

Full Input Data And Results

Scenario 7: '2014 SAT BASE + COM' (FG7: '2014 SAT BASE + COM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	99	236	50	385
	B	91	0	114	92	297
	C	209	64	0	22	295
	D	71	85	29	0	185
	Tot.	371	248	379	164	1162

Traffic Lane Flows

Lane	Scenario 7: 2014 SAT BASE + COM
Junction: Unnamed Junction	
1/1	385
2/1	297
3/1	185
4/1 (with short)	295(In) 231(Out)
4/2 (short)	64
5/1	371
6/1	248
7/1	379
8/1	164

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Scenario 8: '2014 SAT BASE + COM + DEV' (FG8: '2014 SAT BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
Origin		A	B	C	D	Tot.
	A	0	96	251	49	396
	B	88	0	131	90	309
	C	222	78	0	34	334
	D	68	81	43	0	192
	Tot.	378	255	425	173	1231

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2014 SAT BASE + COM + DEV
Junction: Unnamed Junction	
1/1	396
2/1	309
3/1	192
4/1 (with short)	334(In) 256(Out)
4/2 (short)	78
5/1	378
6/1	255
7/1	425
8/1	173

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Full Input Data And Results

Scenario 9: '2019 SAT BASE + COM' (FG9: '2019 SAT BASE + COM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	104	250	54	408
	B	96	0	124	101	321
	C	224	70	0	24	318
	D	75	94	32	0	201
	Tot.	395	268	406	179	1248

Traffic Lane Flows

Lane	Scenario 9: 2019 SAT BASE + COM
Junction: Unnamed Junction	
1/1	408
2/1	321
3/1	201
4/1 (with short)	318(In) 248(Out)
4/2 (short)	70
5/1	395
6/1	268
7/1	406
8/1	179

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Scenario 10: '2019 SAT BASE + COM + DEV' (FG10: '2019 SAT BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin	A	B	C	D	Total	
	A	0	101	265	52	418
	B	93	0	141	99	333
	C	238	85	0	36	359
	D	73	89	45	0	207
	Total	404	275	451	187	1317

Full Input Data And Results

Traffic Lane Flows

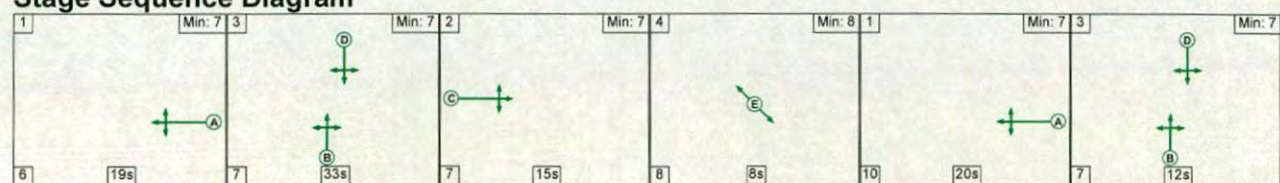
Lane	Scenario 10: 2019 SAT BASE + COM + DEV
Junction: Unnamed Junction	
1/1	418
2/1	333
3/1	207
4/1 (with short)	359(In) 274(Out)
4/2 (short)	85
5/1	404
6/1	275
7/1	451
8/1	187

Lane Saturation Flows

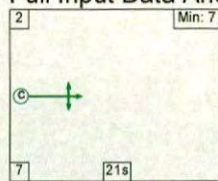
Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (Midland Road Lane 1)	This lane uses a directly entered Saturation Flow						1794
2/1 (Church Road Lane 1)	This lane uses a directly entered Saturation Flow						1664
3/1 (Station Road Lane 1)	This lane uses a directly entered Saturation Flow						1709
4/1 (High Street Lane 1)	This lane uses a directly entered Saturation Flow						1880
4/2 (High Street Lane 2)	This lane uses a directly entered Saturation Flow						1926
5/1 (Midland Road EB Lane 1)	Infinite Saturation Flow						Inf
6/1 (Church Street S Lane 1)	Infinite Saturation Flow						Inf
7/1 (High Street WB Lane 1)	Infinite Saturation Flow						Inf
8/1 (Station Road NB Lane 1)	Infinite Saturation Flow						Inf

