

2032 + Committed, 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	Mini-roundabout		1, 2, 3	17.60	C

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		17.60	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2032 + Committed	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	558	100.000
2		✓	469	100.000
3		✓	411	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1	2	3
From	1	1	420	137
	2	373	0	96
	3	165	246	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	420	420
	2	353	353
	3	309	309
08:00-08:15	1	502	502
	2	422	422
	3	369	369
08:15-08:30	1	614	614
	2	516	516
	3	453	453
08:30-08:45	1	614	614
	2	516	516
	3	453	453
08:45-09:00	1	502	502
	2	422	422
	3	369	369
09:00-09:15	1	420	420
	2	353	353
	3	309	309

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.76	19.47	3.2	C
2	0.60	10.94	1.5	B
3	0.74	22.64	2.7	C

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	420	183	858	0.490	416	1.0	8.363	A
2	353	103	884	0.400	350	0.7	6.906	A
3	309	279	693	0.447	306	0.8	9.336	A

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	502	220	835	0.601	499	1.5	11.028	B
2	422	124	871	0.484	421	0.9	8.190	A
3	369	335	658	0.561	368	1.3	12.432	B

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	614	268	806	0.763	608	3.1	18.292	C
2	516	150	855	0.604	514	1.5	10.780	B
3	453	410	613	0.739	447	2.6	21.281	C

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	614	271	804	0.764	614	3.2	19.469	C
2	516	152	854	0.605	516	1.5	10.944	B
3	453	412	611	0.740	452	2.7	22.642	C

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	502	225	832	0.603	508	1.6	11.702	B
2	422	126	870	0.485	424	1.0	8.339	A
3	369	338	657	0.563	375	1.3	13.160	B

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	420	186	856	0.491	422	1.0	8.642	A
2	353	104	883	0.400	354	0.7	7.017	A
3	309	282	691	0.448	311	0.8	9.638	A

2032 + Committed, 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	Mini-roundabout		1, 2, 3	11.31	B

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		11.31	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2032 + Committed	PM	ONE HOUR	18:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	529	100.000
2		✓	459	100.000
3		✓	291	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	3	428	98
	2	336	0	123
	3	148	143	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	398	398
	2	346	346
	3	219	219
17:00-17:15	1	476	476
	2	413	413
	3	262	262
17:15-17:30	1	582	582
	2	505	505
	3	320	320
17:30-17:45	1	582	582
	2	505	505
	3	320	320
17:45-18:00	1	476	476
	2	413	413
	3	262	262
18:00-18:15	1	398	398
	2	346	346
	3	219	219

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.67	12.45	2.0	B
2	0.58	9.71	1.3	A
3	0.50	11.78	1.0	B

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	398	107	905	0.440	395	0.8	7.085	A
2	346	75	900	0.384	343	0.6	6.485	A
3	219	253	709	0.309	217	0.5	7.521	A

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	476	128	892	0.533	474	1.1	8.671	A
2	413	91	891	0.463	412	0.9	7.553	A
3	262	304	677	0.386	261	0.6	8.884	A

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	582	157	874	0.666	579	1.9	12.181	B
2	505	111	879	0.575	503	1.3	9.612	A
3	320	372	636	0.504	319	1.0	11.639	B

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	582	157	874	0.666	582	2.0	12.448	B
2	505	111	879	0.575	505	1.3	9.714	A
3	320	373	635	0.505	320	1.0	11.776	B

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	476	129	891	0.534	479	1.2	8.878	A
2	413	91	891	0.463	414	0.9	7.653	A
3	262	306	676	0.387	263	0.7	9.007	A

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	398	108	905	0.440	400	0.8	7.223	A
2	346	76	900	0.384	347	0.6	6.571	A
3	219	256	707	0.310	220	0.5	7.625	A

2032 + Committed + Development, 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	Mini-roundabout		1, 2, 3	22.57	C

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		22.57	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2032 + Committed + Development	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	621	100.000
2		✓	490	100.000
3		✓	411	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	483	137	
	2	394	0	96
	3	165	246	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	468	468
	2	369	369
	3	309	309
08:00-08:15	1	558	558
	2	440	440
	3	369	369
08:15-08:30	1	684	684
	2	540	540
	3	453	453
08:30-08:45	1	684	684
	2	540	540
	3	453	453
08:45-09:00	1	558	558
	2	440	440
	3	369	369
09:00-09:15	1	468	468
	2	369	369
	3	309	309

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.65	29.66	5.3	D
2	0.63	11.74	1.7	B
3	0.76	24.77	3.0	C

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	468	183	858	0.545	463	1.2	9.322	A
2	369	103	884	0.417	366	0.7	7.109	A
3	309	295	683	0.453	306	0.8	9.568	A

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	558	220	835	0.668	555	2.0	13.157	B
2	440	123	871	0.506	439	1.0	8.541	A
3	369	354	647	0.571	368	1.3	12.930	B

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	684	267	906	0.848	672	4.9	25.852	D
2	540	149	856	0.631	537	1.7	11.510	B
3	453	433	599	0.756	446	2.8	22.999	C

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	684	271	804	0.851	682	5.3	29.660	D
2	540	152	854	0.632	539	1.7	11.739	B
3	453	435	597	0.758	452	3.0	24.769	C

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	558	225	832	0.671	571	2.2	14.884	B
2	440	127	889	0.507	443	1.1	8.739	A
3	369	357	645	0.573	376	1.4	13.814	B

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	468	187	856	0.546	471	1.3	9.783	A
2	369	105	883	0.418	370	0.7	7.244	A
3	309	298	681	0.454	312	0.9	9.901	A

2032 + Committed + Development, 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	Mini-roundabout		1, 2, 3	12.83	B

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		12.83	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2032 + Committed + Development	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	551	100.000
2		✓	517	100.000
3		✓	291	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	1	2	3	
From	1	3	450	98
	2	394	0	123
	3	148	143	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	415	415
	2	389	389
	3	219	219
17:00-17:15	1	495	495
	2	465	465
	3	262	262
17:15-17:30	1	607	607
	2	569	569
	3	320	320
17:30-17:45	1	607	607
	2	569	569
	3	320	320
17:45-18:00	1	495	495
	2	465	465
	3	262	262
18:00-18:15	1	415	415
	2	389	389
	3	219	219

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.69	13.57	2.2	B
2	0.65	11.70	1.8	B
3	0.54	13.44	1.2	B

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	415	107	905	0.458	411	0.8	7.312	A
2	389	75	900	0.432	386	0.8	7.013	A
3	219	297	682	0.321	217	0.5	7.944	A

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	495	128	892	0.555	494	1.2	9.091	A
2	465	91	891	0.522	463	1.1	8.451	A
3	262	356	646	0.405	261	0.7	9.612	A

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	607	157	874	0.694	603	2.2	13.199	B
2	569	111	879	0.648	566	1.8	11.487	B
3	320	435	597	0.537	319	1.2	13.217	B

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	607	157	874	0.694	606	2.2	13.565	B
2	569	111	879	0.648	569	1.8	11.699	B
3	320	437	596	0.538	320	1.2	13.444	B

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	495	129	891	0.556	499	1.3	9.361	A
2	465	91	890	0.522	468	1.1	8.628	A
3	262	359	644	0.406	263	0.7	9.798	A

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	415	108	904	0.459	417	0.9	7.475	A
2	389	76	900	0.433	391	0.8	7.140	A
3	219	300	680	0.322	220	0.5	8.077	A

Appendix O

Stoke Road/A47 Mitigation – ARCADY Outputs

Junctions 10	
ARCADY 10 - Roundabout Module	
Version: 10.0.1.1519 © Copyright TRL Software Limited, 2021	
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com	
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Filename: T19595 - A47-Stoke Rd Mitigation 2022.j10

Path: C:\Users\JamesCorbett\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19595 North Hinckley\Junction Assessments\Arcady

Report generation date: 25/03/2022 09:42:34

»2027 Base + Com + Dev, AM

»2027 Base + Com + Dev, PM

»2032 Base + Com + Dev, AM

»2032 Base + Com + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2027 Base + Com + Dev										
Arm 1	D5	3.4	13.78	0.77	B	D6	0.7	6.44	0.42	A
Arm 2		6.6	16.07	0.87	C		20.2	41.14	0.97	E
Arm 3		1.6	9.68	0.62	A		1.4	9.50	0.59	A
Arm 4		0.2	7.98	0.14	A		0.2	8.31	0.17	A
Arm 5		1.7	5.88	0.62	A		3.6	10.46	0.78	B
2032 Base + Com + Dev										
Arm 1	D9	4.1	16.32	0.81	C	D10	0.8	6.87	0.44	A
Arm 2		8.5	20.29	0.90	C		31.6	59.56	1.00	F
Arm 3		1.8	10.72	0.65	B		1.5	10.21	0.61	B
Arm 4		0.2	8.50	0.16	A		0.2	8.69	0.18	A
Arm 5		1.9	6.30	0.64	A		4.2	11.99	0.81	B

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

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

File summary

File Description

Title	
Location	
Site number	
Date	31/07/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PTBTRANSPORT\james.corbett
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 iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	38.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Base + Com + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 Base + Com + Dev	PM	ONE HOUR	16:45	18:15	15	✓
D9	2032 Base + Com + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D10	2032 Base + Com + Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2027 Base + Com + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	11.90	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.90	B

Arms

Arms

Arm	Name	Description	No give-way line
1	Stoke Road North		
2	A47 East		
3	Stoke Road South		
4	Sword Drive		
5	A47		

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	3.00	7.40	37.0	35.0	70.0	24.0		
2	3.40	10.00	30.0	34.0	70.0	43.0		
3	3.40	7.40	24.0	20.0	70.0	34.0		
4	3.50	7.30	13.0	16.0	70.0	57.0		
5	4.70	8.00	50.0	60.0	70.0	34.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.555	1953
2	0.570	2149
3	0.517	1795
4	0.446	1480
5	0.603	2292

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 Base + Com + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	824	100.000
2		ONE HOUR	✓	1411	100.000
3		ONE HOUR	✓	557	100.000
4		ONE HOUR	✓	71	100.000
5		ONE HOUR	✓	980	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
	1	0	345	274	11	194
	2	223	93	212	30	853
	3	193	271	0	20	73
	4	2	23	25	0	21
	5	113	792	63	12	0

Proportions

	To					
		1	2	3	4	5
	1	0.00	0.42	0.33	0.01	0.24
	2	0.16	0.07	0.15	0.02	0.60
	3	0.35	0.49	0.00	0.04	0.13
	4	0.03	0.32	0.35	0.00	0.30
	5	0.12	0.81	0.06	0.01	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
	1	0	2	1	22	1
	2	3	4	2	3	8
	3	1	2	0	0	0
	4	0	3	7	0	3
	5	4	9	2	7	0

Average PCU Per Veh

	To					
		1	2	3	4	5
	1	1.000	1.020	1.010	1.220	1.010
	2	1.030	1.040	1.020	1.030	1.080
	3	1.010	1.020	1.000	1.000	1.000
	4	1.000	1.030	1.070	1.000	1.030
	5	1.040	1.090	1.020	1.070	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	620	620
	2	1062	1062
	3	419	419
	4	53	53
	5	738	738
08:00-08:15	1	741	741
	2	1268	1268
	3	501	501
	4	64	64
	5	881	881
08:15-08:30	1	907	907
	2	1554	1554
	3	613	613
	4	78	78
	5	1079	1079
08:30-08:45	1	907	907
	2	1554	1554
	3	613	613
	4	78	78
	5	1079	1079
08:45-09:00	1	741	741
	2	1268	1268
	3	501	501
	4	64	64
	5	881	881
09:00-09:15	1	620	620
	2	1062	1062
	3	419	419
	4	53	53
	5	738	738

