Development (2b)' Scenarios

AM Peak hour



PM Peak hour



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Appendix B EMFM Indicative Network Statistics

B.1.1 Table B.1 and Table B.2 presents the model network statistics within the AoI (see Figure 3.11). It should be noted that these statistics are high-level and should be considered as indicative only.

B.1.2 The statistics include vehicle kilometre travelled (km), network speed (mph) and junction delay (hours) between 2038 'Without Development (1b)', 2038 'With Development (1b)' and 2038 'With Development (2b) scenarios for both AM Peak and PM Peak hour by motorway and non-motorway roads.

B.1.3 As expected, the forecast vehicle kilometres increase in the 'With Development (1b)' scenario compared to the 'Without Development (1b)' scenario for both motorway and non-motorway links. Overall, vehicle kilometres increase further in the 'With development (2b)' scenario on motorway links as the mitigation measures provide additional network capacity on motorways, while vehicle kilometres are forecast to decrease on non-motorway links indicating that the mitigation measures are attracting traffic on to motorway links and off non-motorway links.

B.1.4 The forecast speeds in the 'With Development (1b)' scenario are slower than speeds forecast in the 'Without Development (1b)' for both motorway and non-motorway links. Overall speeds are forecast to reduce in the 'With Development (1b)' scenario by -1.5% on motorway links and -1.2% on non-motorway links. Speeds are forecast to reduce by -1.0% on motorway and increase by +0.7% on non-motorway links in the 'With Development (2b)' scenario compared to the 'Without Development (1b)' scenario, indicating lower delay in the 'With Development (2b) 'scenario on motorway links.

B.1.5 Junction delays on motorway links are forecast to increase in both with development scenarios compared to the 'Without Development (1b)' scenario, with the 'With Development (2b)' scenario forecast to have the lowest increase in delay (+4.7%). There is a reduction in delay forecast on non-motorway links in the 'With Development (2b)' (-0.9%) compared to the 'Without Development (1b)' scenario.

Table B.1: Indicative Network Statistics within the AoI for Motorway Links

Scenario	Model Year/ Peak	Veh/km (demand[7])	Speed (mph)	Junction Delay (Hours)
'Without Development (1b)'	2038 AM	293,022	40.1	1,640
'With Development (1b)'		296,942	39.7	1,709
'With Development (2b)'		299,917	39.4	1,753
'Without Development (1b)'	2038 PM	305,464	43.9	1,298
'With Development (1b)'		310,336	43.0	1,410
'With Development (2b)'		309,551	43.8	1,322
'Without Development (1b)'	2038 AM+PM	598,486	41.9	2,938
'With Development (1b)'		607,278	41.3	3,119
'With Development (2b)'		609,468	41.5	3,075
Percentage difference compared with 'Without Development (1b)'				
'With Development (1b)'	2038 AM+PM	1.5%	-1.5%	6.2%
'With Development (2b)'		1.8%	-1.0%	4.7%

[7] 'Demand flow' is the initial flow, taking into account capacity constraint, delay, etc., considered to pass through a selected link. Whereas 'actual flow' is what reaches the selected, link within the modelled hour, and is reduced whenever the path passes through an over-capacity link or turn. 'Queued flow' is essentially the difference between the demand and the actual flow.

Table B.2: Indicative Network Statistics within the AoI for Non-Motorway Links

Scenario	Model Year/ Peak	Veh/km (demand[7])	Speed (mph)	Junction Delay (Hours)
'Without Development (1b)'	2038 AM	485,162	26.8	4,820
'With Development (1b)'		493,122	26.6	5,003
'With Development (2b)'		490,395	26.8	4,895
'Without Development (1b)'	2038 PM	521,328	25.8	5,408
'With Development (1b)'		530,468	26.6	5,616
'With Development (2b)'		522,787	26.2	5,240
'Without Development (1b)'	2038 AM+PM	1,006,490	26.3	10,228
'With Development (1b)'		1,023,590	26.0	10,619
'With Development (2b)'		1,013,182	26.5	10,136
Percentage difference compared with 'Without Development (1b)'				
'With Development (1b)'	2038 AM+ PM	1.7%	-1.2%	3.8%
'With Development (2b)'		0.7%	0.7%	-0.9%

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APPENDIX 73: COBALT Assessment (document reference EMG2-BWB-GEN-XX-RP-TR-0020_S2-P2)

PROJECT NAME	**East Midlands Gateway Phase 2 – COBALT Assessment**		
DOCUMENT NUMBER	EMG2-BWB-GEN-XX-RP-TR-0018	**BWB REF**	220500
AUTHOR	AJ Oakes	**STATUS**	S2
CHECKED	Matt Corner	**REVISION**	P2
APPROVED	Paul Wilson	**DATE**	25/06/25

1. INTRODUCTION

1.1 BWB Consulting Ltd (BWB) is working with the Transport Working Group (TWG) consisting of key statutory highway authorities, including National Highways (NH), Leicestershire County Council (LCC) and Nottinghamshire County Council (NCC) on the East Midlands Gateway 2 (EMG2) project.

1.2 A Highway Safety Position Statement was produced in March 2025 (Technical Note EMG2-BWB-GEN-XX-RP-TR-0015 Revision P1) summarising Personal Injury Collision (PIC) records on the highway network in the vicinity of the EMG2 development. This identified existing safety problems at the following three locations:

- **EMG1 access junction** – a cluster of PICs have been recorded due to turning movements from the A6 to EMG1 colliding with drivers travelling southbound on the A453.
- **M1 Junction 24** – a cluster of PICs have been recorded on the M1 northbound off-slip on approach to the roundabout.
- **A453/The Green** – a cluster of PICs have been recorded due to right turning movements from the A453 west into The Green. This junction is located within a dip on the A453 with approaching vehicles travelling downhill from both sides. Looking at historic Google Street View records, the tourist sign to the 'Queen's Head' highlighting a left turn into The Green from the east was obstructed by overgrown vegetation until 2023 and since then there have been no PICs occurring through westbound travelling vehicles. There appear to have been improvements to the warning signs for eastbound vehicles between 2017 and 2020 and since then, collision rates have dropped.

1.3 Traffic modelling has been undertaken using Leicestershire's Pan Regional Transport Model (PRTM), a strategic highway assignment model. This tested forecast years of 2028 and 2038, with and without the EMG2 development and more recently with the inclusion of the proposed highway mitigation.

1.4 The proposed highway mitigation is focused on the A453 corridor between Finger Farm roundabout (M1 Junction 23A) and M1 Junction 24, with the key piece of infrastructure comprising a new free flow link from M1 northbound to A50 westbound, allowing traffic to bypass Junction 24. Traffic flows for each of the forecast year scenarios have been obtained from PRTM and have been used in this COBALT (Cost and Benefit to Accidents – Light Touch) assessment.

1.5 The data shows that the largest flow changes in terms of redistribution as a result of the proposed highway mitigation are expected to occur on the A453 corridor between the Finger Farm roundabout and M1 Junction 24, which includes all three locations with

existing safety problems and the area accommodating the proposed highway mitigation.

1.6 A COBALT Methodology Note was prepared in May 2025 (Technical Note EMG2-BWB-GEN-XX-RP-TR-0018 Revision P1) to set out the methodology and study area for the COBALT assessment with the TWG. Comments were received from NH in May 2025, requesting that the study area is extended to include A50 Junction 1. This Technical Note therefore reviews the COBALT assessment and summarises the outputs.

2. ASSESSMENT INPUTS

2.1 COBALT is a computer program developed by the Department for Transport to assess and quantify the change in PIC rates as a direct result of new road schemes. It does so by comparing the rates of PICs by severity and the associated costs across an identified network in a 'without scheme' and 'with scheme' scenario, using details of link and junction characteristics, PIC rates, casualty costs and projected traffic volumes.

2.2 The COBALT study area is shown in **Figure 1** and includes the following links and junctions;

Links

- the A453 between The Green and Finger Farm roundabout;
- the A453 between Finger Farm roundabout and M1 Junction 24;
- the A50 between M1 Junction 24 and A50 Junction 1;

Junctions

- the A453/The Green priority controlled T-junction;
- the A453/Airport Access signal controlled T-junction;
- the A453/Hunter Road roundabout;
- Finger Farm roundabout;
- The A453/EMG1/A6 Kegworth bypass signal controlled roundabout;
- M1 Junction 23, 24 & 24A;
- A50 Junction 1.



Figure 1 - COBALT Assessment Study Area

2.3 The study area was divided up into Junctions and Links for the COBALT assessment. The A453 was divided into 5 links between The Green and M1 Junction 24, with each link being between each of the junctions assessed (i.e. Link 1 is the A453 between 'The Green' and the Airport Access, Link 2 is between the Airport Access and the Site Access roundabout etc.) The A50 was divided into two links; between M1 Junction 24 and M1 Junction 24a and between M1 Junction 24a and A50 Junction 1. Each of the junctions listed above were assessed as 'junctions' within COBALT aside from Junction 23A and Junction 24A which were assessed as multiple links, due to the nature of these 'junctions' being provided as links with merges and diverges onto the surrounding roads rather than physical junctions.

2.4 Traffic flows for each of these links and junctions were extracted from the PRTM model to provide AADT flows for the base 2022 scenario, the forecast 2028 without scheme (Stage 1a) and with scheme (Stage 2a) scenarios, along with the forecast 2038 without scheme (Stage 1a) and with scheme (Stage 2a) scenarios. This allows the comparison of the future years background traffic on the existing highway layout to be compared to the future years proposed traffic on the proposed mitigated highway layout.

2.5 COBALT Version 2.8.0.0 was used for this assessment which is the latest version of the software available on the Tag Software website. The 'parameters file' which was also obtained from the Tag Software website includes for the TAG Databook V1.24 parameters which coincides with the latest version of the software. This parameters file consists of a series of data tables of standard parameters required to calculate accident impacts in line with TAG. The tables include the information required to undertake an economic appraisal, calculate accident and casualty numbers and costs by year and calculate rates of accidents through time using beta factors. The parameters file does not require any editing for the assessment.

2.6 Whilst observed collision data is available for each of the junctions assessed, in every instance the default rates within the TAG data book for each junction/link type are higher than those observed at each of the junction. This means that using the default data is considered a more robust assessment. Likewise, some of the links assessed have no observed collision data recorded on them, this would require the default values to be used to obtain any meaningful results in these locations. As a result the default values within the parameters files were not updated which removed the risk of errors and inconsistency.

2.7 The 'scheme data file' is completed by the user and provides all of the AADT Flows for all 5 scenarios listed above at the links in the study area, along with details of the link type, speed limits, link lengths and number of junction ends. The input file also includes the AADT flows on each arm of each of the 8 junctions assessed, along with the type of junction, speed limit, number of arms and type of carriageways on each arm.

2.8 Once both of these files have been uploaded into the software, the program then validates both of the input files to ensure all the required information is included and provides any warnings on the data that has been provided if required. In this assessment the data was validated by the program with no warnings on any of the junctions or links throughout the data.

3. ASSESSMENT OUTPUTS

3.1 A detailed output file was provided by the COBALT assessment when the impacts were run in the software, which provided details of the assessment run, any validation messages or warnings, summary statistics, link summary statistics and junction summary statistics.

3.2 A copy of the outputs from the COBALT assessment are included in **Appendix 1** and the summary statistics for the scheme as a whole are summarised in **Tables 1** to **3.**

Economic Summary 2010 values and prices			
	Accident Costs Without – Scheme (£000s)	**Accident Costs With – Scheme (£000s)**	**Benefit of Scheme (£000s)**
Total for all years (2028 – 2087)	75,955.2	63,204.3	12,750.9
2028	2,047.3	2,030.3	16.9
2038	1,647.9	1,326.6	321.3

Table 1 - Economic Summary

Accidents Summary (PICs)			
	Accident Numbers Without – Scheme	**Accident Numbers With – Scheme**	**Benefit of Scheme**
Total for all years (2028 – 2087)	2,291.6	1,893.1	398.4
2028	39.9	39.8	0.2
2038	38.2	30.8	7.4

Table 2 - Accidents Summary

Casualties Summary									
	Accident Numbers Without – Scheme			Accident Numbers With – Scheme			Benefit of Scheme		
	Fatal	Serious	Slight	Fatal	Serious	Slight	Fatal	Serious	Slight
Total for all years	24.0	195.8	3143.5	19.5	161.0	2600.2	4.4	34.7	543.3
2028	0.4	3.4	54.8	0.4	3.4	54.6	0.0	0.0	0.2
2038	0.4	3.3	52.4	0.3	2.6	42.4	0.1	0.6	10.0

Table 3 - Casualties Summary

3.3 The assessment summarised that the scheme as a whole would have a benefit on all three factors assessed including; costs, number of collisions and casualties.

3.4 Examining the results in more detail on a link by link and junction by junction basis, the following tables show the impact of the development traffic for the future years both with and without the scheme in place. **Table 4** summarises the impact on the links, any reductions in the number of collisions a year is seen as a beneficial impact and any increase in the number of collisions a year, regardless of how small, is recorded as an adverse impact.

Link		2028 Without Scheme	2028 With Scheme	2028 Scheme Impact	2038 Without Scheme	2038 With Scheme	2038 Scheme Impact
1	A453 (L1)	0.5	0.5	Negligible	0.5	0.4	Beneficial
2	A453 (L2)	0.4	0.3	Beneficial	0.4	0.3	Beneficial
3	A453 (L3)	0.3	0.3	Negligible	0.4	0.2	Beneficial
4	A453 (L4)	0.6	0.6	Negligible	0.5	0.5	Negligible
5	A453 (L5)	0.8	0.8	Negligible	0.6	0.6	Negligible
6	A50 (6)	1.2	1.2	Negligible	1.1	0.8	Beneficial
7	A50 (7)	2.9	2.9	Negligible	2.6	2.0	Beneficial
8	J24A (L1)	0.1	0.1	Negligible	0.1	0.1	Negligible
9	J24A (L2)	0.5	0.5	Negligible	0.5	0.5	Negligible
10	J24A (L3)	0.5	0.5	Negligible	0.4	0.3	Beneficial
11	J24A (L4)	0.1	0.1	Negligible	0.1	0.0	Beneficial
12	J24A (L5)	0.1	0.1	Negligible	0.1	0.1	Negligible
13	J24A (L6)	0.2	0.2	Negligible	0.2	0.2	Negligible
14	J24A (L7)	1.2	1.2	Negligible	1.1	0.8	Beneficial
15	J23A (L1)	0.3	0.3	Negligible	0.2	0.2	Negligible
16	J23A (L2)	0.3	0.3	Negligible	0.3	0.2	Beneficial
17	J23A (L3)	0.1	0.1	Negligible	0.1	0.1	Negligible
18	J23A (L4)	0.4	0.4	Negligible	0.3	0.3	Negligible
19	J23A (L5)	0.3	0.3	Negligible	0.3	0.2	Beneficial
20	J23A (L6)	0.1	0.1	Negligible	0.1	0.1	Negligible
21	J23A (L7)	0.1	0.1	Negligible	0.1	0.1	Negligible
22	J23A (L8)	0.3	0.3	Negligible	0.2	0.2	Negligible

Table 4 - Annual Accident Stats (Links)

3.5 As shown in **Table 4** the scheme provides a negligible impact on the number of collisions per year in 2028 with a minor beneficial impact being forecast at A453 (L2) which is between the Airport signals junction and the site access roundabout. By 2038 it is forecast that the scheme would have more beneficial impacts on a number of the links with nearly half of the links being shown as beneficially impacted by the scheme when compared to the without scheme scenarios.

3.6 **Table 5** summarises the impact on the junctions, any reductions in the number of collisions a year is seen as a beneficial impact and any increase in the number of collisions a year, regardless of how small, is recorded as an adverse impact

Link		2028 Without Scheme	2028 With Scheme	2028 Scheme Impact	2038 Without Scheme	2038 With Scheme	2038 Scheme Impact
1	A453/The Green	1.2	1.2	Negligible	1.3	1.2	Minor Beneficial
2	A453/Airport Access	1.1	1.1	Negligible	1.2	1.0	Minor Beneficial
3	A453/Site Access (existing)	0.5	0.0	Minor Adverse	1.3	0.0	Beneficial
3	A453/Site Access (proposed)	0.0	0.8		0.0	0.6	
4	Finger Farm Roundabout	3.1	2.8	Minor Beneficial	3.5	2.6	Beneficial
5	EMG1 Access	2.5	2.5	Negligible	2.9	1.9	Beneficial
6	M1 Junction 24	15.3	15.4	Minor Adverse	13.0	11.2	Beneficial
7	A50 Junction 1	5.0	5.0	Negligible	5.0	4.3	Beneficial

Table 5 - Annual Accident Stats (Junctions)

3.9 As shown in **Table 5** in 2028 the scheme provides a negligible impact on the A453/The Green junction, A453/Airport Access junction, EMG1 Access junction and the A50 Junction 1. The scheme has beneficial impact on the Finger Farm roundabout whilst minor adverse impacts are present at the A453/Site Access roundabout and M1 Junction 24.

3.10 The minor adverse impact (0.3 collisions per year) at the A453/Site Access roundabout are likely due to the introduction of the additional arm on the roundabout and increase in traffic related to the development. This impact is expected and the forecast increase should not be of concern.

3.11 Likewise, the minor adverse impact (0.1 collisions per year) at M1 Junction 24 is likely due to the increase in traffic as a whole at the junction. Whilst traffic is removed from the M1 northbound off-slip by way of introduction of a new link from the M1 northbound directly to the A50, reducing potential collisions on the M1 northbound off-slip, there is an increase in traffic from the M1 southbound, A50 and A453 at Junction 24. However, COBALT is unable to identify any benefits mitigation provided by providing additional lanes, or reallocating lane destinations. The limitations within the program result in it not being able to provide a full view of the benefits of the proposed scheme.

3.12 Nevertheless, **Table 5** also shows that by 2038, the impact of the scheme is forecast to be beneficial on all of the junctions assessed in COBALT, including both the A453/Site Access roundabout and M1 Junction 24.

3.13 As a result, it is concluded that overall the scheme provides a benefit to the local and Strategic Road Networks in terms of road safety. When reviewing the impact in more detail, it is forecast that initially there would be a negligible impact as a result of the scheme on the links assessed, but this would improve in the future year of 2038 with a number of the links seeing beneficial impacts. Similarly, at the junctions assessed, the scheme would initially see negligible and beneficial impact with the exception of the Site Access roundabout and M1 Junction 24, which would see a very minor adverse impact. This would however improve in the future year of 2038, with all the junctions assessed showing as having a beneficial impact with the mitigation scheme included for.

4. SUMMARY

4.1 This Technical Note has reviewed the COBALT assessment which has been undertaken on the proposed EMG2 scheme, using the study area agreed with NH in the COBALT Methodology Note prepared in May 2025 (Technical Note EMG2-BWB-GEN-XX-RP-TR-0018 Revision P1) which was derived from the Highway Safety Position Statement (Technical Note EMG2-BWB-GEN-XX-RP-TR-0015 Revision P1), which summarised existing Personal Injury Collision records and identified three locations on the highway network where there are existing safety problems.

4.2 The agreed study area has been divided up into a number of links and junctions to be assessed within COBALT. Detailed information about the type of links and junctions were inputted into a data sheet. This was in addition to traffic flows for each of the links and junctions which were extracted from the PRTM model to provide flows for the base 2022 scenario, the forecast 2028 without scheme and with scheme scenarios, along with the forecast 2038 without scheme and with scheme scenarios.

4.3 This information was inputted into COBALT along with the latest 'Parameters file' provided by the software company which reviewed the information input for the scheme against national statistics for similar link and junction types, providing a comparison between the study area, both with and without the scheme in place.

