

Technical Note - Highways

Project: Land North of Bryn Lane, Wrexham Industrial Estate

Project reference: P/2023/0497

Date: 12th March 2026

- 1.1.1 This note provides additional information to strive to reach agreement on the A534 / Industrial Estate Road / Sandy Lane / Borrass Hall Lane Roundabout Junction.
- 1.1.2 The “ARCADY” assessment program has been used to assess the capacity at the existing A534 / Industrial Estate Road / Sandy Lane roundabout junction to the north of the site.
- 1.1.3 **Table 1.1** shows the 2030 Base assessment of the roundabout without the development in place.
- 1.1.4 **Table 1.2** shows the results of the capacity assessment with Phase 1 and 2 in place but without any committed developments or improvements.

Tables 1.1: A534 / Industrial Estate Road / Sandy Lane / Borrass Hall Lane Roundabout Junction – 2030 & 2037 Base

	2030 Base AM Peak		2030 Base PM Peak		2037 Base AM Peak		2037 Base PM	
Arm	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Borrass Hall Lane	0.29	1	0.04	0	0.33	1	0.04	0
Wrexham Road	0.89	7	0.43	1	1.03	23	0.46	1
Industrial Estate Road	0.27	1	0.89	7	0.28	1	0.95	15
Sandy Lane	0.04	0	0.07	0	0.04	0	0.09	0
A534	0.65	2	0.33	1	0.69	3	0.35	1

Tables 1.2: A534 / Industrial Estate Road / Sandy Lane / Borrass Hall Lane Roundabout Junction – 2030 & 2037 Base + Development (Sensitivity – No Committed Developments)

Arm	2030 Base + Development (Phase 1) AM Peak		2030 Base + Development (Phase 1) PM Peak		2037 Base + Development (Phase 1 & 2) AM Peak		2037 Base + Development (Phase 1 & 2) PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Borrass Hall Lane	0.34	1	0.03	0	0.49	1	0.06	0
Wrexham Road	1.32	74	0.49	1	2.33	198.8	0.54	1
Industrial Estate Road	0.31	1	1.00	33	0.38	1	1.17	174
Sandy Lane	0.04	0	0.08	0	0.04	0	0.10	0
A534	0.72	3	0.37	1	0.83	5	0.45	1

- 1.1.5 The assessments show that the A534 / Industrial Estate Road roundabout junction would begin to operate at or over capacity along the A534 arms in the future year assessments.
- 1.1.6 It is proposed that in order to mitigate the traffic impact at the A534 / Industrial Estate Road roundabout junction, the roundabout would be signalised. The proposed improvement drawing is provided in **Appendix TN1**. This is based on the KSS2 North mitigation scheme for this roundabout.
- 1.1.7 The LINSIG program has been used to assess the signalised improvement. **Tables 1.3** and **1.4** summarises the results. **Appendix TN2** provides the LINSIG outputs.

**Table 1.3: A534 / Industrial Estate Road / Sandy Lane / Borrass Hall Lane Roundabout
Junction – 2030 & 2037 Base (Signalised)**

	2030 Base AM Peak		2030 Base PM Peak		2037 Base AM Peak		2037 Base PM Peak	
Arm	DoS	Queue	DoS	Queue	DoS	Queue	DoS	Queue
Industrial Estate Road	42.7	5	77.4	18	43.2	5	80.0	19
Sandy Lane	4.5	0	14.3	1	5.0	0	16.1	1
A534	53.1	6	32.8	5	54.9	7	33.8	7
Borrass Hall Lane	67.7	3	5.0	0	72.4	4	5.6	0
Wrexham Road	73.9	9	77.7	13	77.1	10	80.9	14

**Table 1.4: A534 / Industrial Estate Road / Sandy Lane / Borrass Hall Lane Roundabout
Junction – 2030 & 2037 Base + Development (Signalised)**

	2030 Base + Development (Phase 1) AM Peak		2030 Base + Development (Phase 1) PM Peak		2037 Base + Development (Phase 1 & 2) AM Peak		2037 Base + Development (Phase 1 & 2) PM Peak	
Arm	DoS	Queue	DoS	Queue	DoS	Queue	DoS	Queue
Industrial Estate Road	46.2	5	83.7	21	50.3	6	94.2	27
Sandy Lane	4.6	0	14.4	1	5.1	0	16.5	1
A534	56.9	7	35.6	6	63.3	9	40.4	7
Borrass Hall Lane	71.2	4	5.9	0	80.9	5	9.0	0
Wrexham Road	75.7	9	78.7	13	80.8	10	83.4	15

1.1.8 The proposed development will increase traffic demand at the junction during peak periods, and as such the junction is expected to experience greater levels of delay compared with the future baseline scenario without the development. However, the proposed junction improvements have been designed to mitigate the traffic impact associated with the development.

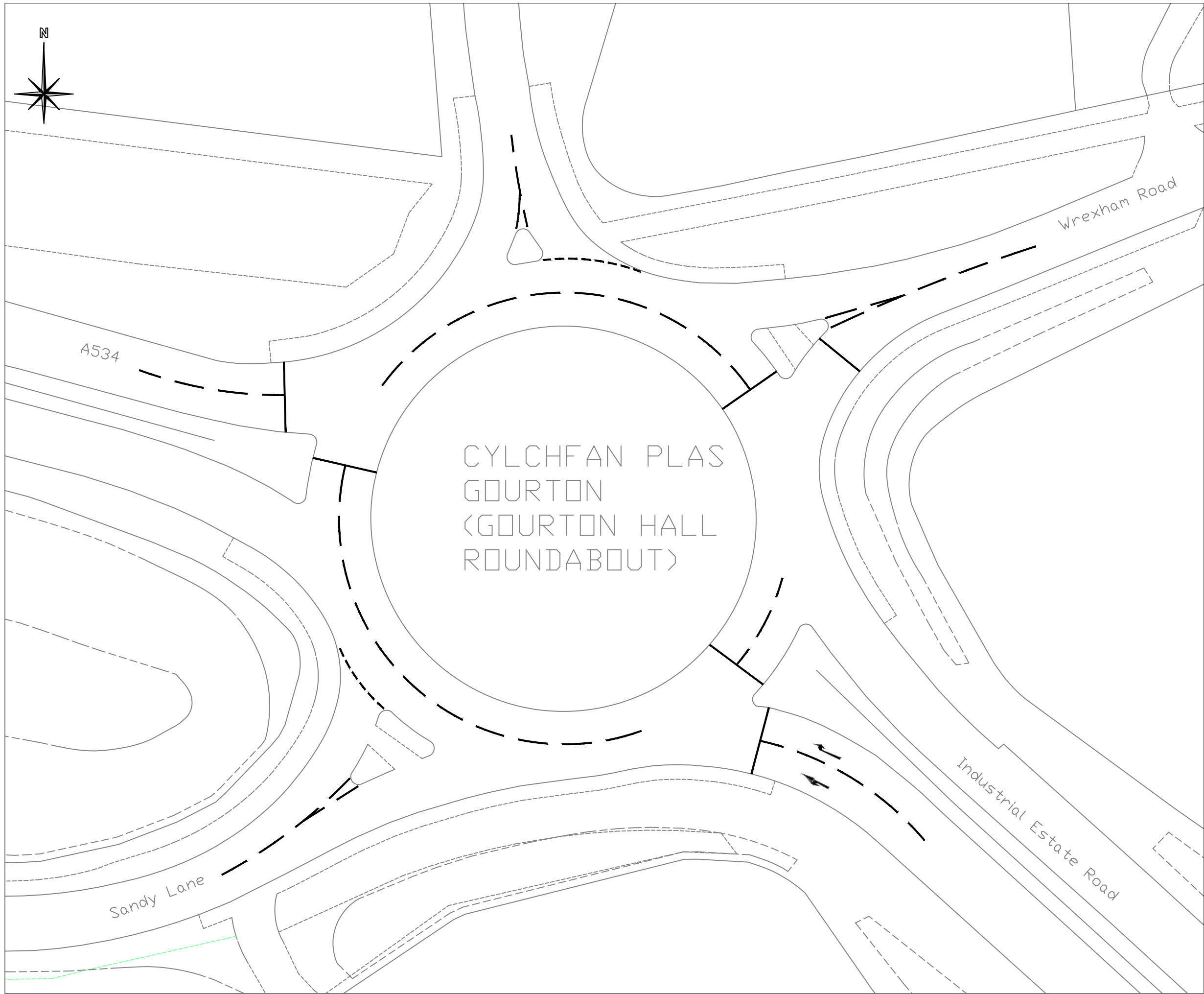
1.1.9 The assessment of junction performance demonstrates that, while the junction may operate slightly worse than the future baseline without the development, the mitigation measures provide a significant improvement compared to a scenario where development traffic is

present but no mitigation is implemented. The proposed improvements therefore directly address the additional demand generated by the development and help to reduce delays, queues, and potential safety issues that would otherwise arise.

- 1.1.10 In planning terms, the relevant consideration is whether the development would result in an unacceptable impact on the safe and efficient operation of the highway network, having regard to the transport objectives set out in Planning Policy Wales and Technical Advice Note 18: Transport. The modelling demonstrates that, with the proposed junction improvements in place, the junction continues to operate within acceptable operational parameters and the residual transport impacts are not considered to be unacceptable.
- 1.1.11 It is recognised that during peak periods, when traffic demand across the wider network is highest, some degree of queueing is inevitable regardless of the development. The purpose of the mitigation measures is therefore not to eliminate queueing entirely, but to ensure that the junction continues to operate safely and efficiently and that the additional traffic generated by the development is appropriately accommodated within the network.
- 1.1.12 Therefore, although the junction performs marginally worse than the future baseline without the development, the proposed improvements provide appropriate and proportionate mitigation for the additional traffic generated and ensure that the overall impact on the local highway network remains acceptable.

Appendices

Appendix A – Highway Improvement



- Notes:
- 1. All dimensions are to be checked on site before the commencement of works. Any discrepancies are to be reported to the Architect & Engineer for verification. Figured dimensions only are to be taken from this drawing.
 - 2. This drawing is to be read in conjunction with all relevant Engineers' and Service Engineers' drawings and specifications. This drawing is copyright.

A	09/03/26	Updated to 3 arms signalised	TC	MC
Rev	Date	Description	Ckd	By

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Client

Net World Sports Limited

Project

North of Bryn Lane
Wrexham

Title

A534 / Wrexham Road
Roundabout
Improvements

Drawing Status

Job No.

16-2067

Drawn	Checked	Scale at A3	Date	Issue Date
MC	TC	1:500	29/10/25	-

Drawing No.

107

A

Appendix B – LINSIG Output

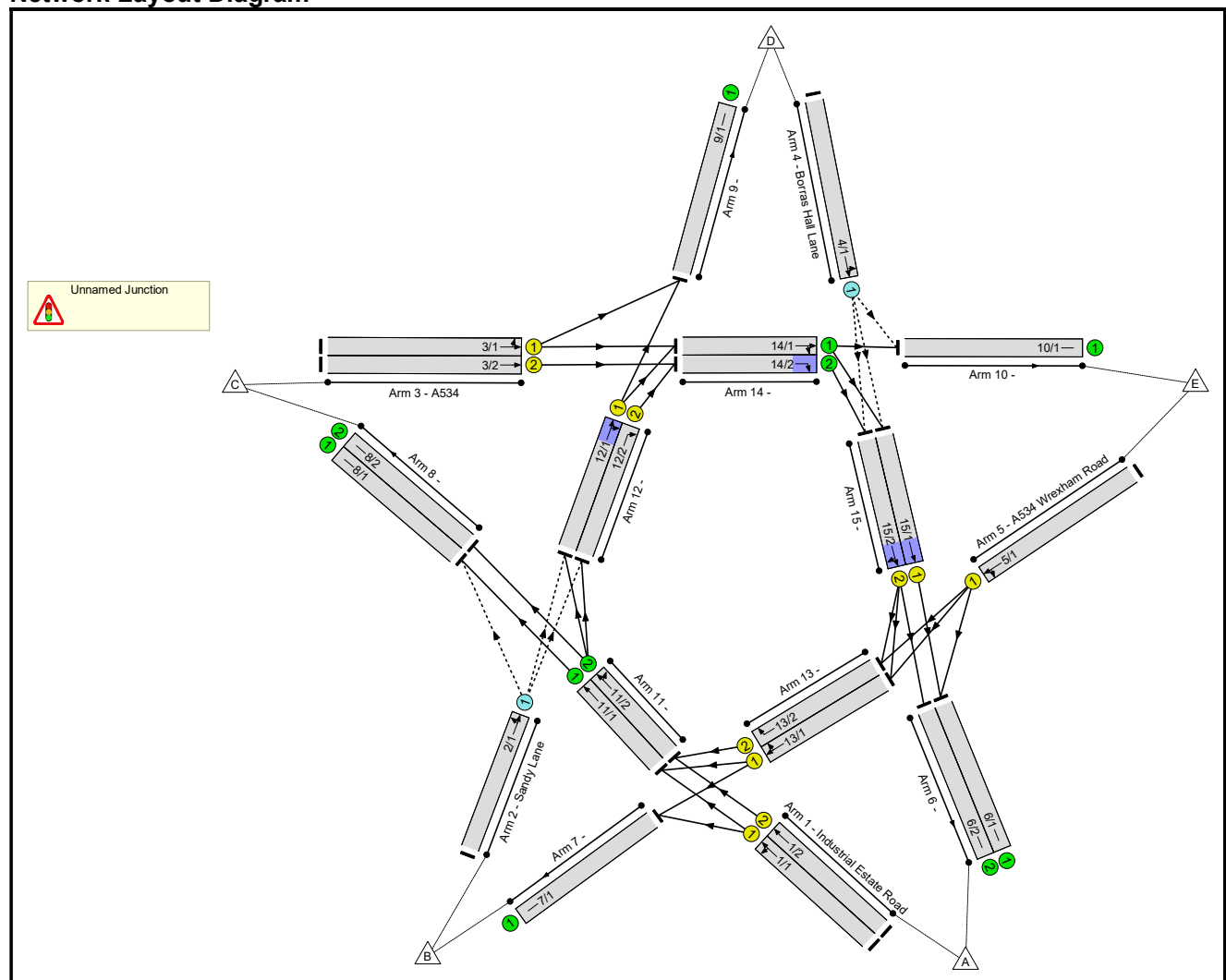
Full Input Data And Results

Full Input Data And Results

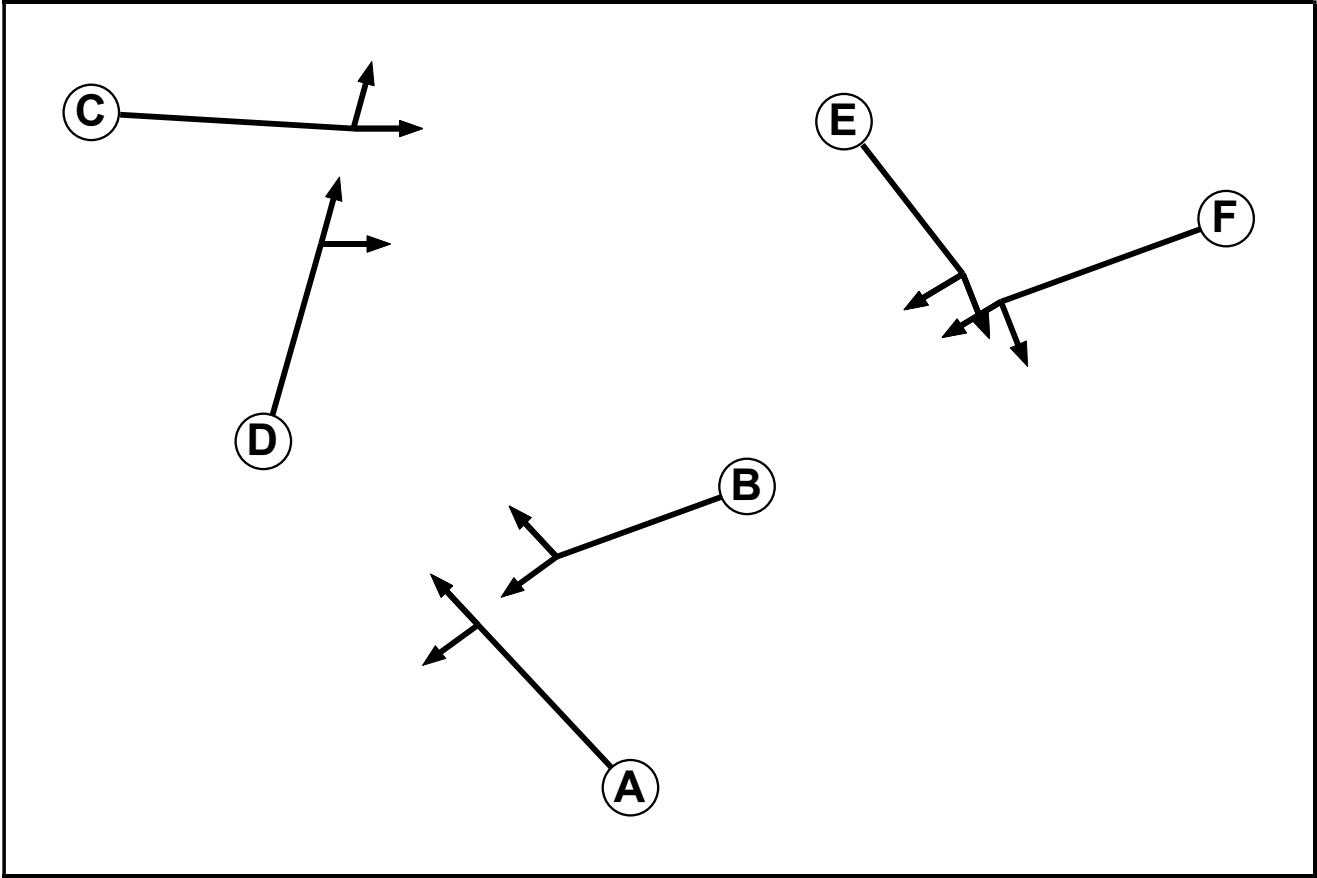
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	A534, Industrial Estate Road, Borrás Hall Lane LINSIG v17 - 3arm full.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		5	5
B	Traffic		5	5
C	Traffic		5	5
D	Traffic		5	5
E	Traffic		5	5
F	Traffic		5	5

Full Input Data And Results

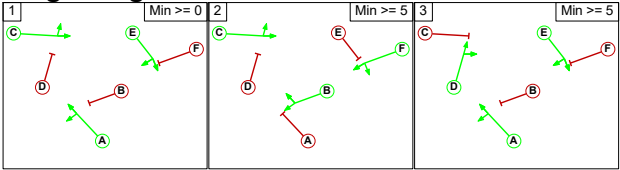
Phase Intergreens Matrix

		Starting Phase					
Terminating Phase		A	B	C	D	E	F
	A		5	-	-	-	-
	B	5		-	-	-	-
	C	-	-		5	-	-
	D	-	-	5		-	-
	E	-	-	-	-		5
	F	-	-	-	-	5	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage		
From Stage		1	2	3
	1		5	5
	2	5		5
	3	5	5	