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	0.77	13.78	3.4	B	756	1134
2	0.87	16.07	6.6	C	1295	1942
3	0.62	9.68	1.6	A	511	767
4	0.14	7.98	0.2	A	65	98
5	0.62	5.88	1.7	A	899	1349

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)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	620	155	959	1420	0.437	617	398	0.0	0.8	4.539	A
2	1062	266	434	1901	0.559	1057	1142	0.0	1.3	4.486	A
3	419	105	1061	1247	0.336	417	430	0.0	0.5	4.387	A
4	53	13	1423	846	0.063	53	55	0.0	0.1	4.736	A
5	738	184	622	1917	0.385	735	855	0.0	0.7	3.281	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	741	185	1148	1316	0.563	739	476	0.8	1.3	6.320	A
2	1268	317	519	1853	0.685	1265	1367	1.3	2.2	6.441	A
3	501	125	1269	1139	0.440	500	515	0.5	0.8	5.697	A
4	64	16	1703	721	0.089	64	65	0.1	0.1	5.714	A
5	881	220	744	1843	0.478	880	1023	0.7	1.0	4.028	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	907	227	1403	1174	0.773	899	581	1.3	3.3	12.967	B
2	1554	388	633	1788	0.869	1538	1670	2.2	6.3	14.375	B
3	613	153	1543	997	0.615	610	627	0.8	1.6	9.352	A
4	78	20	2074	556	0.141	78	80	0.1	0.2	7.853	A
5	1079	270	907	1744	0.619	1076	1244	1.0	1.7	5.786	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	907	227	1408	1171	0.775	907	584	3.3	3.4	13.776	B
2	1554	388	637	1785	0.870	1552	1677	6.3	6.6	16.071	C
3	613	153	1558	990	0.620	613	632	1.6	1.6	9.676	A
4	78	20	2090	548	0.143	78	80	0.2	0.2	7.965	A
5	1079	270	913	1741	0.620	1079	1255	1.7	1.7	5.865	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	741	185	1155	1311	0.565	749	482	3.4	1.3	6.594	A
2	1268	317	526	1849	0.686	1266	1379	6.6	2.4	6.961	A
3	501	125	1290	1128	0.444	504	522	1.6	0.8	5.870	A
4	64	16	1727	710	0.090	64	66	0.2	0.1	5.814	A
5	881	220	753	1838	0.479	884	1038	1.7	1.0	4.085	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	620	155	965	1417	0.438	623	401	1.3	0.8	4.617	A
2	1062	266	437	1899	0.559	1066	1150	2.4	1.4	4.588	A
3	419	105	1070	1242	0.338	421	434	0.8	0.5	4.446	A
4	53	13	1435	840	0.064	54	55	0.1	0.1	4.774	A
5	738	184	627	1914	0.386	739	862	1.0	0.7	3.312	A



2027 Base + Com + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	23.58	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	23.58	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 Base + Com + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	371	100.000
2		ONE HOUR	✓	1676	100.000
3		ONE HOUR	✓	487	100.000
4		ONE HOUR	✓	81	100.000
5		ONE HOUR	✓	1140	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1	2	3	4	5
From	1	0	126	124	7	114
	2	258	294	269	17	838
	3	173	234	0	27	53
	4	9	32	33	0	7
	5	129	887	95	29	0

Proportions

	To					
From		1	2	3	4	5
	1	0.00	0.34	0.33	0.02	0.31
	2	0.15	0.18	0.16	0.01	0.50
	3	0.36	0.48	0.00	0.06	0.11
	4	0.11	0.40	0.41	0.00	0.09
	5	0.11	0.78	0.08	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

	To				
	1	2	3	4	5
From	1	1.000	1.000	1.040	1.000
	2	1.010	1.000	1.000	1.030
	3	1.010	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000
	5	1.020	1.040	1.010	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	279	279
	2	1262	1262
	3	367	367
	4	61	61
	5	858	858
17:00-17:15	1	334	334
	2	1507	1507
	3	438	438
	4	73	73
	5	1025	1025
17:15-17:30	1	408	408
	2	1845	1845
	3	536	536
	4	89	89
	5	1255	1255
17:30-17:45	1	408	408
	2	1845	1845
	3	536	536
	4	89	89
	5	1255	1255
17:45-18:00	1	334	334
	2	1507	1507
	3	438	438
	4	73	73
	5	1025	1025
18:00-18:15	1	279	279
	2	1262	1262
	3	367	367
	4	61	61
	5	858	858

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	0.42	8.44	0.7	A	340	511
2	0.97	41.14	20.2	E	1538	2307
3	0.59	9.50	1.4	A	447	670
4	0.17	8.31	0.2	A	74	111
5	0.78	10.46	3.6	B	1046	1569

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)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	279	70	1202	1286	0.217	278	426	0.0	0.3	3.617	A
2	1262	315	301	1977	0.638	1255	1179	0.0	1.8	5.019	A
3	367	92	1166	1192	0.308	365	390	0.0	0.4	4.357	A
4	61	15	1471	825	0.074	61	60	0.0	0.1	4.710	A
5	858	215	774	1825	0.470	855	758	0.0	0.9	3.822	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	334	83	1438	1154	0.289	333	510	0.3	0.4	4.437	A
2	1507	377	361	1943	0.775	1500	1411	1.8	3.4	8.143	A
3	438	109	1394	1074	0.408	437	467	0.4	0.7	5.660	A
4	73	18	1759	696	0.105	73	72	0.1	0.1	5.774	A
5	1025	256	926	1734	0.591	1023	906	0.9	1.5	5.219	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	408	102	1749	982	0.416	407	617	0.4	0.7	6.334	A
2	1845	461	441	1897	0.973	1795	1715	3.4	15.9	27.518	D
3	536	134	1671	931	0.576	534	564	0.7	1.3	9.037	A
4	89	22	2118	536	0.166	89	87	0.1	0.2	8.045	A
5	1255	314	1118	1617	0.776	1247	1088	1.5	3.4	9.881	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	408	102	1762	974	0.419	408	624	0.7	0.7	6.444	A
2	1845	461	443	1896	0.973	1828	1728	15.9	20.2	41.137	E
3	536	134	1700	916	0.585	536	571	1.3	1.4	9.497	A
4	89	22	2148	523	0.171	89	88	0.2	0.2	8.307	A
5	1255	314	1132	1609	0.780	1255	1106	3.4	3.6	10.459	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	334	83	1462	1141	0.292	335	524	0.7	0.4	4.530	A
2	1507	377	363	1942	0.776	1573	1434	20.2	3.7	11.594	B
3	438	109	1456	1042	0.420	440	480	1.4	0.7	6.028	A
4	73	18	1823	667	0.109	73	73	0.2	0.1	6.062	A
5	1025	256	953	1717	0.597	1033	943	3.6	1.6	5.504	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	279	70	1212	1280	0.218	280	430	0.4	0.3	3.649	A
2	1262	315	303	1976	0.639	1269	1188	3.7	1.8	5.230	A
3	367	92	1179	1186	0.309	368	394	0.7	0.5	4.424	A
4	61	15	1486	818	0.075	61	60	0.1	0.1	4.760	A
5	858	215	781	1821	0.471	861	766	1.6	0.9	3.888	A

2032 Base + Com + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	14.27	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.27	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2032 Base + Com + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	842	100.000
2		ONE HOUR	✓	1452	100.000
3		ONE HOUR	✓	572	100.000
4		ONE HOUR	✓	76	100.000
5		ONE HOUR	✓	1007	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1	2	3	4	5
From	1	0	354	280	12	196
	2	229	96	219	32	876
	3	198	278	0	21	75
	4	3	24	27	0	22
	5	116	814	65	12	0

Proportions

	To					
From		1	2	3	4	5
	1	0.00	0.42	0.33	0.01	0.23
	2	0.16	0.07	0.15	0.02	0.60
	3	0.35	0.49	0.00	0.04	0.13
	4	0.04	0.32	0.36	0.00	0.29
	5	0.12	0.81	0.06	0.01	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1	2	3	4	5
	1	0	2	1	22	1
	2	3	4	2	3	8
	3	1	2	0	0	0
	4	0	3	7	0	3
	5	4	9	2	7	0

Average PCU Per Veh

		To				
		1	2	3	4	5
From	1	1.000	1.020	1.010	1.220	1.010
	2	1.030	1.040	1.020	1.030	1.080
	3	1.010	1.020	1.000	1.000	1.000
	4	1.000	1.030	1.070	1.000	1.030
	5	1.040	1.090	1.020	1.070	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
07:45-08:00	1	634	634
	2	1093	1093
	3	431	431
	4	57	57
	5	758	758
08:00-08:15	1	757	757
	2	1305	1305
	3	514	514
	4	68	68
	5	905	905
08:15-08:30	1	927	927
	2	1599	1599
	3	630	630
	4	84	84
	5	1109	1109
08:30-08:45	1	927	927
	2	1599	1599
	3	630	630
	4	84	84
	5	1109	1109
08:45-09:00	1	757	757
	2	1305	1305
	3	514	514
	4	68	68
	5	905	905
09:00-09:15	1	634	634
	2	1093	1093
	3	431	431
	4	57	57
	5	758	758

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	0.81	16.32	4.1	C	773	1159
2	0.90	20.29	8.5	C	1332	1999
3	0.65	10.72	1.8	B	525	787
4	0.16	8.50	0.2	A	70	105
5	0.64	6.30	1.9	A	924	1386

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)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	834	158	987	1405	0.451	831	409	0.0	0.8	4.706	A
2	1093	273	443	1896	0.577	1087	1174	0.0	1.4	4.682	A
3	431	108	1088	1232	0.349	428	443	0.0	0.5	4.525	A
4	57	14	1459	830	0.069	57	58	0.0	0.1	4.853	A
5	758	190	640	1906	0.398	755	876	0.0	0.7	3.368	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	757	189	1181	1297	0.583	755	490	0.8	1.4	6.717	A
2	1305	326	531	1846	0.707	1301	1405	1.4	2.5	6.936	A
3	514	129	1302	1122	0.458	513	530	0.5	0.8	5.977	A
4	68	17	1746	702	0.097	68	69	0.1	0.1	5.921	A
5	905	226	767	1829	0.495	904	1048	0.7	1.0	4.191	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	927	232	1443	1152	0.805	917	596	1.4	3.9	15.001	C
2	1599	400	646	1781	0.898	1577	1714	2.5	7.8	17.202	C
3	630	157	1579	979	0.644	626	644	0.8	1.8	10.241	B
4	84	21	2121	535	0.157	83	84	0.1	0.2	8.313	A
5	1109	277	933	1729	0.641	1105	1271	1.0	1.9	6.196	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	927	232	1449	1149	0.807	926	601	3.9	4.1	16.323	C
2	1599	400	651	1777	0.899	1596	1723	7.8	8.5	20.294	C
3	630	157	1597	969	0.650	630	650	1.8	1.8	10.721	B
4	84	21	2142	525	0.159	84	85	0.2	0.2	8.499	A
5	1109	277	941	1725	0.643	1109	1285	1.9	1.9	6.304	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	757	189	1190	1292	0.586	767	496	4.1	1.5	7.105	A
2	1305	326	539	1842	0.709	1329	1418	8.5	2.6	7.755	A
3	514	129	1329	1108	0.464	518	539	1.8	0.9	6.220	A
4	68	17	1777	688	0.099	69	70	0.2	0.1	6.061	A
5	905	226	777	1823	0.497	909	1088	1.9	1.1	4.265	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	634	158	993	1402	0.452	636	412	1.5	0.8	4.797	A
2	1093	273	447	1894	0.577	1098	1182	2.6	1.5	4.818	A
3	431	108	1099	1227	0.351	432	447	0.9	0.6	4.595	A
4	57	14	1472	824	0.069	57	58	0.1	0.1	4.899	A
5	758	190	646	1902	0.399	760	884	1.1	0.7	3.402	A