4.4 The COBALT assessment concluded that, overall, the scheme provides a benefit to the local and Strategic Road Networks in terms of road safety. When reviewing the impact in more detail, it is forecast that initially there would be a negligible impact as a result of the scheme on the links assessed, but this would improve in the future year of 2038 with a number of the links seeing beneficial impacts.

4.5 Similarly, at the junctions assessed, the scheme would initially see negligible and beneficial impact, with the exception of the Site Access roundabout and M1 Junction 24. This would however improve in the future year of 2038, with all the junctions assessed showing as having a beneficial impact with the mitigation scheme included for.

APPENDICES

Appendix 1: COBALT FILES

Department
for Transport

COBALT Parameter File Version:

v2.8 (TAG data book v1.24 November 2024)
Date Created: 26/11/24

Notes

Aligned to TAG data book v1.24 November 2024

Editable Parameter Lists

Road Type ID	Road Type	Road Category	In Use
1	D2 Motorways	Motorways	Yes
2	D3 Motorways	Motorways	Yes
3	D4 Motorways	Motorways	Yes
4	Modern S2 Roads	S2 A Roads	Yes
5	Modern S2 Roads with HS	S2 A Roads	Yes
6	Modern WS2 Roads	S2 A Roads	Yes
7	Modern WS2 Roads with HS	S2 A Roads	Yes
8	Older S2 A Roads	S2 A Roads	Yes
9	Other S2 Roads	Other S2 Roads	Yes
10	Modern D2 Roads	Dual Carriageways	Yes
11	Modern D2 Roads with HS	Dual Carriageways	Yes
12	Older D2 Roads	Dual Carriageways	Yes
13	Modern D3+ Roads	Dual Carriageways	Yes
14	Modern D3+ Roads with HS	Dual Carriageways	Yes
15	Older D3+ Roads	Dual Carriageways	Yes
16	Road Type 16	Not Defined	No
17	Road Type 17	Not Defined	No
18	Road Type 18	Not Defined	No
19	Road Type 19	Not Defined	No
20	Road Type 20	Not Defined	No

Road Category	In Use
Motorways	Yes
S2 A Roads	Yes
Other S2 Roads	Yes
Dual Carriageways	Yes
Road Category 5	No
Road Category 6	No

Cost Base Year
2010

Green Book Discount Rates

Default Source: TAG data book v1.24 November 2024, Worksheet Discount %

Years from Current Year	Discount Rates	
	Health	Other
0-30	1.50%	3.5%
31-75	1.29%	3.0%
76-125	1.07%	2.5%
126-200	0.86%	2.0%

Costs per Accident / Casualty

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 1

Cost per Casualty			
Casualty type	**Net output**	**Willingness to pay**	**Medical & ambulance**
Fatal	107,782	1,539,852	925
Serious	20,762	150,741	12,577
Slight	2,195	11,034	931

Cost per Accident							
Severity	**Insurance Administration**	**Damage to Property**			**Police Cost**		
		Urban	**Rural**	**Motorway**	**Urban**	**Rural**	**Motorway**
Fatal	288	7,496	12,713	16,172	16,814	17,267	17,468
Serious	179	4,017	5,796	13,799	1,857	2,318	2,448
Slight	109	2,370	3,842	6,981	480	658	549
Damage	52	1,695	2,533	2,435	35	20	17

Estimated damage only accidents per pia			
	Urban	**Rural**	**Motorway**
Damage only per pia	17.7	7.8	7.6

Annual Rates of Growth of Accident Values

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 2. Note - 2010 in the table below refers to growth for 2010-2011.

Annual Rates of Growth of Accident Values - up to the appraisal year

Year	Casualty ('WTP' component') Growth Rate (% p.a.)	Accident (Accident & 'non-WTP' Casualty Components) Growth Rate (% p.a.)
2010	0.40	0.31
2011	1.09	0.83
2012	1.45	1.11
2013	3.17	2.43
2014	1.93	1.48
2015	1.45	1.11
2016	2.73	2.10
2017	1.18	0.91
2018	1.46	1.12
2019	0.08	0.06
2020	0.08	0.06
2021	0.08	0.06
2022	-1.07	-0.83
2023	0.28	0.22
2024	1.79	1.38
2025	0.00	1.50
2026	0.00	1.50
2027	0.00	1.50
2028	0.00	1.50
2029	0.00	1.50
2030	0.00	1.50
2031	0.00	1.50
2032	0.00	1.50
2033	0.00	1.50
2034	0.00	1.50
2035	0.00	1.50
2036	0.00	1.50
2037	0.00	1.50
2038	0.00	1.50
2039	0.00	1.50
2040	0.00	1.50
2041	0.00	1.50
2042	0.00	1.50
2043	0.00	1.50
2044	0.00	1.50
2045	0.00	1.50
2046	0.00	1.50
2047	0.00	1.50
2048	0.00	1.50
2049	0.00	1.50
2050	0.00	1.50
2051	0.00	1.50
2052	0.00	1.50
2053	0.00	1.50
2054	0.00	1.50
2055	0.00	1.50
2056	0.00	1.50
2057	0.00	1.50
2058	0.00	1.50
2059	0.00	1.50
2060	0.00	1.50
2061	0.00	1.50
2062	0.00	1.50
2063	0.00	1.50
2064	0.00	1.50
2065	0.00	1.50
2066	0.00	1.50
2067	0.00	1.50
2068	0.00	1.50
2069	0.00	1.50
2070	0.00	1.50
2071	0.00	1.50
2072	0.00	1.50
2073	0.00	1.50
2074	0.00	1.50
2075	0.00	1.50
2076	0.00	1.50
2077	0.00	1.50
2078	0.00	1.50
2079	0.00	1.50
2080	0.00	1.50
2081	0.00	1.50
2082	0.00	1.50
2083	0.00	1.50
2084	0.00	1.50
2085	0.00	1.50
2086	0.00	1.50
2087	0.00	1.50
2088	0.00	1.50
2089	0.00	1.50
2090	0.00	1.50
2091	0.00	1.50
2092	0.00	1.50
2093	0.00	1.50
2094	0.00	1.50
2095	0.00	1.50
2096	0.00	1.50
2097	0.00	1.50
2098	0.00	1.50
2099	0.00	1.50
2100	0.00	1.50
2101	0.00	1.50
2102	0.00	1.50
2103	0.00	1.50
2104	0.00	1.50
2105	0.00	1.50
2106	0.00	1.50
2107	0.00	1.50
2108	0.00	1.50
2109	0.00	1.50
2110	0.00	1.50
2111	0.00	1.50
2112	0.00	1.50
2113	0.00	1.50
2114	0.00	1.50
2115	0.00	1.50
2116	0.00	1.50
2117	0.00	1.50
2118	0.00	1.50
2119	0.00	1.50
2120	0.00	1.50
2121	0.00	1.50
2122	0.00	1.50
2123	0.00	1.50
2124	0.00	1.50
2125	0.00	1.50
2126	0.00	1.50
2127	0.00	1.50
2128	0.00	1.50
2129	0.00	1.50
2130	0.00	1.50
2131	0.00	1.50
2132	0.00	1.50
2133	0.00	1.50
2134	0.00	1.50
2135	0.00	1.50
2136	0.00	1.50
2137	0.00	1.50
2138	0.00	1.50
2139	0.00	1.50
2140	0.00	1.50
2141	0.00	1.50
2142	0.00	1.50
2143	0.00	1.50
2144	0.00	1.50
2145	0.00	1.50
2146	0.00	1.50
2147	0.00	1.50
2148	0.00	1.50
2149	0.00	1.50
2150	0.00	1.50

Annual Rates of Growth of Accident Values - from the appraisal year onwards

Casualty ('WTP' component') Growth Rate (% p.a.)	Accident (Accident & 'non-WTP' Casualty Components) Growth Rate (% p.a.)
0.00	1.50

Link & Combined Link / Junction: Accident rates & Beta factors

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 3

Table Source Year: 2009

Link only: Accident Rates and Change Factors

Road Type	Speed Limit (mph)	Accident Rate	Beta Factor	Road Description
1	50	0.063	0.956	Motorways
1	60	0.063	0.956	Motorways
1	70	0.063	0.956	Motorways
2	50	0.063	0.956	Motorways
2	60	0.063	0.956	Motorways
2	70	0.063	0.956	Motorways
3	50	0.075	0.956	Motorways
3	60	0.075	0.956	Motorways
3	70	0.075	0.956	Motorways
4	30	0.175	0.964	Modern S2 Roads
4	40	0.175	0.964	Modern S2 Roads
4	50	0.143	0.958	Modern S2 Roads
4	60	0.143	0.958	Modern S2 Roads
4	70	0.143	0.958	Modern S2 Roads
5	30	0.175	0.964	Modern S2 Roads with HS
5	40	0.175	0.964	Modern S2 Roads with HS
5	50	0.143	0.958	Modern S2 Roads with HS
5	60	0.143	0.958	Modern S2 Roads with HS
5	70	0.143	0.958	Modern S2 Roads with HS
6	30	0.206	0.964	Modern WS2 Roads
6	40	0.206	0.964	Modern WS2 Roads
6	50	0.082	0.958	Modern WS2 Roads
6	60	0.082	0.958	Modern WS2 Roads
6	70	0.082	0.958	Modern WS2 Roads
7	30	0.206	0.964	Modern WS2 Roads with HS
7	40	0.206	0.964	Modern WS2 Roads with HS
7	50	0.082	0.958	Modern WS2 Roads with HS
7	60	0.082	0.958	Modern WS2 Roads with HS
7	70	0.082	0.958	Modern WS2 Roads with HS
8	30	0.206	0.964	Older S2 A Roads
8	40	0.206	0.964	Older S2 A Roads
8	50	0.143	0.958	Older S2 A Roads
8	60	0.143	0.958	Older S2 A Roads
8	70	0.143	0.958	Older S2 A Roads
9	30	0.195	0.957	Other S2 Roads
9	40	0.195	0.957	Other S2 Roads
9	50	0.163	0.935	Other S2 Roads
9	60	0.163	0.935	Other S2 Roads
9	70	0.163	0.935	Other S2 Roads
10	30	0.148	0.965	Modern D2 Roads
10	40	0.148	0.965	Modern D2 Roads
10	50	0.077	0.960	Modern D2 Roads
10	60	0.077	0.960	Modern D2 Roads
10	70	0.077	0.960	Modern D2 Roads
11	30	0.154	0.965	Modern D2 Roads with HS
11	40	0.154	0.965	Modern D2 Roads with HS
11	50	0.059	0.960	Modern D2 Roads with HS
11	60	0.059	0.960	Modern D2 Roads with HS
11	70	0.059	0.960	Modern D2 Roads with HS
12	30	0.154	0.965	Older D2 Roads
12	40	0.154	0.965	Older D2 Roads
12	50	0.077	0.960	Older D2 Roads
12	60	0.077	0.960	Older D2 Roads
12	70	0.077	0.960	Older D2 Roads
13	30	0.184	0.949	Modern D3+ Roads
13	40	0.184	0.949	Modern D3+ Roads
13	50	0.101	0.956	Modern D3+ Roads
13	60	0.101	0.956	Modern D3+ Roads
13	70	0.101	0.956	Modern D3+ Roads
14	30	0.184	0.949	Modern D3+ Roads with HS
14	40	0.184	0.949	Modern D3+ Roads with HS
14	50	0.101	0.956	Modern D3+ Roads with HS
14	60	0.101	0.956	Modern D3+ Roads with HS
14	70	0.101	0.956	Modern D3+ Roads with HS
15	30	0.184	0.949	Older D3+ Roads
15	40	0.184	0.949	Older D3+ Roads
15	50	0.101	0.956	Older D3+ Roads
15	60	0.101	0.956	Older D3+ Roads
15	70	0.101	0.956	Older D3+ Roads
16	20	0	0	Road Type 16
16	30	0	0	Road Type 16
16	40	0	0	Road Type 16
16	50	0	0	Road Type 16
16	60	0	0	Road Type 16
16	70	0	0	Road Type 16
17	20	0	0	Road Type 17
17	30	0	0	Road Type 17
17	40	0	0	Road Type 17
17	50	0	0	Road Type 17
17	60	0	0	Road Type 17
17	70	0	0	Road Type 17
18	20	0	0	Road Type 18
18	30	0	0	Road Type 18
18	40	0	0	Road Type 18
18	50	0	0	Road Type 18
18	60	0	0	Road Type 18
18	70	0	0	Road Type 18
19	20	0	0	Road Type 19
19	30	0	0	Road Type 19
19	40	0	0	Road Type 19
19	50	0	0	Road Type 19
19	60	0	0	Road Type 19
19	70	0	0	Road Type 19
20	20	0	0	Road Type 20
20	30	0	0	Road Type 20
20	40	0	0	Road Type 20
20	50	0	0	Road Type 20
20	60	0	0	Road Type 20
20	70	0	0	Road Type 20

Table Source Year: 2009

Combined Link / Junction: Accident Rates and Change Factors

Road Type	Speed Limit (mph)	Accident Rate	Beta Factor	Road Description
1	50	0.080	0.956	Motorways
1	60	0.080	0.956	Motorways
1	70	0.080	0.956	Motorways
2	50	0.067	0.956	Motorways
2	60	0.067	0.956	Motorways
2	70	0.067	0.956	Motorways
3	50	0.079	0.956	Motorways
3	60	0.079	0.956	Motorways
3	70	0.079	0.956	Motorways
4	30	0.532	0.959	Modern S2 Roads
4	40	0.532	0.959	Modern S2 Roads
4	50	0.244	0.955	Modern S2 Roads
4	60	0.244	0.955	Modern S2 Roads
4	70	0.244	0.955	Modern S2 Roads
5	30	0.532	0.959	Modern S2 Roads with HS
5	40	0.532	0.959	Modern S2 Roads with HS
5	50	0.244	0.955	Modern S2 Roads with HS
5	60	0.244	0.955	Modern S2 Roads with HS
5	70	0.244	0.955	Modern S2 Roads with HS
6	30	0.863	0.959	Modern WS2 Roads
6	40	0.863	0.959	Modern WS2 Roads
6	50	0.163	0.955	Modern WS2 Roads
6	60	0.163	0.955	Modern WS2 Roads
6	70	0.163	0.955	Modern WS2 Roads
7	30	0.863	0.959	Modern WS2 Roads w. HS
7	40	0.863	0.959	Modern WS2 Roads w. HS
7	50	0.163	0.955	Modern WS2 Roads w. HS
7	60	0.163	0.955	Modern WS2 Roads w. HS
7	70	0.163	0.955	Modern WS2 Roads w. HS
8	30	0.863	0.959	Older S2 A Roads
8	40	0.863	0.959	Older S2 A Roads
8	50	0.244	0.955	Older S2 A Roads
8	60	0.244	0.955	Older S2 A Roads
8	70	0.244	0.955	Older S2 A Roads
9	30	0.559	0.951	Other S2 Roads
9	40	0.559	0.951	Other S2 Roads
9	50	0.233	0.933	Other S2 Roads
9	60	0.233	0.933	Other S2 Roads
9	70	0.233	0.933	Other S2 Roads
10	30	0.553	0.967	Modern D2 Roads
10	40	0.553	0.967	Modern D2 Roads
10	50	0.107	0.956	Modern D2 Roads
10	60	0.107	0.956	Modern D2 Roads
10	70	0.107	0.956	Modern D2 Roads
11	30	0.599	0.967	Modern D2 Roads with HS
11	40	0.599	0.967	Modern D2 Roads with HS
11	50	0.072	0.956	Modern D2 Roads with HS
11	60	0.072	0.956	Modern D2 Roads with HS
11	70	0.072	0.956	Modern D2 Roads with HS
12	30	0.599	0.967	Older D2 Roads
12	40	0.599	0.967	Older D2 Roads
12	50	0.107	0.956	Older D2 Roads
12	60	0.107	0.956	Older D2 Roads
12	70	0.107	0.956	Older D2 Roads
13	30	0.620	0.951	Modern D3+ Roads
13	40	0.620	0.951	Modern D3+ Roads
13	50	0.123	0.946	Modern D3+ Roads
13	60	0.123	0.946	Modern D3+ Roads
13	70	0.123	0.946	Modern D3+ Roads
14	30	0.620	0.951	Modern D3+ Roads w. HS
14	40	0.620	0.951	Modern D3+ Roads w. HS
14	50	0.123	0.946	Modern D3+ Roads w. HS
14	60	0.123	0.946	Modern D3+ Roads w. HS
14	70	0.123	0.946	Modern D3+ Roads w. HS
15	30	0.620	0.951	Older D3+ Roads
15	40	0.620	0.951	Older D3+ Roads
15	50	0.123	0.946	Older D3+ Roads
15	60	0.123	0.946	Older D3+ Roads
15	70	0.123	0.946	Older D3+ Roads
16	20	0	0	Road Type 16
16	30	0	0	Road Type 16
16	40	0	0	Road Type 16
16	50	0	0	Road Type 16
16	60	0	0	Road Type 16
16	70	0	0	Road Type 16
17	20	0	0	Road Type 17
17	30	0	0	Road Type 17
17	40	0	0	Road Type 17
17	50	0	0	Road Type 17
17	60	0	0	Road Type 17
17	70	0	0	Road Type 17
18	20	0	0	Road Type 18
18	30	0	0	Road Type 18
18	40	0	0	Road Type 18
18	50	0	0	Road Type 18
18	60	0	0	Road Type 18
18	70	0	0	Road Type 18
19	20	0	0	Road Type 19
19	30	0	0	Road Type 19
19	40	0	0	Road Type 19
19	50	0	0	Road Type 19
19	60	0	0	Road Type 19
19	70	0	0	Road Type 19
20	20	0	0	Road Type 20
20	30	0	0	Road Type 20
20	40	0	0	Road Type 20
20	50	0	0	Road Type 20
20	60	0	0	Road Type 20
20	70	0	0	Road Type 20

Link only and Combined Link / Junction: Accident Beta Factor Changes over Time

Year	Change to Beta Factor
2004	1.00
2005	1.00
2006	1.00
2007	1.00
2008	1.00
2009	1.00
2010	1.00
2011	1.00
2012	1.00
2013	1.00
2014	1.00
2015	1.00
2016	1.00
2017	1.00
2018	1.00
2019	1.00
2020	0.50
2021	0.50
2022	0.50
2023	0.50
2024	0.50
2025	0.50
2026	0.50
2027	0.50
2028	0.50
2029	0.50
2030	0.25
2031	0.25
2032	0.25
2033	0.25
2034	0.25
2035	0.25
2036	0.25
2037	0.25
2038	0.25
2039	0.25
Later Years	0.00

Accident proportions (Link & Combined Link / Junction)

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 4

Table Source Year:	2009

Link only: Accident Proportions

Road Type	Speed Limit (mph)	Accident Proportions			Road Category
		Fatal	Serious	Slight	
1-3	>40	0.019	0.104	0.877	Motorways
4-8	30/40	0.014	0.145	0.841	S2 A Roads
4-8	>40	0.046	0.206	0.748	S2 A Roads
9	30/40	0.010	0.145	0.846	Other S2 Roads
9	>40	0.026	0.193	0.780	Other S2 Roads
10-15	30/40	0.017	0.135	0.849	Dual Carriageways
10-15	>40	0.028	0.135	0.837	Dual Carriageways
16	20	0.000	0.000	0.000	Not Defined
16	30/40	0.000	0.000	0.000	Not Defined
16	>40	0.000	0.000	0.000	Not Defined
17	20	0.000	0.000	0.000	Not Defined
17	30/40	0.000	0.000	0.000	Not Defined
17	>40	0.000	0.000	0.000	Not Defined
18	20	0.000	0.000	0.000	Not Defined
18	30/40	0.000	0.000	0.000	Not Defined
18	>40	0.000	0.000	0.000	Not Defined
19	20	0.000	0.000	0.000	Not Defined
19	30/40	0.000	0.000	0.000	Not Defined
19	>40	0.000	0.000	0.000	Not Defined
20	20	0.000	0.000	0.000	Not Defined
20	30/40	0.000	0.000	0.000	Not Defined
20	>40	0.000	0.000	0.000	Not Defined