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)
2/1 (Sandy Lane)	8/1 (Left)	1439	0	11/1	1.09	All	-	-	-	-	-
	12/1 (Ahead)	1439	0	11/1	1.09	All					
				11/2	1.09	All					
	12/2 (Ahead)	1439	0	11/1	1.09	All					
				11/2	1.09	All					
4/1 (Borras Hall Lane)	10/1 (Left)	1439	0	14/1	1.09	All	-	-	-	-	-
	15/1 (Ahead)	1439	0	14/1	1.09	All					
				14/2	1.09	All					
	15/2 (Ahead)	1439	0	14/1	1.09	All					
				14/2	1.09	All					

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Industrial Estate Road)	U	A	2	3	173.9	Geom	-	4.35	0.00	Y	Arm 7 Left	28.50
											Arm 11 Ahead	Inf
1/2 (Industrial Estate Road)	U	A	2	3	173.9	Geom	-	4.35	0.00	Y	Arm 11 Ahead	Inf
2/1 (Sandy Lane)	O		2	3	60.0	Geom	-	5.00	0.00	Y	Arm 8 Left	21.50
											Arm 12 Ahead	Inf
3/1 (A534)	U	C	2	3	173.9	Geom	-	5.00	0.00	Y	Arm 9 Left	23.60
											Arm 14 Ahead	Inf
3/2 (A534)	U	C	2	3	173.9	Geom	-	5.00	0.00	Y	Arm 14 Ahead	Inf
4/1 (Borras Hall Lane)	O		2	3	60.0	Geom	-	5.00	0.00	Y	Arm 10 Left	22.80
											Arm 15 Ahead	Inf
5/1 (A534 Wrexham Road)	U	F	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 6 Left	23.20
											Arm 13 Ahead	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1	U		2	3	5.0	Geom	-	4.50	0.00	Y	Arm 8 Ahead	Inf
11/2	U		2	3	8.0	Geom	-	4.50	0.00	Y	Arm 8 Ahead	Inf
											Arm 12 Right	Inf
12/1	U	D	2	3	8.0	Geom	-	4.50	0.00	Y	Arm 9 Ahead	Inf
											Arm 14 Right	Inf
12/2	U	D	2	3	8.0	Geom	-	4.50	0.00	Y	Arm 14 Right	Inf

Full Input Data And Results

13/1	U	B	2	3	8.0	Geom	-	4.50	0.00	Y	Arm 7 Ahead	Inf
											Arm 11 Right	Inf
13/2	U	B	2	3	8.0	Geom	-	4.50	0.00	Y	Arm 11 Right	Inf
14/1	U		2	3	8.0	Geom	-	4.50	0.00	Y	Arm 10 Ahead	Inf
											Arm 15 Right	Inf
14/2	U		2	3	8.0	Geom	-	4.50	0.00	Y	Arm 15 Right	Inf
15/1	U	E	2	3	8.0	Geom	-	4.50	0.00	Y	Arm 6 Ahead	Inf
15/2	U	E	2	3	8.0	Geom	-	4.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 13 Right	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Surveyed Flows AM'	08:00	09:00	01:00	
2: '2023 Surveyed Flows PM'	16:30	17:30	01:00	
3: '2030 Growthed Flows AM'	08:00	09:00	01:00	F1 * 1.0499
4: '2030 Growthed Flows PM'	16:30	17:30	01:00	F2 * 1.0499
5: '2037 Growthed Flows AM'	08:00	09:00	01:00	F1 * 1.0937
6: '2037 Growthed Flows PM'	16:30	17:30	01:00	F2 * 1.0927
7: 'Committed Development AM'	08:00	09:00	01:00	
8: 'Committed Development PM'	16:30	17:30	01:00	
9: 'Committed Development AM (No KSS2)'	08:00	09:00	01:00	
10: 'Committed Development PM (No KSS2)'	16:30	17:30	01:00	
11: 'Proposed Development AM (Phase 1)'	08:00	09:00	01:00	
12: 'Proposed Development PM (Phase 1)'	16:30	17:30	01:00	
13: 'Proposed Development AM (Phase 2)'	08:00	09:00	01:00	
14: 'Proposed Development PM (Phase 2)'	16:30	17:30	01:00	
15: '2030 Base + Committed AM'	08:00	09:00	01:00	F3 + F7
16: '2030 Base + Committed PM'	16:30	17:30	01:00	F4 + F8
17: '2037 Base + Committed AM'	08:00	09:00	01:00	F5 + F7
18: '2037 Base + Committed PM'	16:30	17:30	01:00	F6 + F8
19: '2030 Base + Committed + Phase 1 AM'	08:00	09:00	01:00	F3 + F7 + F11
20: '2030 Base + Committed + Phase 1 PM'	16:30	17:30	01:00	F4 + F8 + F12
21: '2037 Base + Committed + Phase 1 and 2 AM'	08:00	09:00	01:00	F5 + F7 + F13
22: '2037 Base + Committed + Phase 1 and 2 PM'	16:30	17:30	01:00	F6 + F8 + F14
23: '2030 Base + Committed + Phase 1 AM (No KSS2)'	08:00	09:00	01:00	F3 + F9 + F11
24: '2030 Base + Committed + Phase 1 PM (No KSS2)'	16:30	17:30	01:00	F4 + F10 + F12
25: '2037 Base + Committed + Phase 1 and 2 AM (No KSS2)'	08:00	09:00	01:00	F5 + F9 + F13

Full Input Data And Results

26: '2037 Base + Committed + Phase 1 and 2 PM (No KSS2)'	16:30	17:30	01:00	F6 + F10 + F14
27: '2037 Base + Committed + Phase 1 AM'	08:00	09:00	01:00	F5 + F7 + F11
28: '2037 Base + Committed + Phase 1 PM'	16:30	17:30	01:00	F6 + F8 + F12
29: '2030 Base + Committed + Phase 1 and 2 AM'	08:00	09:00	01:00	F3 + F7 + F13
30: '2030 Base + Committed + Phase 1 and 2 PM'	16:30	17:30	01:00	F4 + F8 + F14
31: '2030 Base + Development (Phase 1) AM'	08:00	09:00	01:00	F3 + F11
32: '2030 Base + Development (Phase 1) PM'	16:30	17:30	01:00	F4 + F12
33: '2037 Base + Development (Phase 1 + 2) AM '	08:00	09:00	01:00	F5 + F13 + F11
34: '2037 Base + Development (Phase 1 + 2) PM '	16:30	17:30	01:00	F6 + F14 + F12

Scenario 1: '2023 Surveyed Flows AM' (FG1: '2023 Surveyed Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	2	1	405	15	57	480
	B	4	0	22	1	7	34
	C	1114	6	2	22	325	1469
	D	140	0	9	0	10	159
	E	159	7	318	2	0	486
	Tot.	1419	14	756	40	399	2628

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2023 Surveyed Flows AM
Junction: Unnamed Junction	
1/1	19
1/2	459
2/1	34
3/1	817
3/2	650
4/1	159
5/1	486
6/1	765
6/2	652
7/1	14
8/1	198
8/2	556
9/1	40
10/1	399
11/1	176
11/2	630
12/1	82
12/2	4
13/1	171
13/2	171
14/1	859
14/2	654
15/1	606
15/2	667

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	5.3 %	2044	2044
				Arm 11 Ahead	Inf	94.7 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	64.7 %	2024	2024
				Arm 12 Ahead	Inf	35.3 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	2.7 %	2111	2111
				Arm 14 Ahead	Inf	97.3 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	6.3 %	2106	2106
				Arm 15 Ahead	Inf	93.7 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	32.7 %	2071	2071
				Arm 13 Ahead	Inf	67.3 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	88.3 %	2065	2065
				Arm 12 Right	Inf	11.7 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	22.0 %	2065	2065
				Arm 14 Right	Inf	78.0 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	7.6 %	2065	2065
				Arm 11 Right	Inf	92.4 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	45.3 %	2065	2065
				Arm 15 Right	Inf	54.7 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	97.8 %	2065	2065
				Arm 13 Right	Inf	2.2 %		

Full Input Data And Results

Scenario 2: '2023 Surveyed Flows PM' (FG2: '2023 Surveyed Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	1	3	1237	113	187	1541
	B	1	0	18	1	5	25
	C	368	8	2	13	303	694
	D	20	1	7	0	5	33
	E	59	1	400	6	0	466
	Tot.	449	13	1664	133	500	2759

Traffic Lane Flows

Lane	Scenario 2: 2023 Surveyed Flows PM
Junction: Unnamed Junction	
1/1	606
1/2	934
2/1	25
3/1	399
3/2	293
4/1	33
5/1	466
6/1	162
6/2	286
7/1	13
8/1	823
8/2	839
9/1	133
10/1	500
11/1	805
11/2	1145
12/1	312
12/2	1
13/1	212
13/2	211
14/1	578
14/2	294
15/1	103
15/2	302

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	0.5 %	2049	2049
				Arm 11 Ahead	Inf	99.5 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	72.0 %	2014	2014
				Arm 12 Ahead	Inf	28.0 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	3.3 %	2111	2111
				Arm 14 Ahead	Inf	96.7 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	15.2 %	2094	2094
				Arm 15 Ahead	Inf	84.8 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	12.7 %	2098	2098
				Arm 13 Ahead	Inf	87.3 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	73.3 %	2065	2065
				Arm 12 Right	Inf	26.7 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	38.5 %	2065	2065
				Arm 14 Right	Inf	61.5 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	4.7 %	2065	2065
				Arm 11 Right	Inf	95.3 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	85.6 %	2065	2065
				Arm 15 Right	Inf	14.4 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	94.7 %	2065	2065
				Arm 13 Right	Inf	5.3 %		

Full Input Data And Results

Scenario 3: '2030 Growthed Flows AM' (FG3: '2030 Growthed Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	2	1	425	16	60	504
	B	4	0	23	1	7	35
	C	1170	6	2	23	341	1542
	D	147	0	9	0	10	166
	E	167	7	334	2	0	510
	Tot.	1490	14	793	42	418	2757

Traffic Lane Flows

Lane	Scenario 3: 2030 Growthed Flows AM
Junction: Unnamed Junction	
1/1	35
1/2	467
2/1	35
3/1	841
3/2	699
4/1	166
5/1	510
6/1	790
6/2	698
7/1	14
8/1	223
8/2	568
9/1	42
10/1	418
11/1	200
11/2	646
12/1	86
12/2	4
13/1	179
13/2	179
14/1	885
14/2	703
15/1	623
15/2	713

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	2.9 %	2047	2047
				Arm 11 Ahead	Inf	97.1 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	65.7 %	2022	2022
				Arm 12 Ahead	Inf	34.3 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	2.7 %	2111	2111
				Arm 14 Ahead	Inf	97.3 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	6.0 %	2107	2107
				Arm 15 Ahead	Inf	94.0 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	32.7 %	2071	2071
				Arm 13 Ahead	Inf	67.3 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	87.9 %	2065	2065
				Arm 12 Right	Inf	12.1 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	22.1 %	2065	2065
				Arm 14 Right	Inf	77.9 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	7.3 %	2065	2065
				Arm 11 Right	Inf	92.7 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	46.1 %	2065	2065
				Arm 15 Right	Inf	53.9 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	97.9 %	2065	2065
				Arm 13 Right	Inf	2.1 %		

Full Input Data And Results

Scenario 4: '2030 Growthed Flows PM' (FG4: '2030 Growthed Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	1	3	1299	119	196	1618
	B	1	0	19	1	5	26
	C	386	8	2	14	318	728
	D	21	1	7	0	5	34
	E	62	1	420	6	0	489
	Tot.	471	13	1747	140	524	2895

Traffic Lane Flows

Lane	Scenario 4: 2030 Growthed Flows PM
Junction: Unnamed Junction	
1/1	647
1/2	970
2/1	26
3/1	407
3/2	319
4/1	34
5/1	489
6/1	158
6/2	312
7/1	13
8/1	875
8/2	870
9/1	140
10/1	524
11/1	856
11/2	1191
12/1	327
12/2	1
13/1	222
13/2	221
14/1	594
14/2	320
15/1	96
15/2	328

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	0.5 %	2049	2049
				Arm 11 Ahead	Inf	99.5 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	73.1 %	2012	2012
				Arm 12 Ahead	Inf	26.9 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	3.4 %	2110	2110
				Arm 14 Ahead	Inf	96.6 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	14.7 %	2095	2095
				Arm 15 Ahead	Inf	85.3 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	12.7 %	2098	2098
				Arm 13 Ahead	Inf	87.3 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	73.0 %	2065	2065
				Arm 12 Right	Inf	27.0 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	38.5 %	2065	2065
				Arm 14 Right	Inf	61.5 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	4.5 %	2065	2065
				Arm 11 Right	Inf	95.5 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	87.4 %	2065	2065
				Arm 15 Right	Inf	12.6 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	95.1 %	2065	2065
				Arm 13 Right	Inf	4.9 %		

Full Input Data And Results

Scenario 5: '2037 Growthed Flows AM' (FG5: '2037 Growthed Flows AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	2	1	443	16	62	524
	B	4	0	24	1	8	37
	C	1218	7	2	24	355	1606
	D	153	0	10	0	11	174
	E	174	8	348	2	0	532
	Tot.	1551	16	827	43	436	2873

Traffic Lane Flows

Lane	Scenario 5: 2037 Growthed Flows AM
Junction: Unnamed Junction	
1/1	50
1/2	472
2/1	37
3/1	869
3/2	735
4/1	174
5/1	532
6/1	814
6/2	735
7/1	16
8/1	246
8/2	579
9/1	43
10/1	436
11/1	222
11/2	659
12/1	89
12/2	4
13/1	188
13/2	187
14/1	915
14/2	739
15/1	640
15/2	752

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	2.0 %	2048	2048
				Arm 11 Ahead	Inf	98.0 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	64.9 %	2023	2023
				Arm 12 Ahead	Inf	35.1 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	2.8 %	2111	2111
				Arm 14 Ahead	Inf	97.2 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	6.3 %	2106	2106
				Arm 15 Ahead	Inf	93.7 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	32.7 %	2071	2071
				Arm 13 Ahead	Inf	67.3 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	87.9 %	2065	2065
				Arm 12 Right	Inf	12.1 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	21.3 %	2065	2065
				Arm 14 Right	Inf	78.7 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	8.0 %	2065	2065
				Arm 11 Right	Inf	92.0 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	46.4 %	2065	2065
				Arm 15 Right	Inf	53.6 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	97.7 %	2065	2065
				Arm 13 Right	Inf	2.3 %		

Full Input Data And Results

Scenario 6: '2037 Growthed Flows PM' (FG6: '2037 Growthed Flows PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	1	3	1352	123	204	1683
	B	1	0	20	1	5	27
	C	402	9	2	14	331	758
	D	22	1	8	0	5	36
	E	64	1	437	7	0	509
	Tot.	490	14	1819	145	545	3013

Traffic Lane Flows

Lane	Scenario 6: 2037 Growthed Flows PM
Junction: Unnamed Junction	
1/1	680
1/2	1002
2/1	27
3/1	428
3/2	328
4/1	36
5/1	509
6/1	169
6/2	320
7/1	14
8/1	917
8/2	900
9/1	145
10/1	545
11/1	897
11/2	1234
12/1	340
12/2	1
13/1	231
13/2	232
14/1	623
14/2	329
15/1	105
15/2	338

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	0.4 %	2050	2050
				Arm 11 Ahead	Inf	99.6 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	74.1 %	2011	2011
				Arm 12 Ahead	Inf	25.9 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	3.3 %	2111	2111
				Arm 14 Ahead	Inf	96.7 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	13.9 %	2096	2096
				Arm 15 Ahead	Inf	86.1 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	12.6 %	2098	2098
				Arm 13 Ahead	Inf	87.4 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	72.9 %	2065	2065
				Arm 12 Right	Inf	27.1 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	38.5 %	2065	2065
				Arm 14 Right	Inf	61.5 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	4.8 %	2065	2065
				Arm 11 Right	Inf	95.2 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	86.7 %	2065	2065
				Arm 15 Right	Inf	13.3 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	94.7 %	2065	2065
				Arm 13 Right	Inf	5.3 %		

Full Input Data And Results
'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	2	73	427	26	60	588
	B	4	0	23	1	7	35
	C	1317	6	2	23	341	1689
	D	153	0	9	0	10	172
	E	179	7	334	2	0	522
	Tot.	1655	86	795	52	418	3006

Traffic Lane Flows

Lane	Scenario 7: 2030 Base + Deveopment (Sens) AM
Junction: Unnamed Junction	
1/1	81
1/2	505
2/1	35
3/1	902
3/2	785
4/1	172
5/1	522
6/1	869
6/2	784
7/1	86
8/1	197
8/2	596
9/1	52
10/1	418
11/1	174
11/2	684
12/1	96
12/2	4
13/1	179
13/2	179
14/1	946
14/2	789
15/1	690
15/2	799

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	90.1 %	1957	1957
				Arm 11 Ahead	Inf	9.9 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	65.7 %	2022	2022
				Arm 12 Ahead	Inf	34.3 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	2.5 %	2112	2112
				Arm 14 Ahead	Inf	97.5 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	5.8 %	2107	2107
				Arm 15 Ahead	Inf	94.2 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	34.3 %	2069	2069
				Arm 13 Ahead	Inf	65.7 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	87.1 %	2065	2065
				Arm 12 Right	Inf	12.9 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	30.2 %	2065	2065
				Arm 14 Right	Inf	69.8 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	7.3 %	2065	2065
				Arm 11 Right	Inf	92.7 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	43.1 %	2065	2065
				Arm 15 Right	Inf	56.9 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	98.1 %	2065	2065
				Arm 13 Right	Inf	1.9 %		

Full Input Data And Results
'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	1	136	1305	129	196	1767
	B	1	0	19	1	5	26
	C	472	8	2	14	318	814
	D	23	1	7	0	5	36
	E	68	1	420	6	0	495
	Tot.	565	146	1753	150	524	3138

Traffic Lane Flows

Lane	Scenario 8: 2030 Base + Development (Sens) PM
Junction: Unnamed Junction	
1/1	717
1/2	1049
2/1	26
3/1	451
3/2	361
4/1	36
5/1	495
6/1	210
6/2	354
7/1	146
8/1	812
8/2	939
9/1	150
10/1	524
11/1	793
11/2	1270
12/1	337
12/2	1
13/1	222
13/2	221
14/1	638
14/2	362
15/1	142
15/2	370

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	19.0 %	2030	2030
				Arm 11 Ahead	Inf	81.0 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	73.1 %	2012	2012
				Arm 12 Ahead	Inf	26.9 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	3.1 %	2111	2111
				Arm 14 Ahead	Inf	96.9 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	13.9 %	2096	2096
				Arm 15 Ahead	Inf	86.1 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	13.7 %	2096	2096
				Arm 13 Ahead	Inf	86.3 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	73.9 %	2065	2065
				Arm 12 Right	Inf	26.1 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	40.4 %	2065	2065
				Arm 14 Right	Inf	59.6 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	4.5 %	2065	2065
				Arm 11 Right	Inf	95.5 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	81.3 %	2065	2065
				Arm 15 Right	Inf	18.7 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	95.7 %	2065	2065
				Arm 13 Right	Inf	4.3 %		