2032 Base + Com + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 5 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	32.42	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	32.42	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2032 Base + Com + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	379	100.000
2		ONE HOUR	✓	1720	100.000
3		ONE HOUR	✓	500	100.000
4		ONE HOUR	✓	84	100.000
5		ONE HOUR	✓	1170	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	129	127	7	116
	2	283	303	278	18	858
	3	176	241	0	28	55
	4	9	33	34	0	8
	5	131	911	98	30	0

Proportions

	To					
	1	2	3	4	5	
From	1	0.00	0.34	0.34	0.02	0.31
	2	0.15	0.18	0.16	0.01	0.50
	3	0.35	0.48	0.00	0.06	0.11
	4	0.11	0.39	0.40	0.00	0.10
	5	0.11	0.78	0.08	0.03	0.00

Vehicle Mix

Heavy Vehicle Percentages

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

Average PCU Per Veh

	To				
	1	2	3	4	5
From	1	1.000	1.000	1.040	1.000
	2	1.010	1.000	1.000	1.030
	3	1.010	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000
	5	1.020	1.040	1.010	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
16:45-17:00	1	285	285
	2	1295	1295
	3	376	376
	4	63	63
	5	881	881
17:00-17:15	1	341	341
	2	1546	1546
	3	449	449
	4	76	76
	5	1052	1052
17:15-17:30	1	417	417
	2	1894	1894
	3	551	551
	4	92	92
	5	1288	1288
17:30-17:45	1	417	417
	2	1894	1894
	3	551	551
	4	92	92
	5	1288	1288
17:45-18:00	1	341	341
	2	1546	1546
	3	449	449
	4	76	76
	5	1052	1052
18:00-18:15	1	285	285
	2	1295	1295
	3	376	376
	4	63	63
	5	881	881

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	6.87	0.8	A	348	522
2	1.00	59.56	31.6	F	1578	2367
3	0.61	10.21	1.5	B	459	888
4	0.18	8.69	0.2	A	77	116
5	0.81	11.99	4.2	B	1074	1610

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)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	285	71	1236	1267	0.225	284	434	0.0	0.3	3.707	A
2	1295	324	309	1973	0.656	1287	1212	0.0	1.9	5.281	A
3	376	94	1194	1178	0.320	375	402	0.0	0.5	4.488	A
4	63	16	1506	809	0.078	63	62	0.0	0.1	4.825	A
5	881	220	793	1814	0.486	877	776	0.0	1.0	3.959	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	341	85	1479	1132	0.301	340	519	0.3	0.4	4.604	A
2	1546	387	370	1938	0.798	1539	1450	1.9	3.8	8.989	A
3	449	112	1427	1057	0.425	448	481	0.5	0.7	5.923	A
4	76	19	1801	677	0.112	75	74	0.1	0.1	5.980	A
5	1052	263	948	1720	0.612	1049	928	1.0	1.6	5.531	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	417	104	1794	957	0.436	416	624	0.4	0.8	6.725	A
2	1894	473	452	1891	1.001	1820	1758	3.8	22.2	34.814	D
3	551	138	1694	919	0.599	548	578	0.7	1.5	9.648	A
4	92	23	2151	521	0.177	92	90	0.1	0.2	8.385	A
5	1288	322	1139	1605	0.803	1279	1104	1.6	4.0	11.110	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	417	104	1809	948	0.440	417	632	0.8	0.8	6.866	A
2	1894	473	453	1890	1.002	1856	1773	22.2	31.6	59.556	F
3	551	138	1724	903	0.609	550	585	1.5	1.5	10.214	B
4	92	23	2184	507	0.183	92	91	0.2	0.2	8.690	A
5	1288	322	1153	1596	0.807	1287	1123	4.0	4.2	11.987	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	341	85	1513	1113	0.306	342	539	0.8	0.5	4.740	A
2	1546	387	372	1936	0.799	1656	1482	31.6	4.3	17.793	C
3	449	112	1526	1006	0.447	452	502	1.5	0.8	6.580	A
4	76	19	1902	632	0.119	76	76	0.2	0.1	6.477	A
5	1052	263	991	1694	0.621	1062	988	4.2	1.7	5.970	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	285	71	1247	1260	0.226	285	438	0.5	0.3	3.746	A
2	1295	324	311	1971	0.657	1304	1222	4.3	2.0	5.558	A
3	376	94	1209	1170	0.322	378	406	0.8	0.5	4.567	A
4	63	16	1524	801	0.079	63	63	0.1	0.1	4.884	A
5	881	220	802	1808	0.487	884	786	1.7	1.0	4.040	A

Appendix P

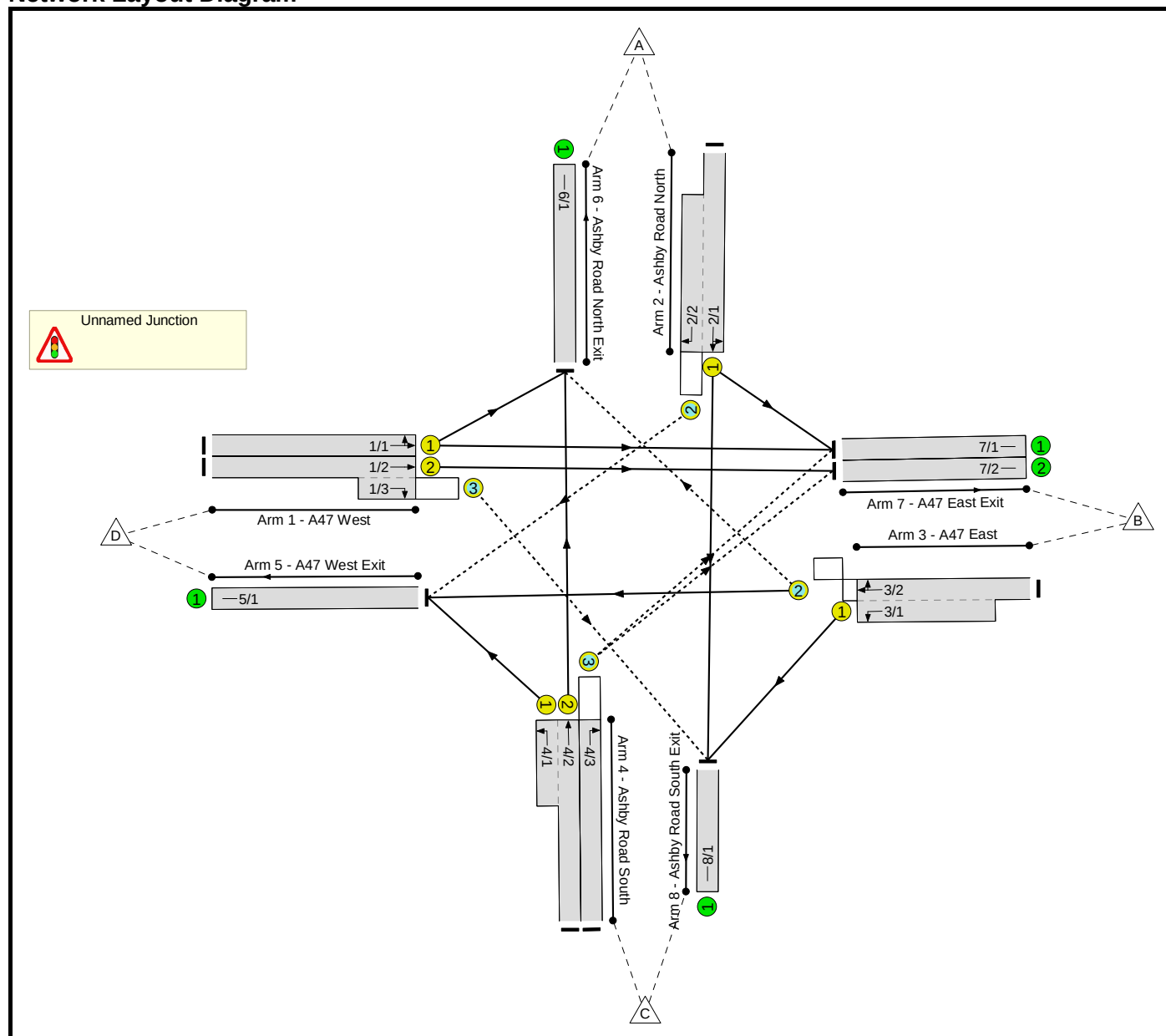
A47/Ashby Road Mitigation – LinSig Outputs