Table Source Year:	2009

Combined Link / Junction: Accident Proportions

Road Type	Speed Limit (mph)	Accident Proportions			Road Description
		Fatal	Serious	Slight	
1-3	>40	0.018	0.101	0.882	Motorways
4-8	30/40	0.008	0.122	0.869	S2 A Roads
4-8	>40	0.034	0.187	0.779	S2 A Roads
9	30/40	0.007	0.126	0.867	Other S2 Roads
9	>40	0.024	0.187	0.789	Other S2 Roads
10-15	30/40	0.009	0.104	0.887	Dual Carriageways
10-15	>40	0.023	0.127	0.850	Dual Carriageways
16	20	0.000	0.000	0.000	Not Defined
16	30/40	0.000	0.000	0.000	Not Defined
16	>40	0.000	0.000	0.000	Not Defined
17	20	0.000	0.000	0.000	Not Defined
17	30/40	0.000	0.000	0.000	Not Defined
17	>40	0.000	0.000	0.000	Not Defined
18	20	0.000	0.000	0.000	Not Defined
18	30/40	0.000	0.000	0.000	Not Defined
18	>40	0.000	0.000	0.000	Not Defined
19	20	0.000	0.000	0.000	Not Defined
19	30/40	0.000	0.000	0.000	Not Defined
19	>40	0.000	0.000	0.000	Not Defined
20	20	0.000	0.000	0.000	Not Defined
20	30/40	0.000	0.000	0.000	Not Defined
20	>40	0.000	0.000	0.000	Not Defined

Total Link Only Accident Proportions	Total Combined Accident Proportions
1.000	1.001
1.000	0.999
1.000	1.000
1.001	1.000
0.999	1.000
1.001	1.000
1.000	1.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000
0.000	0.000

Link & Combined Link / Junction: Casualty Rates & Beta Factors

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 5

Table Source Year: 2009

Link only: Casualty Rates

Road Type	Speed Limit (mph)	Casualties per P.I.A.			Road Description
		Fatal	Serious	Slight	
1 - 3	50/60/70	0.021	0.129	1.464	Motorways
4 - 8	30/40	0.015	0.162	1.154	S2 A Roads
4 - 8	>40	0.052	0.274	1.251	S2 A Roads
9	30/40	0.010	0.156	1.071	Other S2 Roads
9	>40	0.028	0.230	1.178	Other S2 Roads
10 - 15	30/40	0.018	0.148	1.183	Dual Carriageways
10 - 15	>40	0.031	0.161	1.328	Dual Carriageways
16	20	0	0	0	Not Defined
16	30/40	0	0	0	Not Defined
16	>40	0	0	0	Not Defined
17	20	0	0	0	Not Defined
17	30/40	0	0	0	Not Defined
17	>40	0	0	0	Not Defined
18	20	0	0	0	Not Defined
18	30/40	0	0	0	Not Defined
18	>40	0	0	0	Not Defined
19	20	0	0	0	Not Defined
19	30/40	0	0	0	Not Defined
19	>40	0	0	0	Not Defined
20	20	0	0	0	Not Defined
20	30/40	0	0	0	Not Defined
20	>40	0	0	0	Not Defined

Table Source Year: 2009

Combined Link / Junction: Casualty Rates

Road Type	Speed Limit (mph)	Casualties per P.I.A.			Road Description
		Fatal	Serious	Slight	
1 - 3	50/60/70	0.020	0.123	1.455	Motorways
4 - 8	30/40	0.009	0.132	1.176	S2 A Roads
4 - 8	>40	0.038	0.238	1.300	S2 A Roads
9	30/40	0.007	0.134	1.132	Other S2 Roads
9	>40	0.026	0.222	1.218	Other S2 Roads
10 - 15	30/40	0.009	0.112	1.238	Dual Carriageways
10 - 15	>40	0.025	0.151	1.297	Dual Carriageways
16	20	0	0	0	Not Defined
16	30/40	0	0	0	Not Defined
16	>40	0	0	0	Not Defined
17	20	0	0	0	Not Defined
17	30/40	0	0	0	Not Defined
17	>40	0	0	0	Not Defined
18	20	0	0	0	Not Defined
18	30/40	0	0	0	Not Defined
18	>40	0	0	0	Not Defined
19	20	0	0	0	Not Defined
19	30/40	0	0	0	Not Defined
19	>40	0	0	0	Not Defined
20	20	0	0	0	Not Defined
20	30/40	0	0	0	Not Defined
20	>40	0	0	0	Not Defined

Table Source Year: 2009

Link only: Casualty Beta Factors

Road Type	Speed Limit (mph)	Beta Factor			Road Description
		Fatal	Serious	Slight	
1 - 3	50/60/70	0.978	0.979	1.002	Motorways
4 - 8	30/40	0.971	0.995	1.001	S2 A Roads
4 - 8	>40	0.979	0.983	1.002	S2 A Roads
9	30/40	0.985	0.997	1.001	Other S2 Roads
9	>40	0.987	0.989	0.998	Other S2 Roads
10 - 15	30/40	0.998	0.990	1.002	Dual Carriageways
10 - 15	>40	0.984	0.985	0.998	Dual Carriageways
16	20	0	0	0	Not Defined
16	30/40	0	0	0	Not Defined
16	>40	0	0	0	Not Defined
17	20	0	0	0	Not Defined
17	30/40	0	0	0	Not Defined
17	>40	0	0	0	Not Defined
18	20	0	0	0	Not Defined
18	30/40	0	0	0	Not Defined
18	>40	0	0	0	Not Defined
19	20	0	0	0	Not Defined
19	30/40	0	0	0	Not Defined
19	>40	0	0	0	Not Defined
20	20	0	0	0	Not Defined
20	30/40	0	0	0	Not Defined
20	>40	0	0	0	Not Defined

Table Source Year: 2009

Combined Link / Junction: Casualty Beta Factors

Road Type	Speed Limit (mph)	Beta Factor			Road Description
		Fatal	Serious	Slight	
1 - 3	50/60/70	0.978	0.979	1.002	Motorways
4 - 8	30/40	0.971	0.995	1.001	S2 A Roads
4 - 8	>40	0.979	0.983	1.002	S2 A Roads
9	30/40	0.985	0.997	1.001	Other S2 Roads
9	>40	0.987	0.989	0.998	Other S2 Roads
10 - 15	30/40	0.998	0.99	1.002	Dual Carriageways
10 - 15	>40	0.984	0.985	0.998	Dual Carriageways
16	20	0	0	0	Not Defined
16	30/40	0	0	0	Not Defined
16	>40	0	0	0	Not Defined
17	20	0	0	0	Not Defined
17	30/40	0	0	0	Not Defined
17	>40	0	0	0	Not Defined
18	20	0	0	0	Not Defined
18	30/40	0	0	0	Not Defined
18	>40	0	0	0	Not Defined
19	20	0	0	0	Not Defined
19	30/40	0	0	0	Not Defined
19	>40	0	0	0	Not Defined
20	20	0	0	0	Not Defined
20	30/40	0	0	0	Not Defined
20	>40	0	0	0	Not Defined

Link only and Combined Link / Junction: Casualty Beta Factor Changes over Time

Year	Change to Beta Factor
1995	1
1996	1
1997	1
1998	1
1999	1
2000	1
2001	1
2002	1
2003	1
2004	1
2005	1
2006	1
2007	1
2008	1
2009	1
2010	1
2011	1
2012	1
2013	1
2014	1
2015	1
2016	1
2017	1
2018	1
2019	1
Later Years	0

Junction only: Accident Parameters

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 6

Table Source Year:	1997

Junction only: Accident Parameters

Junction Type	Speed Limit (mph)	Coefficient 'a'	Power 'b'	Arms	Highest Link (S/D)	Formula type	Junction Description
1	>40	0.195	0.46	3	S	C	Priority
2	20/30/40	0.195	0.46	3	S	C	Priority
3	>40	0.195	0.46	3	D	C	Priority
4	20/30/40	0.195	0.46	3	D	C	Priority
5	>40	0.361	0.44	4	S	I	Priority
6	20/30/40	0.361	0.44	4	S	I	Priority
7	>40	0.240	0.71	4	D	C	Priority
8	20/30/40	0.240	0.71	4	D	C	Priority
9	>40	0.361	0.44	5	S	I	Priority
10	20/30/40	0.361	0.44	5	S	I	Priority
11	>40	0.361	0.44	5	D	I	Priority
12	20/30/40	0.361	0.44	5	D	I	Priority
13	>40	0.195	0.46	3	S	C	Priority w Ghost Island
14	20/30/40	0.195	0.46	3	S	C	Priority w Ghost Island
15	>40	0.195	0.46	3	D	C	Priority w Ghost Island
16	20/30/40	0.195	0.46	3	D	C	Priority w Ghost Island
17	>40	0.361	0.44	4	S	I	Priority w Ghost Island
18	20/30/40	0.361	0.44	4	S	I	Priority w Ghost Island
19	>40	0.240	0.71	4	D	C	Priority w Ghost Island
20	20/30/40	0.240	0.71	4	D	C	Priority w Ghost Island
21	>40	0.361	0.44	5	S	I	Priority w Ghost Island
22	20/30/40	0.361	0.44	5	S	I	Priority w Ghost Island
23	>40	0.361	0.44	5	D	I	Priority w Ghost Island
24	20/30/40	0.361	0.44	5	D	I	Priority w Ghost Island
25	>40	0.195	0.46	3	S	C	Priority w Single Lane Dualling
26	20/30/40	0.195	0.46	3	S	C	Priority w Single Lane Dualling
27	>40	0.195	0.46	3	D	C	Priority w Single Lane Dualling
28	20/30/40	0.195	0.46	3	D	C	Priority w Single Lane Dualling
29	>40	0.361	0.44	4	S	I	Priority w Single Lane Dualling
30	20/30/40	0.361	0.44	4	S	I	Priority w Single Lane Dualling
31	>40	0.240	0.71	4	D	C	Priority w Single Lane Dualling
32	20/30/40	0.240	0.71	4	D	C	Priority w Single Lane Dualling
33	>40	0.361	0.44	5	S	I	Priority w Single Lane Dualling
34	20/30/40	0.361	0.44	5	S	I	Priority w Single Lane Dualling
35	>40	0.361	0.44	5	D	I	Priority w Single Lane Dualling
36	20/30/40	0.361	0.44	5	D	I	Priority w Single Lane Dualling
37	>40	0.223	0.61	3	S	I	Signals
38	20/30/40	0.223	0.61	3	S	I	Signals
39	>40	0.494	0.42	3	D	C	Signals
40	20/30/40	0.291	0.51	3	D	C	Signals
41	>40	1.378	0.20	4	S	C	Signals
42	20/30/40	1.378	0.20	4	S	C	Signals
43	>40	0.494	0.42	4	D	C	Signals
44	20/30/40	0.291	0.51	4	D	C	Signals
45	>40	0.254	0.62	5 / 6	S	I	Signals
46	20/30/40	0.254	0.62	5 / 6	S	I	Signals
47	>40	0.238	0.85	5 / 6	D	I	Signals
48	20/30/40	0.160	0.97	5 / 6	D	I	Signals
49	>40	0.033	0.76	3	S	C	Roundabouts (Standard)
50	20/30/40	0.033	0.76	3	S	C	Roundabouts (Standard)
51	>40	0.033	0.76	3	D	C	Roundabouts (Standard)
52	20/30/40	0.033	0.76	3	D	C	Roundabouts (Standard)
53	>40	0.024	0.89	4	S	C	Roundabouts (Standard)
54	20/30/40	0.048	0.74	4	S	C	Roundabouts (Standard)
55	>40	0.063	0.69	4	D	C	Roundabouts (Standard)
56	20/30/40	0.022	0.85	4	D	C	Roundabouts (Standard)
57	>40	0.007	1.77	5 / 6	S	I	Roundabouts (Standard)
58	20/30/40	0.014	1.53	5 / 6	S	I	Roundabouts (Standard)
59	>40	0.019	1.42	5 / 6	D	I	Roundabouts (Standard)
60	20/30/40	0.006	1.73	5 / 6	D	I	Roundabouts (Standard)
61	>40	0.033	0.76	3	S	C	Roundabouts (Small)
62	20/30/40	0.033	0.76	3	S	C	Roundabouts (Small)
63	>40	0.033	0.76	3	D	C	Roundabouts (Small)
64	20/30/40	0.033	0.76	3	D	C	Roundabouts (Small)
65	>40	0.101	0.66	4	S	C	Roundabouts (Small)
66	20/30/40	0.263	0.54	4	S	C	Roundabouts (Small)

67	>40	0.101	0.66	4	D	C	Roundabouts (Small)
68	20/30/40	0.263	0.54	4	D	C	Roundabouts (Small)
69	>40	0.044	1.28	5 / 6	S	I	Roundabouts (Small)
70	20/30/40	0.095	1.14	5 / 6	S	I	Roundabouts (Small)
71	>40	0.044	1.28	5 / 6	D	I	Roundabouts (Small)
72	20/30/40	0.095	1.14	5 / 6	D	I	Roundabouts (Small)
73	>40	0.012	1.04	3	S	C	Roundabouts (Mini)
74	20/30/40	0.012	1.04	3	S	C	Roundabouts (Mini)
75	>40	0.012	1.04	3	D	C	Roundabouts (Mini)
76	20/30/40	0.012	1.04	3	D	C	Roundabouts (Mini)
77	>40	0.070	0.64	4	S	C	Roundabouts (Mini)
78	20/30/40	0.070	0.64	4	S	C	Roundabouts (Mini)
79	>40	0.070	0.64	4	D	C	Roundabouts (Mini)
80	20/30/40	0.070	0.64	4	D	C	Roundabouts (Mini)
81	>40	0.013	1.47	5 / 6	S	I	Roundabouts (Mini)
82	20/30/40	0.013	1.47	5 / 6	S	I	Roundabouts (Mini)
83	>40	0.013	1.47	5 / 6	D	I	Roundabouts (Mini)
84	20/30/40	0.013	1.47	5 / 6	D	I	Roundabouts (Mini)
85	>40	0.033	0.76	3	S	C	Roundabouts (Signalled)
86	20/30/40	0.033	0.76	3	S	C	Roundabouts (Signalled)
87	>40	0.033	0.76	3	D	C	Roundabouts (Signalled)
88	20/30/40	0.033	0.76	3	D	C	Roundabouts (Signalled)
89	>40	0.024	0.89	4	S	C	Roundabouts (Signalled)
90	20/30/40	0.048	0.74	4	S	C	Roundabouts (Signalled)
91	>40	0.063	0.69	4	D	C	Roundabouts (Signalled)
92	20/30/40	0.022	0.85	4	D	C	Roundabouts (Signalled)
93	>40	0.007	1.77	5 / 6	S	I	Roundabouts (Signalled)
94	20/30/40	0.014	1.53	5 / 6	S	I	Roundabouts (Signalled)
95	>40	0.019	1.42	5 / 6	D	I	Roundabouts (Signalled)
96	20/30/40	0.006	1.73	5 / 6	D	I	Roundabouts (Signalled)

Accident Beta Factors (Junction only)

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 7

Table Source Year:	2000

Junction only: Accident Beta Factors		
Classification	**Speed Limit (mph)**	**Beta Factor**
Major	20/30/40	0.991
Major	>40	0.984
Minor	20/30/40	0.976
Minor	>40	0.996

Junction only: Accident Beta Factor Changes over Time	
Year	**Change to Beta Factor**
1995	1.00
1996	1.00
1997	1.00
1998	1.00
1999	1.00
2000	1.00
2001	1.00
2002	1.00
2003	1.00
2004	1.00
2005	1.00
2006	1.00
2007	1.00
2008	1.00
2009	1.00
2010	1.00
2011	0.50
2012	0.50
2013	0.50
2014	0.50
2015	0.50
2016	0.50
2017	0.50
2018	0.50
2019	0.50
2020	0.50
2021	0.25
2022	0.25
2023	0.25
2024	0.25
2025	0.25
2026	0.25
2027	0.25
2028	0.25
2029	0.25
2030	0.25
Future Years	0.00

Accident proportions (Junction only)