Full Input Data And Results
'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	2	191	449	39	62	743
	B	4	0	24	1	8	37
	C	1531	7	2	24	355	1919
	D	167	0	10	0	11	188
	E	199	8	348	2	0	557
	Tot.	1903	206	833	66	436	3444

Traffic Lane Flows

Lane	Scenario 9: 2037 Base + Deveopment (Sens) AM
Junction: Unnamed Junction	
1/1	191
1/2	550
2/1	37
3/1	1002
3/2	915
4/1	188
5/1	557
6/1	988
6/2	913
7/1	206
8/1	197
8/2	634
9/1	66
10/1	436
11/1	173
11/2	737
12/1	112
12/2	4
13/1	188
13/2	187
14/1	1048
14/2	919
15/1	789
15/2	930

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	100.0 %	1948	1948
				Arm 11 Ahead	Inf	0.0 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	64.9 %	2023	2023
				Arm 12 Ahead	Inf	35.1 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	2.4 %	2112	2112
				Arm 14 Ahead	Inf	97.6 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	5.9 %	2107	2107
				Arm 15 Ahead	Inf	94.1 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	35.7 %	2067	2067
				Arm 13 Ahead	Inf	64.3 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	86.0 %	2065	2065
				Arm 12 Right	Inf	14.0 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	37.5 %	2065	2065
				Arm 14 Right	Inf	62.5 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	8.0 %	2065	2065
				Arm 11 Right	Inf	92.0 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	40.6 %	2065	2065
				Arm 15 Right	Inf	59.4 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	98.2 %	2065	2065
				Arm 13 Right	Inf	1.8 %		

Full Input Data And Results
'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	1	295	1365	144	204	2009
	B	1	0	20	1	5	27
	C	619	9	2	14	331	975
	D	29	1	8	0	5	43
	E	79	1	437	7	0	524
	Tot.	729	306	1832	166	545	3578

Traffic Lane Flows

Lane	Scenario 10: 2037 Base + Development (Sens) PM
Junction: Unnamed Junction	
1/1	828
1/2	1180
2/1	27
3/1	540
3/2	433
4/1	43
5/1	524
6/1	303
6/2	425
7/1	306
8/1	773
8/2	1057
9/1	166
10/1	545
11/1	753
11/2	1412
12/1	361
12/2	1
13/1	231
13/2	232
14/1	735
14/2	434
15/1	224
15/2	443

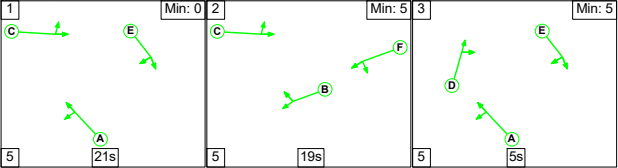
Lane Saturation Flows

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 (Industrial Estate Road)	4.35	0.00	Y	Arm 7 Left	28.50	35.6 %	2012	2012
				Arm 11 Ahead	Inf	64.4 %		
1/2 (Industrial Estate Road)	4.35	0.00	Y	Arm 11 Ahead	Inf	100.0 %	2050	2050
2/1 (Sandy Lane)	5.00	0.00	Y	Arm 8 Left	21.50	74.1 %	2011	2011
				Arm 12 Ahead	Inf	25.9 %		
3/1 (A534)	5.00	0.00	Y	Arm 9 Left	23.60	2.6 %	2112	2112
				Arm 14 Ahead	Inf	97.4 %		
3/2 (A534)	5.00	0.00	Y	Arm 14 Ahead	Inf	100.0 %	2115	2115
4/1 (Borras Hall Lane)	5.00	0.00	Y	Arm 10 Left	22.80	11.6 %	2099	2099
				Arm 15 Ahead	Inf	88.4 %		
5/1 (A534 Wrexham Road)	5.00	0.00	Y	Arm 6 Left	23.20	15.1 %	2095	2095
				Arm 13 Ahead	Inf	84.9 %		
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	4.50	0.00	Y	Arm 8 Ahead	Inf	100.0 %	2065	2065
11/2	4.50	0.00	Y	Arm 8 Ahead	Inf	74.9 %	2065	2065
				Arm 12 Right	Inf	25.1 %		
12/1	4.50	0.00	Y	Arm 9 Ahead	Inf	42.1 %	2065	2065
				Arm 14 Right	Inf	57.9 %		
12/2	4.50	0.00	Y	Arm 14 Right	Inf	100.0 %	2065	2065
13/1	4.50	0.00	Y	Arm 7 Ahead	Inf	4.8 %	2065	2065
				Arm 11 Right	Inf	95.2 %		
13/2	4.50	0.00	Y	Arm 11 Right	Inf	100.0 %	2065	2065
14/1	4.50	0.00	Y	Arm 10 Ahead	Inf	73.5 %	2065	2065
				Arm 15 Right	Inf	26.5 %		
14/2	4.50	0.00	Y	Arm 15 Right	Inf	100.0 %	2065	2065
15/1	4.50	0.00	Y	Arm 6 Ahead	Inf	100.0 %	2065	2065
15/2	4.50	0.00	Y	Arm 6 Ahead	Inf	95.9 %	2065	2065
				Arm 13 Right	Inf	4.1 %		

Full Input Data And Results

Scenario 1: '2023 Surveyed Flows AM' (FG1: '2023 Surveyed Flows AM', Plan 1: 'Network Control Plan 1')

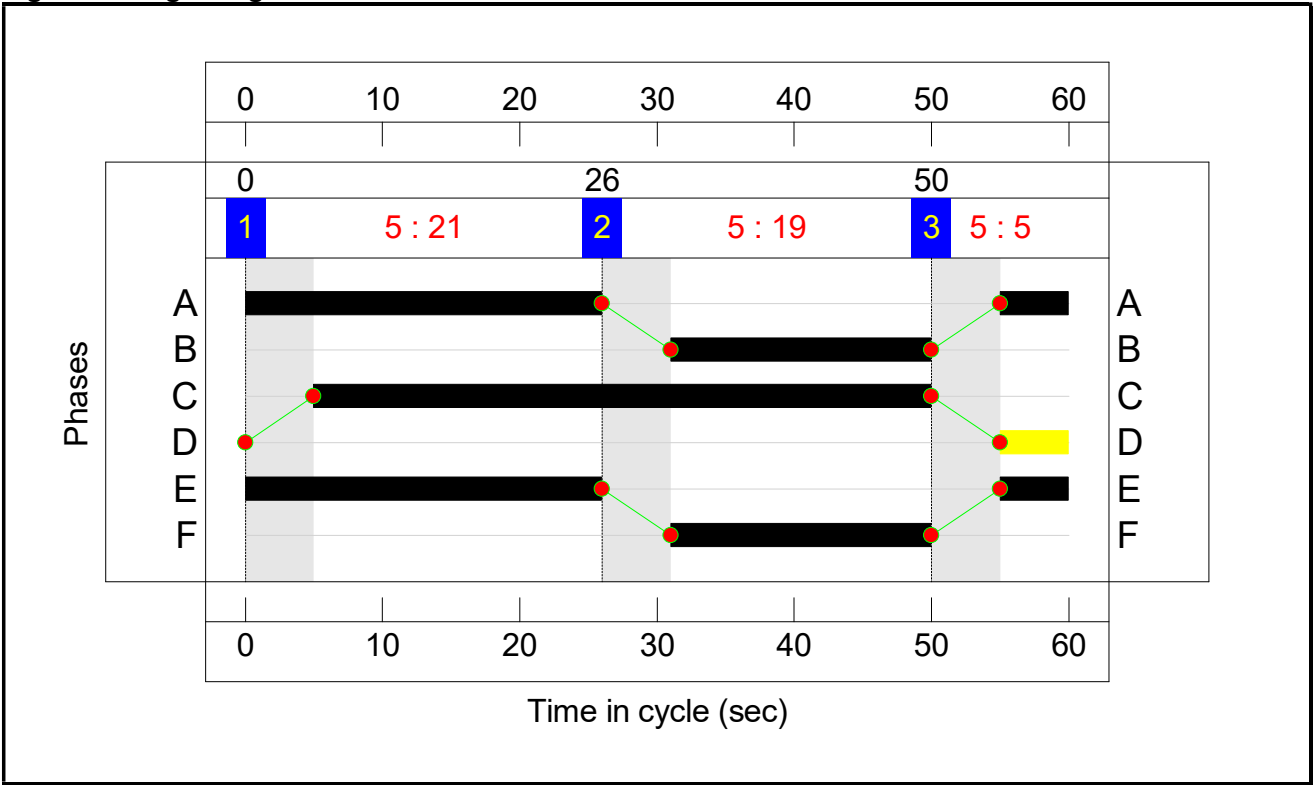
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	21	19	5
Change Point	0	26	50

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

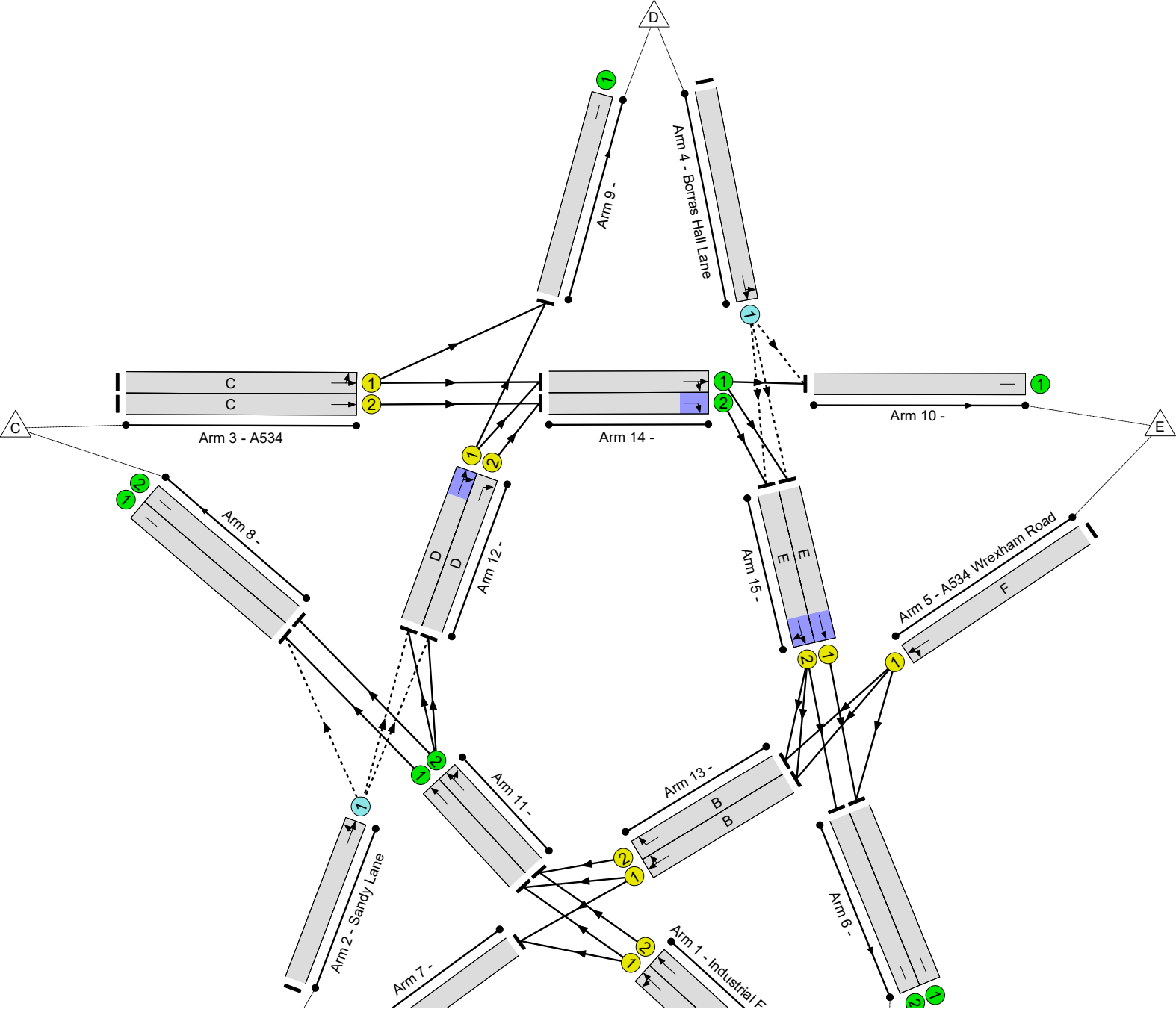
Full Input Data And Results



Unnamed Junction

PRC: 27.8 %

Total Traffic Delay: 13.5 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	70.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	70.4%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	31	-	19	2044	1090	1.7%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	31	-	459	2050	1093	42.0%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	34	2024	806	4.2%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	45	-	817	2111	1618	50.5%
3/2	A534 Ahead	U	N/A	N/A	C		1	45	-	650	2115	1622	40.1%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	159	2106	226	70.2%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	19	-	486	2071	690	70.4%
6/1		U	N/A	N/A	-		-	-	-	765	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	652	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	198	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	399	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	176	2065	2065	8.5%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	630	2065	2065	30.5%
12/1	Ahead Right	U	N/A	N/A	D		1	5	-	82	2065	206	39.7%
12/2	Right	U	N/A	N/A	D		1	5	-	4	2065	206	1.9%
13/1	Ahead Right	U	N/A	N/A	B		1	19	-	171	2065	688	24.8%
13/2	Right	U	N/A	N/A	B		1	19	-	171	2065	688	24.8%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	859	2065	2065	41.6%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	654	2065	2065	31.7%
15/1	Ahead	U	N/A	N/A	E		1	31	-	606	2065	1101	55.0%
15/2	Ahead Right	U	N/A	N/A	E		1	31	-	667	2065	1101	60.6%

Full Input Data And Results

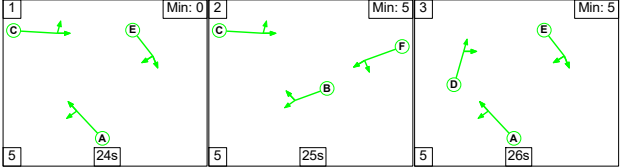
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	193	0	0	9.6	3.9	0.0	13.5	-	-	-	-
Unnamed Junction	-	-	193	0	0	9.6	3.9	0.0	13.5	-	-	-	-
1/1	19	19	-	-	-	0.0	0.0	-	0.0	8.4	0.1	0.0	0.2
1/2	459	459	-	-	-	1.1	0.0	-	1.1	8.4	4.6	0.0	4.6
2/1	34	34	34	0	0	0.0	0.0	-	0.0	3.1	0.1	0.0	0.1
3/1	817	817	-	-	-	0.6	0.5	-	1.1	4.9	5.0	0.5	5.5
3/2	650	650	-	-	-	0.4	0.3	-	0.8	4.2	3.6	0.3	3.9
4/1	159	159	159	0	0	1.0	1.1	-	2.1	47.9	2.5	1.1	3.6
5/1	486	486	-	-	-	2.4	1.2	-	3.5	26.1	7.0	1.2	8.2
6/1	765	765	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	652	652	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	198	198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	176	176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	630	630	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	82	82	-	-	-	0.9	0.3	-	1.2	52.1	1.3	0.3	1.7
12/2	4	4	-	-	-	0.0	0.0	-	0.0	33.3	0.1	0.0	0.1
13/1	171	171	-	-	-	0.2	0.2	-	0.4	8.0	0.4	0.2	0.6
13/2	171	171	-	-	-	0.2	0.2	-	0.4	7.6	0.4	0.2	0.5
14/1	859	859	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	606	606	-	-	-	1.1	0.0	-	1.1	6.8	3.7	0.0	3.7
15/2	667	667	-	-	-	1.7	0.0	-	1.7	9.2	5.1	0.0	5.1

Full Input Data And Results

C1	PRC for Signalled Lanes (%):	27.8	Total Delay for Signalled Lanes (pcuHr):	11.34	Cycle Time (s):	60
	PRC Over All Lanes (%):	27.8	Total Delay Over All Lanes(pcuHr):	13.48		

Full Input Data And Results
Scenario 2: '2023 Surveyed Flows PM' (FG2: '2023 Surveyed Flows PM', Plan 1: 'Network Control Plan 1')

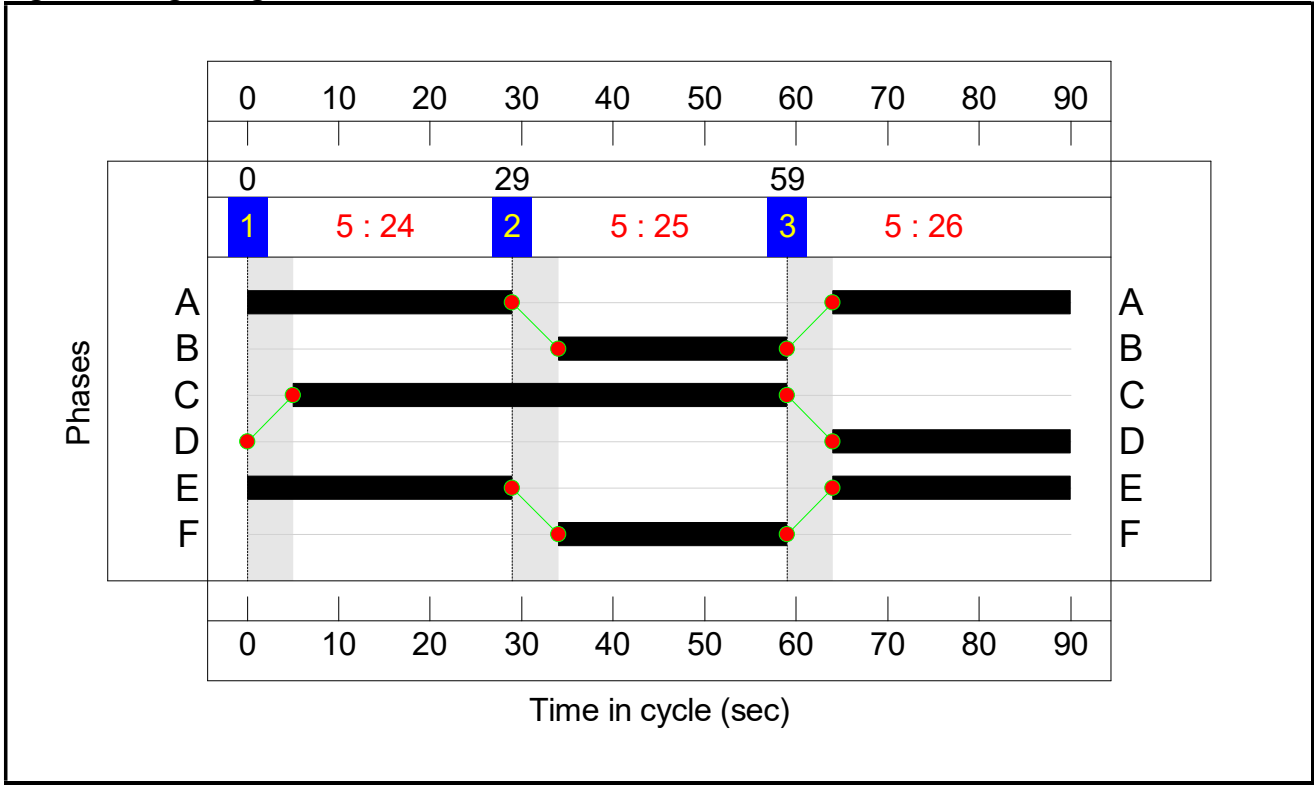
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	24	25	26
Change Point	0	29	59