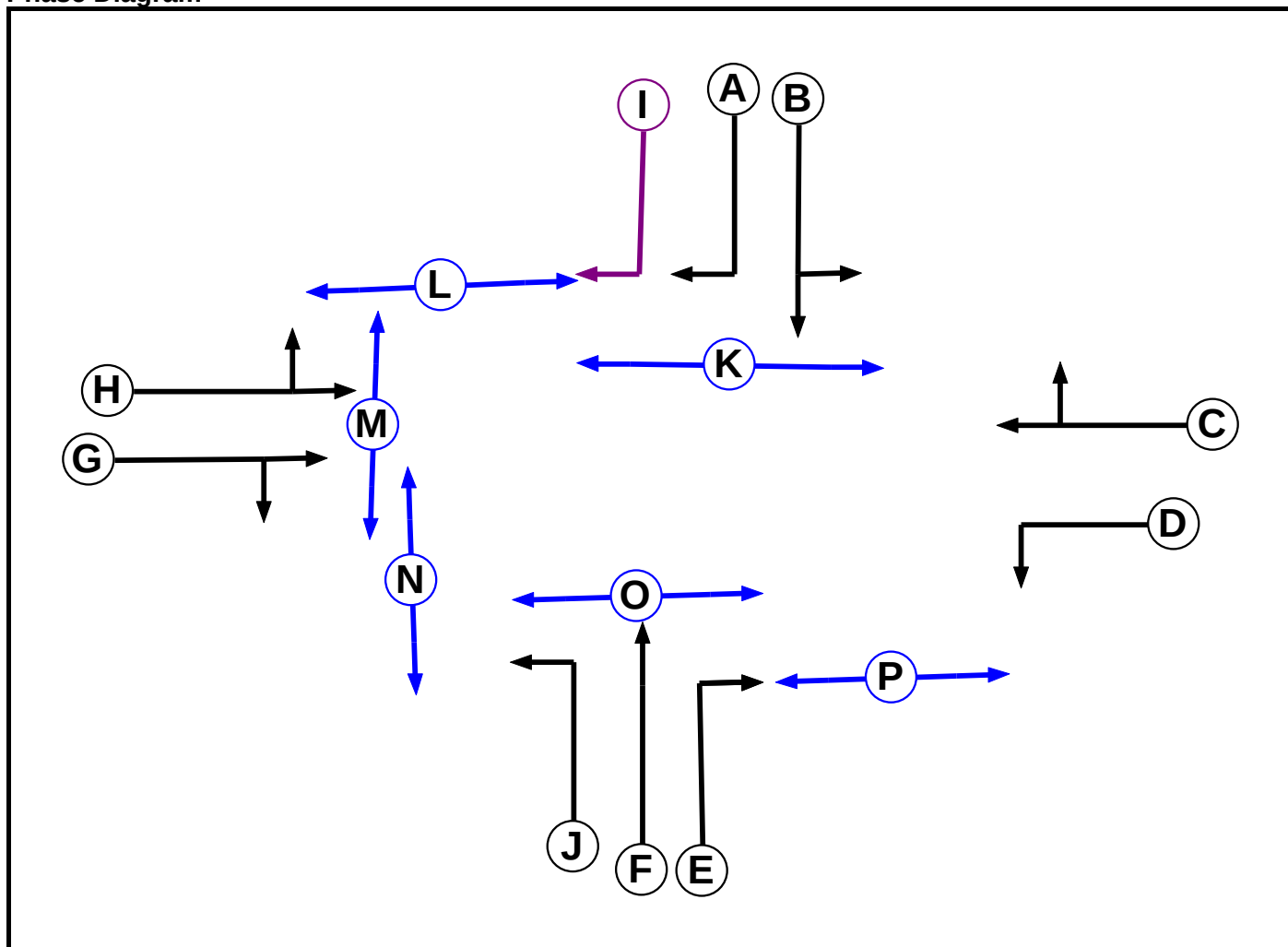
Full Input Data And Results

User and Project Details

Project:	Land East of Stoke Road
Title:	A47/Ashby Road
Location:	
Client:	Richborough Estates Ltd/Mr & Mrs Adcock
Additional detail:	
File name:	Ashby Road-A47 Signals - Proposed Mitigation rev A.lsg3x
Author:	Max Law
Company:	Hub Transport Planning Ltd
Address:	Radclyffe House, 66/68 Hagley Road, Edgbaston, Birmingham, B16 8PF

Network Layout Diagram



Phase Diagram

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
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	Traffic		7	7
H	Traffic	A	7	7
I	Ind. Arrow		0	0
J	Traffic		7	7
K	Pedestrian		5	5
L	Pedestrian		5	5
M	Pedestrian		8	8
N	Pedestrian		4	4
O	Pedestrian		8	8
P	Pedestrian		5	5

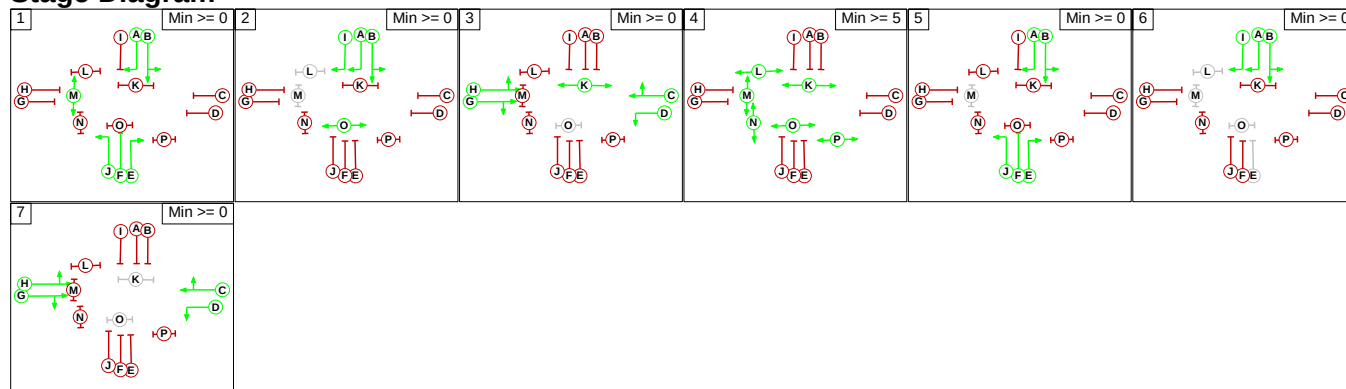
Phase Intergreens Matrix

Phase Into 3rd Grade Matrix																		
	Starting Phase																	
Terminating Phase		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
	A			-	5	-	-	-	5	5	-	-	5	-	-	9	-	-
	B				6	6	-	-	6	6	-	-	5	-	-	-	-	9
	C	5	5			-	5	5	-	-	5	6	-	9	-	9	-	-
	D	-	5	-			-	-	-	-	-	-	-	-	-	-	-	7
	E	-	-	5	-			-	5	5	-	-	-	-	-	-	5	-
	F	-	-	5	-	-			5	5	5	-	-	9	-	-	5	-
	G	5	5	7	-	-	5	5		-	5	-	-	-	5	-	-	9
	H	5	5	7	-	-	5	5	-		5	-	-	8	5	-	-	-
	I	-	-	-	5	-	-	6	5	5		6	5	-	-	-	-	-
	J	-	-	-	5	-	-	-	-	-	5		6	-	-	-	7	5
	K	7	7	7	-	-	-	-	-	-	7	-		6	-	-	-	-
	L	-	-	-	6	-	-	6	-	6	-	-	-		6	-	-	-
	M	-	-	-	-	-	-	-	10	10	-	-	-	-		6	-	-
	N	6	-	6	6	-	-	-	-	-	-	6	-	-	-		6	-
	O	-	-	-	-	-	10	10	-	-	-	10	-	-	-	-		6
	P	-	7	-	7	-	-	-	7	-	-	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A B E F J M
2	A B I O
3	C D G H K
4	K L M N O P
5	A B E F J
6	A B I
7	C D G H

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	4	5	6	7
	1		5	10	9	0	5	10
	2	10		6	9	10	0	6
	3	7	7		9	7	7	0
	4	10	7	10		10	7	10
	5	0	5	6	9		5	6
	6	6	0	6	9	6		6
	7	7	7	0	9	7	7	

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)
1/3 (A47 West)	8/1 (Right)	1439	0	3/2	1.09	To 5/1 (Ahead)	3.00	-	0.50	3	2.00
				3/1	1.09	All					
2/2 (Ashby Road North)	5/1 (Right)	1439	0	4/3	1.09	All	3.00	-	0.50	3	2.00
3/2 (A47 East)	6/1 (Right)	1439	0	1/2	1.09	To 7/2 (Ahead)	3.00	2.00	0.50	3	2.00
				1/1	1.09	All					
4/3 (Ashby Road South)	7/1 (Right)	1439	0	2/1	1.09	All	3.00	-	0.50	3	2.00
	7/2 (Right)	1439	0	2/1	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 (A47 West)	U	H	2	3	15.0	Geom	-	3.00	0.00	Y	Arm 6 Left Arm 7 Ahead	13.00 Inf
1/2 (A47 West)	U	G	2	3	60.0	Geom	-	3.00	0.00	N	Arm 7 Ahead	Inf
1/3 (A47 West)	O	G	2	3	4.0	Geom	-	3.00	0.00	Y	Arm 8 Right	15.00
2/1 (Ashby Road North)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf
2/2 (Ashby Road North)	O	A I	2	3	11.0	Geom	-	3.00	0.00	Y	Arm 5 Right	20.00
3/1 (A47 East)	U	D	2	3	15.0	Geom	-	3.00	0.00	Y	Arm 8 Left	15.00
3/2 (A47 East)	O	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	20.00
4/1 (Ashby Road South)	U	J	2	3	6.0	Geom	-	3.00	0.00	Y	Arm 5 Left	15.00
4/2 (Ashby Road South)	U	F	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Ahead	Inf
4/3 (Ashby Road South)	O	E	2	3	8.0	Geom	-	3.00	0.00	Y	Arm 7 Right	25.00
5/1 (A47 West Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Ashby Road North Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A47 East Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (A47 East Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (Ashby Road South Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2022 Base AM'	08:00	09:00	01:00	
2: '2022 Base PM'	17:00	18:00	01:00	
3: '2027 Base AM'	08:00	09:00	01:00	
4: '2027 Base PM'	17:00	18:00	01:00	
5: '2027 + Committed AM'	08:00	09:00	01:00	
6: '2027 + Committed PM'	17:00	18:00	01:00	
7: '2027 + Committed + Development AM'	08:00	09:00	01:00	
8: '2027 + Committed + Development PM'	17:00	18:00	01:00	
9: '2032 Base AM'	08:00	09:00	01:00	
10: '2032 Base PM'	17:00	18:00	01:00	
11: '2032 + Committed AM'	08:00	09:00	01:00	
12: '2032 + Committed PM'	17:00	18:00	01:00	
13: '2032 + Committed + Development AM'	08:00	09:00	01:00	
14: '2032 + Committed + Development PM'	17:00	18:00	01:00	

Scenario 1: '2027 + Committed + Dev AM No Peds' (FG7: '2027 + Committed + Development AM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

		Destination				
Origin	A	0	44	386	437	867
	B	49	0	134	744	927
	C	305	138	0	175	618
	D	375	664	138	0	1177
	Tot.	729	846	658	1356	3589

Traffic Lane Flows

Lane	Scenario 1: 2027 + Committed + Dev AM No Peds
Junction: Unnamed Junction	
1/1	505
1/2 (with short)	672(In) 534(Out)
1/3 (short)	138
2/1 (with short)	867(In) 430(Out)
2/2 (short)	437
3/1 (short)	134
3/2 (with short)	927(In) 793(Out)
4/1 (short)	175
4/2 (with short)	480(In) 305(Out)
4/3	138
5/1	1356
6/1	729
7/1	243
7/2	603
8/1	658

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 (A47 West)	3.00	0.00	Y	Arm 6 Left Arm 7 Ahead	13.00 Inf	74.3 % 25.7 %	1764	1764
1/2 (A47 West)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/3 (A47 West)	3.00	0.00	Y	Arm 8 Right	15.00	100.0 %	1741	1741
2/1 (Ashby Road North)	3.00	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf	10.2 % 89.8 %	1896	1896
2/2 (Ashby Road North)	3.00	0.00	Y	Arm 5 Right	20.00	100.0 %	1781	1781
3/1 (A47 East)	3.00	0.00	Y	Arm 8 Left	15.00	100.0 %	1741	1741
3/2 (A47 East)	3.00	0.00	Y	Arm 5 Ahead Arm 6 Right	Inf 20.00	93.8 % 6.2 %	1906	1906
4/1 (Ashby Road South)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (Ashby Road South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
4/3 (Ashby Road South)	3.00	0.00	Y	Arm 7 Right	25.00	100.0 %	1807	1807
5/1 (A47 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Ashby Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A47 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A47 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Ashby Road South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2027 + Committed + Dev PM No Peds' (FG8: '2027 + Committed + Development PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	50	333	476	859
	B	49	0	98	654	801
	C	392	146	0	211	749
	D	427	585	67	0	1079
	Tot.	868	781	498	1341	3488