Scenario 1: '2013 PM BASE' (FG1: '2013 PM BASE', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



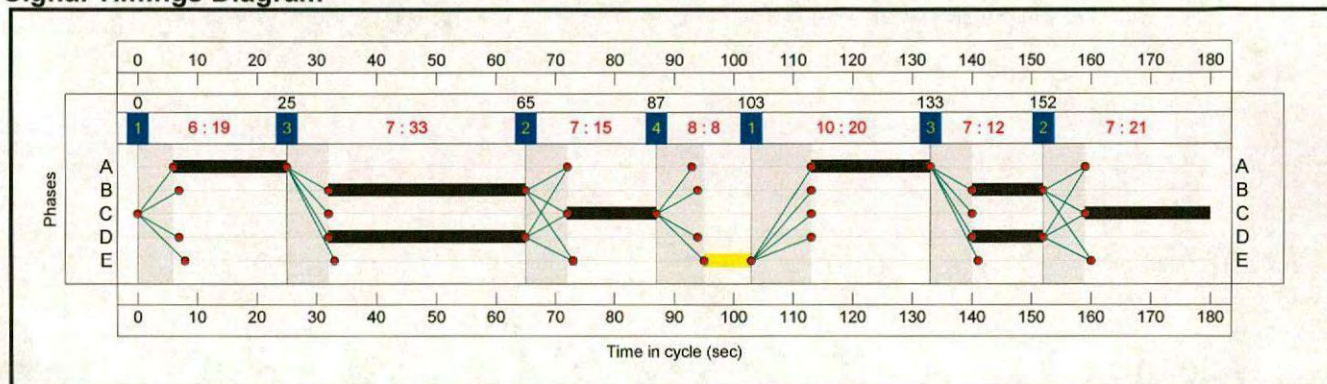
Full Input Data And Results

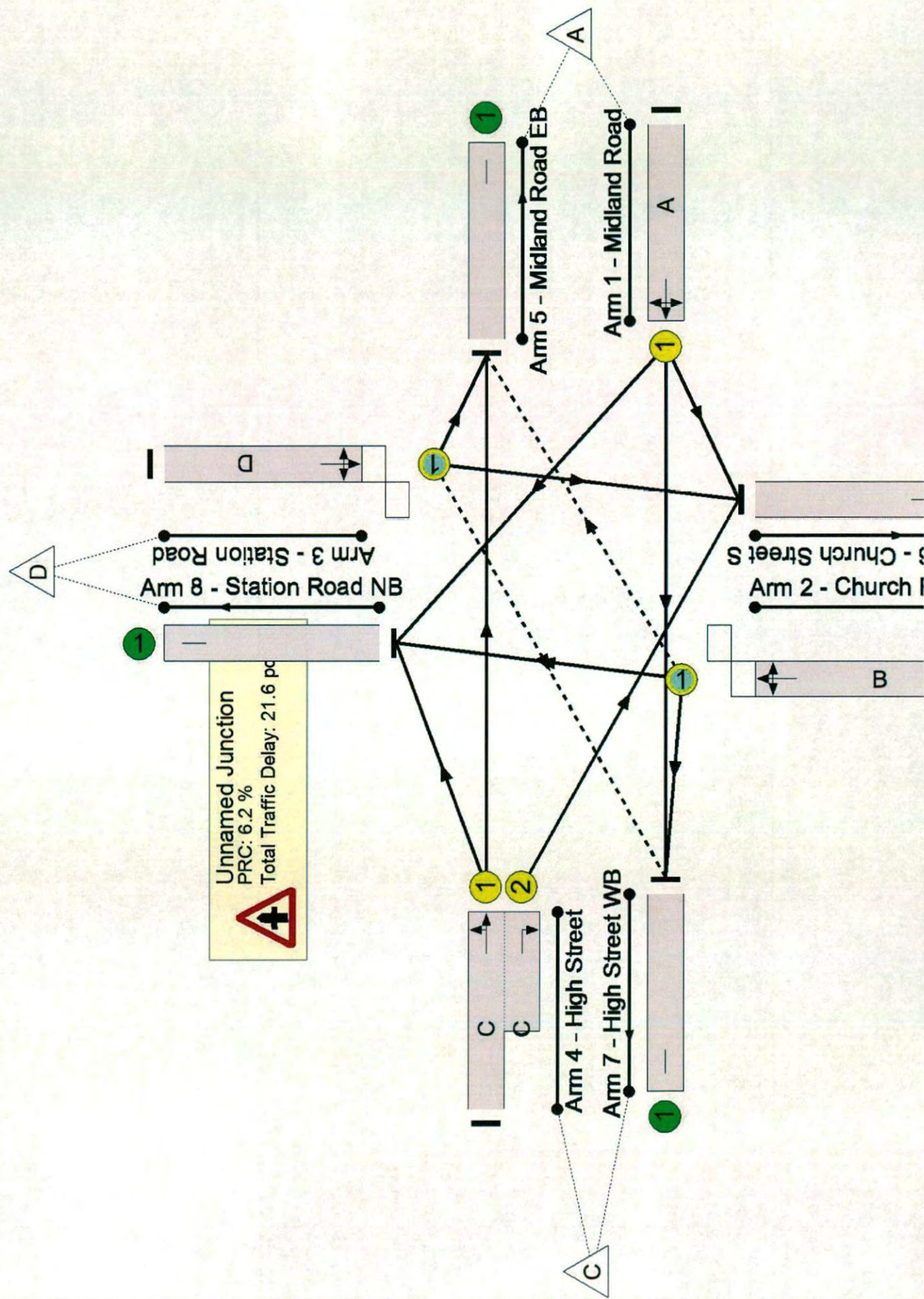


Stage Timings

Stage	1	3	2	4	1	3	2
Duration	19	33	15	8	20	12	21
Change Point	0	25	65	87	103	133	152

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-	-	-	-	-	-	-	-	84.7%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	84.7%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A		2	39	-	346	1794	409	84.7%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B		2	45	-	340	1664	403	84.4%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D		2	45	-	238	1709	446	53.3%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C		2	36	-	437	1880:1926	516	84.7%
5/1	Midland Road EB	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-		-	-	-	365	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-		-	-	-	185	Inf	Inf	0.0%