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

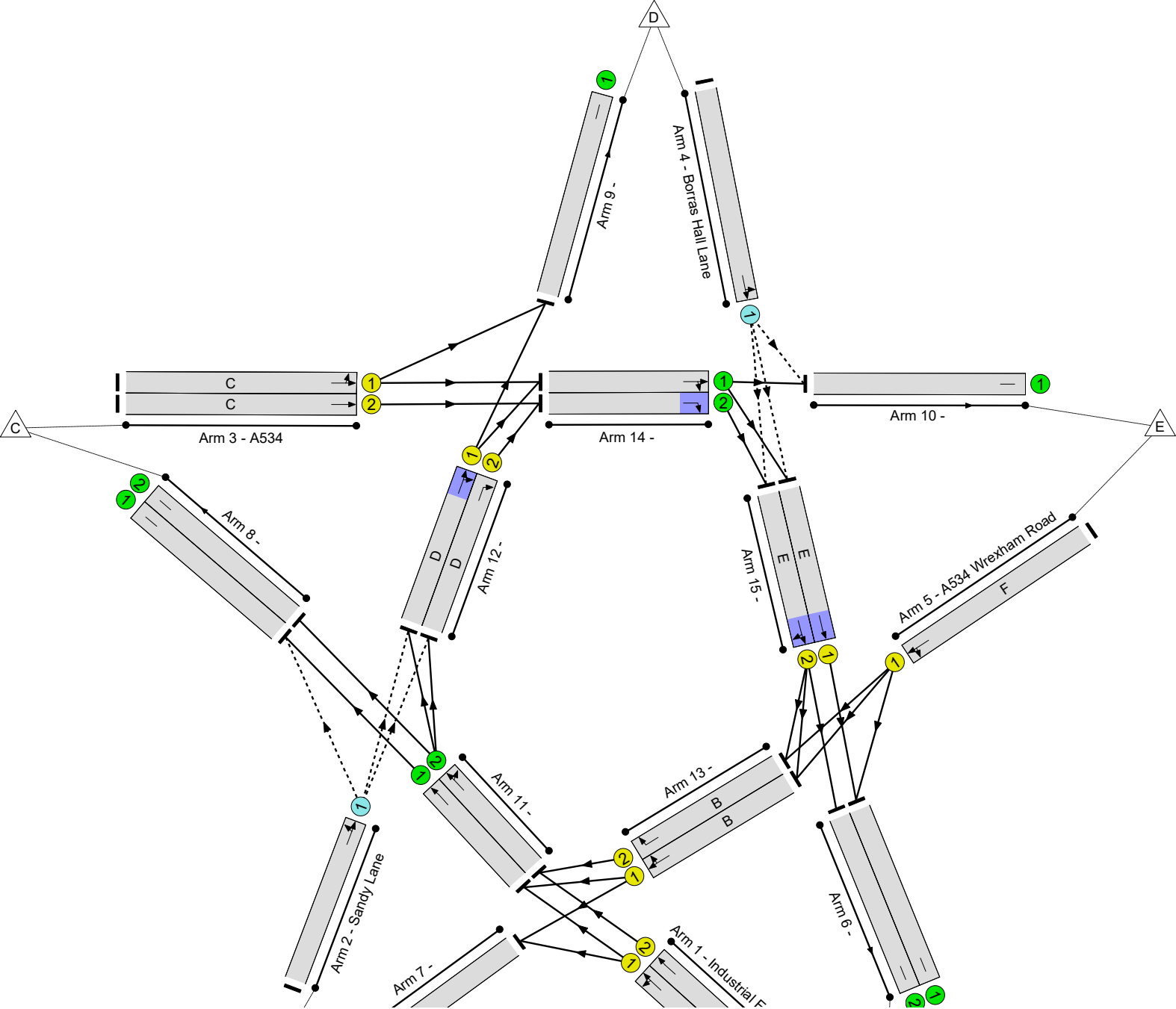
Full Input Data And Results



Unnamed Junction

PRC: 17.1 %

Total Traffic Delay: 17.8 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	76.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	76.9%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	55	-	606	2049	1275	47.5%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	55	-	934	2050	1276	73.2%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	25	2014	182	13.8%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	54	-	399	2111	1290	30.9%
3/2	A534 Ahead	U	N/A	N/A	C		1	54	-	293	2115	1293	22.7%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	33	2094	693	4.8%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	25	-	466	2098	606	76.9%
6/1		U	N/A	N/A	-		-	-	-	162	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	286	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	13	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	823	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	839	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	133	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	500	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	805	2065	2065	39.0%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1145	2065	2065	55.4%
12/1	Ahead Right	U	N/A	N/A	D		1	26	-	312	2065	619	50.4%
12/2	Right	U	N/A	N/A	D		1	26	-	1	2065	619	0.2%
13/1	Ahead Right	U	N/A	N/A	B		1	25	-	212	2065	597	35.5%
13/2	Right	U	N/A	N/A	B		1	25	-	211	2065	597	35.4%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	578	2065	2065	28.0%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	294	2065	2065	14.2%
15/1	Ahead	U	N/A	N/A	E		1	55	-	103	2065	1285	8.0%
15/2	Ahead Right	U	N/A	N/A	E		1	55	-	302	2065	1285	23.5%

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	-	-	58	0	0	14.2	3.6	0.0	17.8	-	-	-	-
Unnamed Junction	-	-	58	0	0	14.2	3.6	0.0	17.8	-	-	-	-
1/1	606	606	-	-	-	1.5	0.5	-	2.0	11.8	8.1	0.5	8.5
1/2	934	934	-	-	-	3.1	0.0	-	3.1	11.8	16.1	0.0	16.1
2/1	25	25	25	0	0	0.1	0.1	-	0.2	31.0	0.4	0.1	0.5
3/1	399	399	-	-	-	0.9	0.2	-	1.2	10.4	4.8	0.2	5.0
3/2	293	293	-	-	-	0.6	0.1	-	0.8	9.7	3.3	0.1	3.4
4/1	33	33	33	0	0	0.0	0.0	-	0.0	3.4	0.1	0.0	0.1
5/1	466	466	-	-	-	3.8	1.6	-	5.4	41.8	10.6	1.6	12.2
6/1	162	162	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	286	286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	13	13	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	839	839	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	133	133	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	500	500	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	805	805	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1145	1145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	312	312	-	-	-	2.6	0.5	-	3.1	36.0	4.8	0.5	5.3
12/2	1	1	-	-	-	0.0	0.0	-	0.0	19.0	0.0	0.0	0.0
13/1	212	212	-	-	-	0.3	0.3	-	0.6	10.4	0.6	0.3	0.9
13/2	211	211	-	-	-	0.3	0.3	-	0.6	9.4	0.4	0.3	0.7
14/1	578	578	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	294	294	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	103	103	-	-	-	0.2	0.0	-	0.2	6.9	1.0	0.0	1.0
15/2	302	302	-	-	-	0.6	0.0	-	0.6	7.6	2.9	0.0	2.9

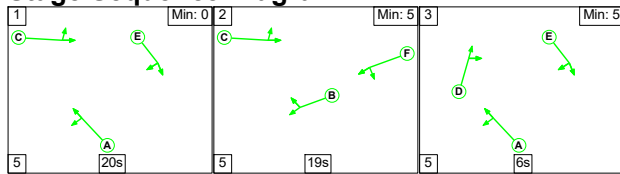
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	17.1	Total Delay for Signalled Lanes (pcuHr):	17.53	Cycle Time (s):	90
	PRC Over All Lanes (%):	17.1	Total Delay Over All Lanes(pcuHr):	17.77		

Full Input Data And Results

Scenario 3: '2030 Growthed Flows AM' (FG3: '2030 Growthed Flows AM', Plan 1: 'Network Control Plan 1')

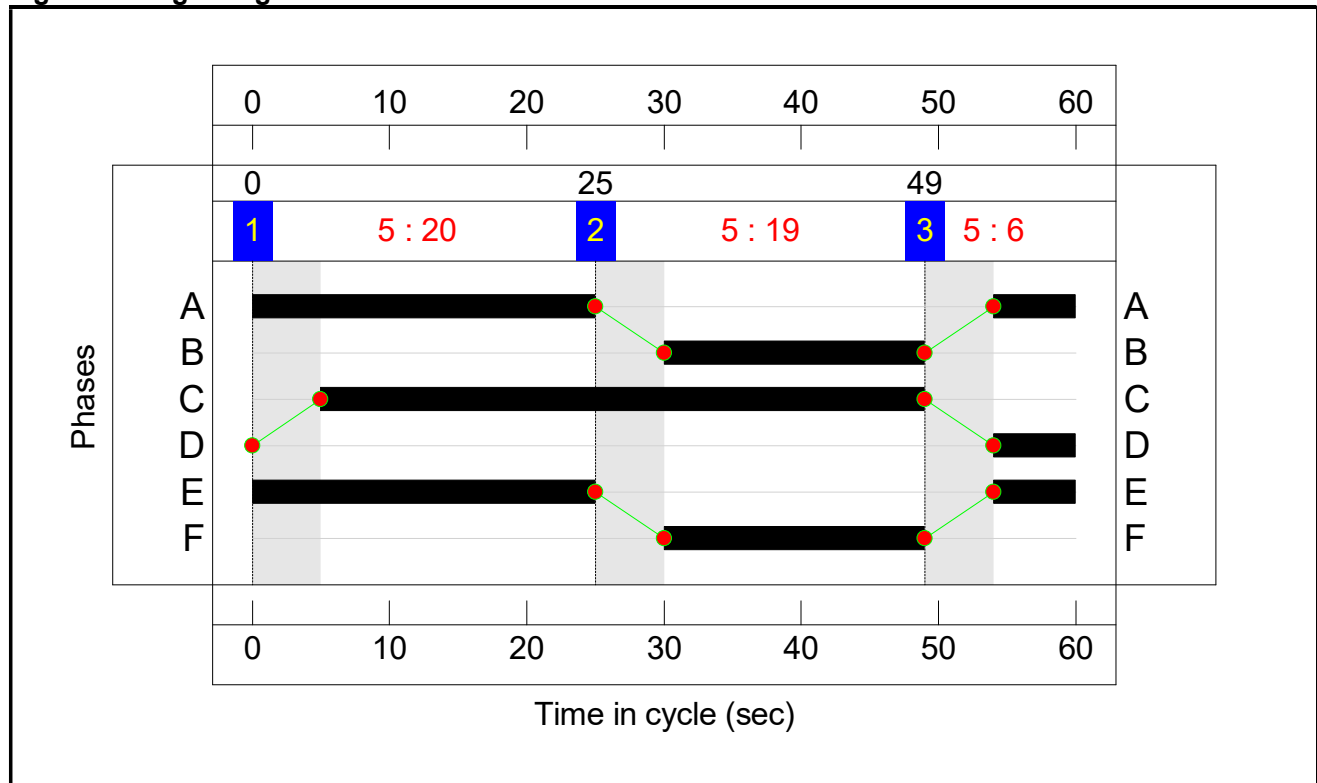
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	20	19	6
Change Point	0	25	49

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

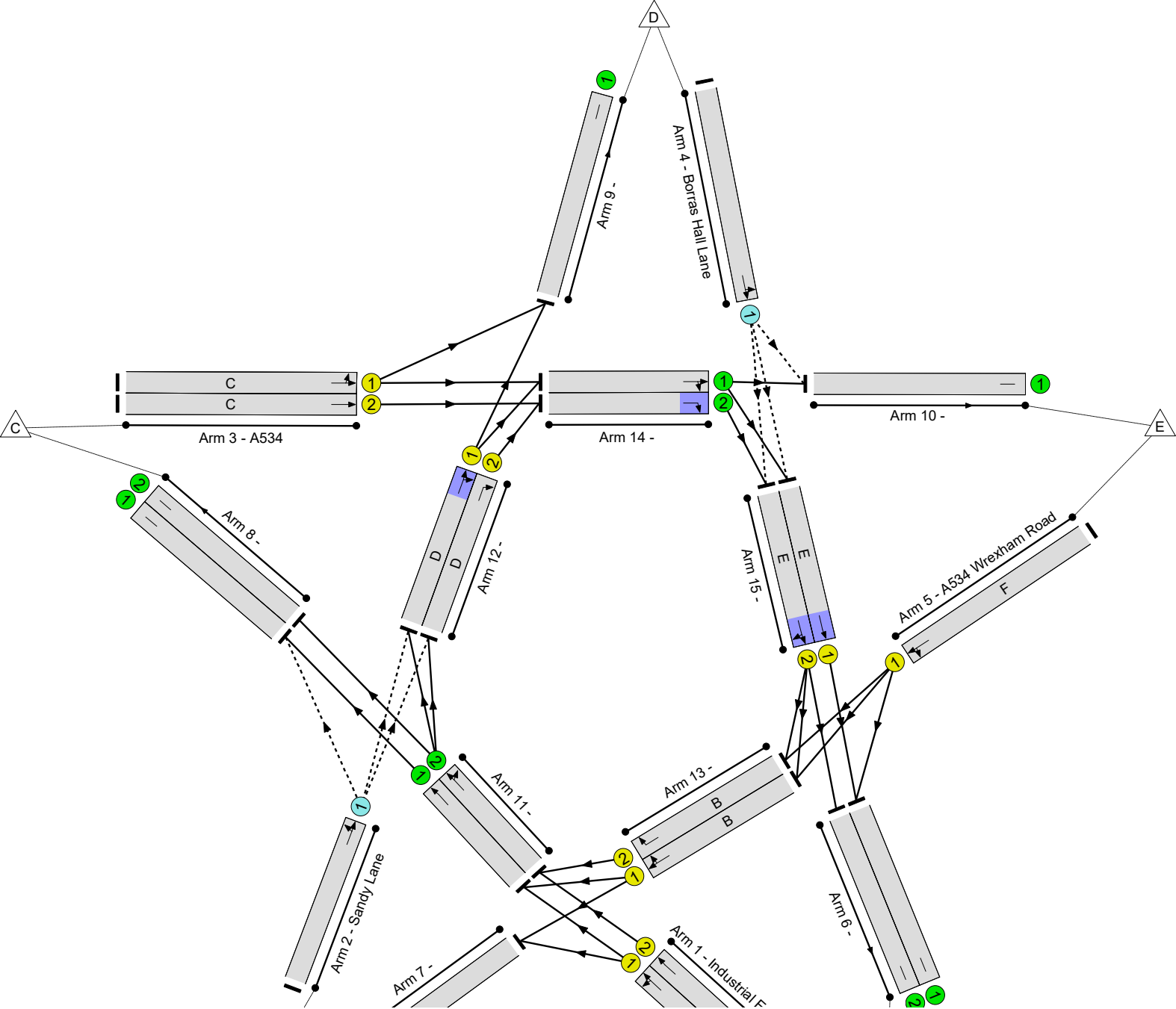
Full Input Data And Results



Unnamed Junction

PRC: 21.8 %

Total Traffic Delay: 14.5 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	73.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	73.9%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	31	-	35	2047	1092	3.2%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	31	-	467	2050	1093	42.7%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	35	2022	770	4.5%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	44	-	841	2111	1583	53.1%
3/2	A534 Ahead	U	N/A	N/A	C		1	44	-	699	2115	1586	44.1%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	166	2107	245	67.7%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	19	-	510	2071	690	73.9%
6/1		U	N/A	N/A	-		-	-	-	790	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	698	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	42	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	200	2065	2065	9.7%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	646	2065	2065	31.3%
12/1	Ahead Right	U	N/A	N/A	D		1	6	-	86	2065	241	35.7%
12/2	Right	U	N/A	N/A	D		1	6	-	4	2065	241	1.7%
13/1	Ahead Right	U	N/A	N/A	B		1	19	-	179	2065	688	26.0%
13/2	Right	U	N/A	N/A	B		1	19	-	179	2065	688	26.0%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	885	2065	2065	42.9%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	703	2065	2065	34.0%
15/1	Ahead	U	N/A	N/A	E		1	31	-	623	2065	1101	56.6%
15/2	Ahead Right	U	N/A	N/A	E		1	31	-	713	2065	1101	64.7%

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	-	-	201	0	0	10.5	4.1	0.0	14.5	-	-	-	-
Unnamed Junction	-	-	201	0	0	10.5	4.1	0.0	14.5	-	-	-	-
1/1	35	35	-	-	-	0.1	0.0	-	0.1	8.5	0.3	0.0	0.3
1/2	467	467	-	-	-	1.1	0.0	-	1.1	8.5	4.7	0.0	4.7
2/1	35	35	35	0	0	0.0	0.0	-	0.0	3.4	0.1	0.0	0.1
3/1	841	841	-	-	-	0.7	0.6	-	1.3	5.5	5.6	0.6	6.2
3/2	699	699	-	-	-	0.5	0.4	-	0.9	4.8	4.3	0.4	4.7
4/1	166	166	166	0	0	1.0	1.0	-	2.0	43.7	2.6	1.0	3.6
5/1	510	510	-	-	-	2.5	1.4	-	3.9	27.5	7.5	1.4	8.9
6/1	790	790	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	698	698	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	42	42	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	200	200	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	86	86	-	-	-	0.9	0.3	-	1.2	49.3	1.4	0.3	1.7
12/2	4	4	-	-	-	0.0	0.0	-	0.0	31.0	0.1	0.0	0.1
13/1	179	179	-	-	-	0.2	0.2	-	0.4	8.2	0.5	0.2	0.6
13/2	179	179	-	-	-	0.2	0.2	-	0.4	7.8	0.4	0.2	0.6
14/1	885	885	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	703	703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	623	623	-	-	-	1.2	0.0	-	1.2	7.1	3.9	0.0	3.9
15/2	713	713	-	-	-	1.9	0.0	-	1.9	9.7	5.6	0.0	5.6

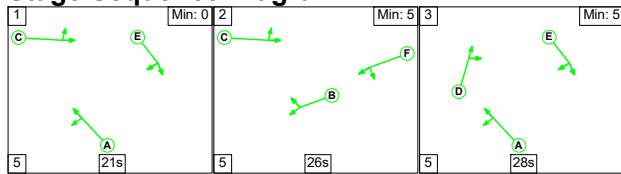
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	21.8	Total Delay for Signalled Lanes (pcuHr):	12.47	Cycle Time (s):	60
	PRC Over All Lanes (%):	21.8	Total Delay Over All Lanes(pcuHr):	14.51		