Traffic Lane Flows

Lane	Scenario 2: 2027 + Committed + Dev PM No Peds
Junction: Unnamed Junction	
1/1	470
1/2 (with short)	609(In) 542(Out)
1/3 (short)	67
2/1 (with short)	859(In) 383(Out)
2/2 (short)	476
3/1 (short)	98
3/2 (with short)	801(In) 703(Out)
4/1 (short)	211
4/2 (with short)	603(In) 392(Out)
4/3	146
5/1	1341
6/1	868
7/1	166
7/2	615
8/1	498

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 (A47 West)	3.00	0.00	Y	Arm 6 Left Arm 7 Ahead	13.00 Inf	90.9 % 9.1 %	1733	1733
1/2 (A47 West)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/3 (A47 West)	3.00	0.00	Y	Arm 8 Right	15.00	100.0 %	1741	1741
2/1 (Ashby Road North)	3.00	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf	13.1 % 86.9 %	1890	1890
2/2 (Ashby Road North)	3.00	0.00	Y	Arm 5 Right	20.00	100.0 %	1781	1781
3/1 (A47 East)	3.00	0.00	Y	Arm 8 Left	15.00	100.0 %	1741	1741
3/2 (A47 East)	3.00	0.00	Y	Arm 5 Ahead Arm 6 Right	Inf 20.00	93.0 % 7.0 %	1905	1905
4/1 (Ashby Road South)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (Ashby Road South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
4/3 (Ashby Road South)	3.00	0.00	Y	Arm 7 Right	25.00	100.0 %	1807	1807
5/1 (A47 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Ashby Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A47 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A47 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Ashby Road South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2032 + Committed + Dev AM No Peds' (FG13: '2032 + Committed + Development AM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired**Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	45	399	448	892
	B	51	0	139	766	956
	C	314	142	0	181	637
	D	383	681	142	0	1206
	Tot.	748	868	680	1395	3691

Traffic Lane Flows

Lane	Scenario 3: 2032 + Committed + Dev AM No Peds
Junction: Unnamed Junction	
1/1	524
1/2 (with short)	682(In) 540(Out)
1/3 (short)	142
2/1 (with short)	892(In) 444(Out)
2/2 (short)	448
3/1 (short)	139
3/2 (with short)	956(In) 817(Out)
4/1 (short)	181
4/2 (with short)	495(In) 314(Out)
4/3	142
5/1	1395
6/1	748
7/1	257
7/2	611
8/1	680

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 (A47 West)	3.00	0.00	Y	Arm 6 Left Arm 7 Ahead	13.00 Inf	73.1 % 26.9 %	1766	1766
1/2 (A47 West)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/3 (A47 West)	3.00	0.00	Y	Arm 8 Right	15.00	100.0 %	1741	1741
2/1 (Ashby Road North)	3.00	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf	10.1 % 89.9 %	1896	1896
2/2 (Ashby Road North)	3.00	0.00	Y	Arm 5 Right	20.00	100.0 %	1781	1781
3/1 (A47 East)	3.00	0.00	Y	Arm 8 Left	15.00	100.0 %	1741	1741
3/2 (A47 East)	3.00	0.00	Y	Arm 5 Ahead Arm 6 Right	Inf 20.00	93.8 % 6.2 %	1906	1906
4/1 (Ashby Road South)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (Ashby Road South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
4/3 (Ashby Road South)	3.00	0.00	Y	Arm 7 Right	25.00	100.0 %	1807	1807
5/1 (A47 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Ashby Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A47 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A47 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Ashby Road South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2032 + Committed + Dev PM No Peds' (FG14: '2032 + Committed + Development PM', Plan 2: 'Network Control Plan 2')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	51	346	487	884
	B	50	0	103	670	823
	C	401	150	0	216	767
	D	435	601	71	0	1107
	Tot.	886	802	520	1373	3581

Traffic Lane Flows

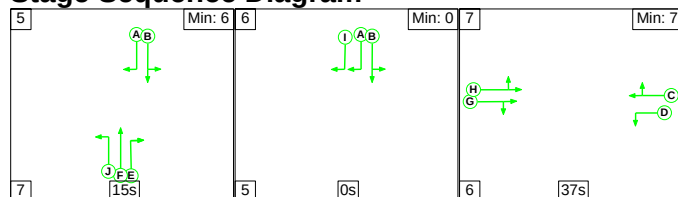
Lane	Scenario 4: 2032 + Committed + Dev PM No Peds
Junction: Unnamed Junction	
1/1	483
1/2 (with short)	624(In) 553(Out)
1/3 (short)	71
2/1 (with short)	884(In) 397(Out)
2/2 (short)	487
3/1 (short)	103
3/2 (with short)	823(In) 720(Out)
4/1 (short)	216
4/2 (with short)	617(In) 401(Out)
4/3	150
5/1	1373
6/1	886
7/1	174
7/2	628
8/1	520

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 (A47 West)	3.00	0.00	Y	Arm 6 Left Arm 7 Ahead	13.00 Inf	90.1 % 9.9 %	1735	1735
1/2 (A47 West)	3.00	0.00	N	Arm 7 Ahead	Inf	100.0 %	2055	2055
1/3 (A47 West)	3.00	0.00	Y	Arm 8 Right	15.00	100.0 %	1741	1741
2/1 (Ashby Road North)	3.00	0.00	Y	Arm 7 Left Arm 8 Ahead	15.00 Inf	12.8 % 87.2 %	1891	1891
2/2 (Ashby Road North)	3.00	0.00	Y	Arm 5 Right	20.00	100.0 %	1781	1781
3/1 (A47 East)	3.00	0.00	Y	Arm 8 Left	15.00	100.0 %	1741	1741
3/2 (A47 East)	3.00	0.00	Y	Arm 5 Ahead Arm 6 Right	Inf 20.00	93.1 % 6.9 %	1905	1905
4/1 (Ashby Road South)	3.00	0.00	Y	Arm 5 Left	15.00	100.0 %	1741	1741
4/2 (Ashby Road South)	3.00	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1915	1915
4/3 (Ashby Road South)	3.00	0.00	Y	Arm 7 Right	25.00	100.0 %	1807	1807
5/1 (A47 West Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Ashby Road North Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A47 East Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A47 East Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (Ashby Road South Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

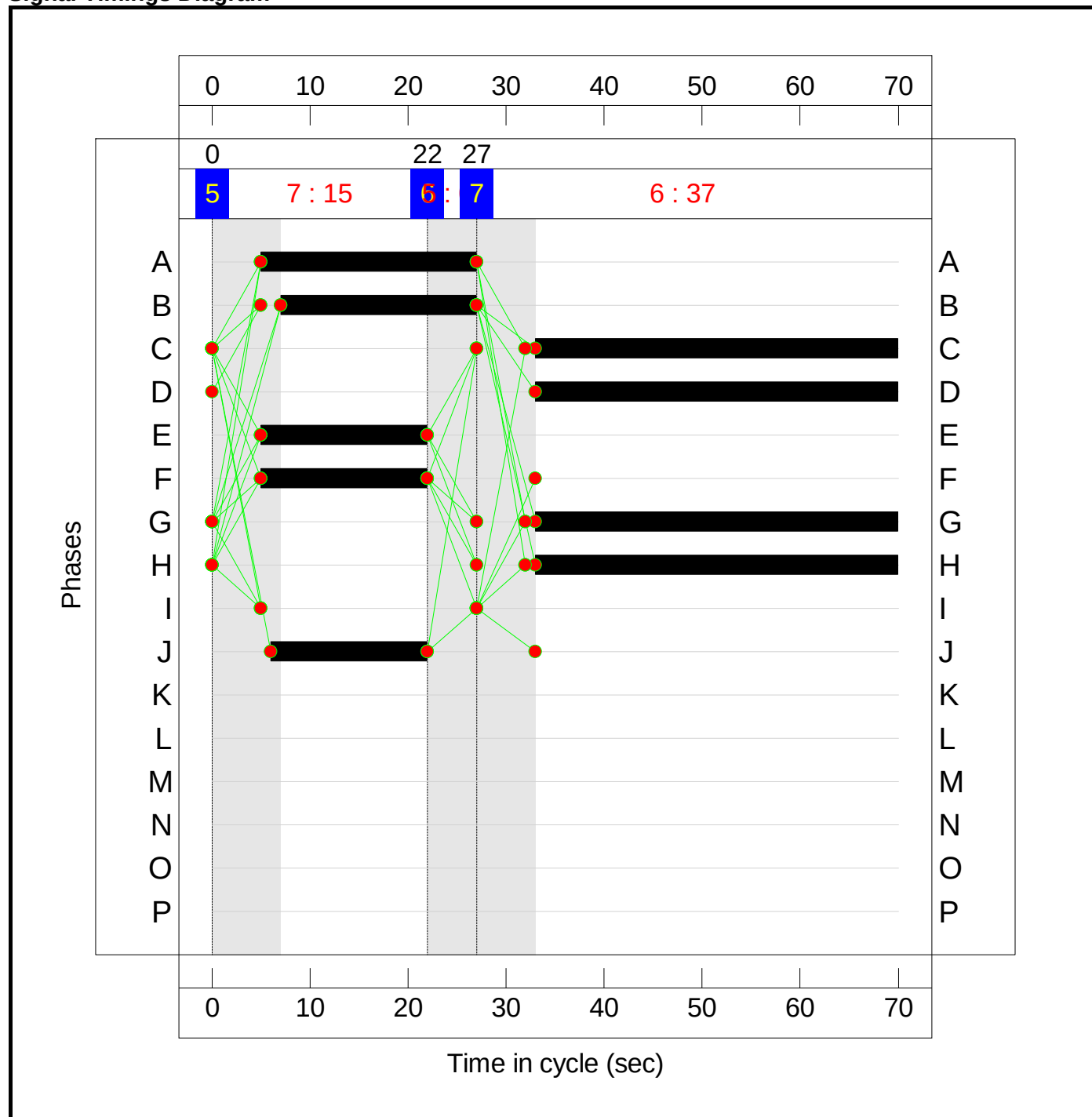
Scenario 1: '2027 + Committed + Dev AM No Peds' (FG7: '2027 + Committed + Development AM', Plan 2: 'Network Control Plan 2')