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 8

Table Source Year:	2000

Junction only: Accident Proportions

Junction Type	Speed Limit (mph)	Accident Proportions			Arms	Highest Link (S/D)	Junction Description	Total of Junction Accident Proportions
		Fatal	Serious	Slight				
1	>40	0.0243	0.1883	0.7874	3	S	Priority	1.0000
2	20/30/40	0.0072	0.1240	0.8688	3	S	Priority	1.0000
3	>40	0.0243	0.1883	0.7874	3	D	Priority	1.0000
4	20/30/40	0.0072	0.1240	0.8688	3	D	Priority	1.0000
5	>40	0.0271	0.2064	0.7665	4	S	Priority	1.0000
6	20/30/40	0.0060	0.1162	0.8778	4	S	Priority	1.0000
7	>40	0.0271	0.2064	0.7665	4	D	Priority	1.0000
8	20/30/40	0.0060	0.1162	0.8778	4	D	Priority	1.0000
9	>40	0.0271	0.2064	0.7665	5	S	Priority	1.0000
10	20/30/40	0.0060	0.1162	0.8778	5	S	Priority	1.0000
11	>40	0.0271	0.2064	0.7665	5	D	Priority	1.0000
12	20/30/40	0.0060	0.1162	0.8778	5	D	Priority	1.0000
13	>40	0.0243	0.1883	0.7874	3	S	Priority w Ghost Island	1.0000
14	20/30/40	0.0072	0.1240	0.8688	3	S	Priority w Ghost Island	1.0000
15	>40	0.0243	0.1883	0.7874	3	D	Priority w Ghost Island	1.0000
16	20/30/40	0.0072	0.1240	0.8688	3	D	Priority w Ghost Island	1.0000
17	>40	0.0271	0.2064	0.7665	4	S	Priority w Ghost Island	1.0000
18	20/30/40	0.0060	0.1162	0.8778	4	S	Priority w Ghost Island	1.0000
19	>40	0.0271	0.2064	0.7665	4	D	Priority w Ghost Island	1.0000
20	20/30/40	0.0060	0.1162	0.8778	4	D	Priority w Ghost Island	1.0000
21	>40	0.0271	0.2064	0.7665	5	S	Priority w Ghost Island	1.0000
22	20/30/40	0.0060	0.1162	0.8778	5	S	Priority w Ghost Island	1.0000
23	>40	0.0271	0.2064	0.7665	5	D	Priority w Ghost Island	1.0000
24	20/30/40	0.0060	0.1162	0.8778	5	D	Priority w Ghost Island	1.0000
25	>40	0.0243	0.1883	0.7874	3	S	Priority w Single Lane Dualling	1.0000
26	20/30/40	0.0072	0.1240	0.8688	3	S	Priority w Single Lane Dualling	1.0000
27	>40	0.0243	0.1883	0.7874	3	D	Priority w Single Lane Dualling	1.0000
28	20/30/40	0.0072	0.1240	0.8688	3	D	Priority w Single Lane Dualling	1.0000
29	>40	0.0271	0.2064	0.7665	4	S	Priority w Single Lane Dualling	1.0000
30	20/30/40	0.0060	0.1162	0.8778	4	S	Priority w Single Lane Dualling	1.0000
31	>40	0.0271	0.2064	0.7665	4	D	Priority w Single Lane Dualling	1.0000
32	20/30/40	0.0060	0.1162	0.8778	4	D	Priority w Single Lane Dualling	1.0000
33	>40	0.0271	0.2064	0.7665	5	S	Priority w Single Lane Dualling	1.0000
34	20/30/40	0.0060	0.1162	0.8778	5	S	Priority w Single Lane Dualling	1.0000
35	>40	0.0271	0.2064	0.7665	5	D	Priority w Single Lane Dualling	1.0000
36	20/30/40	0.0060	0.1162	0.8778	5	D	Priority w Single Lane Dualling	1.0000
37	>40	0.0092	0.1171	0.8737	3	S	Signals	1.0000
38	20/30/40	0.0060	0.1066	0.8874	3	S	Signals	1.0000
39	>40	0.0092	0.1171	0.8737	3	D	Signals	1.0000
40	20/30/40	0.0060	0.1066	0.8874	3	D	Signals	1.0000
41	>40	0.0088	0.1153	0.8759	4	S	Signals	1.0000
42	20/30/40	0.0060	0.1069	0.8871	4	S	Signals	1.0000
43	>40	0.0088	0.1153	0.8759	4	D	Signals	1.0000
44	20/30/40	0.0060	0.1069	0.8871	4	D	Signals	1.0000
45	>40	0.0088	0.1153	0.8759	5 / 6	S	Signals	1.0000
46	20/30/40	0.0060	0.1069	0.8871	5 / 6	S	Signals	1.0000
47	>40	0.0088	0.1153	0.8759	5 / 6	D	Signals	1.0000
48	20/30/40	0.0060	0.1069	0.8871	5 / 6	D	Signals	1.0000
49	>40	0.0056	0.0912	0.9032	3	S	Roundabouts (Standard)	1.0000
50	20/30/40	0.0027	0.0746	0.9227	3	S	Roundabouts (Standard)	1.0000
51	>40	0.0056	0.0912	0.9032	3	D	Roundabouts (Standard)	1.0000
52	20/30/40	0.0027	0.0746	0.9227	3	D	Roundabouts (Standard)	1.0000
53	>40	0.0056	0.0912	0.9032	4	S	Roundabouts (Standard)	1.0000
54	20/30/40	0.0027	0.0746	0.9227	4	S	Roundabouts (Standard)	1.0000
55	>40	0.0056	0.0912	0.9032	4	D	Roundabouts (Standard)	1.0000
56	20/30/40	0.0027	0.0746	0.9227	4	D	Roundabouts (Standard)	1.0000
57	>40	0.0056	0.0912	0.9032	5 / 6	S	Roundabouts (Standard)	1.0000
58	20/30/40	0.0027	0.0746	0.9227	5 / 6	S	Roundabouts (Standard)	1.0000
59	>40	0.0056	0.0912	0.9032	5 / 6	D	Roundabouts (Standard)	1.0000
60	20/30/40	0.0027	0.0746	0.9227	5 / 6	D	Roundabouts (Standard)	1.0000
61	>40	0.0056	0.0912	0.9032	3	S	Roundabouts (Small)	1.0000
62	20/30/40	0.0027	0.0746	0.9227	3	S	Roundabouts (Small)	1.0000
63	>40	0.0056	0.0912	0.9032	3	D	Roundabouts (Small)	1.0000
64	20/30/40	0.0027	0.0746	0.9227	3	D	Roundabouts (Small)	1.0000
65	>40	0.0056	0.0912	0.9032	4	S	Roundabouts (Small)	1.0000
66	20/30/40	0.0027	0.0746	0.9227	4	S	Roundabouts (Small)	1.0000
67	>40	0.0056	0.0912	0.9032	4	D	Roundabouts (Small)	1.0000

68	20/30/40	0.0027	0.0746	0.9227	4	D	Roundabouts (Small)	1.0000
69	>40	0.0056	0.0912	0.9032	5 / 6	S	Roundabouts (Small)	1.0000
70	20/30/40	0.0027	0.0746	0.9227	5 / 6	S	Roundabouts (Small)	1.0000
71	>40	0.0056	0.0912	0.9032	5 / 6	D	Roundabouts (Small)	1.0000
72	20/30/40	0.0027	0.0746	0.9227	5 / 6	D	Roundabouts (Small)	1.0000
73	>40	0.0056	0.0912	0.9032	3	S	Roundabouts (Mini)	1.0000
74	20/30/40	0.0028	0.0868	0.9104	3	S	Roundabouts (Mini)	1.0000
75	>40	0.0056	0.0912	0.9032	3	D	Roundabouts (Mini)	1.0000
76	20/30/40	0.0028	0.0868	0.9104	3	D	Roundabouts (Mini)	1.0000
77	>40	0.0056	0.0912	0.9032	4	S	Roundabouts (Mini)	1.0000
78	20/30/40	0.0028	0.0868	0.9104	4	S	Roundabouts (Mini)	1.0000
79	>40	0.0056	0.0912	0.9032	4	D	Roundabouts (Mini)	1.0000
80	20/30/40	0.0028	0.0868	0.9104	4	D	Roundabouts (Mini)	1.0000
81	>40	0.0056	0.0912	0.9032	5 / 6	S	Roundabouts (Mini)	1.0000
82	20/30/40	0.0028	0.0868	0.9104	5 / 6	S	Roundabouts (Mini)	1.0000
83	>40	0.0056	0.0912	0.9032	5 / 6	D	Roundabouts (Mini)	1.0000
84	20/30/40	0.0028	0.0868	0.9104	5 / 6	D	Roundabouts (Mini)	1.0000
85	>40	0.0039	0.0624	0.9337	3	S	Roundabouts (Signalled)	1.0000
86	20/30/40	0.0031	0.0643	0.9326	3	S	Roundabouts (Signalled)	1.0000
87	>40	0.0039	0.0624	0.9337	3	D	Roundabouts (Signalled)	1.0000
88	20/30/40	0.0031	0.0643	0.9326	3	D	Roundabouts (Signalled)	1.0000
89	>40	0.0039	0.0624	0.9337	4	S	Roundabouts (Signalled)	1.0000
90	20/30/40	0.0031	0.0643	0.9326	4	S	Roundabouts (Signalled)	1.0000
91	>40	0.0039	0.0624	0.9337	4	D	Roundabouts (Signalled)	1.0000
92	20/30/40	0.0031	0.0643	0.9326	4	D	Roundabouts (Signalled)	1.0000
93	>40	0.0039	0.0624	0.9337	5 / 6	S	Roundabouts (Signalled)	1.0000
94	20/30/40	0.0031	0.0643	0.9326	5 / 6	S	Roundabouts (Signalled)	1.0000
95	>40	0.0039	0.0624	0.9337	5 / 6	D	Roundabouts (Signalled)	1.0000
96	20/30/40	0.0031	0.0643	0.9326	5 / 6	D	Roundabouts (Signalled)	1.0000

Casualty Rates and Beta Factors (Junction only)

Default Source: TAG data book v1.24 November 2024, Worksheet COBALT 9

Table Source Year: 2000

Junction only: Casualty Rates

Junction Type	Speed Limit (mph)	Casualties per P.I.A.			Arms	Highest Link (S/D)	Junction Description
		Fatal	Serious	Slight			
1	>40	0.0265	0.2413	1.355	3	S	Priority
2	20/30/40	0.0075	0.1350	1.144	3	S	Priority
3	>40	0.0265	0.2413	1.355	3	D	Priority
4	20/30/40	0.0075	0.1350	1.144	3	D	Priority
5	>40	0.0295	0.2793	1.459	4	S	Priority
6	20/30/40	0.0062	0.1292	1.244	4	S	Priority
7	>40	0.0295	0.2793	1.459	4	D	Priority
8	20/30/40	0.0062	0.1292	1.244	4	D	Priority
9	>40	0.0295	0.2793	1.459	5	S	Priority
10	20/30/40	0.0062	0.1292	1.244	5	S	Priority
11	>40	0.0295	0.2793	1.459	5	D	Priority
12	20/30/40	0.0062	0.1292	1.244	5	D	Priority
13	>40	0.0265	0.2413	1.355	3	S	Priority w Ghost Island
14	20/30/40	0.0075	0.1350	1.144	3	S	Priority w Ghost Island
15	>40	0.0265	0.2413	1.355	3	D	Priority w Ghost Island
16	20/30/40	0.0075	0.1350	1.144	3	D	Priority w Ghost Island
17	>40	0.0295	0.2793	1.459	4	S	Priority w Ghost Island
18	20/30/40	0.0062	0.1292	1.244	4	S	Priority w Ghost Island
19	>40	0.0295	0.2793	1.459	4	D	Priority w Ghost Island
20	20/30/40	0.0062	0.1292	1.244	4	D	Priority w Ghost Island
21	>40	0.0295	0.2793	1.459	5	S	Priority w Ghost Island
22	20/30/40	0.0062	0.1292	1.244	5	S	Priority w Ghost Island
23	>40	0.0295	0.2793	1.459	5	D	Priority w Ghost Island
24	20/30/40	0.0062	0.1292	1.244	5	D	Priority w Ghost Island
25	>40	0.0265	0.2413	1.355	3	S	Priority w Single Lane Dualling
26	20/30/40	0.0075	0.1350	1.144	3	S	Priority w Single Lane Dualling
27	>40	0.0265	0.2413	1.355	3	D	Priority w Single Lane Dualling
28	20/30/40	0.0075	0.1350	1.144	3	D	Priority w Single Lane Dualling
29	>40	0.0295	0.2793	1.459	4	S	Priority w Single Lane Dualling
30	20/30/40	0.0062	0.1292	1.244	4	S	Priority w Single Lane Dualling
31	>40	0.0295	0.2793	1.459	4	D	Priority w Single Lane Dualling
32	20/30/40	0.0062	0.1292	1.244	4	D	Priority w Single Lane Dualling
33	>40	0.0295	0.2793	1.459	5	S	Priority w Single Lane Dualling
34	20/30/40	0.0062	0.1292	1.244	5	S	Priority w Single Lane Dualling
35	>40	0.0295	0.2793	1.459	5	D	Priority w Single Lane Dualling
36	20/30/40	0.0062	0.1292	1.244	5	D	Priority w Single Lane Dualling
37	>40	0.0092	0.1631	1.444	3	S	Signals
38	20/30/40	0.0064	0.1157	1.214	3	S	Signals
39	>40	0.0092	0.1631	1.444	3	D	Signals
40	20/30/40	0.0064	0.1157	1.214	3	D	Signals
41	>40	0.0095	0.1423	1.467	4	S	Signals
42	20/30/40	0.0061	0.1177	1.253	4	S	Signals
43	>40	0.0095	0.1423	1.467	4	D	Signals
44	20/30/40	0.0061	0.1177	1.253	4	D	Signals
45	>40	0.0095	0.1423	1.467	5/6	S	Signals
46	20/30/40	0.0061	0.1177	1.253	5/6	S	Signals
47	>40	0.0095	0.1423	1.467	5/6	D	Signals
48	20/30/40	0.0061	0.1177	1.253	5/6	D	Signals
49	>40	0.0060	0.1019	1.214	3	S	Roundabouts (Standard)
50	20/30/40	0.0027	0.0806	1.163	3	S	Roundabouts (Standard)
51	>40	0.0060	0.1019	1.214	3	D	Roundabouts (Standard)
52	20/30/40	0.0027	0.0806	1.163	3	D	Roundabouts (Standard)
53	>40	0.0060	0.1019	1.214	4	S	Roundabouts (Standard)
54	20/30/40	0.0027	0.0806	1.163	4	S	Roundabouts (Standard)
55	>40	0.0060	0.1019	1.214	4	D	Roundabouts (Standard)
56	20/30/40	0.0027	0.0806	1.163	4	D	Roundabouts (Standard)
57	>40	0.0060	0.1019	1.214	5/6	S	Roundabouts (Standard)
58	20/30/40	0.0027	0.0806	1.163	5/6	S	Roundabouts (Standard)
59	>40	0.0060	0.1019	1.214	5/6	D	Roundabouts (Standard)
60	20/30/40	0.0027	0.0806	1.163	5/6	D	Roundabouts (Standard)
61	>40	0.0060	0.1019	1.214	3	S	Roundabouts (Small)
62	20/30/40	0.0027	0.0806	1.163	3	S	Roundabouts (Small)
63	>40	0.0060	0.1019	1.214	3	D	Roundabouts (Small)
64	20/30/40	0.0027	0.0806	1.163	3	D	Roundabouts (Small)
65	>40	0.0060	0.1019	1.214	4	S	Roundabouts (Small)
66	20/30/40	0.0027	0.0806	1.163	4	S	Roundabouts (Small)
67	>40	0.0060	0.1019	1.214	4	D	Roundabouts (Small)
68	20/30/40	0.0027	0.0806	1.163	4	D	Roundabouts (Small)
69	>40	0.0060	0.1019	1.214	5/6	S	Roundabouts (Small)
70	20/30/40	0.0027	0.0806	1.163	5/6	S	Roundabouts (Small)
71	>40	0.0060	0.1019	1.214	5/6	D	Roundabouts (Small)
72	20/30/40	0.0027	0.0806	1.163	5/6	D	Roundabouts (Small)
73	>40	0.0060	0.1019	1.214	3	S	Roundabouts (Mini)
74	20/30/40	0.0028	0.0965	1.182	3	S	Roundabouts (Mini)
75	>40	0.0060	0.1019	1.214	3	D	Roundabouts (Mini)
76	20/30/40	0.0028	0.0965	1.182	3	D	Roundabouts (Mini)
77	>40	0.0060	0.1019	1.214	4	S	Roundabouts (Mini)
78	20/30/40	0.0028	0.0965	1.182	4	S	Roundabouts (Mini)
79	>40	0.0060	0.1019	1.214	4	D	Roundabouts (Mini)
80	20/30/40	0.0028	0.0965	1.182	4	D	Roundabouts (Mini)
81	>40	0.0060	0.1019	1.214	5/6	S	Roundabouts (Mini)
82	20/30/40	0.0028	0.0965	1.182	5/6	S	Roundabouts (Mini)
83	>40	0.0060	0.1019	1.214	5/6	D	Roundabouts (Mini)
84	20/30/40	0.0028	0.0965	1.182	5/6	D	Roundabouts (Mini)
85	>40	0.0039	0.0703	1.258	3	S	Roundabouts (Signalled)
86	20/30/40	0.0031	0.0705	1.221	3	S	Roundabouts (Signalled)
87	>40	0.0039	0.0703	1.258	3	D	Roundabouts (Signalled)
88	20/30/40	0.0031	0.0705	1.221	3	D	Roundabouts (Signalled)
89	>40	0.0039	0.0703	1.258	4	S	Roundabouts (Signalled)
90	20/30/40	0.0031	0.0705	1.221	4	S	Roundabouts (Signalled)
91	>40	0.0039	0.0703	1.258	4	D	Roundabouts (Signalled)
92	20/30/40	0.0031	0.0705	1.221	4	D	Roundabouts (Signalled)
93	>40	0.0039	0.0703	1.258	5/6	S	Roundabouts (Signalled)
94	20/30/40	0.0031	0.0705	1.221	5/6	S	Roundabouts (Signalled)
95	>40	0.0039	0.0703	1.258	5/6	D	Roundabouts (Signalled)
96	20/30/40	0.0031	0.0705	1.221	5/6	D	Roundabouts (Signalled)

Table Source Year: 2000

Junction only: Casualty Beta Factors

Classification	Speed Limit (mph)	Beta Factor		
		Fatal	Serious	Slight
Major	20/30/40	0.949	0.962	1.010
Major	>40	0.961	0.959	1.011
Minor	20/30/40	0.968	0.958	1.006
Minor	>40	0.976	0.972	1.011

Junction only: Casualty Beta Factor Changes over Time

Range of Years	Change to Beta Factor
1995	1.00
1996	1.00
1997	1.00
1998	1.00
1999	1.00
2000	1.00
2001	1.00
2002	1.00
2003	1.00
2004	1.00
2005	1.00
2006	1.00
2007	1.00
2008	1.00
2009	1.00
2010	1.00
Later Years	0.00

Editable Parameter Lists

Road Type ID	Road Type	Road Category	In Use
1	D2 Motorways	Motorways	Yes
2	D3 Motorways	Motorways	Yes
3	D4 Motorways	Motorways	Yes
4	Modern S2 Roads	S2 A Roads	Yes
5	Modern S2 Roads with HS	S2 A Roads	Yes
6	Modern WS2 Roads	S2 A Roads	Yes
7	Modern WS2 Roads with HS	S2 A Roads	Yes
8	Older S2 A Roads	S2 A Roads	Yes
9	Other S2 Roads	Other S2 Roads	Yes
10	Modern D2 Roads	Dual Carriageways	Yes
11	Modern D2 Roads with HS	Dual Carriageways	Yes
12	Older D2 Roads	Dual Carriageways	Yes
13	Modern D3+ Roads	Dual Carriageways	Yes
14	Modern D3+ Roads with HS	Dual Carriageways	Yes
15	Older D3+ Roads	Dual Carriageways	Yes
16	Road Type 16	Not Defined	No
17	Road Type 17	Not Defined	No
18	Road Type 18	Not Defined	No
19	Road Type 19	Not Defined	No
20	Road Type 20	Not Defined	No

Road Category	In Use
Motorways	Yes
S2 A Roads	Yes
Other S2 Roads	Yes
Dual Carriageways	Yes
Road Category 5	No
Road Category 6	No

Note: Road Types and Road Categories must match those contained in the COBALT Parameters file that is used. Road Types 1-15 and the first 4 Road Categories are standard and cannot be changed.

COBALT Scheme Entry Template v2.1

Compatible with COBALT v2.2 and v2.3

Scheme Identifier	EMG2
Scheme Notes	
Current Year	2025
Scheme Traffic Model Base Year	2022
Traffic Model Year 1	2028
Traffic Model Year 2	2038
Traffic Model Year 3	
Traffic Model Year 4	
Traffic Model Year 5	
Scheme Opening Year (start of appraisal period)	2028
Extrapolation Parameter	1

The traffic flow extrapolation parameter is a value between 0 and 1 that is used to determine the extent to which a fully flat-line (extrapolation factor = 0) or full continuation of trend (extrapolation factor = 1) extrapolation is used.
See Section 5.5 of COBALT User Manual for further details.