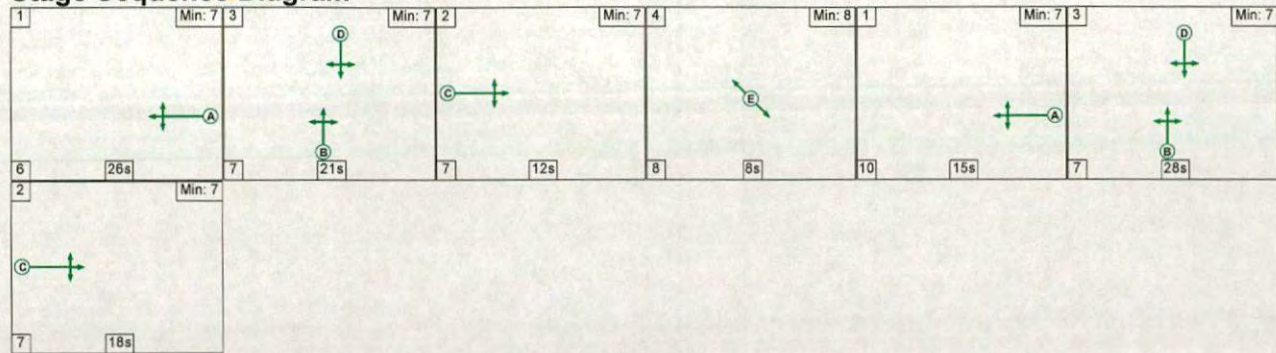
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	105	0	27	13.3	8.2	0.1	21.6	-	-	-	-
Unnamed Junction	-	-	105	0	27	13.3	8.2	0.1	21.6	-	-	-	-
1/1	346	346	-	-	-	3.4	2.6	-	6.0	61.9	10.3	2.6	12.8
2/1	340	340	76	0	26	4.0	2.5	0.1	6.6	70.2	10.3	2.5	12.8
3/1	238	238	29	0	1	1.9	0.6	0.0	2.5	37.6	5.6	0.6	6.2
4/1+4/2	437	437	-	-	-	3.9	2.6	-	6.5	53.7	7.2	2.6	9.8
5/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	365	365	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	185	185	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1										Cycle Time (s): 180			
PRC for Signalised Lanes (%):					6.2	Total Delay for Signalised Lanes (pcuHr):			21.59				
PRC Over All Lanes (%):					6.2	Total Delay Over All Lanes (pcuHr):			21.59				