Stage Sequence Diagram

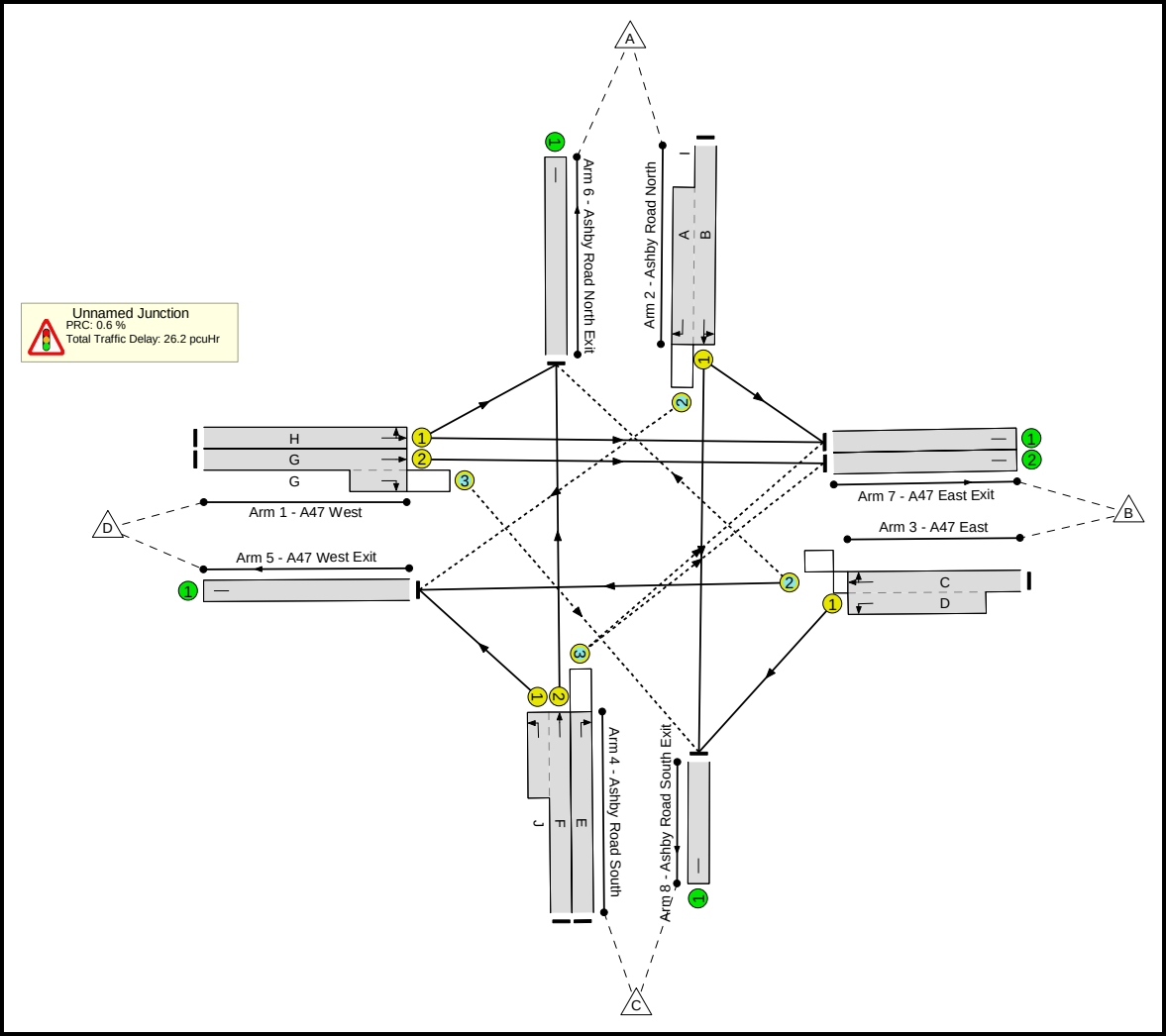


Stage Timings

Stage	5	6	7
Duration	15	0	37
Change Point	0	22	27

Signal Timings Diagram

Network Layout Diagram

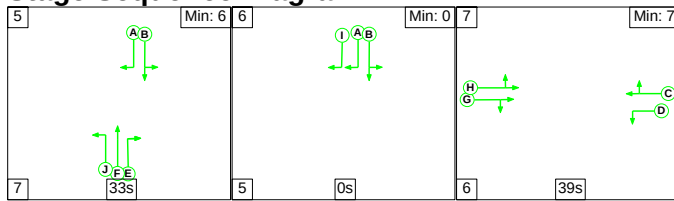


Network Results

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: A47/Ashby Road	-	-	N/A	-	-		-	-	-	-	-	-	89.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	89.4%
1/1	A47 West Left Ahead	U	N/A	N/A	H		1	37	-	505	1764	958	52.7%
1/2+1/3	A47 West Ahead Right	U+O	N/A	N/A	G		1	37	-	672	2055:1741	903+200	59.1 : 68.9%
2/1+2/2	Ashby Road North Right Left Ahead	U+O	N/A	N/A	B A	I	1	20:22	0	867	1896:1781	566+552	76.0 : 79.2%
3/2+3/1	A47 East Ahead Right Left	O+U	N/A	N/A	C D		1	37	-	927	1906:1741	1001+169	79.2 : 79.2%
4/2+4/1	Ashby Road South Left Ahead	U	N/A	N/A	F J		1	17:16	-	480	1915:1741	426+244	71.6 : 71.6%
4/3	Ashby Road South Right	O	N/A	N/A	E		1	17	-	138	1807	154	89.4%
5/1	A47 West Exit	U	N/A	N/A	-		-	-	-	1356	Inf	Inf	0.0%
6/1	Ashby Road North Exit	U	N/A	N/A	-		-	-	-	729	Inf	Inf	0.0%
7/1	A47 East Exit	U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
7/2	A47 East Exit	U	N/A	N/A	-		-	-	-	603	Inf	Inf	0.0%
8/1	Ashby Road South Exit	U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%

Scenario 2: '2027 + Committed + Dev PM No Peds' (FG8: '2027 + Committed + Development PM', Plan 2: 'Network Control Plan 2')