COBALT Traffic Scheme Links

Scheme Identifier EMG2

Links (Valid)

Links (Invalid)

Validation	Basic Link Information					Forecast Traffic Flows: Volumes (AADT)										Observed PIA Data (Optional)								Comment (Optional)
							Without Scheme Flows					With Scheme Flows													
	Link Identifier	Link Type	Speed Limit	Junction Ends	Link Length (km)	Base 2022	Flow 1 2028	Flow 2 2038	Flow 3	Flow 4	Flow5	Flow 1 2028	Flow 2 2038	Flow 3	Flow 4	Flow 5	Obser-vation Year	Rate (PIA/ mvkm)	Year 1 Volume	Year 2 Volume	Year 3 Volume	Year 4 Volume	Year 5 Volume	Year 6 Volume	
	A453 L1	Older S2 A Roads	50	2	1.2	12353	14733	17363				14880	14491												
	A453 L2	Older S2 A Roads	50	2	0.8	15948	17741	19947				16085	13890												
	A453 L3	Older S2 A Roads	50	2	0.5	24401	26269	37176				22982	19454												
	A453 L4	Older D2 Roads	70	2	1	34879	39609	35028				37703	35468												
	A453 L5	Older D2 Roads	50	1	1.2	39764	43358	36415				41928	35466												
	A50 L6	Older D2 Roads	70	0	1.7	42702	45657	44868				44488	32087												
	A50 L7	Older D3+ Roads	70	1	1.5	91071	101174	102707				100194	77731												
	M1 J24A L1	Older S2 A Roads	70	0	0.5	8218	8619.7	8324				8571	6779												
	M1 J24A L2	Older D2 Roads	40	0	1.7	5528.9	8785.8	8697.5				9350.8	9723.8												
	M1 J24A L3	Modern D2 Roads with HS	50	0	1	34617	38706	40666				38229	29128												
	M1 J24A L4	Modern WS2 Roads with HS	70	0	0.6	7363.8	7437.3	8517.3				7063.5	5742.3												
	M1 J24A L5	Modern WS2 Roads with HS	50	0	0.4	18432	17759	20342				16947	11180												
	M1 J24A L6	Modern D2 Roads with HS	70	0	0.8	16186	20948	20413				21282	17948												
	M1 J24A L7	Older D2 Roads	70	0	1.7	42702	45657	44868				44488	32087												
	M1 J23A L1	Older D2 Roads	70	0	0.6	26697	30133	22618				27681	25744												
	M1 J23A L2	Older D2 Roads	70	0	0.7	24102	30326	30187				30605	25370												
	M1 J23A L3	Older D2 Roads	70	0	0.6	10800	12394	14995				11250	10769												
	M1 J23A L4	Older D2 Roads	70	0	0.8	24964	31150	31327				30320	22964												
	M1 J23A L5	Older D2 Roads	70	0	0.6	26293	32865	33058				32579	27423												
	M1 J23A L6	Older D2 Roads	70	0	0.8	8608.4	9851.4	12127				9278.6	8719.6												
	M1 J23A L7	Older S2 A Roads	70	0	0.7	3017.2	3915.4	4591.1				3840.4	5256.4												
	M1 J23A L8	Older D2 Roads	70	0	0.8	23679	26218	18027				23840	20488												

COBALT Traffic Scheme Junctions

Scheme Identifier EMG2

Junctions (Valid)

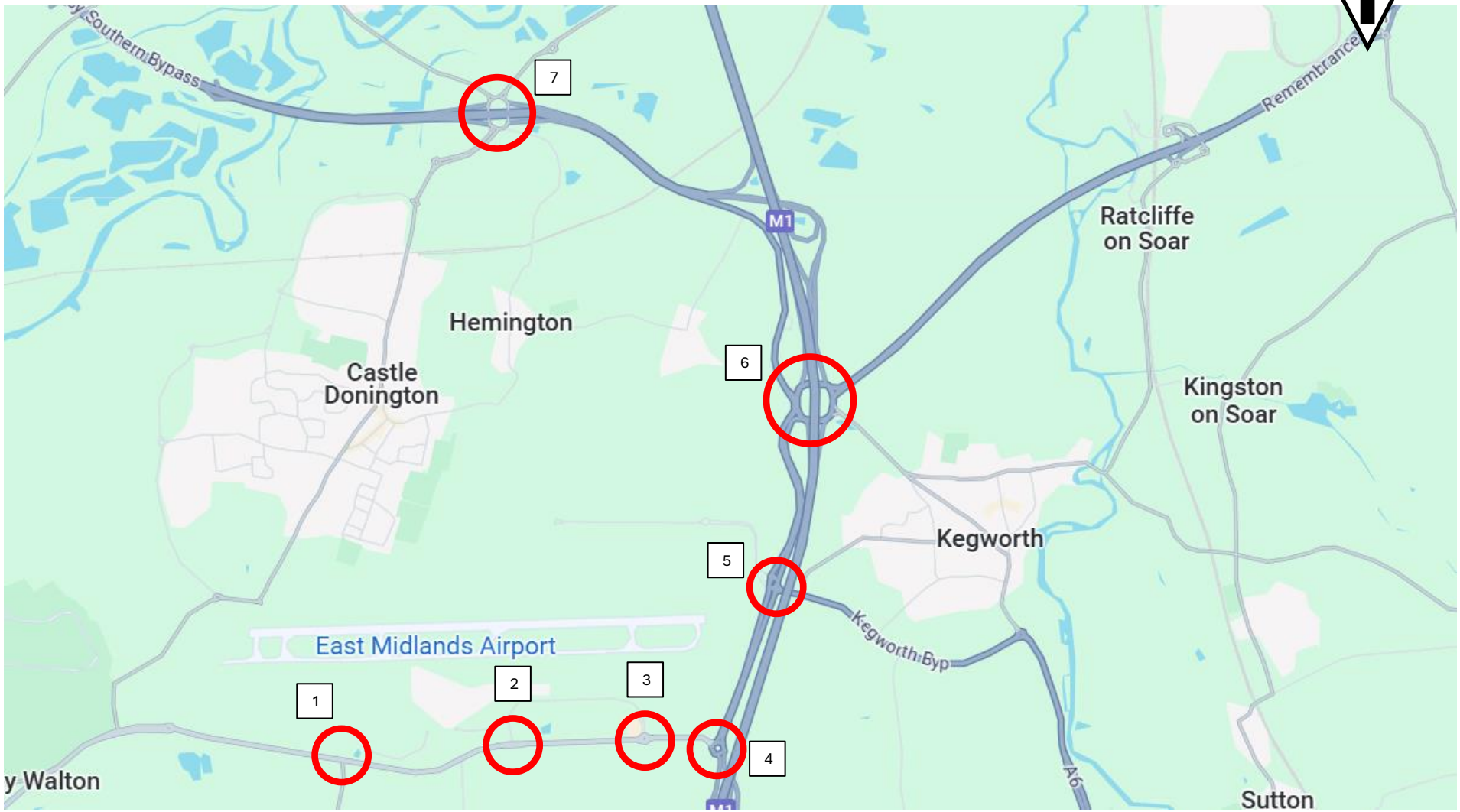
Junctions (Invalid)

Validation	Basic Junction Information						Base 2022						Flow 1 2028					
	Junction Identifier	Junction Description	Speed Limit	Highest Carriage way	Highest Standard	Junction Arms	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6
	A453/The Green	Priority	50	Single	Major	3	5743	3785	7174				6320	7048	7694			
	Airport Signals	Signals	50	Single	Major	3	4057	7724	6879				5620	7748	9006			
	Site Access Roun	Roundabout – Standard	50	Dual	Major	3	3896	12281	0	8224			3820	12457	0	9993		
	Site Access Roun	Roundabout – Standard	50	Dual	Major	4	3896	12281	0	8224			0	0	0	0		
	Finger Farm Rou	Roundabout – Standard	70	Dual	Major	4	12120	9574	26697	0			13812	10264	30133	0		
	EMG1 Access	Roundabout – Signalled	50	Dual	Major	4	7364	6900	9376	11284			7437	7736	9019	12798		
	M1 Junction 24	Roundabout – Signalled	50	Dual	Major	6	25797	26078	9188	19758	30388	18432	25203	27074	12841	22653	34339	17759
	A50 Junction 1	Roundabout – Standard	60	Dual	Major	6	2512.86	11498.1	11272	808.05	11809.5	10165.1	3508.22	15581.4	14875.1	848.92	13824	14592.5

Forecast Traffic Flows: Volumes (AADT)																									
Without Scheme Flows																									
Flow 2 2038						Flow 3						Flow 4						Flow5							
Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)
7762	7566	8565																						6230	7933
6266	8728	10470																						5989	7084
3145	17649	8015	11219																					0	0
0	0	0	0																					3390	10559
19527	12772	22618	0																					12423	9713
8517	8220	10031	14351																					7063	8161
27092	27092	12852	11256	26385	20342																			26867	26867
3508.37	15692.8	14697	915.7	14518.2	14410.2																			3459.87	15463.3

With Scheme Flows																									
Flow 1 2028				Flow 2 2038						Flow 3						Flow 4						Flow 5			
Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)	Arm 5	Arm 6	Arm 1 (Major)	Arm 2 (Minor)	Arm 3 (Major)	Arm 4 (Minor)
7084				6660	6746	8397																			
9289				6793	6120	8694																			
0	0			0	0	0	0																		
0	9001			2625	8996	0	7770																		
27681	0			10539	9625	25744	0																		
8543	12597			5742	6241	6557	12163																		
12841	23272	33385	16947	23395	23395	10589	15057	28908	11180																
14688.8	911.59	14273.8	14783.5	3148.53	14562.6	11486.5	1354.11	14912	11705.6																

		Observed PIA Data (Optional)								Comment (Optional)
Arm 5	Arm 6	Obser-vation Year	Rate 'a' parameter	Year 1 Volume	Year 2 Volume	Year 3 Volume	Year 4 Volume	Year 5 Volume	Year 6 Volume	



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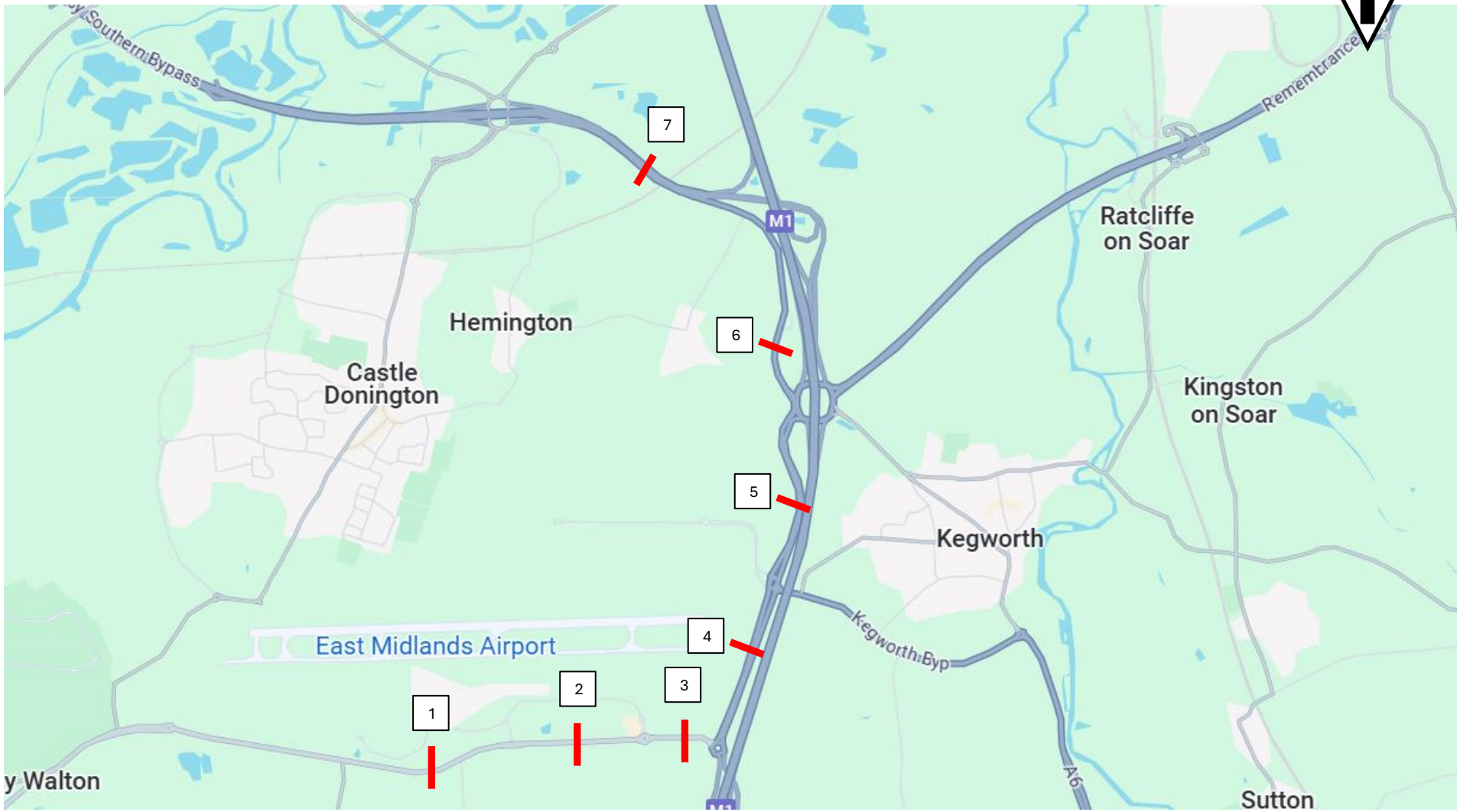
Junction Locations



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Link Locations



BWB
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Junction 24A Locations



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Junction 23A Locations

Link		2028 Baseline Typical Annual Accidents	2028 Typical Annual Accidents with Proposed Development	Proposed Development Impact (2028)	2038 Baseline Typical Annual Accidents	2038 Typical Annual Accidents with Proposed Development	Proposed Development Impact (2038)
1	A453 (Link 1)	0.5	0.5	Negligible	0.5	0.4	Minor Beneficial
2	A453 (Link 2)	0.4	0.3	Minor Beneficial	0.4	0.3	Minor Beneficial
3	A453 (Link 3)	0.3	0.3	Negligible	0.4	0.2	Minor Beneficial
4	A453 (Link 4)	0.6	0.6	Negligible	0.5	0.5	Negligible
5	A453 (Link 5)	0.8	0.8	Negligible	0.6	0.6	Negligible
6	A50 (Link 6)	1.2	1.2	Negligible	1.1	0.8	Minor Beneficial
7	A50 (Link 7)	2.9	2.9	Negligible	2.6	2.0	Beneficial
8	J24A (Link 1)	0.1	0.1	Negligible	0.1	0.1	Negligible
9	J24A (Link 2)	0.5	0.5	Negligible	0.5	0.5	Negligible
10	J24A (Link 3)	0.5	0.5	Negligible	0.4	0.3	Minor Beneficial
11	J24A (Link 4)	0.1	0.1	Negligible	0.1	0.0	Minor Beneficial
12	J24A (Link 5)	0.1	0.1	Negligible	0.1	0.1	Negligible
13	J24A (Link 6)	0.2	0.2	Negligible	0.2	0.2	Negligible
14	J24A (Link 7)	1.2	1.2	Negligible	1.1	0.8	Minor Beneficial
15	J23A (Link 1)	0.3	0.3	Negligible	0.2	0.2	Negligible
16	J23A (Link 2)	0.3	0.3	Negligible	0.3	0.2	Minor Beneficial
17	J23A (Link 3)	0.1	0.1	Negligible	0.1	0.1	Negligible
18	J23A (Link 4)	0.4	0.4	Negligible	0.3	0.3	Negligible
19	J23A (Link 5)	0.3	0.3	Negligible	0.3	0.2	Minor Beneficial
20	J23A (Link 6)	0.1	0.1	Negligible	0.1	0.1	Negligible
21	J23A (Link 7)	0.1	0.1	Negligible	0.1	0.1	Negligible
22	J23A (Link 8)	0.3	0.3	Negligible	0.2	0.2	Negligible
Junction		**2028 Baseline Typical Annual Accidents**	**2028 Typical Annual Accidents with Proposed Development**	**Proposed Development Impact (2028)**	**2038 Baseline Typical Annual Accidents**	**2038 Typical Annual Accidents with Proposed Development**	**Proposed Development Impact (2038)**
1	A453/The Green Priority T junction	1.2	1.2	Negligible	1.3	1.2	Minor Beneficial
2	A453/Airport Signals T Junction	1.1	1.1	Negligible	1.2	1.0	Minor Beneficial
3	A453/Site Access Roundabout (Existing)	0.5	0.0	N/A	1.3	0.0	N/A
3	A453/Site Access Roundabout (Proposed)	0.0	0.8	Minor Adverse	0.0	0.6	Beneficial
4	Finger Farm Roundabout	3.1	2.8	Minor Beneficial	3.5	2.6	Beneficial
5	EMG1 Access Roundabout	2.5	2.5	Negligible	2.9	1.9	Beneficial
6	M1 Junction 24 Roundabout	15.3	15.4	Minor Adverse	13.0	11.2	Beneficial
7	A50 Junction 1 Roundabot	5.0	5.0	Negligible	5.0	4.3	Beneficial

APPENDIX 74: EMFM Construction Traffic Forecasting Report Assessment (document reference EMFM 2019 East Midlands Gateway Phase 2: Forecasting Report 1a Construction Traffic)



EMFM 2019

East Midlands Gateway Phase 2: Forecasting Report 1a Construction Traffic

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Quality Information

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Section 1 – Overview

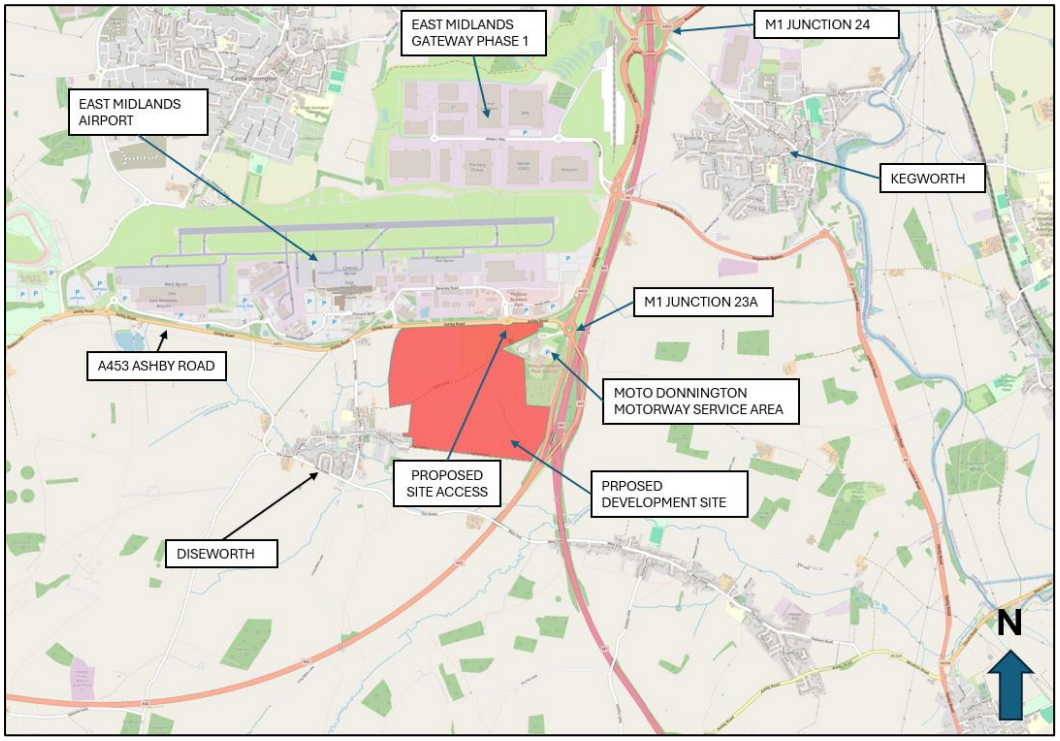
1.1 Introduction

1.1.1 The East Midlands Gateway Phase 2 (EMGP2) development is a proposed employment development of mixed B2 (general industrial) and B8 (storage or distribution) use, with capacity for 400,000sqm floorspace (300,000sqm ground floorspace and 100,000sqm of B8 mezzanine floorspace) of industrial use, comprising 340,000sqm B8 and 60,000sqm B2. In addition to this, 30,000sqm of B8 floorspace is proposed on EMG Phase 1 (Plot 16).