Full Input Data And Results

Scenario 2: '2014 PM BASE + COM' (FG2: '2014 PM BASE + COM', Plan 1: 'Network Control Plan 1')

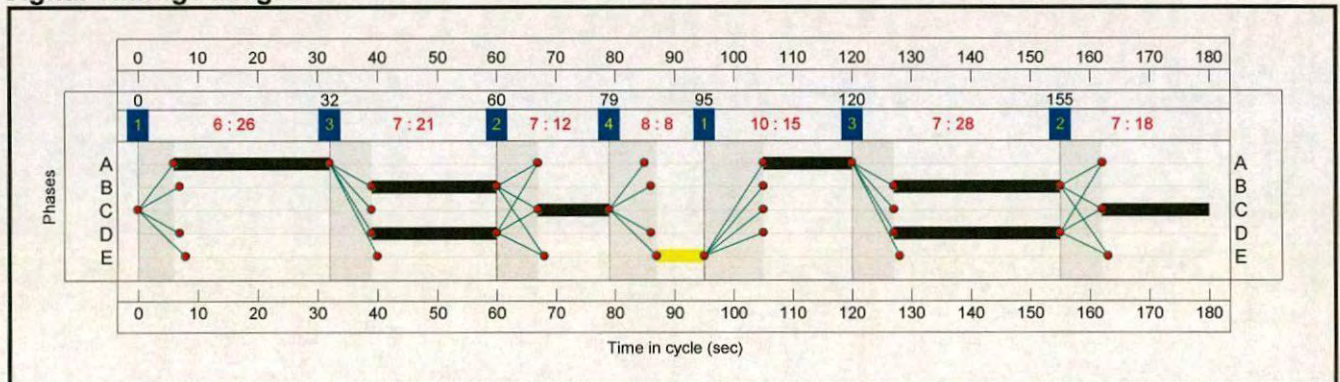
Stage Sequence Diagram

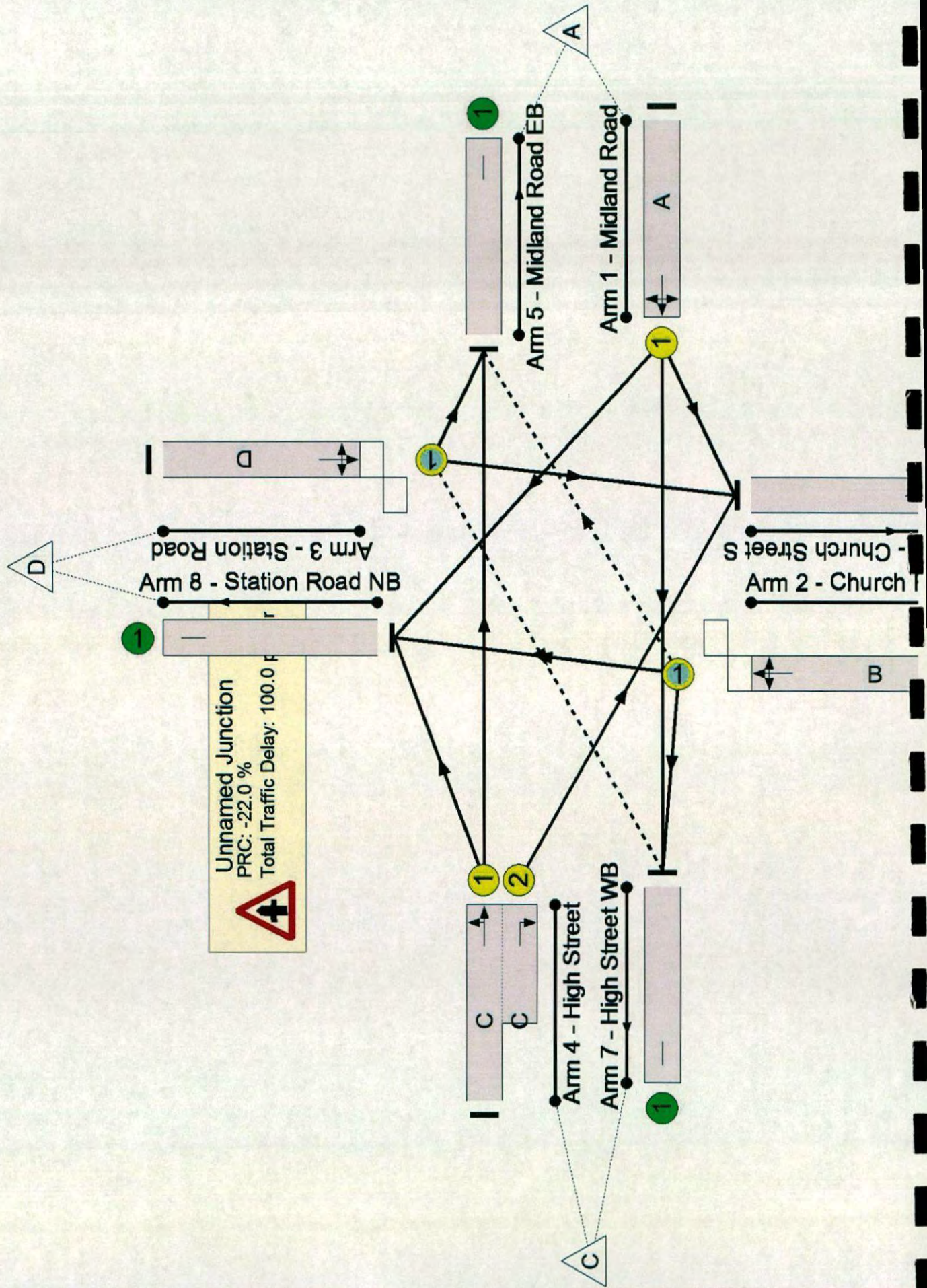


Stage Timings

Stage	1	3	2	4	1	3	2
Duration	26	21	12	8	15	28	18
Change Point	0	32	60	79	95	120	155

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	109.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	109.8%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A		2	41	-	468	1794	429	109.2%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B		2	49	-	410	1664	374	109.8%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D		2	49	-	256	1709	484	52.9%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C		2	30	-	481	1880:1926	442	108.9%
5/1	Midland Road EB	U	N/A	N/A	-		-	-	-	492	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-		-	-	-	438	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-		-	-	-	478	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-		-	-	-	207	Inf	Inf	0.0%