Full Input Data And Results

Scenario 4: '2030 Growthed Flows PM' (FG4: '2030 Growthed Flows PM', Plan 1: 'Network Control Plan 1')

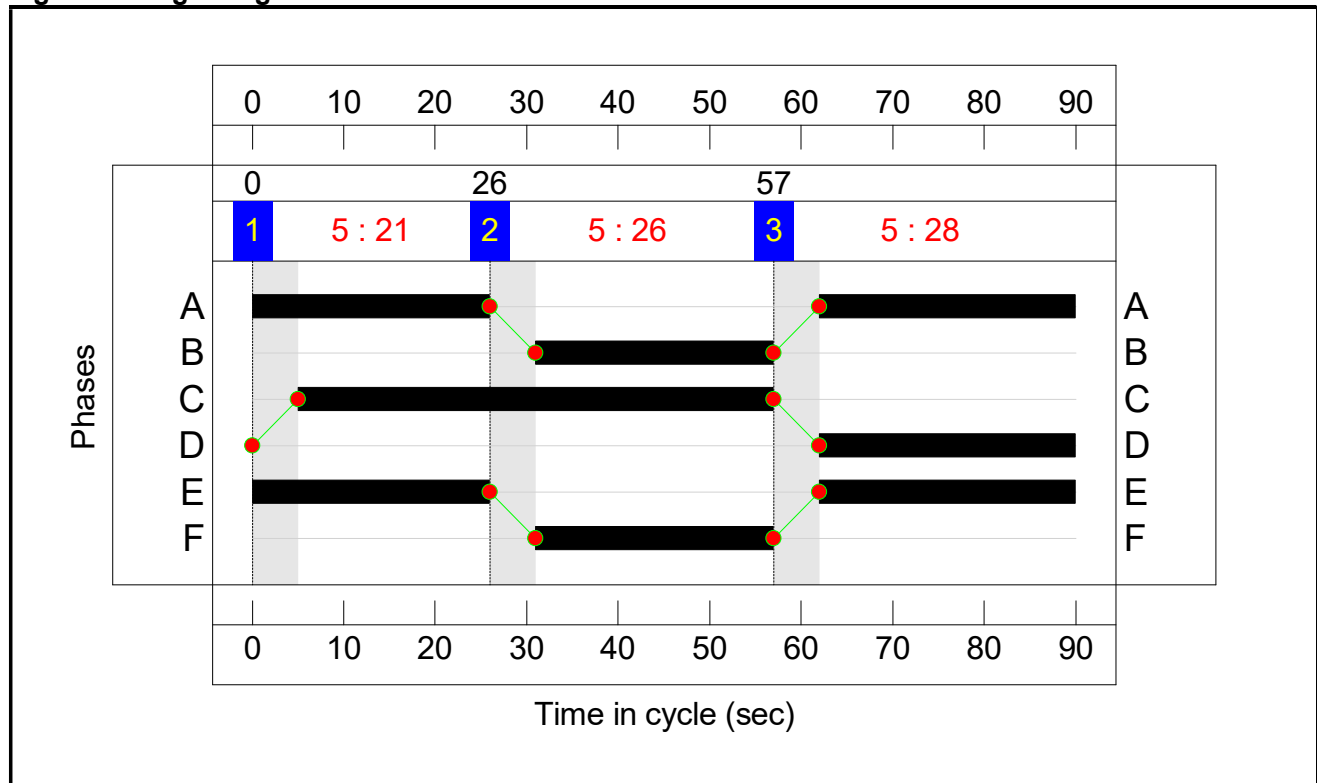
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	21	26	28
Change Point	0	26	57

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

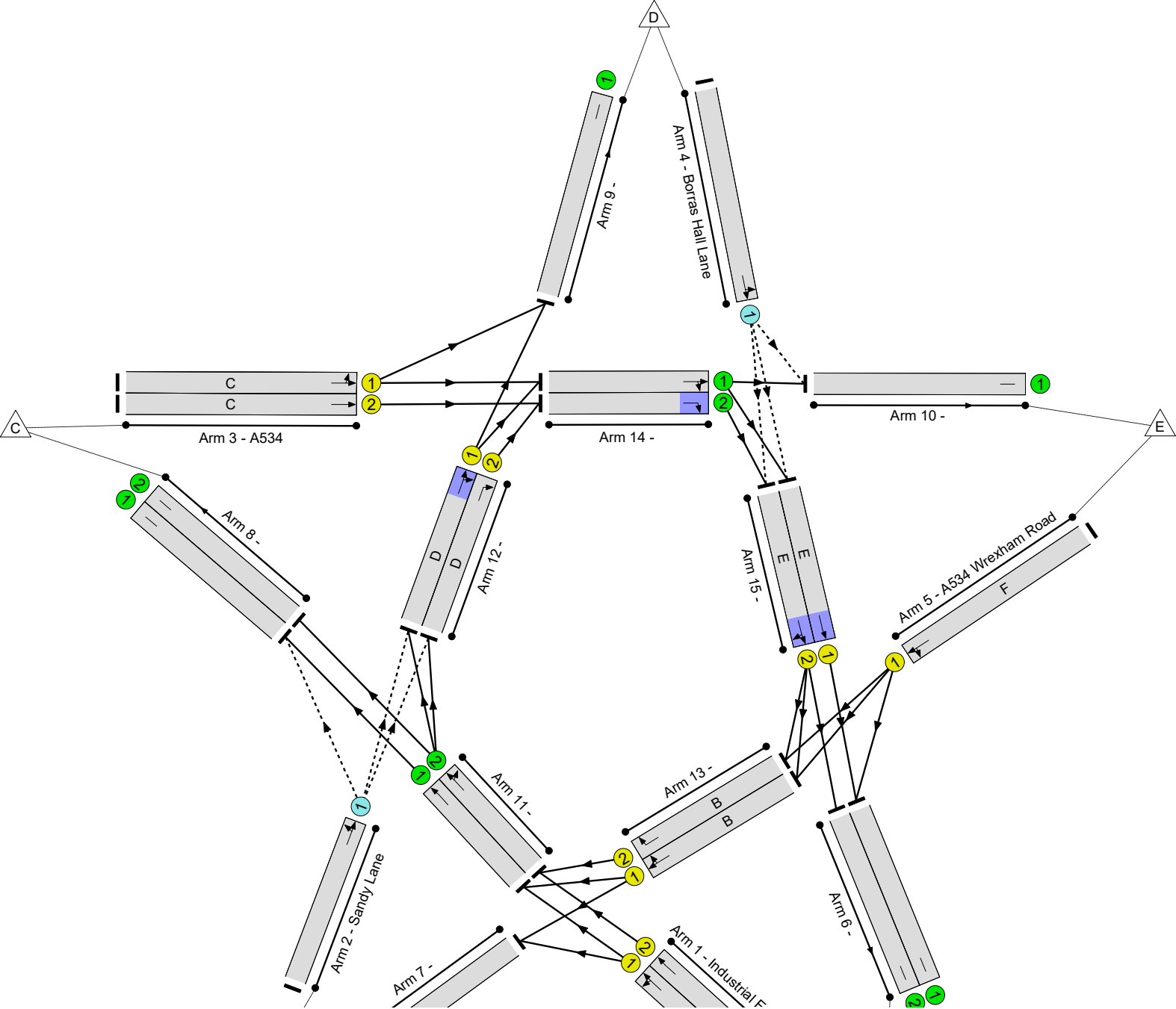
Full Input Data And Results



Unnamed Junction

PRC: 15.8 %

Total Traffic Delay: 19.2 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	77.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	77.7%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	54	-	647	2049	1252	51.7%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	54	-	970	2050	1253	77.4%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	26	2012	182	14.3%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	52	-	407	2110	1243	32.8%
3/2	A534 Ahead	U	N/A	N/A	C		1	52	-	319	2115	1245	25.6%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	34	2095	675	5.0%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	26	-	489	2098	629	77.7%
6/1		U	N/A	N/A	-		-	-	-	158	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	13	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	875	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	870	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	140	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	856	2065	2065	41.5%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1191	2065	2065	57.7%
12/1	Ahead Right	U	N/A	N/A	D		1	28	-	327	2065	665	49.1%
12/2	Right	U	N/A	N/A	D		1	28	-	1	2065	665	0.2%
13/1	Ahead Right	U	N/A	N/A	B		1	26	-	222	2065	619	35.8%
13/2	Right	U	N/A	N/A	B		1	26	-	221	2065	619	35.7%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	594	2065	2065	28.8%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	320	2065	2065	15.5%
15/1	Ahead	U	N/A	N/A	E		1	54	-	96	2065	1262	7.6%
15/2	Ahead Right	U	N/A	N/A	E		1	54	-	328	2065	1262	26.0%

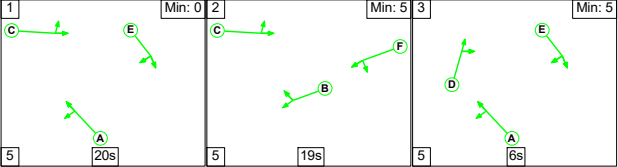
Full Input Data And Results

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	-	-	60	0	0	15.4	3.8	0.0	19.2	-	-	-	-
Unnamed Junction	-	-	60	0	0	15.4	3.8	0.0	19.2	-	-	-	-
1/1	647	647	-	-	-	1.8	0.5	-	2.3	12.9	9.2	0.5	9.7
1/2	970	970	-	-	-	3.5	0.0	-	3.5	12.9	17.8	0.0	17.8
2/1	26	26	26	0	0	0.1	0.1	-	0.2	30.7	0.4	0.1	0.5
3/1	407	407	-	-	-	1.1	0.2	-	1.3	11.6	5.1	0.2	5.3
3/2	319	319	-	-	-	0.8	0.2	-	1.0	10.9	3.8	0.2	4.0
4/1	34	34	34	0	0	0.0	0.0	-	0.0	3.6	0.1	0.0	0.1
5/1	489	489	-	-	-	3.9	1.7	-	5.6	41.3	11.1	1.7	12.8
6/1	158	158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	13	13	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	875	875	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	870	870	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	140	140	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	856	856	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1191	1191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	327	327	-	-	-	2.6	0.5	-	3.0	33.4	4.7	0.5	5.2
12/2	1	1	-	-	-	0.0	0.0	-	0.0	19.2	0.0	0.0	0.0
13/1	222	222	-	-	-	0.3	0.3	-	0.6	10.1	0.6	0.3	0.9
13/2	221	221	-	-	-	0.3	0.3	-	0.6	9.2	0.5	0.3	0.7
14/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	320	320	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	96	96	-	-	-	0.2	0.0	-	0.2	8.2	1.0	0.0	1.0
15/2	328	328	-	-	-	0.8	0.0	-	0.8	8.4	3.3	0.0	3.3

Full Input Data And Results

C1	PRC for Signalled Lanes (%):	15.8	Total Delay for Signalled Lanes (pcuHr):	18.90	Cycle Time (s):	90
	PRC Over All Lanes (%):	15.8	Total Delay Over All Lanes(pcuHr):	19.16		

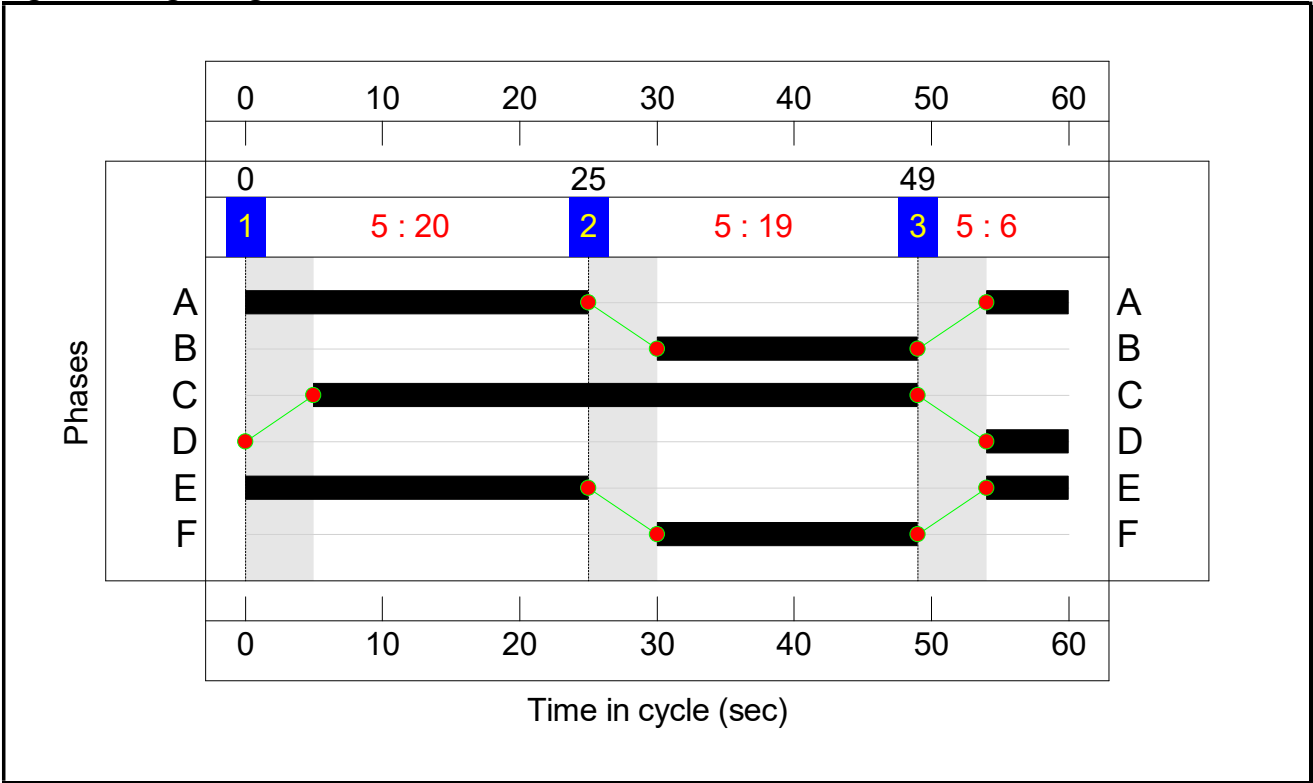
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	20	19	6
Change Point	0	25	49

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

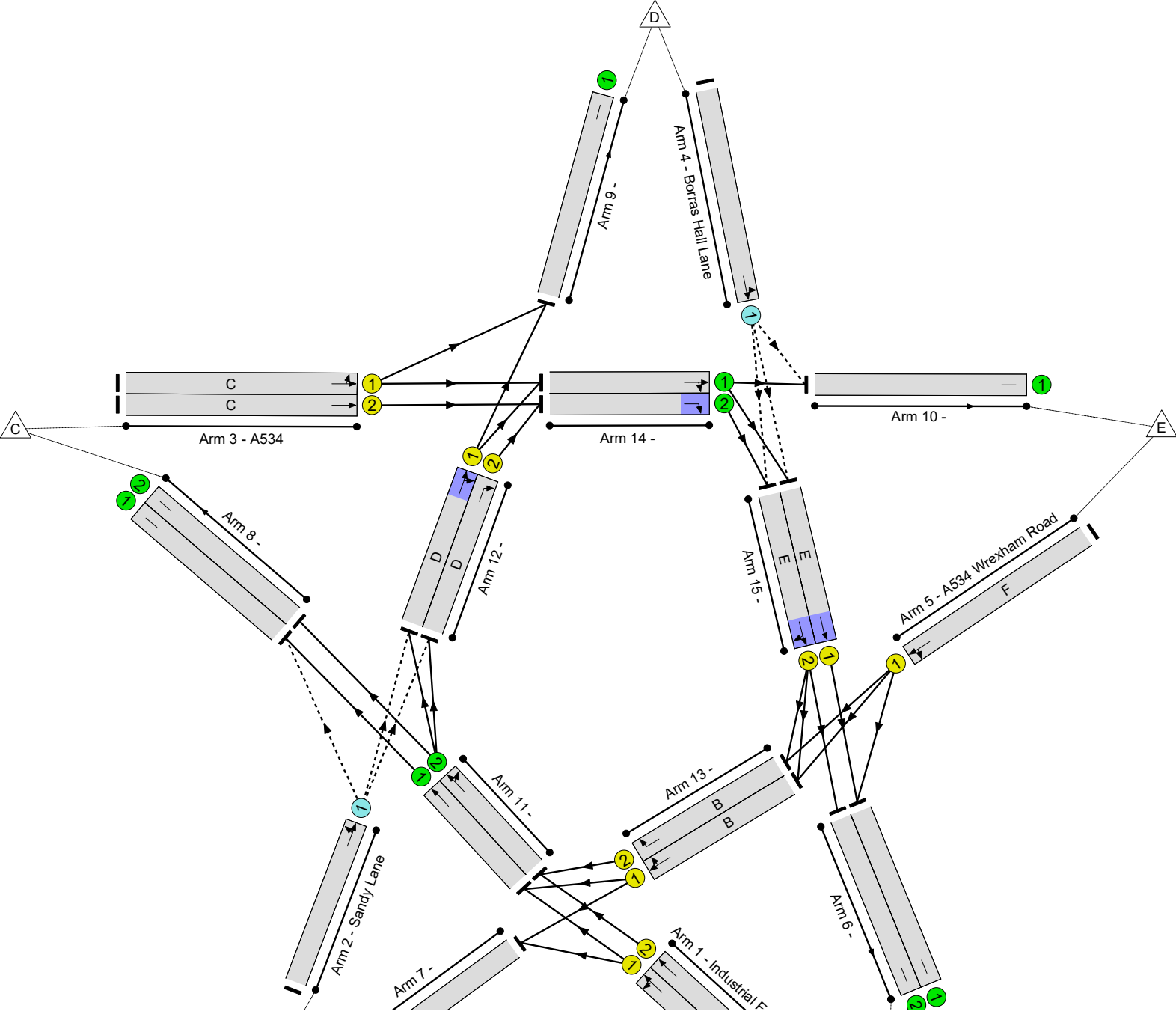
Full Input Data And Results



Unnamed Junction

PRC: 16.8 %

Total Traffic Delay: 15.8 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	77.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	77.1%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	31	-	50	2048	1092	4.6%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	31	-	472	2050	1093	43.2%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	37	2023	736	5.0%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	44	-	869	2111	1583	54.9%
3/2	A534 Ahead	U	N/A	N/A	C		1	44	-	735	2115	1586	46.3%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	174	2106	240	72.4%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	19	-	532	2071	690	77.1%
6/1		U	N/A	N/A	-		-	-	-	814	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	16	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	579	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	43	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	436	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	222	2065	2065	10.8%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	659	2065	2065	31.9%
12/1	Ahead Right	U	N/A	N/A	D		1	6	-	89	2065	241	36.9%
12/2	Right	U	N/A	N/A	D		1	6	-	4	2065	241	1.7%
13/1	Ahead Right	U	N/A	N/A	B		1	19	-	188	2065	688	27.3%
13/2	Right	U	N/A	N/A	B		1	19	-	187	2065	688	27.2%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	915	2065	2065	44.3%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	739	2065	2065	35.8%
15/1	Ahead	U	N/A	N/A	E		1	31	-	640	2065	1101	58.1%
15/2	Ahead Right	U	N/A	N/A	E		1	31	-	752	2065	1101	68.3%