1.1.2 The development site is located to the south of East Midlands Airport and west of the A42 and is expected to build out by 2031.

1.1.3 Figure 1.1 shows an indication of the location of the proposed EMGP2 development, denoted by the area shaded in red. The proposed development has a total area of circa 250 acres located to the south of the A453 and East Midlands Airport itself, to the east of Diseworth village. M1 Junction 23a lies to the east of the site with the Moto Donnington Motorway Service Area (MSA) directly abutting to the north-east.

Figure 1.1: Location of Proposed Development[1]



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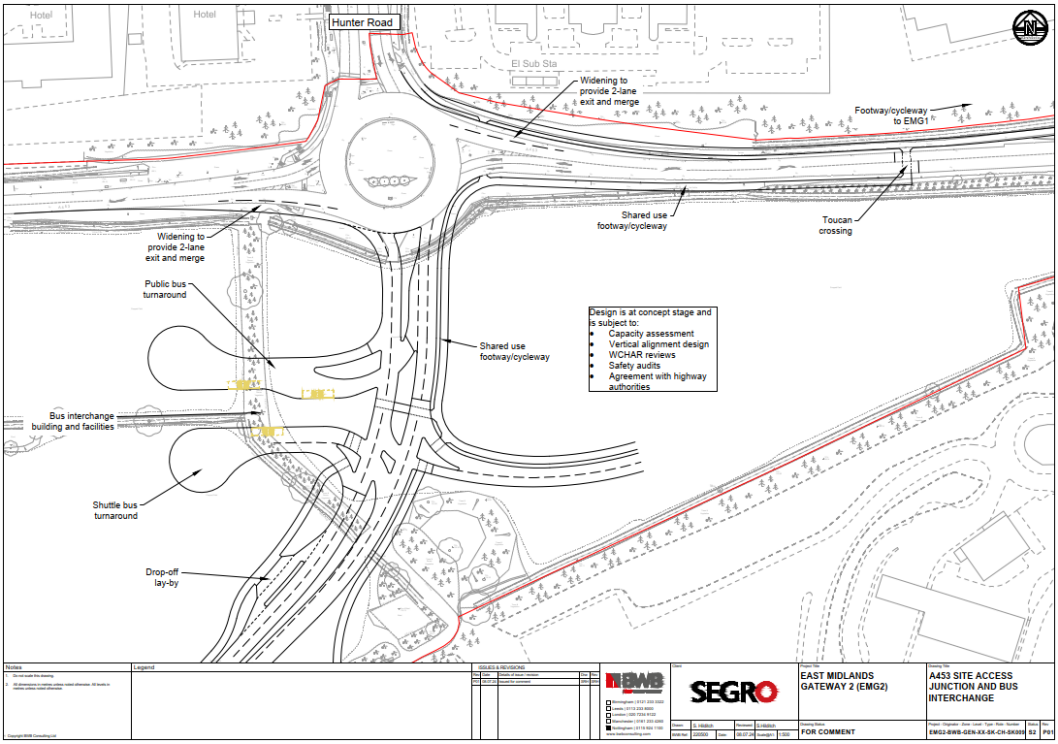
1.1.4 The proposed EMGP2 development will access the highway network via a fourth arm off the existing A453 / Hunter Road roundabout, as shown in Figure 1.2.

1.1.5 The proposed EMG Phase 1 (Plot 16) development will access the highway network via the existing access via Wilder's Way.

[1] Location of Proposed Development adapted from Technical Note 1 – Transport Scoping Note, East Midlands Gateway Phase 2 (EMG-BWB-GEN-XX-RP-TR-0001_TN1 Transport Scoping Note-S1-P3.pdf). Provided as part of the information pack with the PRTM Development Form for East Midlands Gateway Phase 2.

Figure 1.2: Site Access Junction[2]



1.1.6 AECOM has been commissioned to undertake strategic modelling to assess the potential traffic impacts of the proposed development using the East Midlands Freeport Model (EMFM) for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours.

1.1.7 The strategic modelling assessment for the proposed EMGP2 development has been undertaken in four stages, as follows:

Stage 1a modelling (Proforma 14)

2022/2023/2024 'Without Development'.

2028/2038 'Without Development (1a)'. Without EMGP2 development (with all Freeport and Local Plan sites).

2028 'With Construction Traffic (1a)'. With construction traffic, without EMGP2 development (with all Freeport and Local Plan sites).

2028/2038 'With Development (1a)'. With EMGP2 development (with all Freeport and Local Plan sites).

Stage 1b modelling (Proforma 14a)

2028/2038 'Without Development (1b)'. Without EMGP2 development (without Local Plan sites).

2028 'With Construction Traffic (1b)'. With construction traffic, without EMGP2 development (without Local Plan sites).

2028/2038 'With Development (1b)'. With EMGP2 development (without Local Plan sites).

Stage 2a modelling with mitigation (Proforma 14)

2028/2038 'With Development (2a)'. With EMGP2 and with mitigation measures (with all Freeport and Local Plan sites).

[2] EMG2-BWB-GEN-XX-SK-CH-SK009 S2 P01

Stage 2b modelling with mitigation (Proforma 14a)

2028/2038 'With Development (2b)'. With EMGP2 and with mitigation measures (without Local Plan sites).

1.1.8 This report follows the East Midlands Gateway Phase 2 Base Year Model Review Addendum report[3], which details the calibrated 2019 base year model review and performance in the vicinity of the proposed development site. It forms an addendum to the Stage 1a forecast results documented in the Forecasting Report[4]. This addendum documents the forecast model results for 'With Construction Traffic (1a)' of the EMFM strategic modelling assessment.

1.2 Report Structure

1.2.1 Following the introduction, this report contains the following sections:

- Section 2 – Forecast Approach and Assumptions: this section details the forecast assumptions applied within this assessment, including the assumed construction traffic and trip distribution.
- Section 3 – Forecast Model Results: this section details the forecast results with the construction traffic included and assigned using EMFM.
- Section 4– Summary of the Assessment: this section provides a summary of the assessment with the construction traffic included.

[3] EMFM 2019 – East Midlands Gateway Phase 2: Base Year Model Review Addendum v1.0 (2024-08-19)
[4] EMFM 2019 – East Midlands Gateway Phase 2: Forecasting Report v1.0 (2025-02-04)

Section 2 – Forecast Approach and Assumptions

2.1 Introduction

2.1.1 This section sets out the forecast assumptions applied for this application of the EMFM, and the methodology adopted to create the required model forecasts.

2.1.2 The following forecast model scenario has been produced for this version of the addendum:

Stage 1a modelling (Proforma 14)

2028 'With Construction Traffic (1a)'. With construction traffic, without the EMGP2 or EMGP1 proposed developments (with all Freeport and Local Plan sites).

2.1.3 To produce the 'With Construction Traffic (1a)' forecasts, the highway demand for the construction traffic has been added to the EMFM 2028 'Without Development (1a)' highway demand matrices and assigned in the EMFM. To estimate the trip distribution, the in-built PRTM gravity model has been used.

2.1.4 With no network assumptions associated with the construction, the 'With Construction Traffic (1a)' scenario network is identical to the 'Without Development (1a)' scenario.

2.1.5 Sections 2.3 to 2.4 provide the trip generation and trip distribution assumptions for the construction traffic.

2.2 'Without Development' Assumptions

2.2.1 The forecast planning and infrastructure schemes, in the format of an uncertainty log, were reviewed by the client and stakeholders. The planning data assumptions and forecast assumptions are stated in the Forecasting Report[5].

2.3 Construction Traffic Trip Generation Assumptions

2.3.1 The construction traffic trip generation methodology and assumptions have been provided by BWB in the form of a technical note[6]. This includes a breakdown of construction traffic by vehicle type (namely HGVs, LGVs, cars, and vans) and by construction site (EMGP2, EMGP1 and 'external highway works' (predominantly related to works on the M1 Junction 24)).

2.3.2 The construction trip generation calculations assume all construction activities begin in 'Year 1' (assumed to be 2026) with 'Year 1' forecast to generate the highest volume of construction traffic. It has been agreed that 'Year 1' construction traffic should be assessed using the existing 2028 EMFM model; 'Without Development (1a). This approach provides a conservative basis for assessing the impact of construction traffic.

2.3.3 The construction traffic trip generation by vehicle type and construction site is provided in Table 2.1 for both the AM and PM Peak hours.

[5] EMFM 2019 – East Midlands Gateway Phase 2: Forecasting Report v1.0 (2025-02-04)
[6] EMG2-BWB-GEN-XX-RP-TR-0013_Construction Traffic Calculations-S2-P3.pdf (Email dated 2025-05-14)

Table 2.1: Construction Traffic Trip Generation

	Car and Van (in vehicles)			Light Vehicle (in vehicles)			HGV (in vehicles)			Total (in vehicles)		
	Departing (Out)	Arriving (In)	Total	Departing (Out)	Arriving (In)	Total	Departing (Out)	Arriving (In)	Total	Departing (Out)	Arriving (In)	Total
EMGP1												
AM Peak hour (08:00 to 09:00)	3	13	**16**	1	1	**2**	4	4	**8**	8	18	**26**
PM Peak hour (17:00 to 18:00)	19	3	**22**	0	0	**0**	1	1	**2**	20	4	**24**
EMGP2												
AM Peak hour (08:00 to 09:00)	7	34	**40**	2	2	**4**	7	7	**14**	16	43	**58**
PM Peak hour (17:00 to 18:00)	51	9	**60**	0	0	**0**	1	1	**2**	52	10	**62**
External Highway Works												
AM Peak hour (08:00 to 09:00)	3	10	**13**	1	1	**2**	5	5	**10**	9	16	**25**
PM Peak hour (17:00 to 18:00)	15	3	**18**	0	0	**0**	1	1	**2**	16	4	**20**
Total Construction Traffic												
AM Peak hour (08:00 to 09:00)	12	57	**68**	3	3	**6**	17	17	**34**	32	77	**108**
PM Peak hour (17:00 to 18:00)	85	14	**99**	1	1	**2**	3	3	**6**	89	18	**107**

2.3.4 The construction traffic arriving and departing the EMGP1 and EMGP2 sites has been assigned to the respective development zones in the EMFM model. For the 'external highway works', the majority of the traffic is associated with construction activities at M1 Junction 24. As there is no EMFM zone in the immediate vicinity of M1 Junction 24, the EMGP1 zone was identified as the most appropriate zone for loading the 'external highway works' construction traffic.

2.4 Proposed Construction Traffic Distribution Assumptions

2.4.1 As no designated routeing for construction traffic was available, it was agreed that the trip distribution would be based on the PRTM 'gravity model' approach. To reflect the longer distance nature of HGV construction traffic (e.g. earthworks, landscaping, etc.) the trip distribution for HGV traffic was adjusted such that shorter distance trips of fewer than 8 kilometres have been excluded from the trip distribution.

2.4.2 Figure 2.1 to Figure 2.4 show the forecast construction traffic trip distribution for HGVs, cars, vans and light vehicles for the 2028 'With Construction Traffic (1a)' scenario in passenger car units (PCUs). For information, the PCU factor for HGV is 2.0 and the PCU factor for the other assignment vehicle types (i.e. cars, vans and LGVs) is 1.0. These figures reflect the estimated trip generation values presented in Table 2.1

2.4.3 As noted in Paragraph 2.3.4, the 'external highway works' construction traffic has been loaded into the same zone as the EMGP1 construction traffic.

2.4.4 The forecast HGV construction traffic has a broadly similar distribution to and from the construction site in both the AM Peak and PM Peak hours, albeit there is more HGV construction traffic forecast in the AM Peak hour compared with the PM Peak hour. As expected, HGVs are forecast to use the

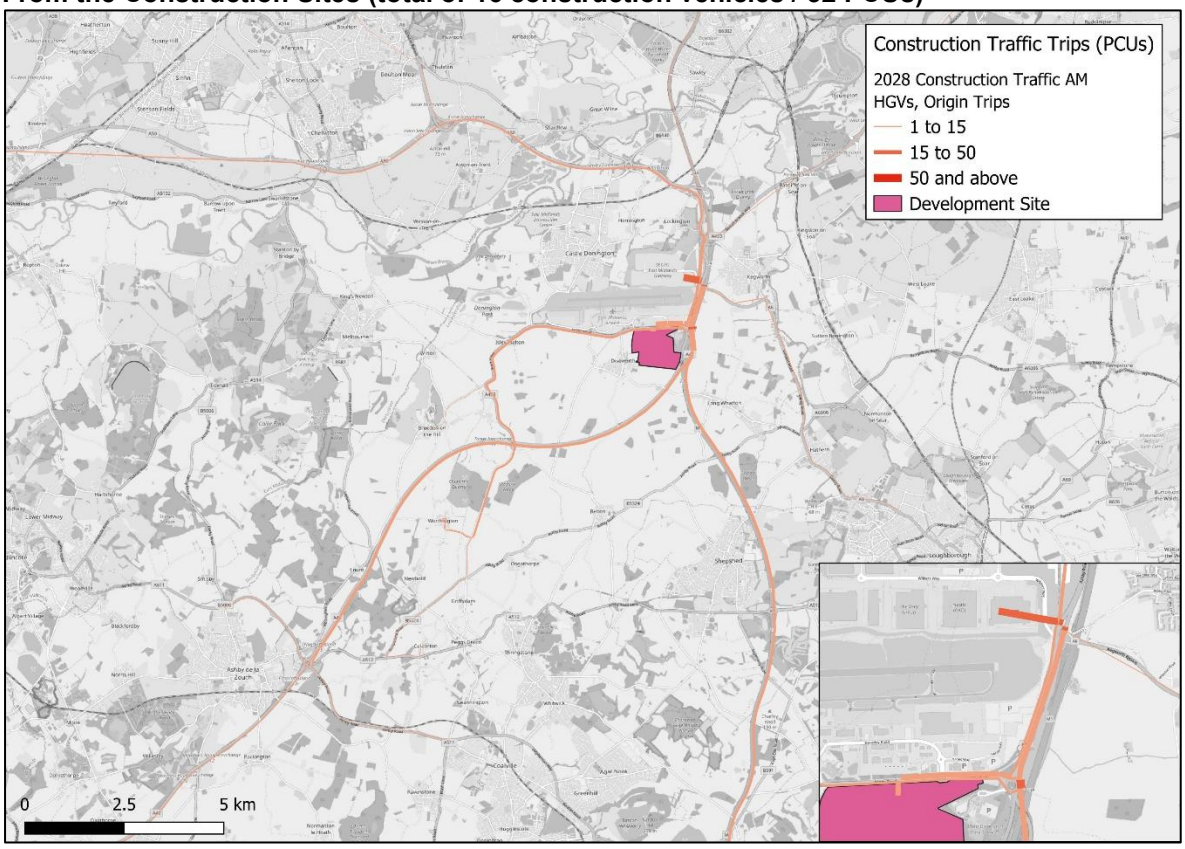
Strategic Road Network (SRN) such as the M1, A50, A42 and the A453 Remembrance Way towards Nottingham.

2.4.5 It should be noted that the local networks through Diseworth, Castle Donington and Kegworth have weight restrictions applied in the model. These restrictions are represented in the EMFM, and therefore HGV construction trips cannot route via these roads.

2.4.6 For car, van and light vehicle construction traffic, the majority of traffic arriving at the construction sites in the AM Peak hour is forecast to use the M1 northbound. This pattern is broadly reversed in the PM Peak hour whereby the majority of car, van and light vehicle construction traffic leaving the construction sites route via the M1 southbound. Other roads used by car, van and light vehicles construction traffic include the A42, A40 and the A6 Kegworth Bypass but these are forecast to carry fewer than 20 construction vehicles.

Figure 2.1: 2028 HGV Trip Distribution (AM)

From the Construction Sites (total of 16 construction vehicles / 32 PCUs)



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To the Construction Sites (total of 16 construction vehicles / 32 PCUs)

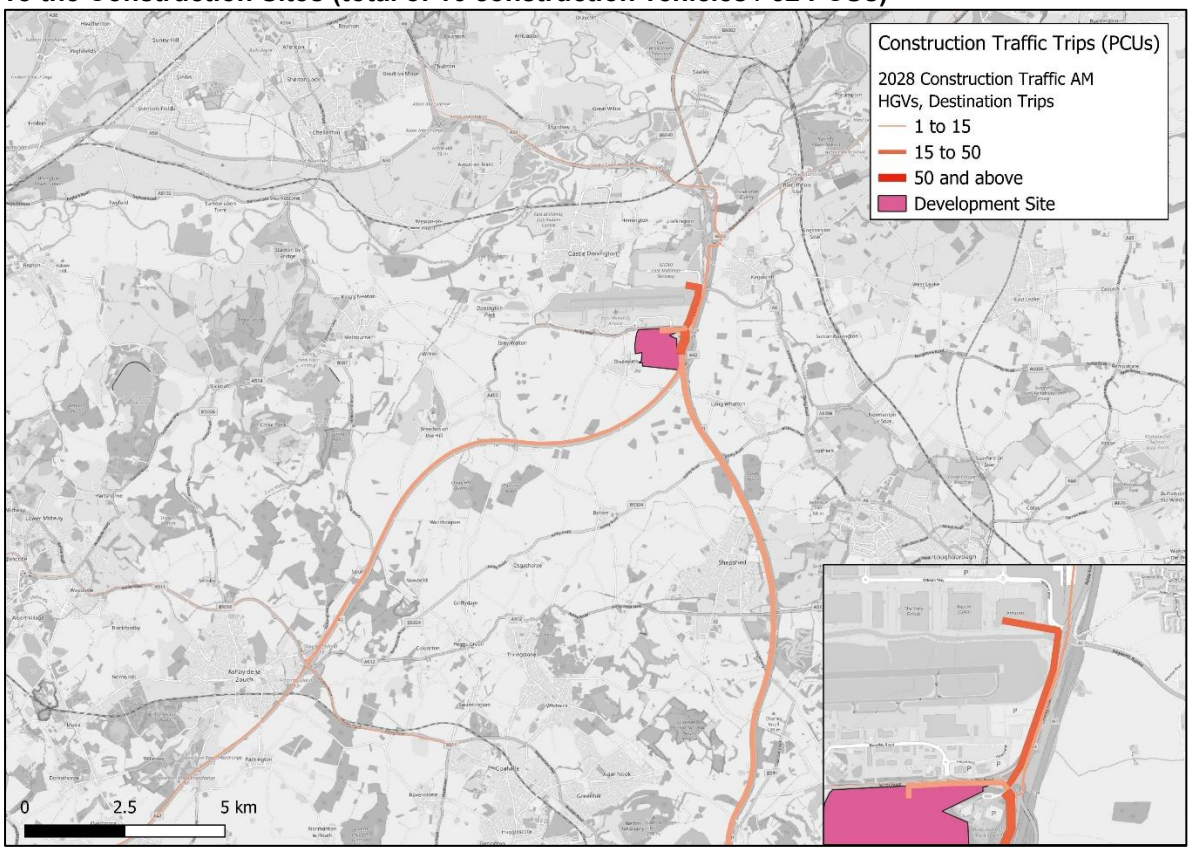

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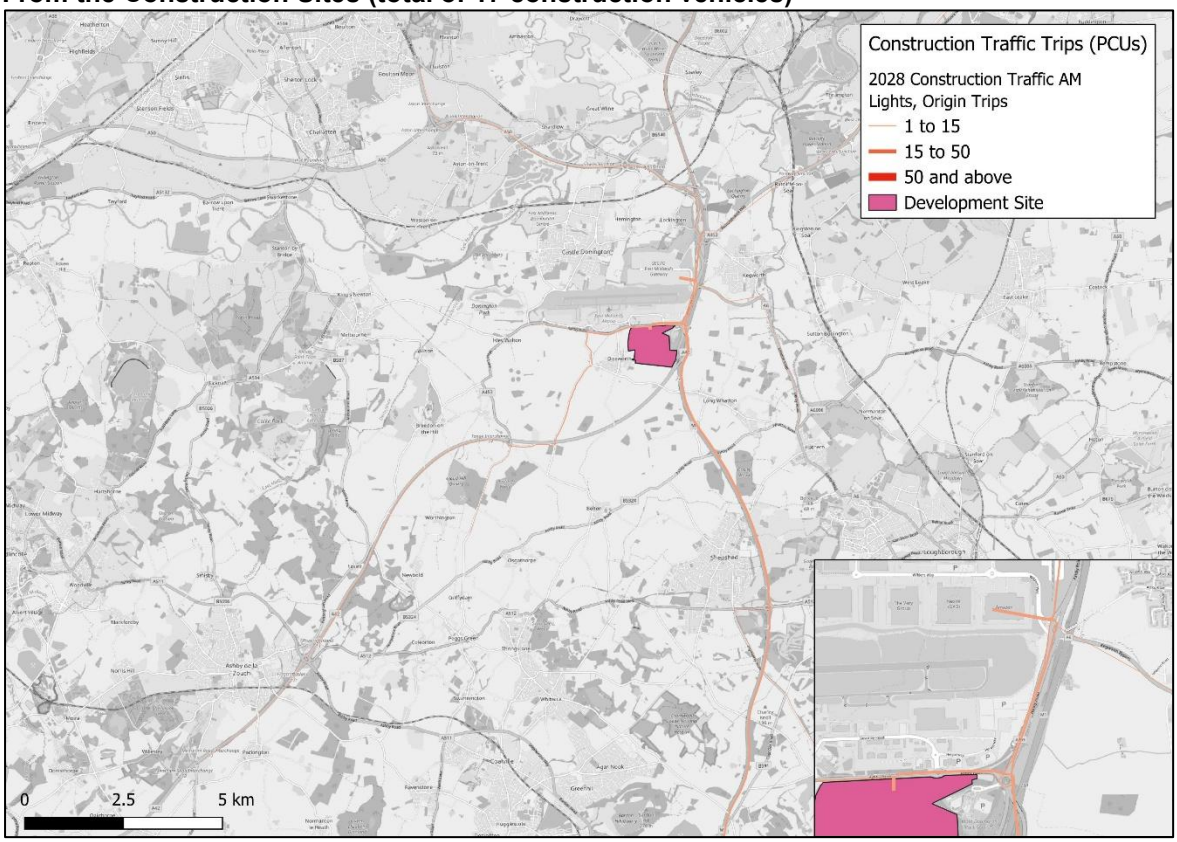
Figure 2.2: 2028 Car, Van and Light Vehicle Trip Distribution (AM)