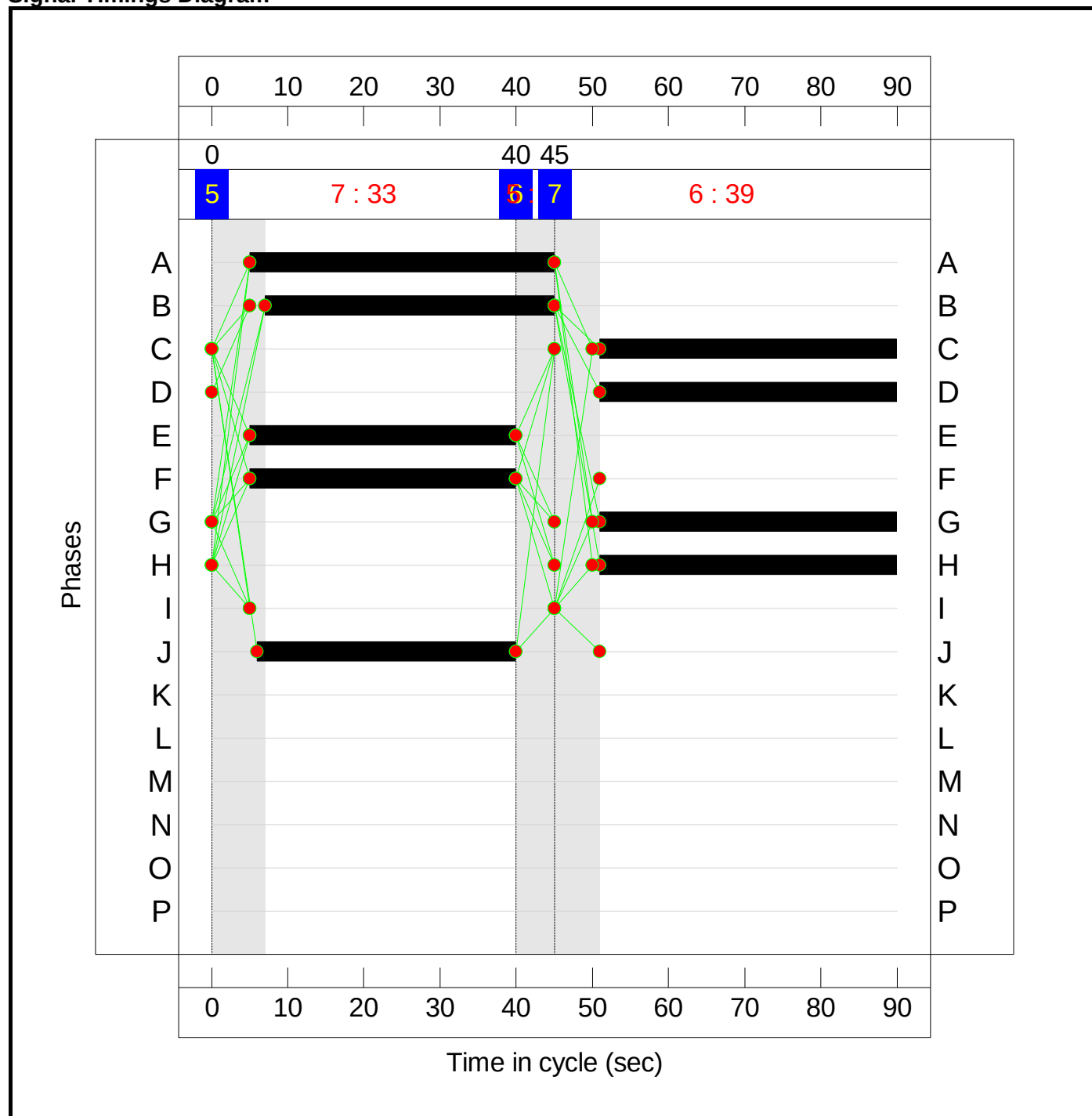
Stage Sequence Diagram



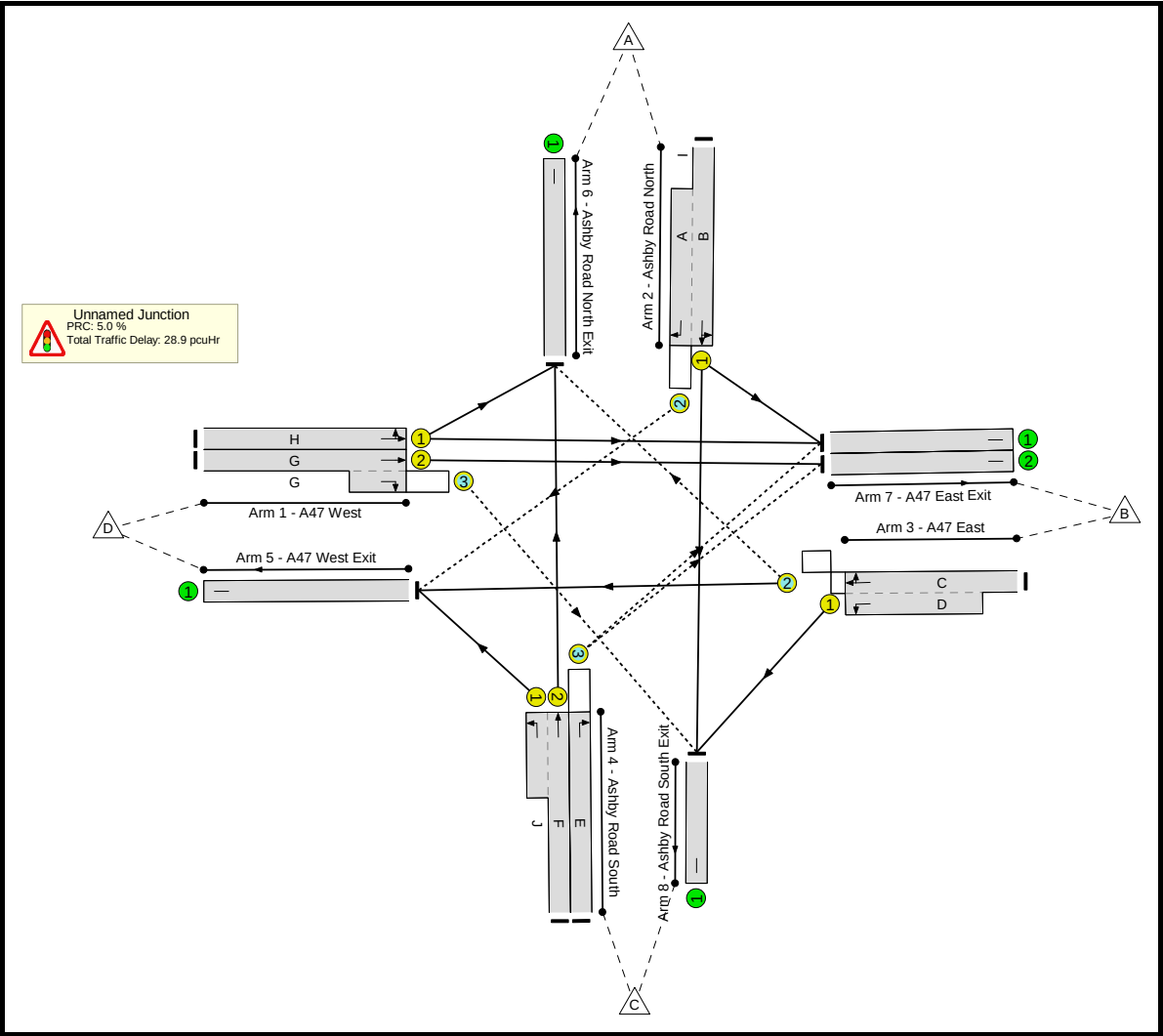
Stage Timings

Stage	5	6	7
Duration	33	0	39
Change Point	0	40	45

Signal Timings Diagram



Network Layout Diagram

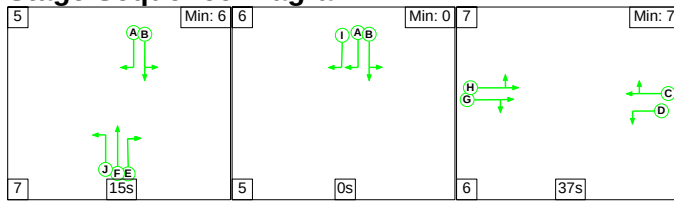


Network Results

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: A47/Ashby Road	-	-	N/A	-	-		-	-	-	-	-	-	85.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	85.7%
1/1	A47 West Left Ahead	U	N/A	N/A	H		1	39	-	470	1733	770	61.0%
1/2+1/3	A47 West Ahead Right	U+O	N/A	N/A	G		1	39	-	609	2055:1741	818+101	66.3 : 66.3%
2/1+2/2	Ashby Road North Right Left Ahead	U+O	N/A	N/A	B A	I	1	38:40	0	859	1890:1781	471+561	81.4 : 84.8%
3/2+3/1	A47 East Ahead Right Left	O+U	N/A	N/A	C D		1	39	-	801	1905:1741	820+114	85.7 : 85.7%
4/2+4/1	Ashby Road South Left Ahead	U	N/A	N/A	F J		1	35:34	-	603	1915:1741	574+309	68.3 : 68.3%
4/3	Ashby Road South Right	O	N/A	N/A	E		1	35	-	146	1807	336	43.5%
5/1	A47 West Exit	U	N/A	N/A	-		-	-	-	1341	Inf	Inf	0.0%
6/1	Ashby Road North Exit	U	N/A	N/A	-		-	-	-	868	Inf	Inf	0.0%
7/1	A47 East Exit	U	N/A	N/A	-		-	-	-	166	Inf	Inf	0.0%
7/2	A47 East Exit	U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
8/1	Ashby Road South Exit	U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%

Scenario 3: '2032 + Committed + Dev AM No Peds' (FG13: '2032 + Committed + Development AM', Plan 2: 'Network Control Plan 2')