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	-	-	211	0	0	11.1	4.7	0.0	15.8	-	-	-	-
Unnamed Junction	-	-	211	0	0	11.1	4.7	0.0	15.8	-	-	-	-
1/1	50	50	-	-	-	0.1	0.0	-	0.1	8.5	0.4	0.0	0.4
1/2	472	472	-	-	-	1.1	0.0	-	1.1	8.5	4.7	0.0	4.7
2/1	37	37	37	0	0	0.0	0.0	-	0.0	3.6	0.1	0.0	0.1
3/1	869	869	-	-	-	0.8	0.6	-	1.4	5.7	6.0	0.6	6.6
3/2	735	735	-	-	-	0.6	0.4	-	1.0	5.0	4.5	0.4	4.9
4/1	174	174	174	0	0	1.1	1.3	-	2.3	48.0	2.7	1.3	4.0
5/1	532	532	-	-	-	2.7	1.6	-	4.3	29.1	7.8	1.6	9.5
6/1	814	814	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	16	16	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	43	43	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	436	436	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	222	222	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	89	89	-	-	-	0.9	0.3	-	1.2	49.5	1.5	0.3	1.7
12/2	4	4	-	-	-	0.0	0.0	-	0.0	31.4	0.1	0.0	0.1
13/1	188	188	-	-	-	0.3	0.2	-	0.4	8.6	0.5	0.2	0.7
13/2	187	187	-	-	-	0.2	0.2	-	0.4	8.1	0.4	0.2	0.6
14/1	915	915	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	739	739	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	640	640	-	-	-	1.3	0.0	-	1.3	7.2	4.0	0.0	4.0
15/2	752	752	-	-	-	2.1	0.0	-	2.1	9.9	5.9	0.0	5.9

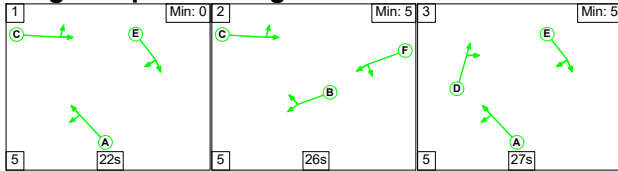
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	16.8	Total Delay for Signalled Lanes (pcuHr):	13.41	Cycle Time (s):	60
	PRC Over All Lanes (%):	16.8	Total Delay Over All Lanes(pcuHr):	15.77		

Full Input Data And Results

Scenario 6: '2037 Growthed Flows PM' (FG6: '2037 Growthed Flows PM', Plan 1: 'Network Control Plan 1')

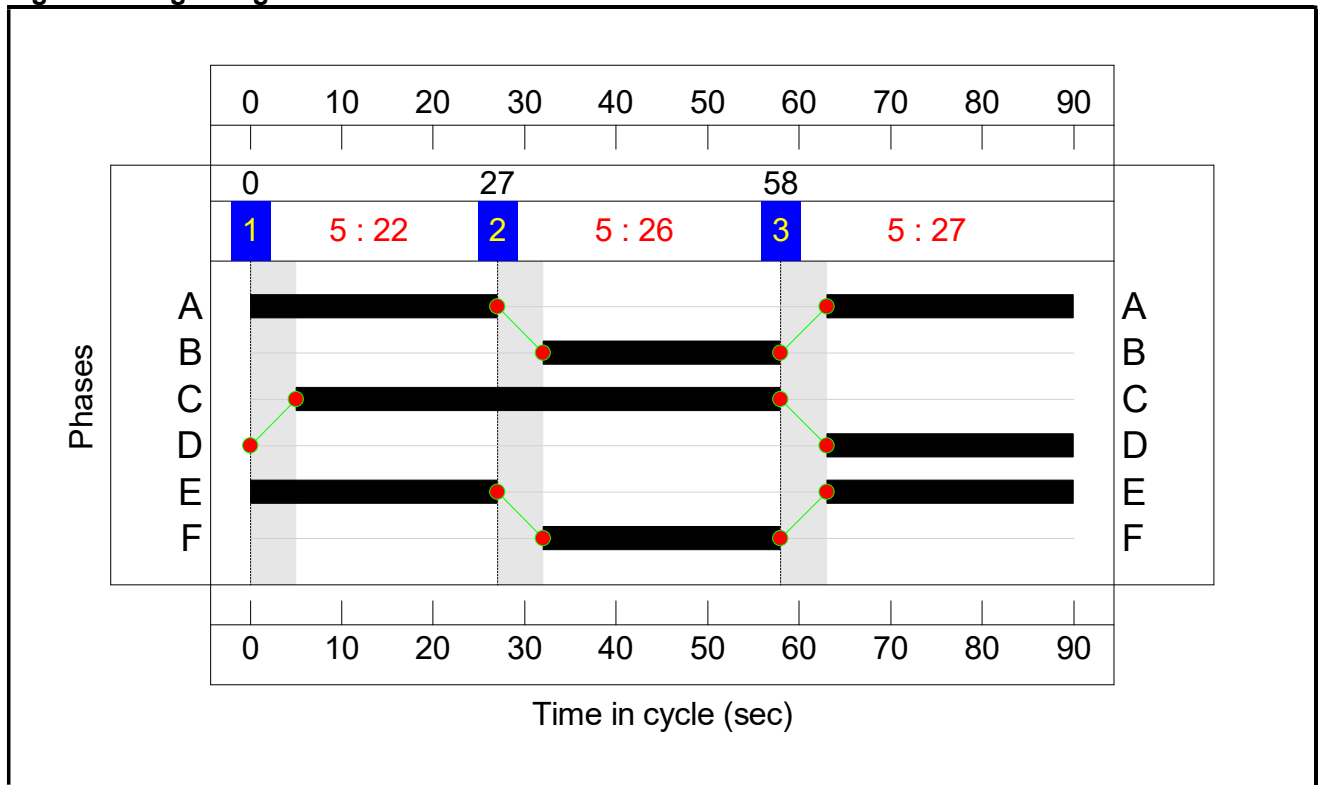
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	22	26	27
Change Point	0	27	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

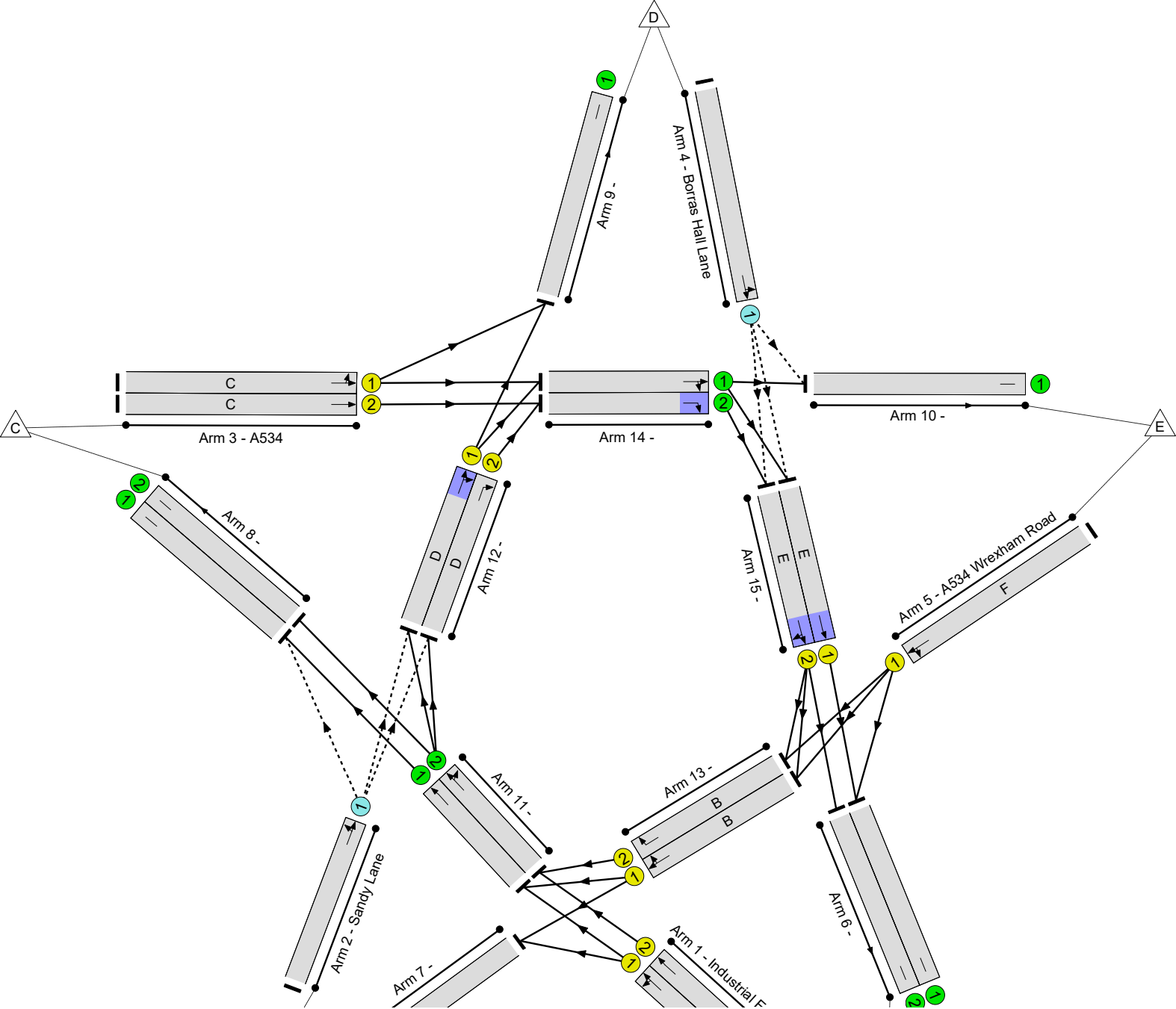
Full Input Data And Results



Unnamed Junction

PRC: 11.3 %

Total Traffic Delay: 20.7 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	80.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	80.9%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	54	-	680	2050	1253	54.3%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	54	-	1002	2050	1253	80.0%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	27	2011	168	16.1%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	53	-	428	2111	1267	33.8%
3/2	A534 Ahead	U	N/A	N/A	C		1	53	-	328	2115	1269	25.8%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	36	2096	639	5.6%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	26	-	509	2098	629	80.9%
6/1		U	N/A	N/A	-		-	-	-	169	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	320	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	14	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	900	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	897	2065	2065	43.4%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1234	2065	2065	59.8%
12/1	Ahead Right	U	N/A	N/A	D		1	27	-	340	2065	642	52.9%
12/2	Right	U	N/A	N/A	D		1	27	-	1	2065	642	0.2%
13/1	Ahead Right	U	N/A	N/A	B		1	26	-	231	2065	619	37.3%
13/2	Right	U	N/A	N/A	B		1	26	-	232	2065	619	37.4%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	623	2065	2065	30.2%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	329	2065	2065	15.9%
15/1	Ahead	U	N/A	N/A	E		1	54	-	105	2065	1262	8.3%
15/2	Ahead Right	U	N/A	N/A	E		1	54	-	338	2065	1262	26.8%

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	-	-	63	0	0	16.3	4.3	0.0	20.7	-	-	-	-
Unnamed Junction	-	-	63	0	0	16.3	4.3	0.0	20.7	-	-	-	-
1/1	680	680	-	-	-	1.9	0.6	-	2.5	13.3	9.8	0.6	10.4
1/2	1002	1002	-	-	-	3.7	0.0	-	3.7	13.3	18.9	0.0	18.9
2/1	27	27	27	0	0	0.1	0.1	-	0.2	32.1	0.4	0.1	0.5
3/1	428	428	-	-	-	1.1	0.3	-	1.3	11.2	5.4	0.3	5.6
3/2	328	328	-	-	-	0.8	0.2	-	1.0	10.4	3.8	0.2	4.0
4/1	36	36	36	0	0	0.0	0.0	-	0.0	3.8	0.1	0.0	0.1
5/1	509	509	-	-	-	4.1	2.0	-	6.2	43.6	11.7	2.0	13.8
6/1	169	169	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	320	320	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	14	14	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	900	900	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	897	897	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1234	1234	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	340	340	-	-	-	2.9	0.6	-	3.4	36.3	5.2	0.6	5.8
12/2	1	1	-	-	-	0.0	0.0	-	0.0	19.3	0.0	0.0	0.0
13/1	231	231	-	-	-	0.4	0.3	-	0.7	10.5	0.7	0.3	1.0
13/2	232	232	-	-	-	0.3	0.3	-	0.6	9.7	0.5	0.3	0.8
14/1	623	623	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	329	329	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	105	105	-	-	-	0.2	0.0	-	0.2	7.9	1.1	0.0	1.1
15/2	338	338	-	-	-	0.8	0.0	-	0.8	8.4	3.3	0.0	3.3

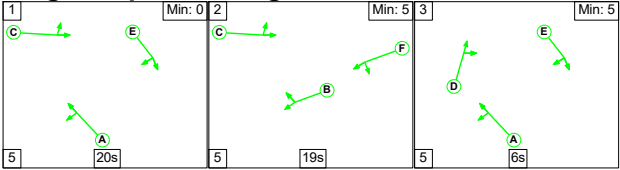
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	11.3	Total Delay for Signalled Lanes (pcuHr):	20.41	Cycle Time (s):	90
	PRC Over All Lanes (%):	11.3	Total Delay Over All Lanes(pcuHr):	20.69		

Full Input Data And Results

Scenario 7: '2030 Base + Deveopment (Sens) AM' (FG31: '2030 Base + Development (Phase 1) AM', Plan 1: 'Network Control Plan 1')

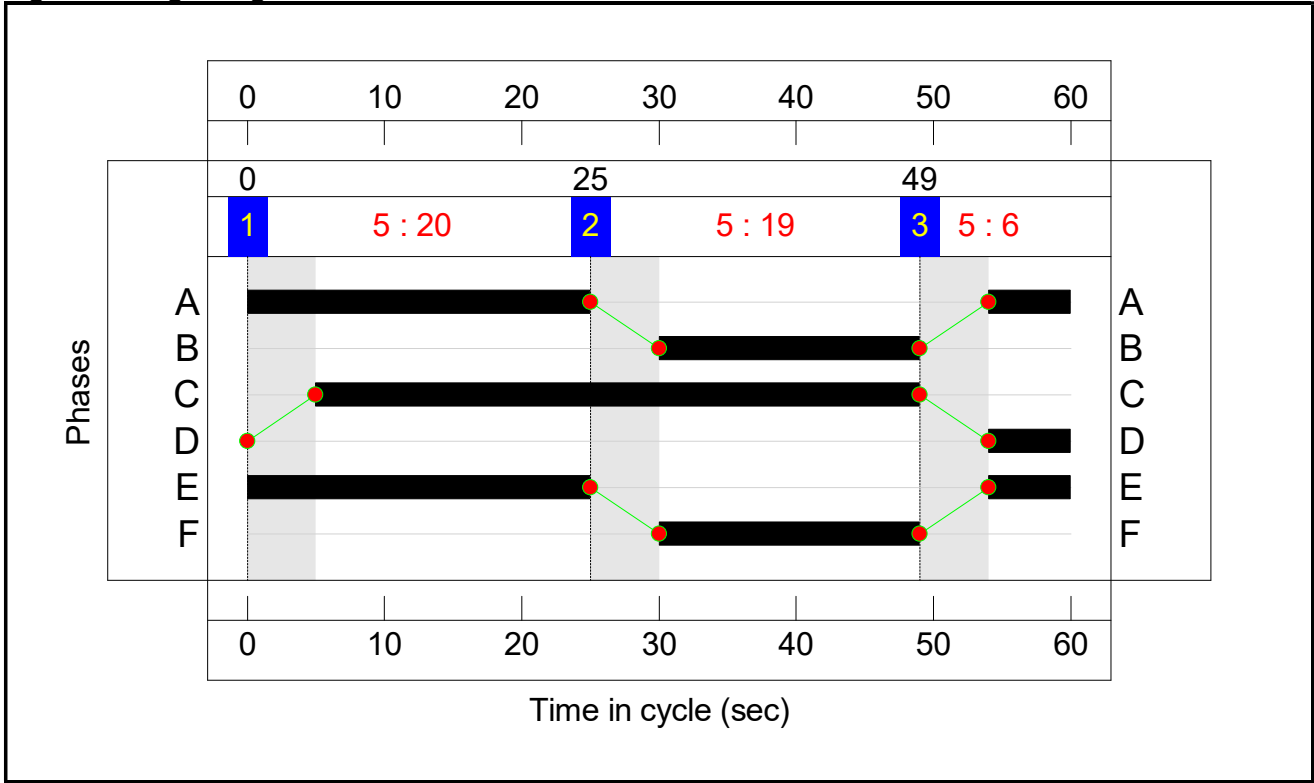
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	20	19	6
Change Point	0	25	49