From the Construction Sites (total of 17 construction vehicles)



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To the Construction Sites (total of 61 construction vehicles)

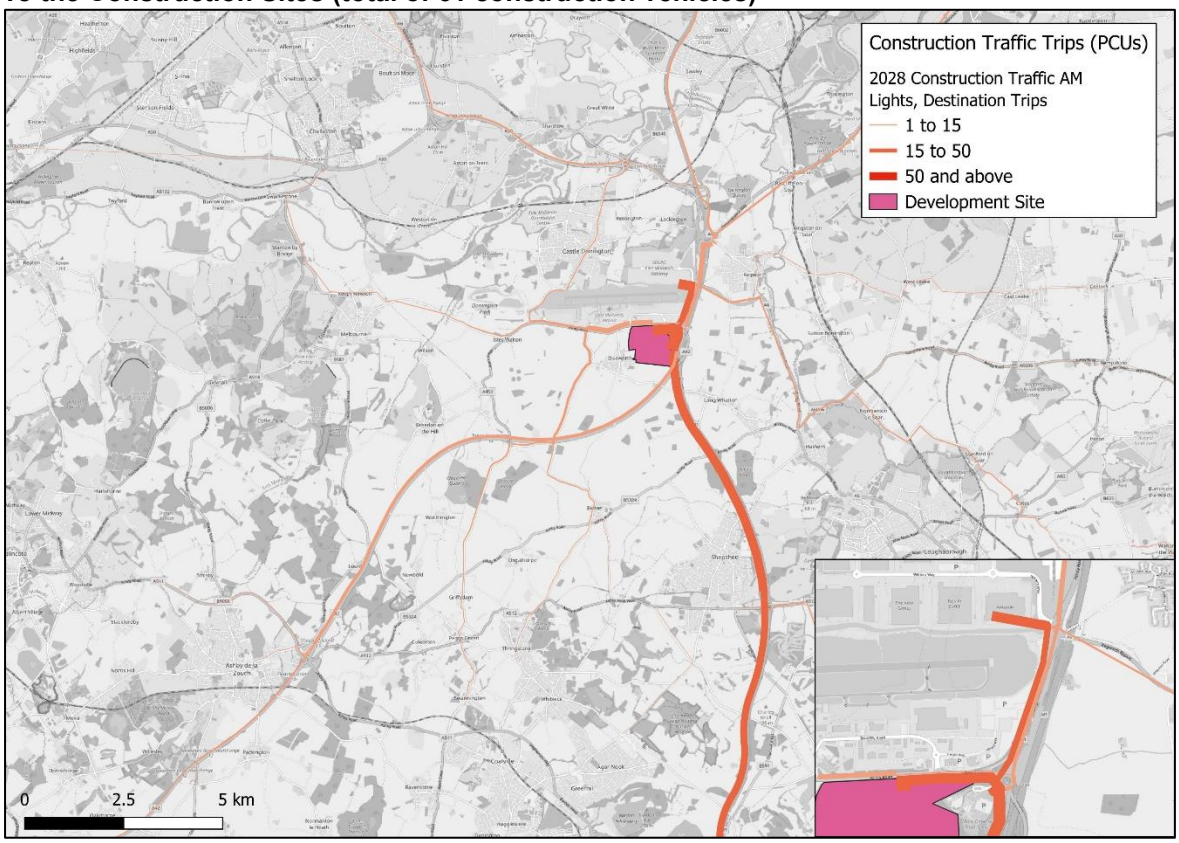

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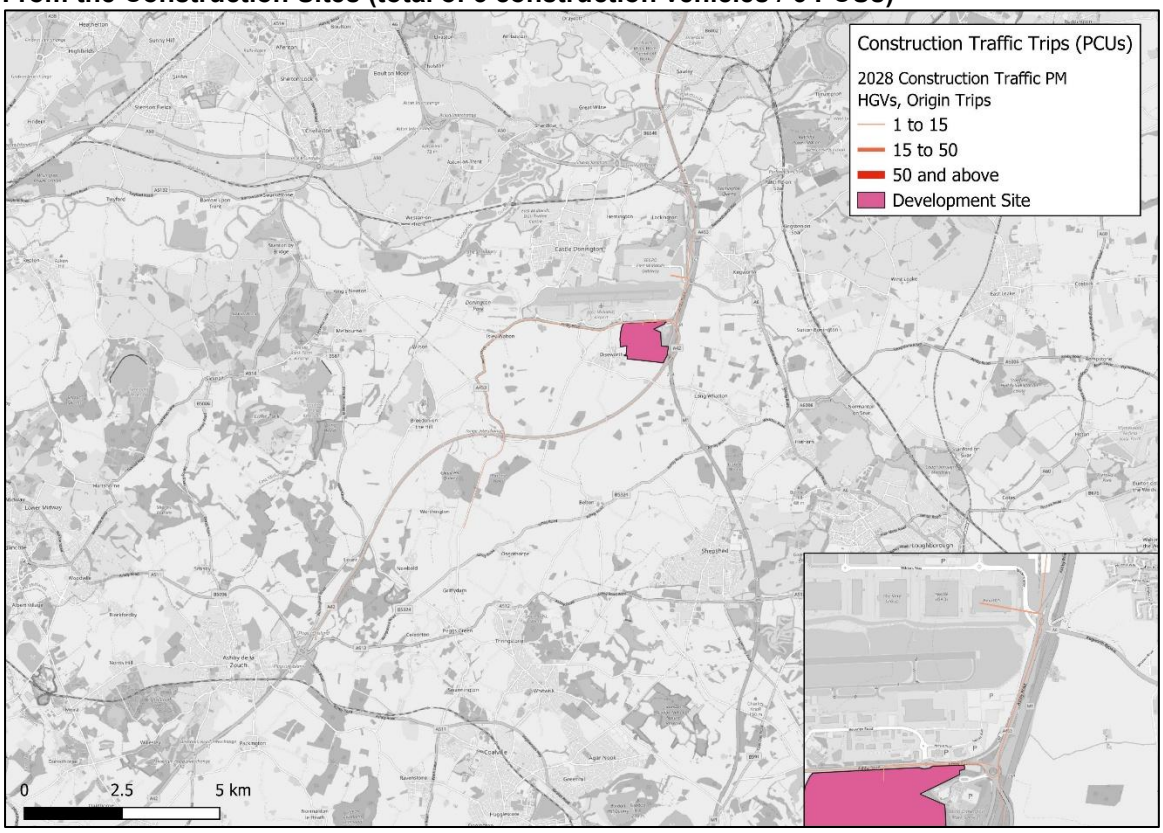
Figure 2.3: 2028 HGV Trip Distribution (PM)

From the Construction Sites (total of 3 construction vehicles / 6 PCUs)



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To the Construction Sites (total of 3 construction vehicles / 6 PCUs)

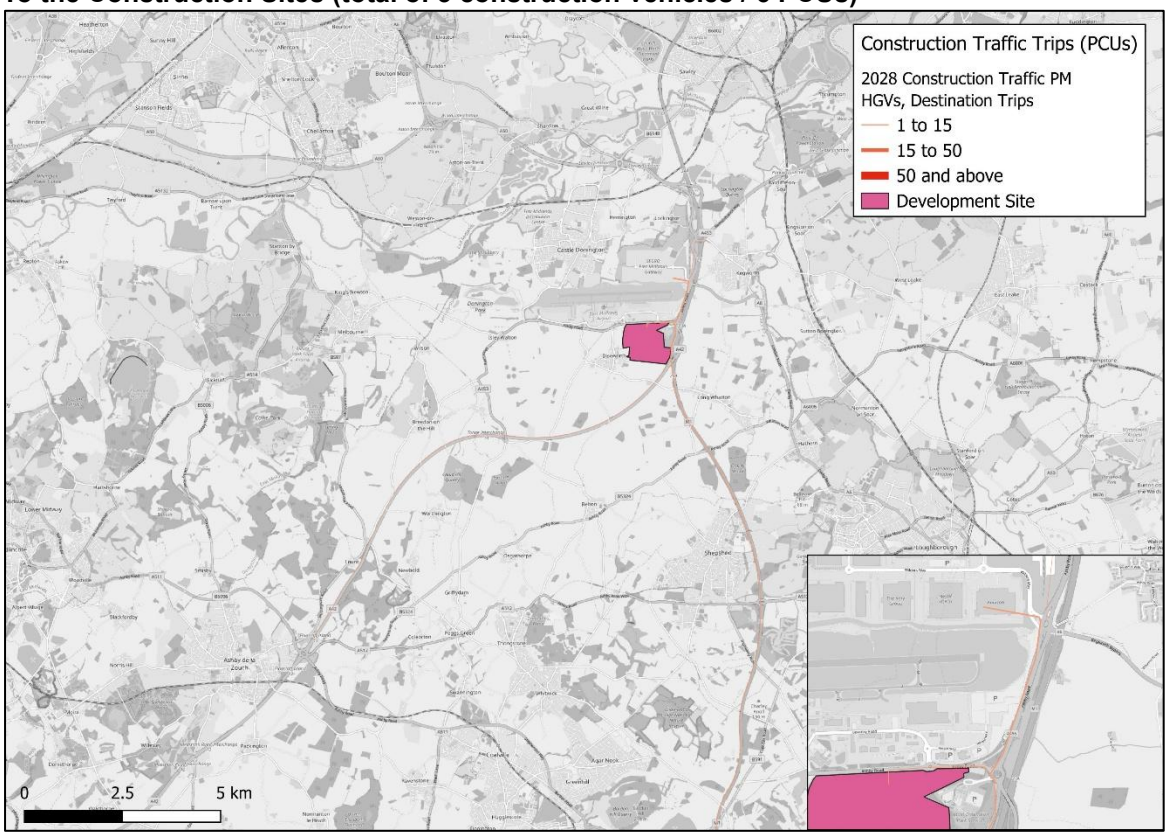

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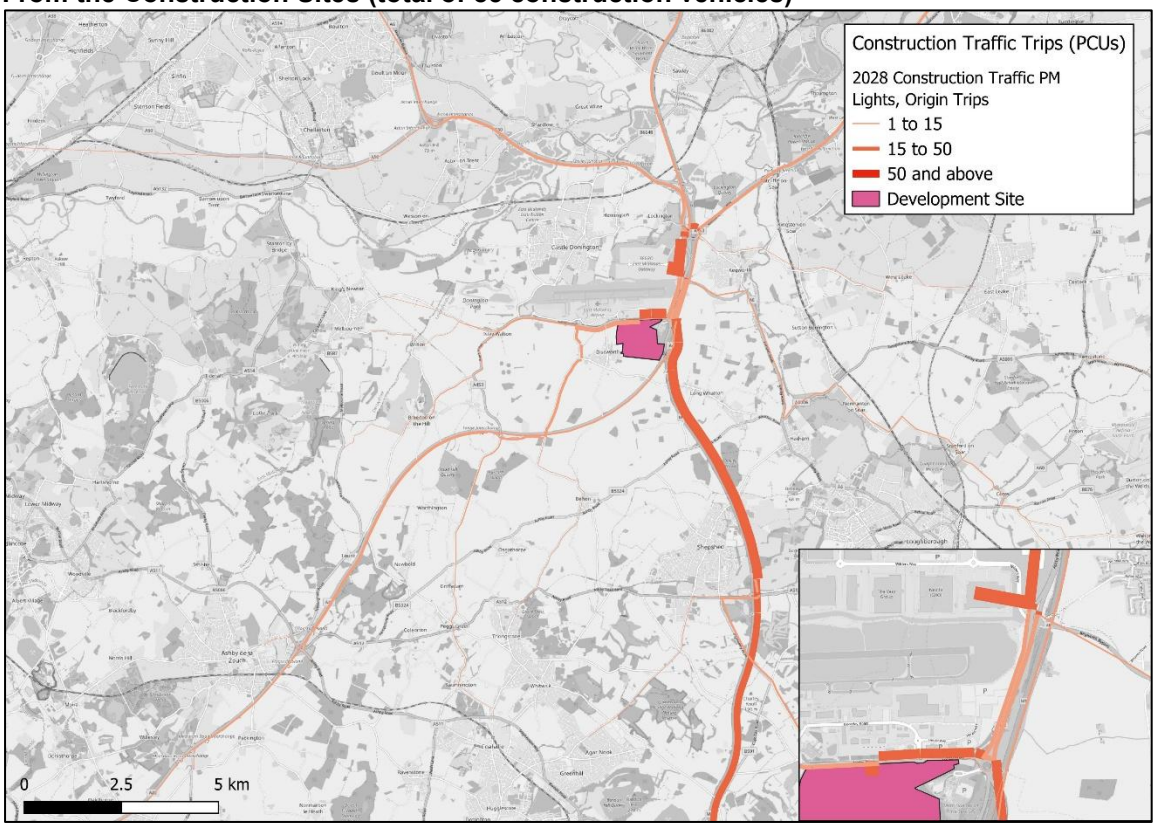
Figure 2.4: 2028 Car, Van and Light Vehicle Trip Distribution (PM)

From the Construction Sites (total of 85 construction vehicles)



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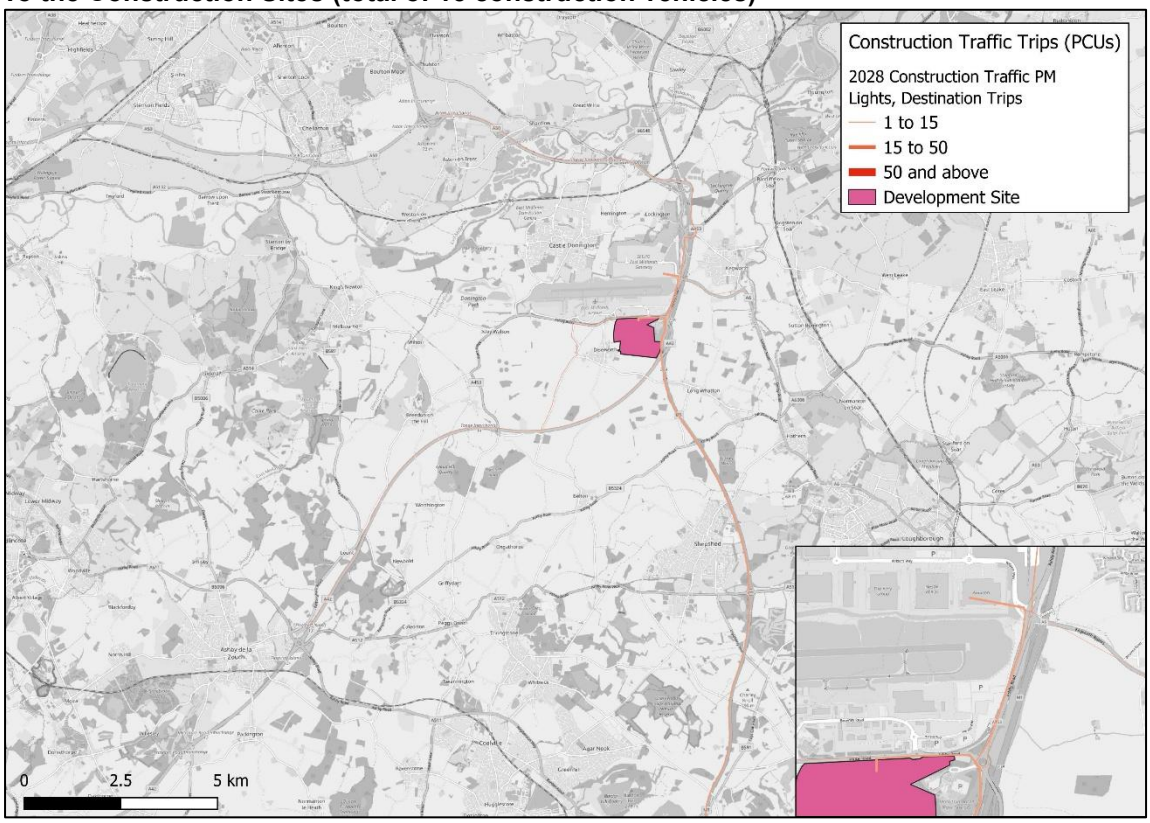
To the Construction Sites (total of 15 construction vehicles)



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Section 3 – Forecast Model Results

3.1 Introduction

3.1.1 This section details the forecast model results for the proposed EMGP2 development assessment for the AM Peak (08:00 to 09:00) and PM Peak (17:00 to 18:00) hours. The analysis includes:

- routeing of the forecast construction traffic in the 2028 'With Construction Traffic (1a)' scenarios (Section 0 and Section 3.2);
- forecast flow changes in 2028 between the 'With Construction Traffic (1a)' and 'Without Development (1a)' scenarios (Section 3.3); and
- forecast maximum node volume-capacity ratios in the 2028 'With Construction Traffic (1a)' scenarios (Section 3.4).

3.2 Forecast Construction Traffic

3.2.1 It was agreed that the construction traffic trip distributions were to be based on the PRTM 'gravity model' approach.