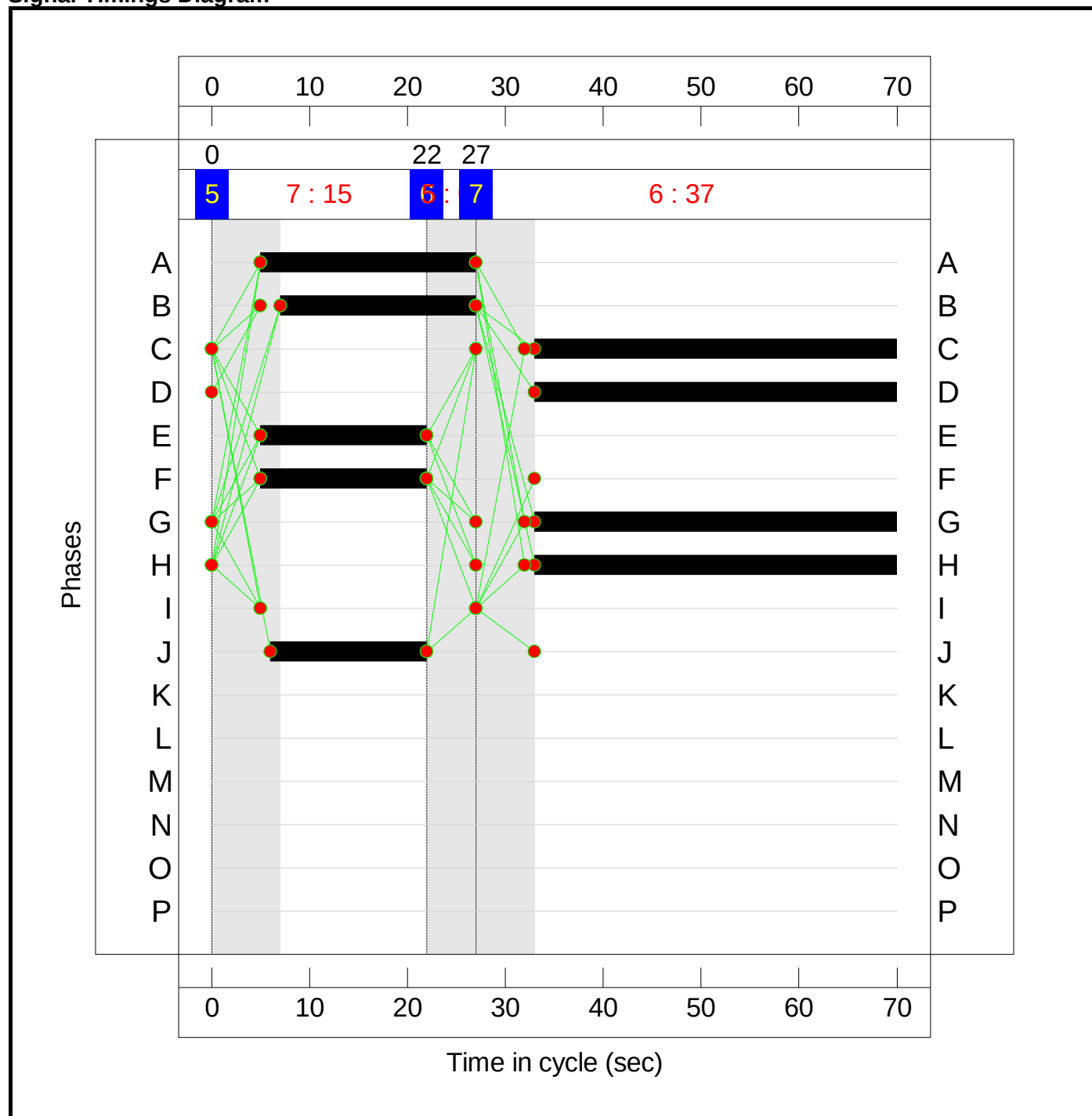
Stage Sequence Diagram



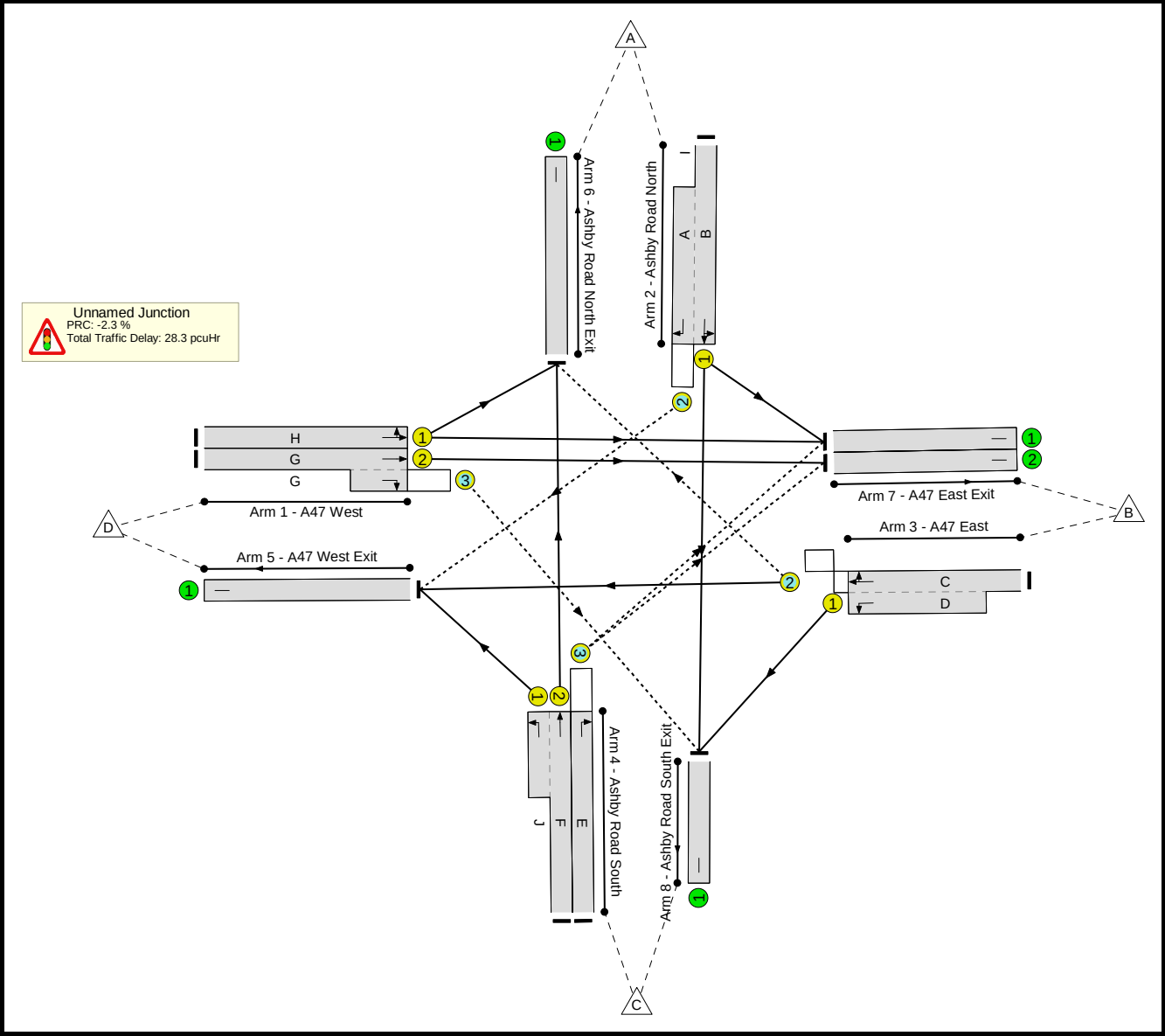
Stage Timings

Stage	5	6	7
Duration	15	0	37
Change Point	0	22	27

Signal Timings Diagram



Network Layout Diagram

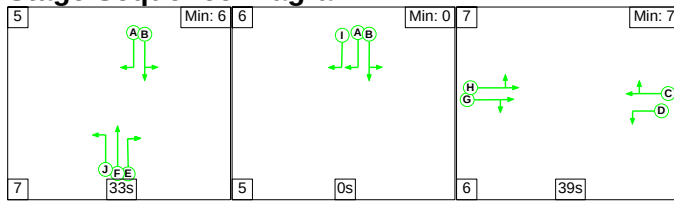


Network Results

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: A47/Ashby Road	-	-	N/A	-	-		-	-	-	-	-	-	92.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	92.0%
1/1	A47 West Left Ahead	U	N/A	N/A	H		1	37	-	524	1766	959	54.7%
1/2+1/3	A47 West Ahead Right	U+O	N/A	N/A	G		1	37	-	682	2055:1741	900+187	60.0 : 76.0%
2/1+2/2	Ashby Road North Right Left Ahead	U+O	N/A	N/A	B A	I	1	20:22	0	892	1896:1781	567+553	78.4 : 81.0%
3/2+3/1	A47 East Ahead Right Left	O+U	N/A	N/A	C D		1	37	-	956	1906:1741	1001+170	81.6 : 81.6%
4/2+4/1	Ashby Road South Left Ahead	U	N/A	N/A	F J		1	17:16	-	495	1915:1741	426+245	73.7 : 73.7%
4/3	Ashby Road South Right	O	N/A	N/A	E		1	17	-	142	1807	154	92.0%
5/1	A47 West Exit	U	N/A	N/A	-		-	-	-	1395	Inf	Inf	0.0%
6/1	Ashby Road North Exit	U	N/A	N/A	-		-	-	-	748	Inf	Inf	0.0%
7/1	A47 East Exit	U	N/A	N/A	-		-	-	-	257	Inf	Inf	0.0%
7/2	A47 East Exit	U	N/A	N/A	-		-	-	-	611	Inf	Inf	0.0%
8/1	Ashby Road South Exit	U	N/A	N/A	-		-	-	-	680	Inf	Inf	0.0%

Scenario 4: '2032 + Committed + Dev PM No Peds' (FG14: '2032 + Committed + Development PM', Plan 2: 'Network Control Plan 2')

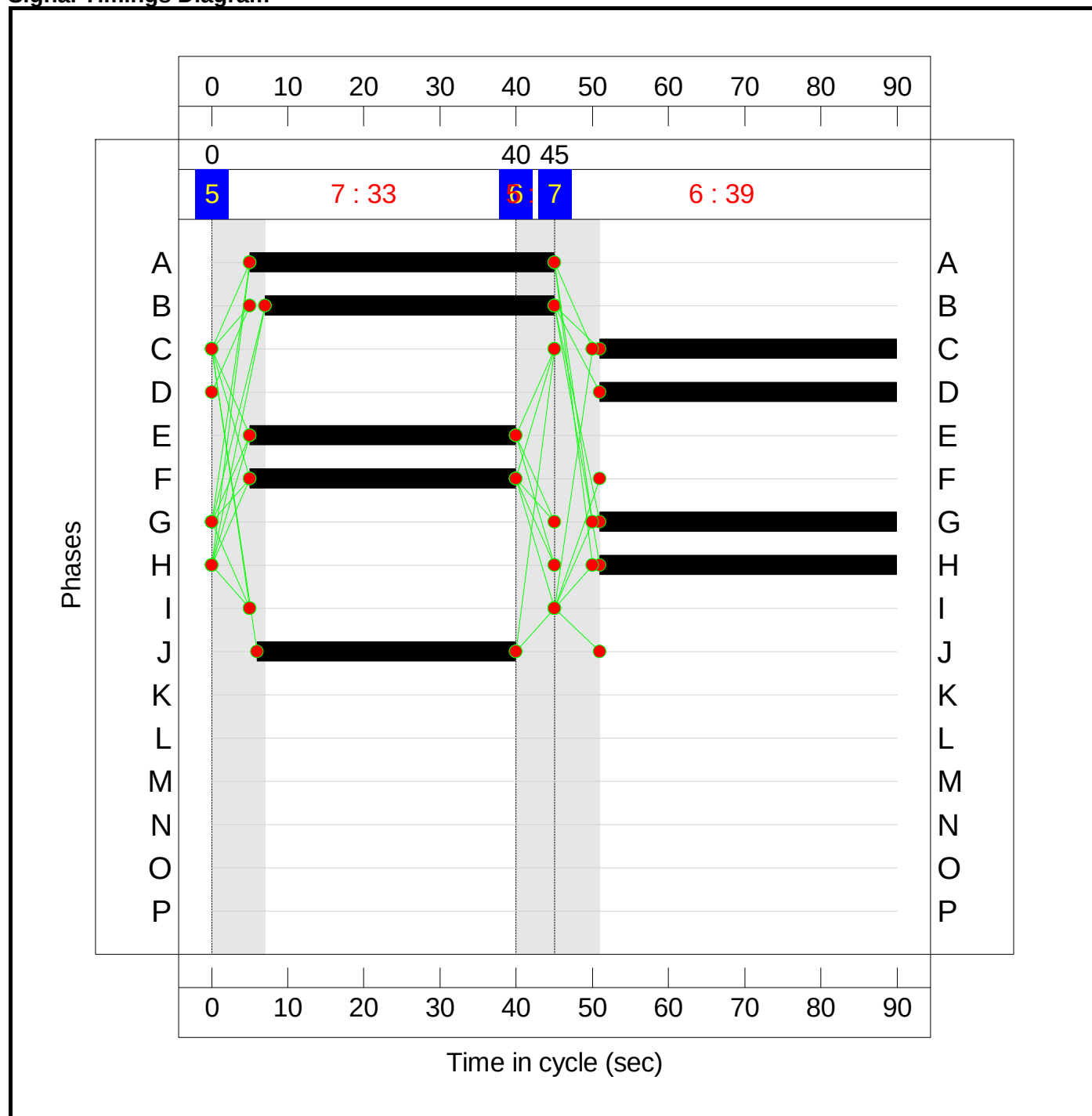
Stage Sequence Diagram



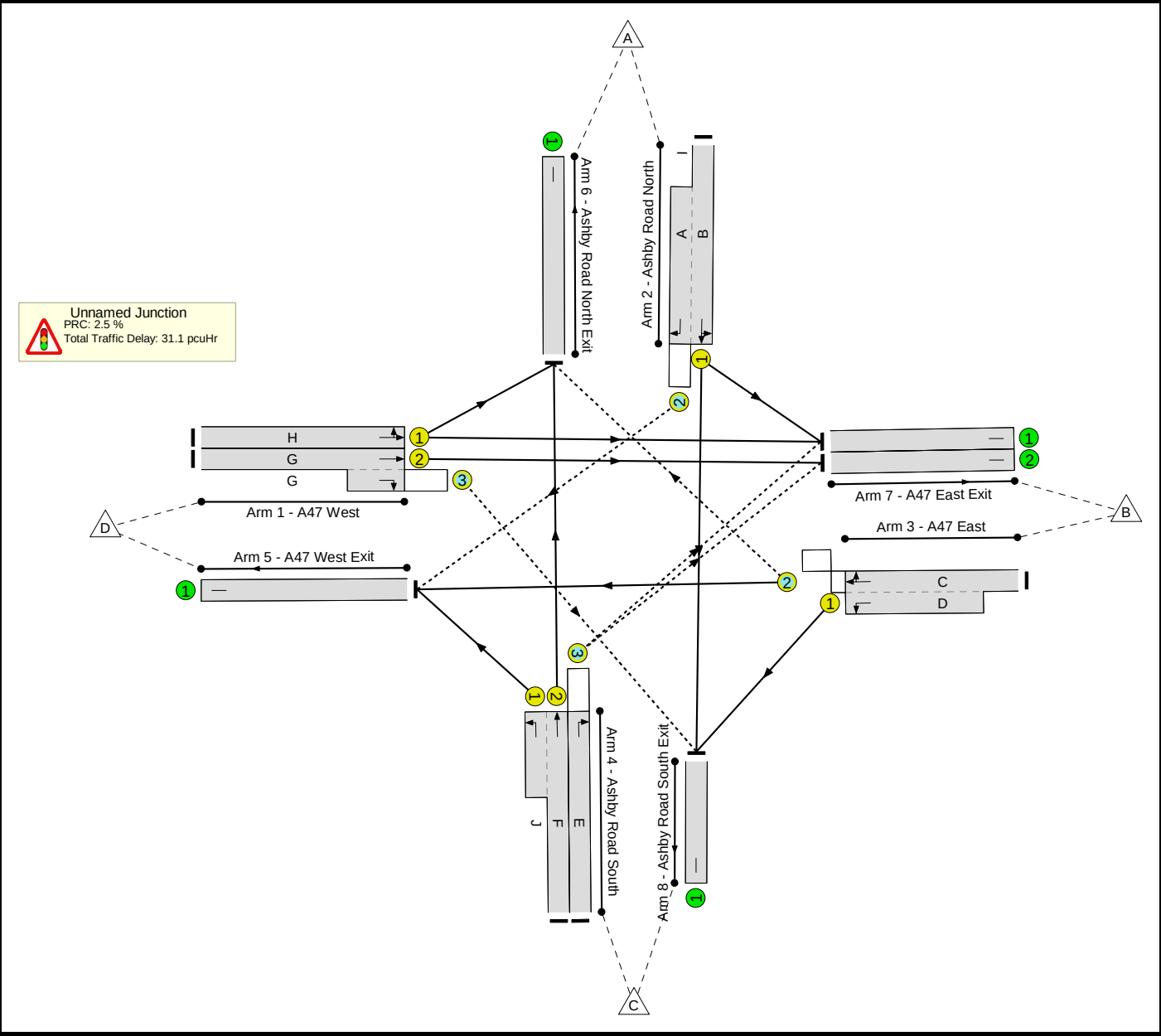
Stage Timings

Stage	5	6	7
Duration	33	0	39
Change Point	0	40	45

Signal Timings Diagram



Network Layout Diagram



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: A47/Ashby Road	-	-	N/A	-	-		-	-	-	-	-	-	87.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	87.8%
1/1	A47 West Left Ahead	U	N/A	N/A	H		1	39	-	483	1735	771	62.6%
1/2+1/3	A47 West Ahead Right	U+O	N/A	N/A	G		1	39	-	624	2055:1741	814+105	67.9 : 67.9%
2/1+2/2	Ashby Road North Right Left Ahead	U+O	N/A	N/A	B A	I	1	38:40	0	884	1891:1781	474+557	83.8 : 87.5%
3/2+3/1	A47 East Ahead Right Left	O+U	N/A	N/A	C D		1	39	-	823	1905:1741	820+117	87.8 : 87.8%
4/2+4/1	Ashby Road South Left Ahead	U	N/A	N/A	F J		1	35:34	-	617	1915:1741	574+309	69.9 : 69.9%
4/3	Ashby Road South Right	O	N/A	N/A	E		1	35	-	150	1807	322	46.5%
5/1	A47 West Exit	U	N/A	N/A	-		-	-	-	1373	Inf	Inf	0.0%
6/1	Ashby Road North Exit	U	N/A	N/A	-		-	-	-	886	Inf	Inf	0.0%
7/1	A47 East Exit	U	N/A	N/A	-		-	-	-	174	Inf	Inf	0.0%
7/2	A47 East Exit	U	N/A	N/A	-		-	-	-	628	Inf	Inf	0.0%
8/1	Ashby Road South Exit	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%