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

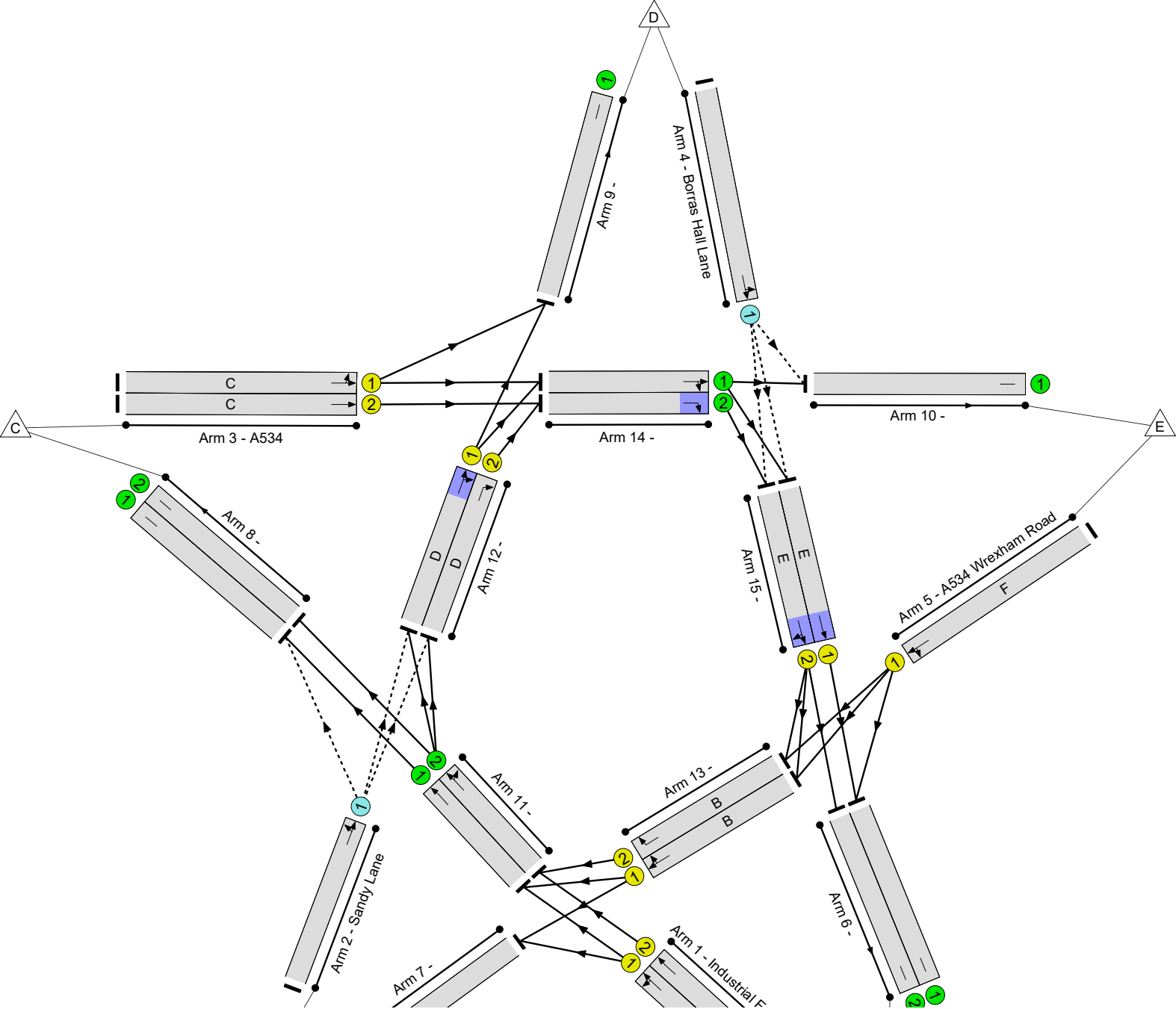
Full Input Data And Results



Unnamed Junction

PRC: 18.9 %

Total Traffic Delay: 16.4 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	75.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	75.7%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	31	-	81	1957	1044	7.8%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	31	-	505	2050	1093	46.2%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	35	2022	767	4.6%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	44	-	902	2112	1584	56.9%
3/2	A534 Ahead	U	N/A	N/A	C		1	44	-	785	2115	1586	49.5%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	172	2107	241	71.2%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	19	-	522	2069	690	75.7%
6/1		U	N/A	N/A	-		-	-	-	869	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	784	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	86	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	197	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	52	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	418	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	174	2065	2065	8.4%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	684	2065	2065	33.1%
12/1	Ahead Right	U	N/A	N/A	D		1	6	-	96	2065	241	39.8%
12/2	Right	U	N/A	N/A	D		1	6	-	4	2065	241	1.7%
13/1	Ahead Right	U	N/A	N/A	B		1	19	-	179	2065	688	26.0%
13/2	Right	U	N/A	N/A	B		1	19	-	179	2065	688	26.0%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	946	2065	2065	45.8%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	789	2065	2065	38.2%
15/1	Ahead	U	N/A	N/A	E		1	31	-	690	2065	1101	62.7%
15/2	Ahead Right	U	N/A	N/A	E		1	31	-	799	2065	1101	72.5%

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	-	-	207	0	0	11.8	4.6	0.0	16.4	-	-	-	-
Unnamed Junction	-	-	207	0	0	11.8	4.6	0.0	16.4	-	-	-	-
1/1	81	81	-	-	-	0.2	0.0	-	0.2	8.7	0.7	0.0	0.7
1/2	505	505	-	-	-	1.2	0.0	-	1.2	8.7	5.2	0.0	5.2
2/1	35	35	35	0	0	0.0	0.0	-	0.0	3.3	0.1	0.0	0.1
3/1	902	902	-	-	-	0.8	0.7	-	1.5	5.9	6.5	0.7	7.2
3/2	785	785	-	-	-	0.7	0.5	-	1.1	5.2	5.0	0.5	5.5
4/1	172	172	172	0	0	1.0	1.2	-	2.2	46.9	2.7	1.2	3.9
5/1	522	522	-	-	-	2.6	1.5	-	4.1	28.4	7.7	1.5	9.2
6/1	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	784	784	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	86	86	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	197	197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	52	52	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	418	418	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	684	684	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	96	96	-	-	-	1.0	0.3	-	1.3	50.3	1.6	0.3	1.9
12/2	4	4	-	-	-	0.0	0.0	-	0.0	30.8	0.1	0.0	0.1
13/1	179	179	-	-	-	0.2	0.2	-	0.4	8.3	0.5	0.2	0.6
13/2	179	179	-	-	-	0.2	0.2	-	0.4	7.9	0.4	0.2	0.6
14/1	946	946	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	789	789	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	690	690	-	-	-	1.5	0.0	-	1.5	7.8	4.5	0.0	4.5
15/2	799	799	-	-	-	2.3	0.0	-	2.3	10.4	6.7	0.0	6.7

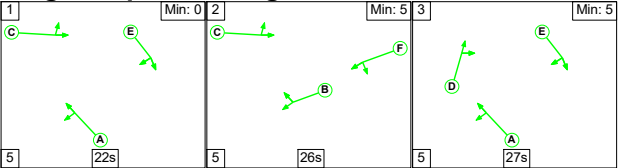
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	18.9	Total Delay for Signalled Lanes (pcuHr):	14.12	Cycle Time (s):	60
	PRC Over All Lanes (%):	18.9	Total Delay Over All Lanes(pcuHr):	16.40		

Full Input Data And Results

Scenario 8: '2030 Base + Development (Sens) PM' (FG32: '2030 Base + Development (Phase 1) PM', Plan 1: 'Network Control Plan 1')

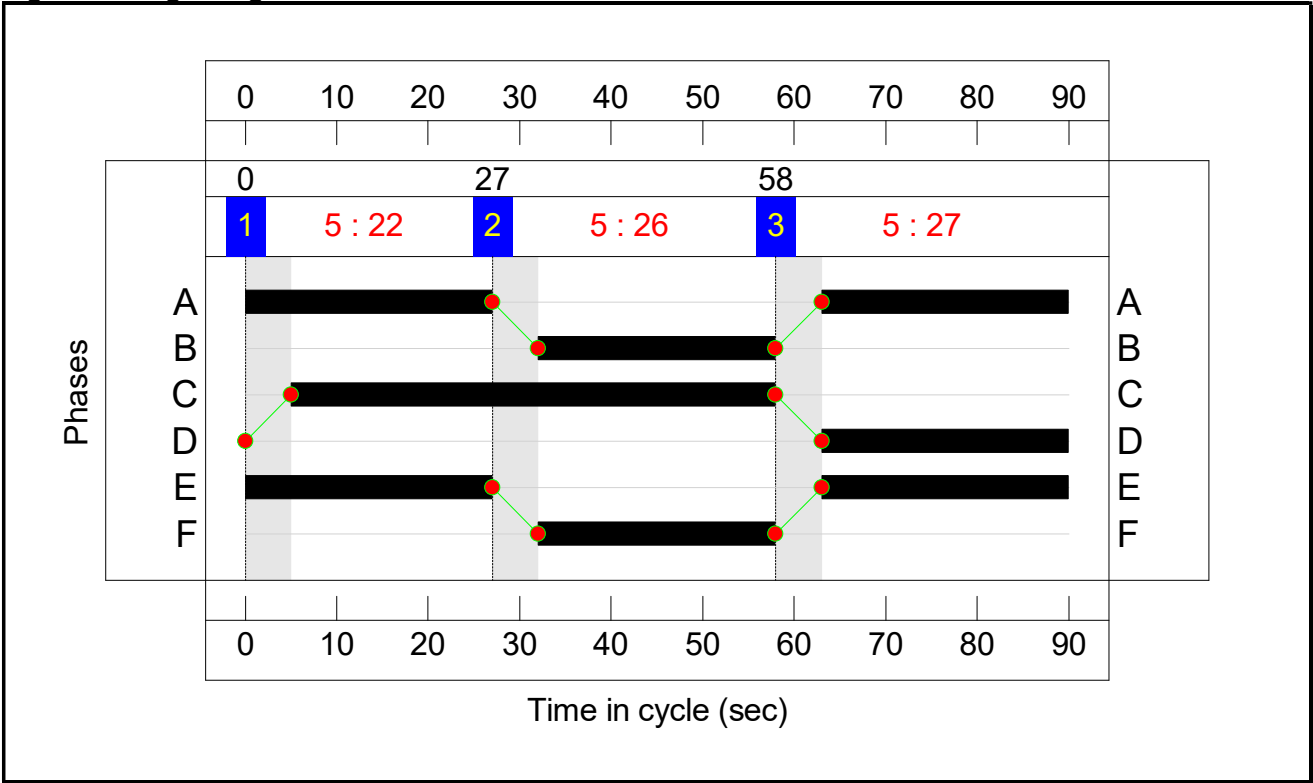
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	22	26	27
Change Point	0	27	58

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

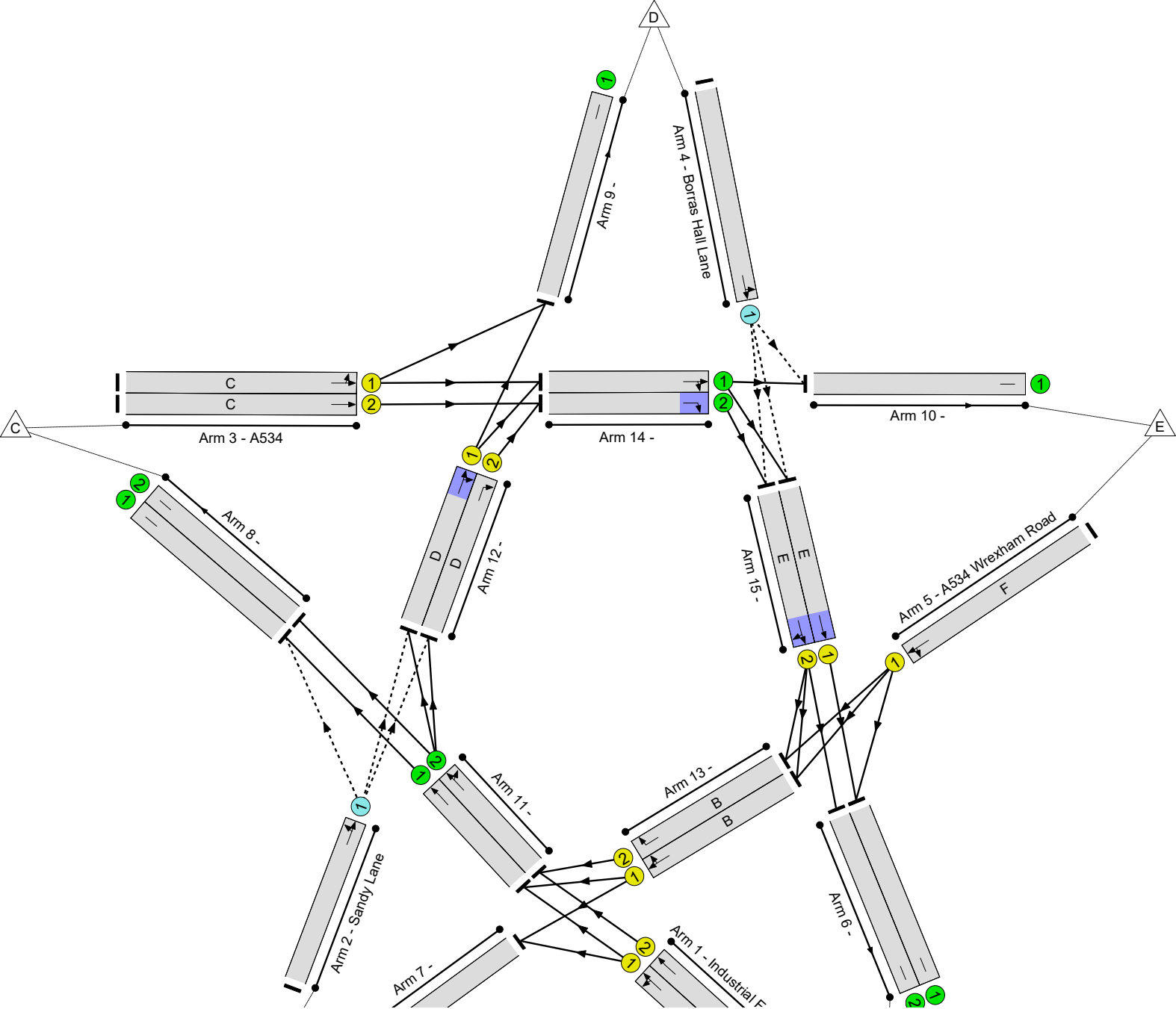
Full Input Data And Results



Unnamed Junction

PRC: 7.5 %

Total Traffic Delay: 21.3 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	83.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	83.7%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	54	-	717	2030	1241	57.8%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	54	-	1049	2050	1253	83.7%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	26	2012	180	14.4%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	53	-	451	2111	1267	35.6%
3/2	A534 Ahead	U	N/A	N/A	C		1	53	-	361	2115	1269	28.4%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	36	2096	614	5.9%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	26	-	495	2096	629	78.7%
6/1		U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	146	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	812	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	939	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	150	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	793	2065	2065	38.4%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1270	2065	2065	61.5%
12/1	Ahead Right	U	N/A	N/A	D		1	27	-	337	2065	642	52.5%
12/2	Right	U	N/A	N/A	D		1	27	-	1	2065	642	0.2%
13/1	Ahead Right	U	N/A	N/A	B		1	26	-	222	2065	619	35.8%
13/2	Right	U	N/A	N/A	B		1	26	-	221	2065	619	35.7%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	638	2065	2065	30.9%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	362	2065	2065	17.5%
15/1	Ahead	U	N/A	N/A	E		1	54	-	142	2065	1262	11.3%
15/2	Ahead Right	U	N/A	N/A	E		1	54	-	370	2065	1262	29.3%

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	-	-	62	0	0	17.1	4.2	0.0	21.3	-	-	-	-
Unnamed Junction	-	-	62	0	0	17.1	4.2	0.0	21.3	-	-	-	-
1/1	717	717	-	-	-	2.1	0.7	-	2.8	14.0	10.8	0.7	11.4
1/2	1049	1049	-	-	-	4.1	0.0	-	4.1	13.9	20.7	0.0	20.7
2/1	26	26	26	0	0	0.1	0.1	-	0.2	30.8	0.4	0.1	0.5
3/1	451	451	-	-	-	1.1	0.3	-	1.4	11.4	5.6	0.3	5.9
3/2	361	361	-	-	-	0.9	0.2	-	1.1	10.7	4.3	0.2	4.5
4/1	36	36	36	0	0	0.0	0.0	-	0.0	4.1	0.1	0.0	0.2
5/1	495	495	-	-	-	4.0	1.8	-	5.8	42.0	11.3	1.8	13.1
6/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	146	146	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	939	939	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	150	150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	793	793	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1270	1270	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	337	337	-	-	-	2.9	0.5	-	3.5	37.0	5.3	0.5	5.9
12/2	1	1	-	-	-	0.0	0.0	-	0.0	19.3	0.0	0.0	0.0
13/1	222	222	-	-	-	0.3	0.3	-	0.6	10.1	0.7	0.3	0.9
13/2	221	221	-	-	-	0.3	0.3	-	0.6	9.3	0.5	0.3	0.7
14/1	638	638	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	362	362	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	142	142	-	-	-	0.3	0.0	-	0.3	8.4	1.5	0.0	1.5
15/2	370	370	-	-	-	0.9	0.0	-	0.9	8.6	3.7	0.0	3.7

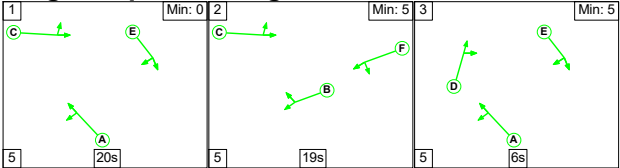
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	7.5	Total Delay for Signalled Lanes (pcuHr):	20.99	Cycle Time (s):	90
	PRC Over All Lanes (%):	7.5	Total Delay Over All Lanes(pcuHr):	21.25		

Full Input Data And Results

Scenario 9: '2037 Base + Deveopment (Sens) AM' (FG33: '2037 Base + Development (Phase 1 + 2) AM ', Plan 1: 'Network Control Plan 1')

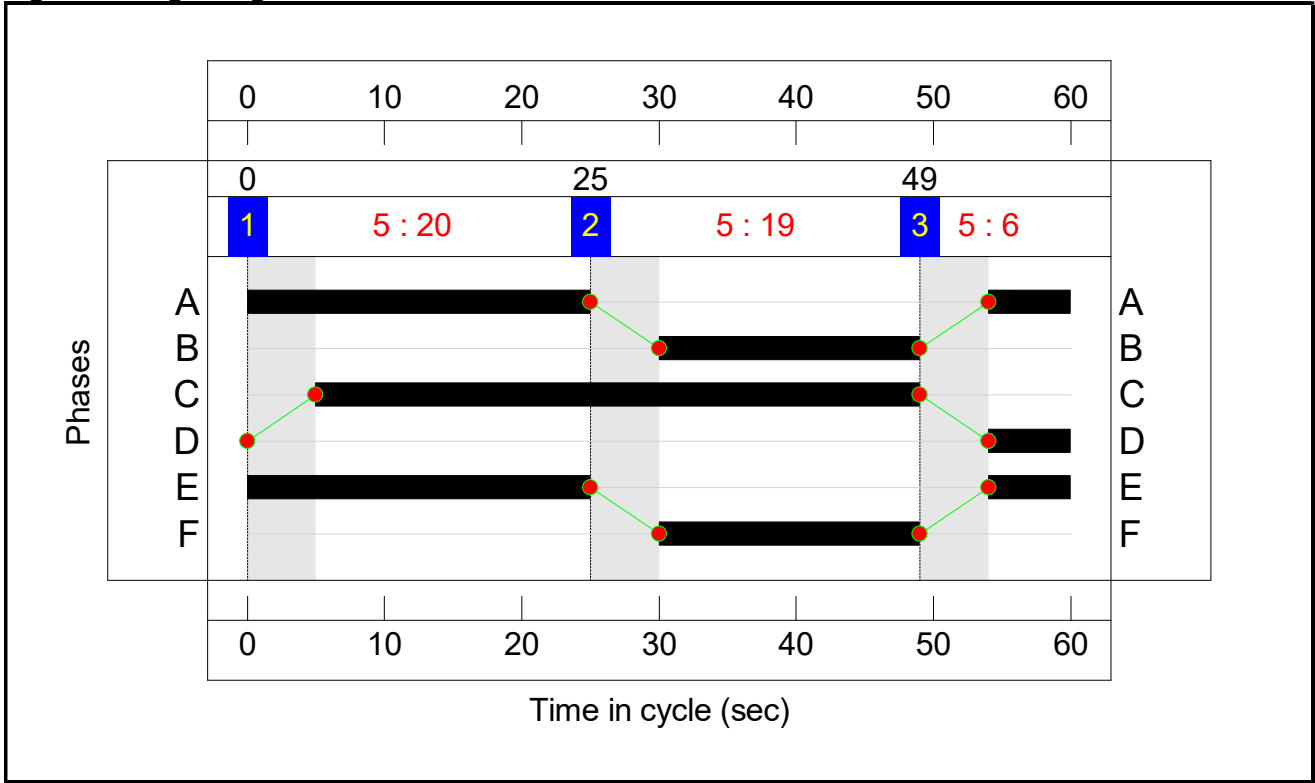
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	20	19	6
Change Point	0	25	49