3.2.2 Figure 2.1 to Figure 2.4 in Section 2 show the forecast trip distribution for HGVs, cars, vans and light vehicles travelling to and from the construction site in 2028, in PCUs, for both AM Peak and PM Peak hours.

3.2.3 As discussed in Section 2.4, the figures show that HGV construction traffic, although relatively small, primarily route via the SRN including the M1, A42, A50 and the A453 Remembrance Way. For car, van and light vehicle construction traffic, most traffic access the construction sites via the M1 south of the Wilders Way / A453 / A6 Kegworth Bypass junction.

3.3 Forecast Flow Change

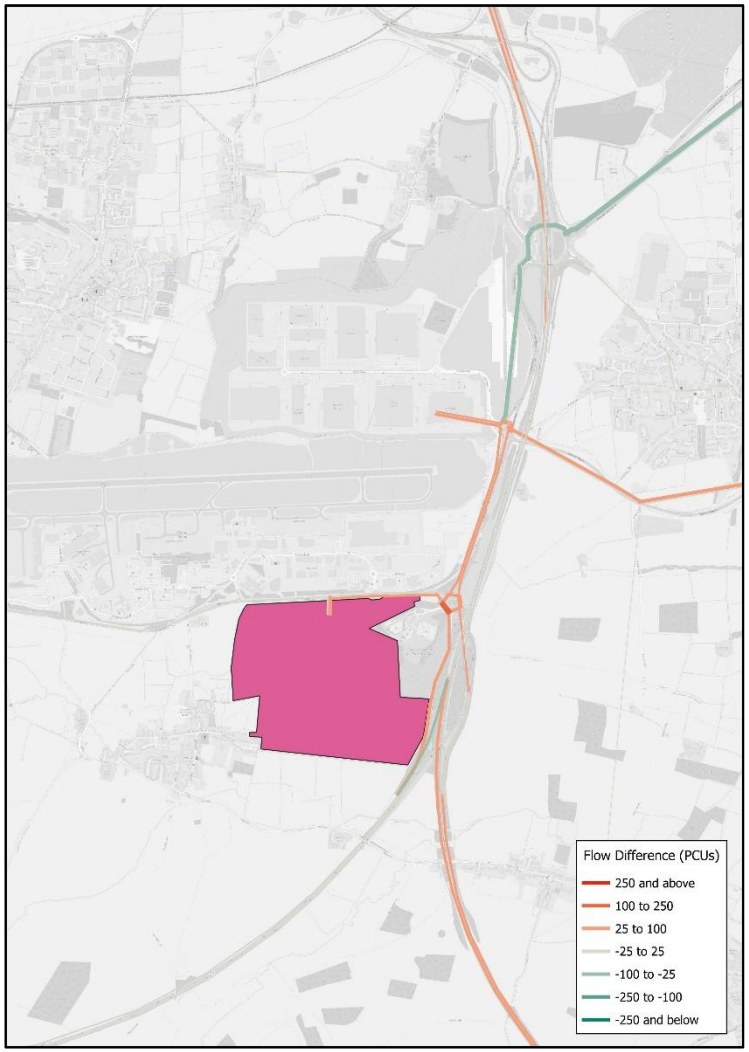
3.3.1 Figure 3.1 shows the forecast flow changes in 2028 between the 'With Construction Traffic (1a)' and 'Without Development (1a)' scenarios for the AM Peak and PM Peak hours. Red /orange bandwidth represents an increase in traffic flow in the 'With Construction Traffic (1a)' scenario and green bandwidth represents a decrease.

3.3.2 Considering these forecast flow changes in light of the forecast development traffic for the construction traffic (as shown in Section 2.4), there are forecast flow increases on the M1 in both peak hours and on A6 Kegworth Bypass in the AM Peak hour. The increase in traffic on the SRN broadly corresponds with the forecast routeing of traffic to / from the proposed construction sites.

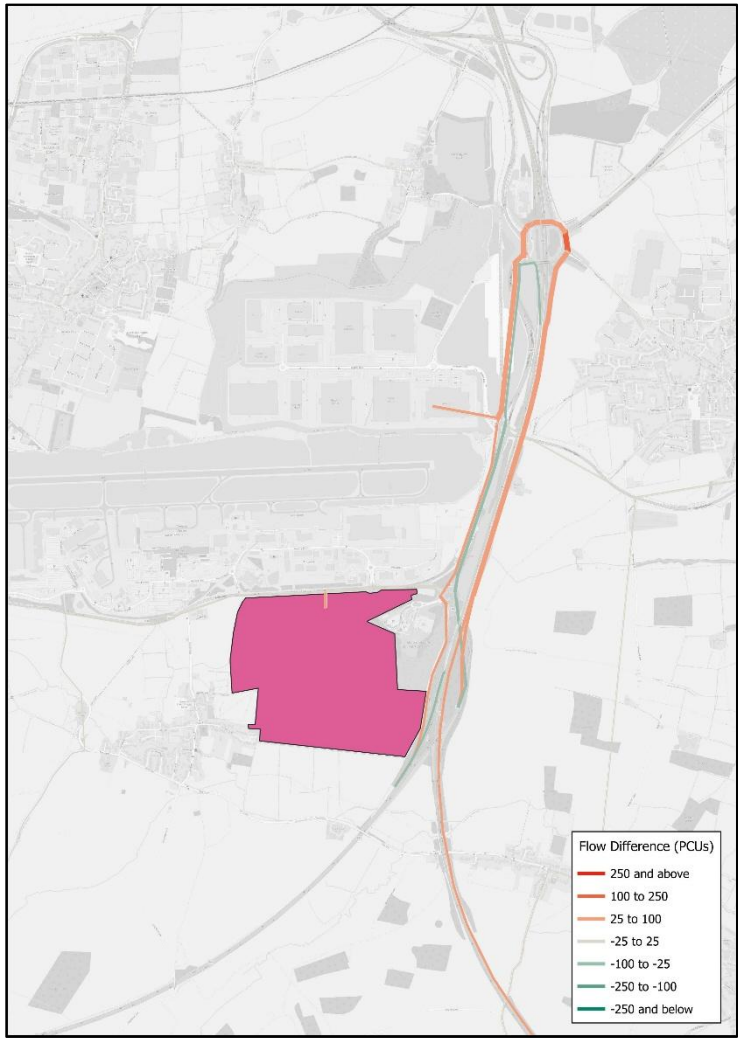
3.3.3 In terms of the A453 parallel to the M1 and the M1 Junction 24, there is evidence of forecast displacement of traffic, albeit for very few trips. The impact of construction traffic on the local road network is forecast to be minimal.

Figure 3.1: Forecast Flow Change for 2028 'With Construction Traffic (1a)' minus 'Without Development (1a)'

AM Peak hour



PM Peak hour



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3.4 Forecast Node Volume-Capacity Ratios

3.4.1 As a part of the forecast modelling, node / junction capacities are estimated for individual turning movements based on a number of factors including priority of the turn (for example, give-way or merge), the level of green-time at signalised junctions, and the amount of opposing traffic at the junction. Using these calculated capacities and the forecast traffic volumes, node volume-capacity ratios are estimated to identify locations where the forecast flows are approaching or exceeding the forecast capacity.

3.4.2 To summarise the forecast-capacity ratios for the individual turning movements at a node, there are two approaches. These are to calculate the flow-weighted average volume-capacity of the node, or to calculate the maximum volume-capacity ratio for all turns within a node. The average volume-capacity ratio provides an overview of how the individual node is performing but may not highlight locations where a limited number of movements at a node are approaching or exceeding capacity. To highlight these locations, the maximum volume-capacity ratio at each node has been used. Node volume-capacity ratios exceeding 85% indicate that the highway network is under stress, and there is likely to be a reduction in speed and increase in delay.

3.4.3 Figure 3.2 shows the forecast maximum junction volume-capacity ratios for 2028 ‘With Construction Traffic (1a)’ and ‘Without Development (1a)’ scenarios. For ease of comparison, the symbology has been designed to show the data for ‘Without Development (1a)’ and ‘With Construction Traffic (1a)’ scenarios on the same plot.

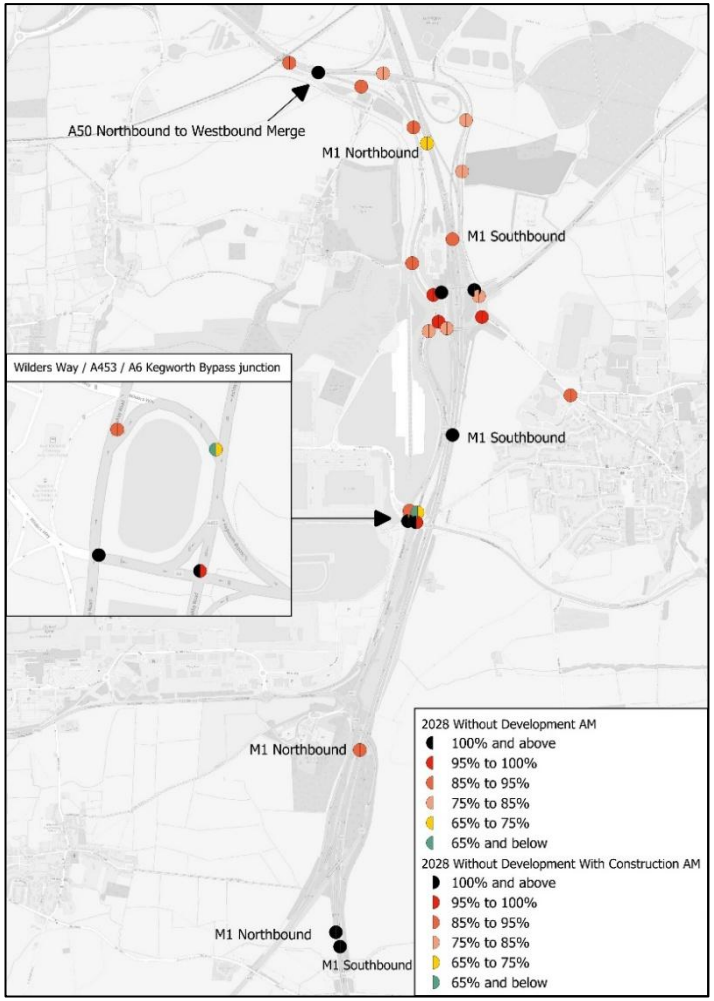
3.4.4 The reader should note that Figure 3.2 shows a subset of all nodes within the EMFM to reduce the number of data points within the plots. Nodes which do not fall within the AoI are not shown. Nodes with maximum volume-capacity ratios below 85% in all forecast scenarios are not shown.

3.4.5 As expected, given the relatively low forecast construction traffic flows, the forecast maximum node volume-capacity ratio plots show that the construction traffic has little impact on the node volume-capacity ratios in both the AM Peak and PM Peak hour on the wider SRN.

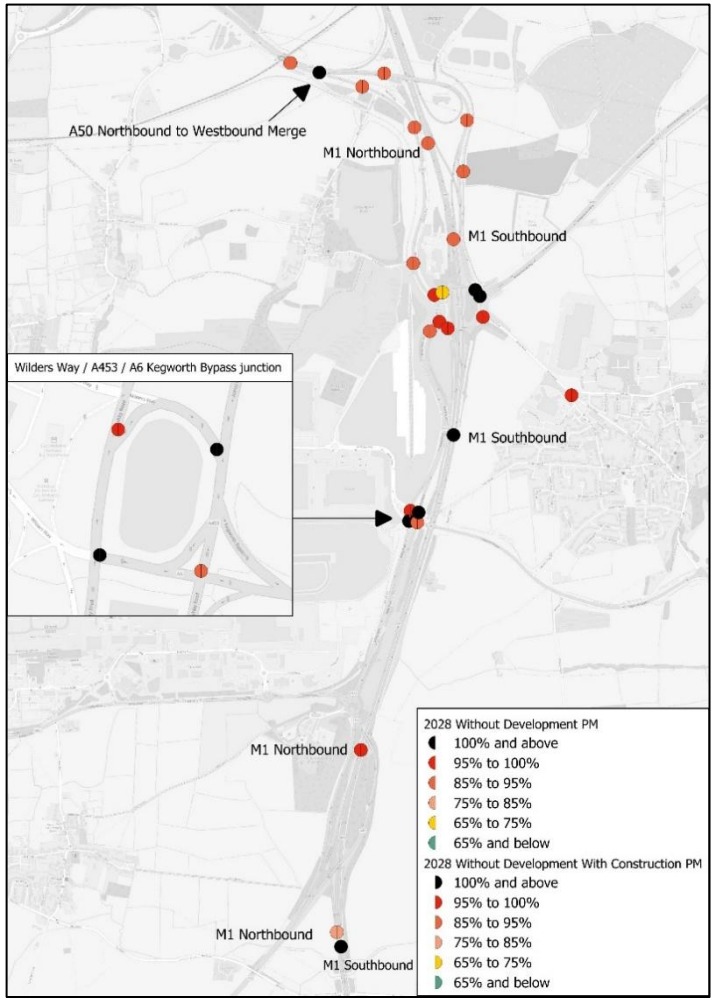
3.4.6 However, the volume-capacity ratio on the Wilders Way / A453 / A6 Kegworth Bypass junction in the AM Peak hour is forecast to increase at the A453 southbound approach (up to a maximum of 75%, so still within capacity) and decrease at the A453 southbound exit. It should also be noted that the forecast node volume-capacity ratios at this junction and M1 Junction 24 are high in the ‘Without Development (1a)’ scenarios, with multiple nodes exceeding 85% in both peaks.

Figure 3.2: Forecast Node Volume-Capacity Ratio for 2028 'Without Development (1a)' and the 2028 'With Construction Traffic (1a)' Scenarios

AM Peak hour



PM Peak hour



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Section 4 – Summary of the Assessment

4.1 Summary of Assessment

4.1.1 Using the East Midlands Freeport Model (EMFM), forecasts have been undertaken to produce the 2028 'With Construction Traffic (1a)' scenario for both the AM Peak and PM Peak hours for the strategic assessment of the impact of construction traffic.

4.1.2 The construction traffic trip generation forecasts were provided by BWB by vehicle type and by construction site. 'Year 1' construction traffic is forecast to generate the highest volume of construction traffic and these forecasts were assessed in the 2028 EMFM.

4.1.3 HGV construction traffic primarily routes via the SRN including the M1, A42, A50 and the A453 Remembrance Way. For car, van and light vehicle construction traffic, most access the construction sites via the M1 south of the Wilders Way / A453 / A6 Kegworth Bypass junction.

4.1.4 The forecast flow changes in 2028 between the 'With Construction Traffic (1a)' and 'Without Development (1a)' scenarios show that there are forecast flow increases on the M1 in both peak hours and A6 Kegworth Bypass on the PM Peak hour.

4.1.5 There is evidence of forecast displacement of traffic on the A453 parallel to the M1 and the M1 Junction 24, albeit for very few trips. The impact of construction traffic on the local road network is forecast to be minimal.

4.1.6 The forecast maximum node volume-capacity ratio plots show that the construction traffic has little impact in either peak hour on the wider SRN compared with the 'Without Development (1a)'

4.1.7 However, the volume-capacity ratio on the Wilders Way / A453 / A6 Kegworth Bypass junction in the AM Peak hour is forecast to increase at the A453 southbound approach and decrease at the A453 southbound exit. It should also be noted that the forecast node volume-capacity ratios at this junction and the M1 Junction 24 are high in the 'Without Development (1a)' scenarios, with multiple nodes exceeding 85% in both peaks.

4.1.8 The forecasts undertaken reflect the forecast impact of the construction traffic at EMGP2. It should be noted that the results provided in this report are at a high level. Due to the strategic nature of the EMFM, not all roads are modelled, and the results should be interpreted with that in mind.

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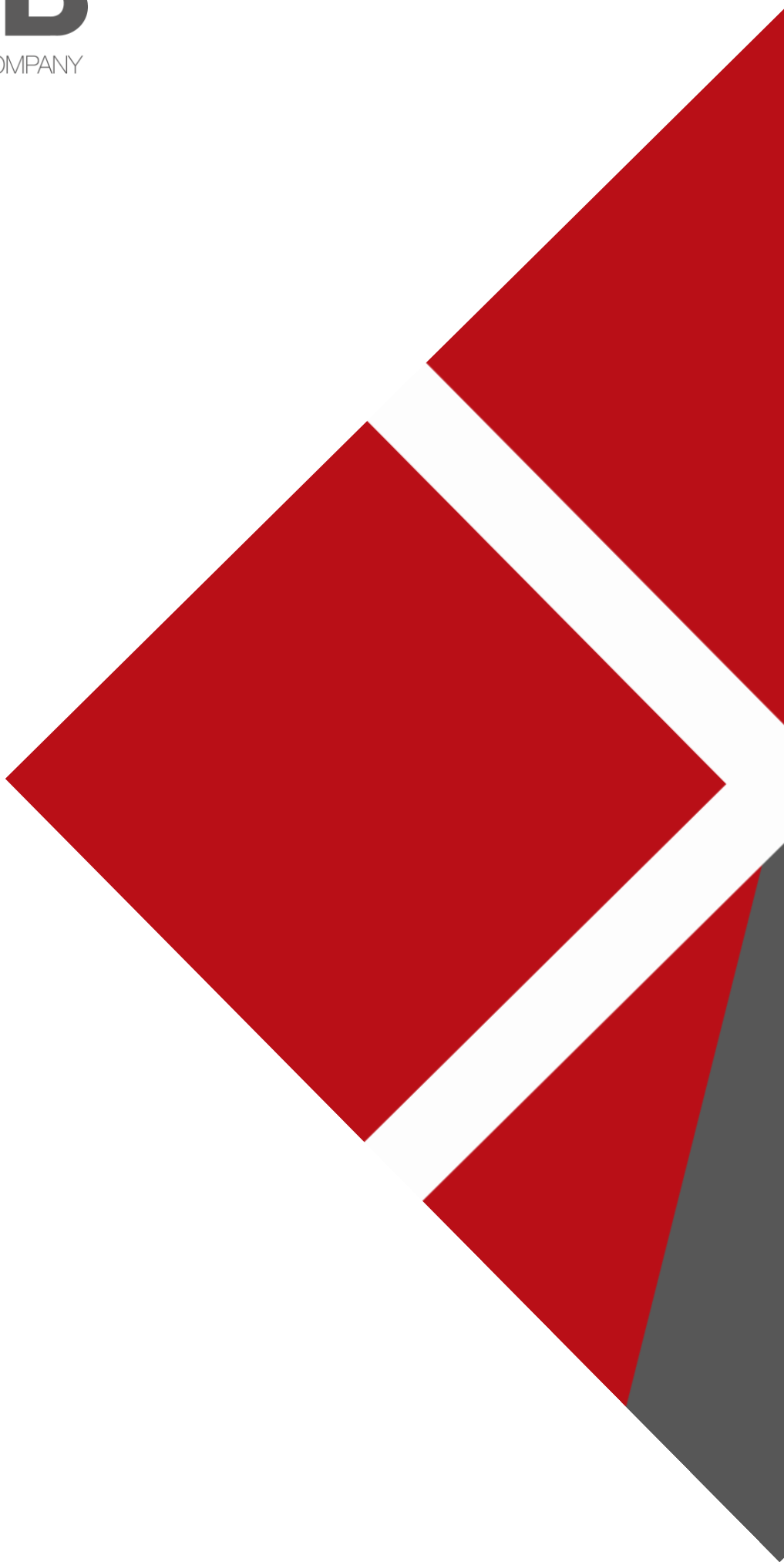

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