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

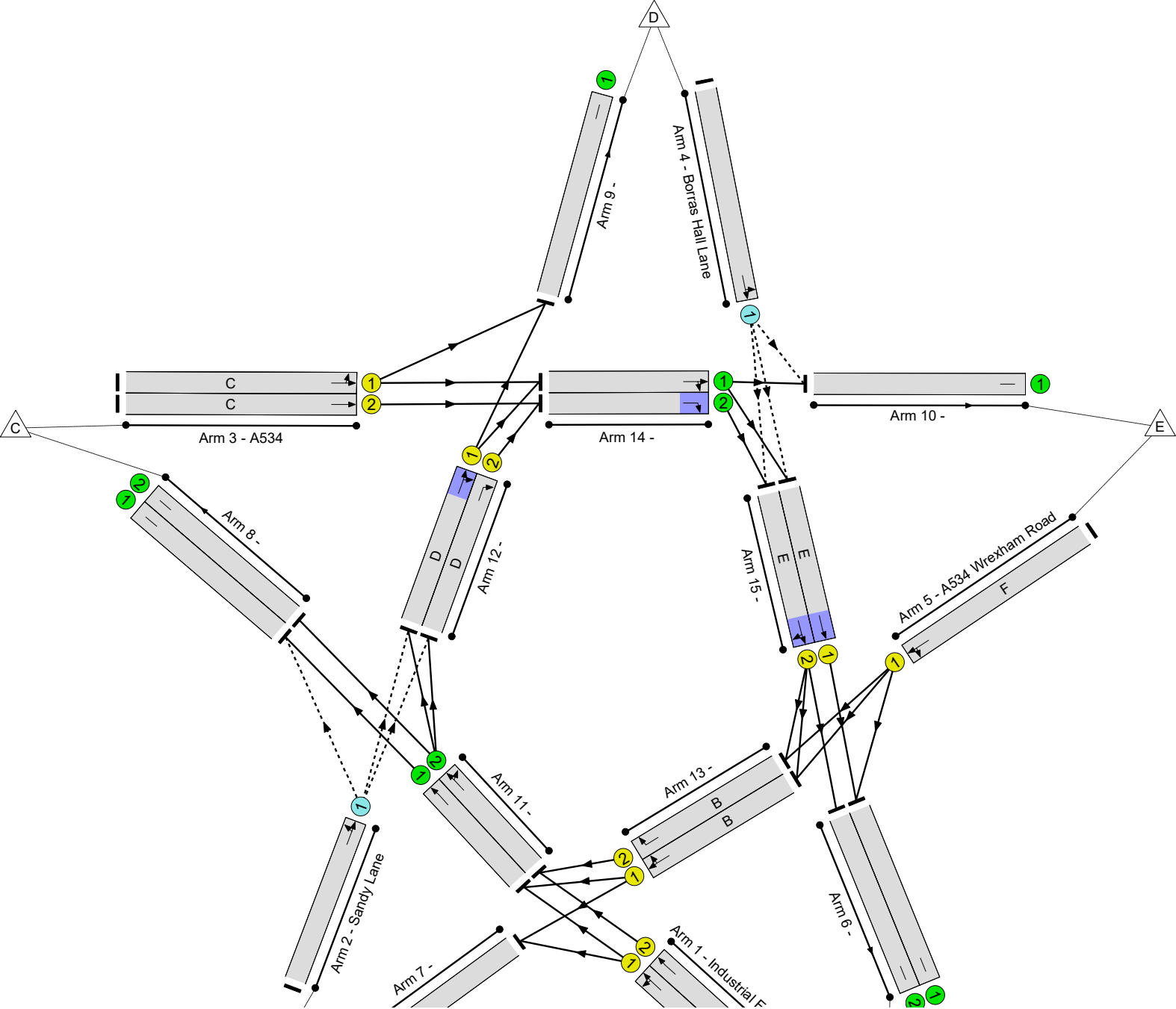
Full Input Data And Results



Unnamed Junction

PRC: 6.6 %

Total Traffic Delay: 20.9 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	84.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	84.4%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	31	-	191	1948	1039	18.4%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	31	-	550	2050	1093	50.3%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	37	2023	721	5.1%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	44	-	1002	2112	1584	63.3%
3/2	A534 Ahead	U	N/A	N/A	C		1	44	-	915	2115	1586	57.7%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	188	2107	232	80.9%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	19	-	557	2067	689	80.8%
6/1		U	N/A	N/A	-		-	-	-	988	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	206	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	197	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	634	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	436	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	173	2065	2065	8.4%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	737	2065	2065	35.7%
12/1	Ahead Right	U	N/A	N/A	D		1	6	-	112	2065	241	46.5%
12/2	Right	U	N/A	N/A	D		1	6	-	4	2065	241	1.7%
13/1	Ahead Right	U	N/A	N/A	B		1	19	-	188	2065	688	27.3%
13/2	Right	U	N/A	N/A	B		1	19	-	187	2065	688	27.2%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	1048	2065	2065	50.8%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	919	2065	2065	44.5%
15/1	Ahead	U	N/A	N/A	E		1	31	-	789	2065	1101	71.6%
15/2	Ahead Right	U	N/A	N/A	E		1	31	-	930	2065	1101	84.4%

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	-	-	225	0	0	14.4	6.5	0.0	20.9	-	-	-	-
Unnamed Junction	-	-	225	0	0	14.4	6.5	0.0	20.9	-	-	-	-
1/1	191	191	-	-	-	0.4	0.1	-	0.5	9.4	1.6	0.1	1.8
1/2	550	550	-	-	-	1.4	0.0	-	1.4	8.9	5.8	0.0	5.8
2/1	37	37	37	0	0	0.0	0.0	-	0.0	3.6	0.1	0.0	0.1
3/1	1002	1002	-	-	-	1.0	0.9	-	1.9	6.7	7.8	0.9	8.7
3/2	915	915	-	-	-	0.8	0.7	-	1.5	6.0	6.6	0.7	7.3
4/1	188	188	188	0	0	1.2	1.9	-	3.1	59.9	3.0	1.9	4.9
5/1	557	557	-	-	-	2.8	2.0	-	4.9	31.5	8.4	2.0	10.4
6/1	988	988	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	913	913	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	197	197	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	436	436	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	173	173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	737	737	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	112	112	-	-	-	1.2	0.4	-	1.6	51.9	1.8	0.4	2.3
12/2	4	4	-	-	-	0.0	0.0	-	0.0	30.5	0.1	0.0	0.1
13/1	188	188	-	-	-	0.3	0.2	-	0.5	8.9	0.6	0.2	0.7
13/2	187	187	-	-	-	0.3	0.2	-	0.4	8.5	0.5	0.2	0.6
14/1	1048	1048	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	919	919	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	789	789	-	-	-	2.0	0.0	-	2.0	9.2	5.5	0.0	5.5
15/2	930	930	-	-	-	3.1	0.0	-	3.1	11.9	9.2	0.0	9.2

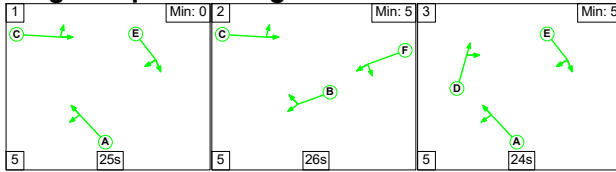
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	6.6	Total Delay for Signalled Lanes (pcuHr):	17.74	Cycle Time (s):	60
	PRC Over All Lanes (%):	6.6	Total Delay Over All Lanes(pcuHr):	20.91		

Full Input Data And Results

Scenario 10: '2037 Base + Development (Sens) PM' (FG34: '2037 Base + Development (Phase 1 + 2) PM ', Plan 1: 'Network Control Plan 1')

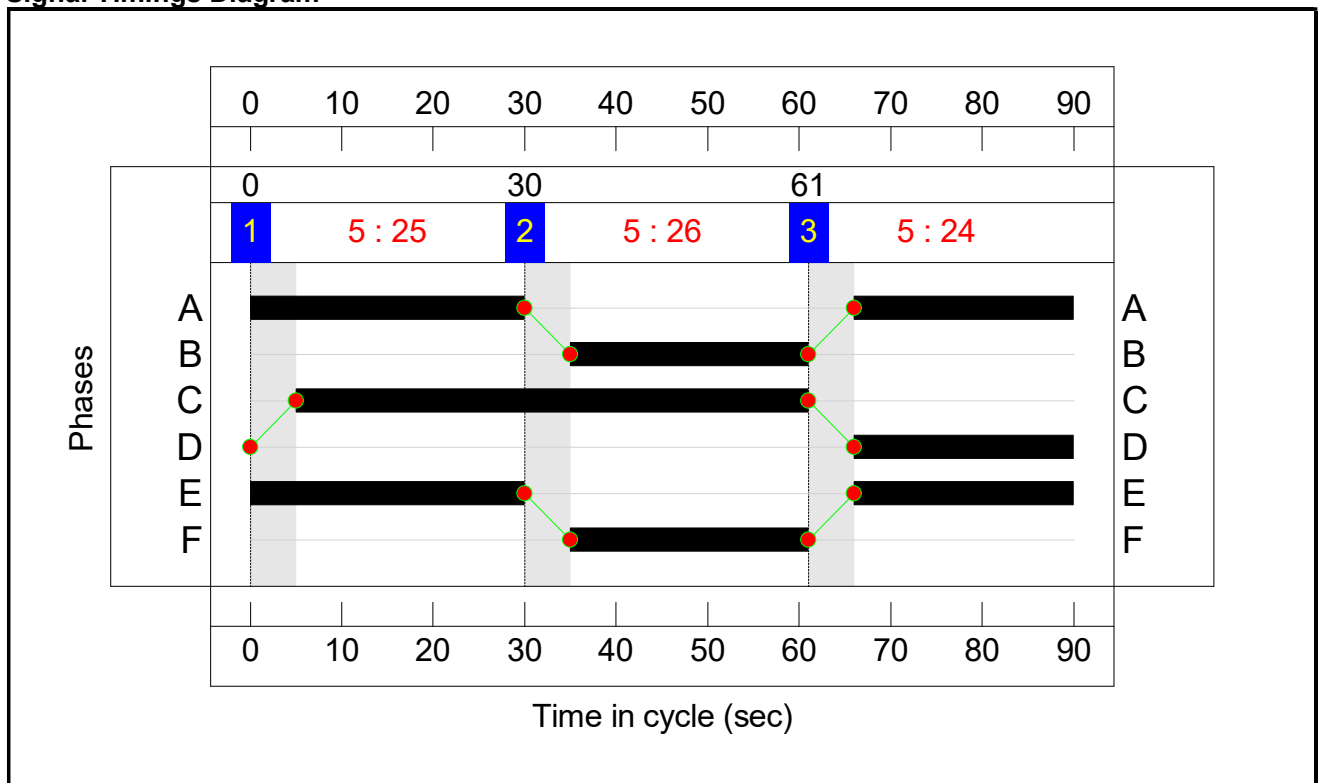
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	25	26	24
Change Point	0	30	61

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

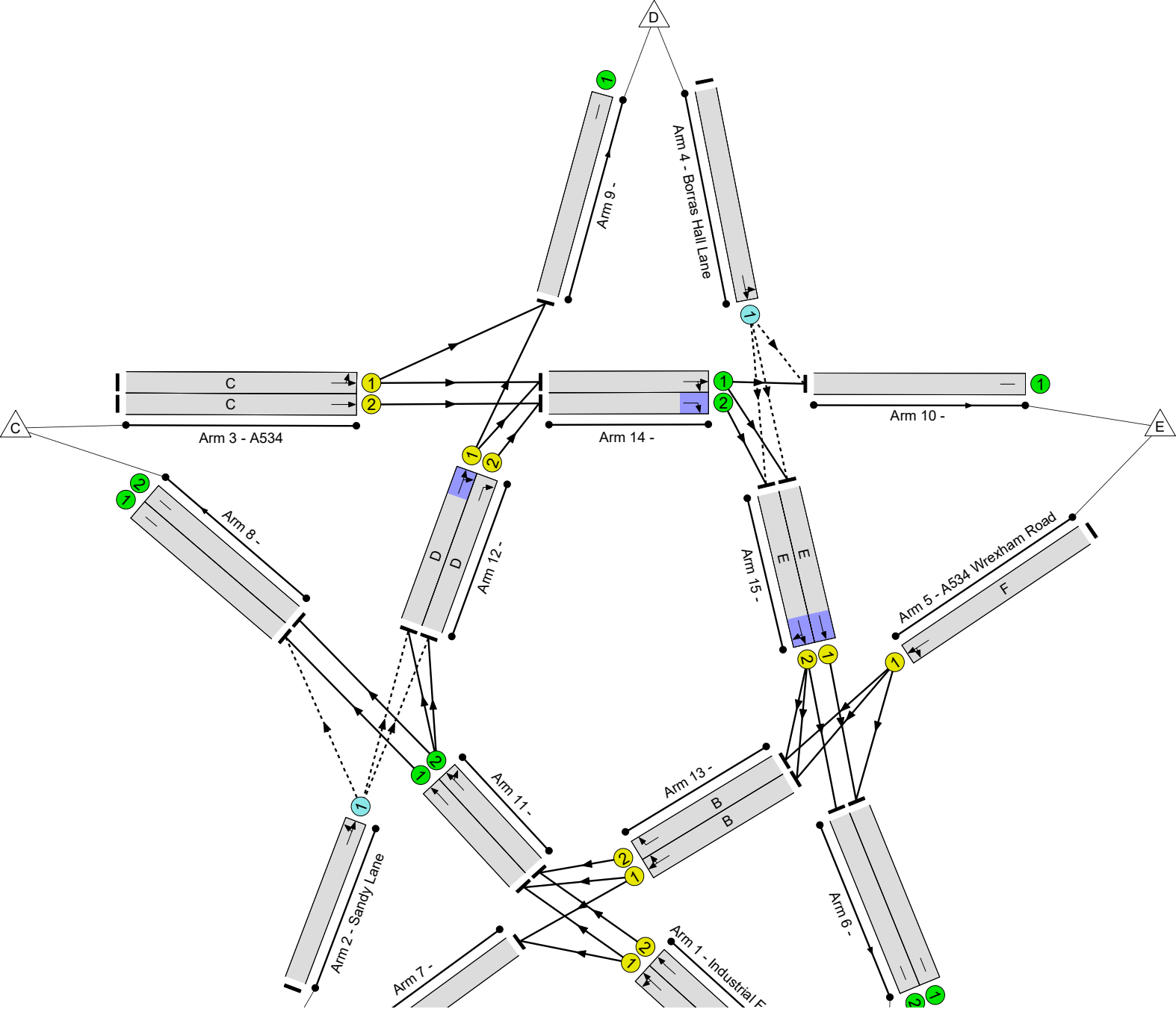
Full Input Data And Results



Unnamed Junction

PRC: -4.7 %

Total Traffic Delay: 26.1 pcuHr



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	-	-	N/A	-	-		-	-	-	-	-	-	94.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	94.2%
1/1	Industrial Estate Road Left Ahead	U	N/A	N/A	A		1	54	-	828	2012	1230	67.3%
1/2	Industrial Estate Road Ahead	U	N/A	N/A	A		1	54	-	1180	2050	1253	94.2%
2/1	Sandy Lane Left Ahead	O	N/A	N/A	-		-	-	-	27	2011	164	16.5%
3/1	A534 Left Ahead	U	N/A	N/A	C		1	56	-	540	2112	1338	40.4%
3/2	A534 Ahead	U	N/A	N/A	C		1	56	-	433	2115	1339	32.3%
4/1	Borras Hall Lane Left Ahead	O	N/A	N/A	-		-	-	-	43	2099	477	9.0%
5/1	A534 Wrexham Road Left Ahead	U	N/A	N/A	F		1	26	-	524	2095	628	83.4%
6/1		U	N/A	N/A	-		-	-	-	303	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	425	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	773	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	1057	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	545	Inf	Inf	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	753	2065	2065	36.5%
11/2	Ahead Right	U	N/A	N/A	-		-	-	-	1412	2065	2065	68.4%
12/1	Ahead Right	U	N/A	N/A	D		1	24	-	361	2065	574	62.9%
12/2	Right	U	N/A	N/A	D		1	24	-	1	2065	574	0.2%
13/1	Ahead Right	U	N/A	N/A	B		1	26	-	231	2065	619	37.3%
13/2	Right	U	N/A	N/A	B		1	26	-	232	2065	619	37.4%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	735	2065	2065	35.6%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	434	2065	2065	21.0%
15/1	Ahead	U	N/A	N/A	E		1	54	-	224	2065	1262	17.8%
15/2	Ahead Right	U	N/A	N/A	E		1	54	-	443	2065	1262	35.1%

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	-	-	70	0	0	20.5	5.6	0.0	26.1	-	-	-	-
Unnamed Junction	-	-	70	0	0	20.5	5.6	0.0	26.1	-	-	-	-
1/1	828	828	-	-	-	2.7	1.0	-	3.7	16.0	13.6	1.0	14.6
1/2	1180	1180	-	-	-	5.3	0.0	-	5.3	16.0	26.9	0.0	26.9
2/1	27	27	27	0	0	0.1	0.1	-	0.2	32.7	0.4	0.1	0.5
3/1	540	540	-	-	-	1.2	0.3	-	1.6	10.4	6.6	0.3	6.9
3/2	433	433	-	-	-	0.9	0.2	-	1.2	9.6	4.9	0.2	5.2
4/1	43	43	43	0	0	0.0	0.0	-	0.1	5.6	0.2	0.0	0.3
5/1	524	524	-	-	-	4.3	2.4	-	6.7	45.9	12.2	2.4	14.6
6/1	303	303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	425	425	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	773	773	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	1057	1057	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	166	166	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	545	545	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	753	753	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	1412	1412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	361	361	-	-	-	3.7	0.8	-	4.5	45.2	6.6	0.8	7.4
12/2	1	1	-	-	-	0.0	0.0	-	0.0	19.6	0.0	0.0	0.0
13/1	231	231	-	-	-	0.4	0.3	-	0.7	10.8	0.7	0.3	1.0
13/2	232	232	-	-	-	0.3	0.3	-	0.6	10.0	0.6	0.3	0.9
14/1	735	735	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	224	224	-	-	-	0.5	0.0	-	0.5	8.4	2.3	0.0	2.3
15/2	443	443	-	-	-	1.1	0.0	-	1.1	8.8	4.3	0.0	4.3

Full Input Data And Results

C1	PRC for Signalled Lanes (%):	-4.7	Total Delay for Signalled Lanes (pcuHr):	25.81	Cycle Time (s):	90
	PRC Over All Lanes (%):	-4.7	Total Delay Over All Lanes(pcuHr):	26.12		