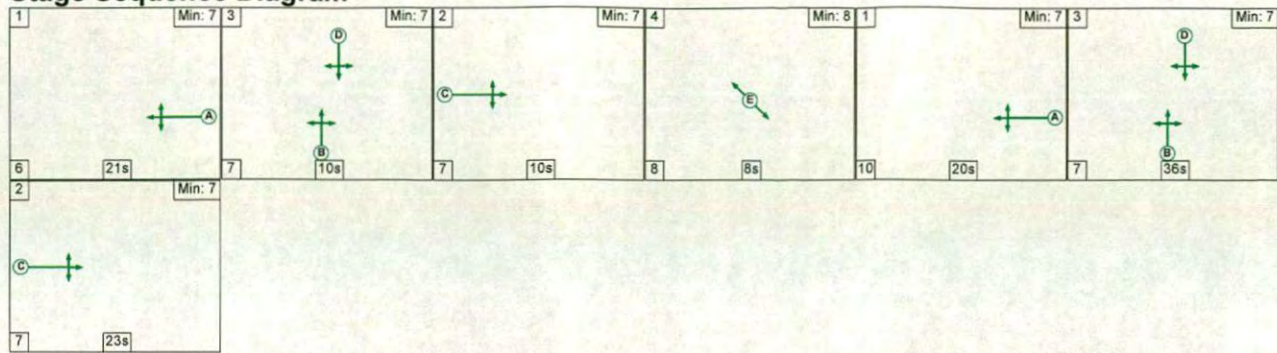
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	155	0	7	27.6	72.3	0.1	100.0	-	-	-	-
Unnamed Junction	-	-	155	0	7	27.6	72.3	0.1	100.0	-	-	-	-
1/1	468	429	-	-	-	9.8	24.5	-	34.3	264.0	17.4	24.5	41.9
2/1	410	374	123	0	6	6.8	22.7	0.1	29.7	260.8	14.6	22.7	37.3
3/1	256	256	32	0	0	1.9	0.6	0.0	2.5	35.1	5.5	0.6	6.0
4/1+4/2	481	442	-	-	-	9.0	24.5	-	33.5	250.8	14.9	24.5	39.4
5/1	457	457	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	414	414	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	189	189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1													
PRC for Signalled Lanes (%):					-22.0	Total Delay for Signalled Lanes (pcuHr):			100.02	Cycle Time (s):			
PRC Over All Lanes (%):					-22.0	Total Delay Over All Lanes (pcuHr):			100.02				

Full Input Data And Results

Scenario 3: '2014 PM BASE + COM + DEV' (FG3: '2014 PM BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

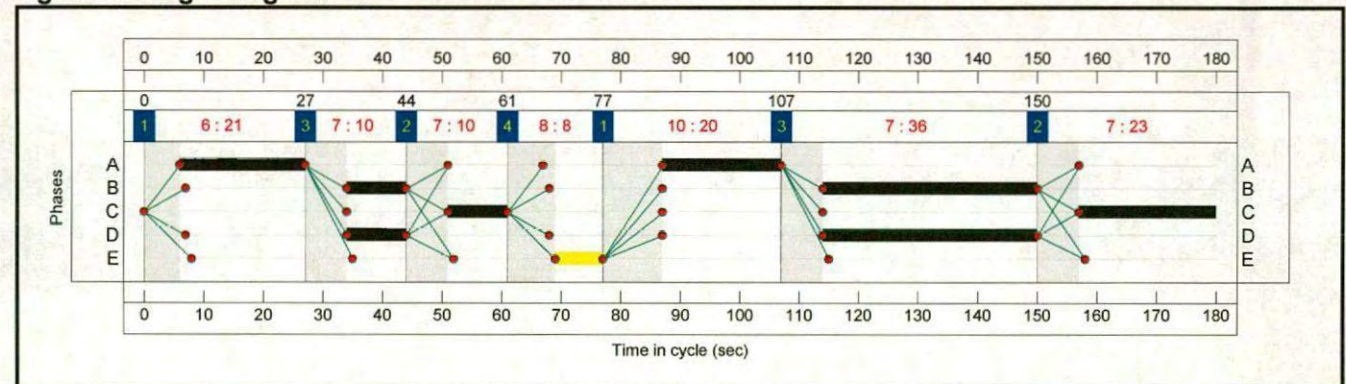
Stage Sequence Diagram



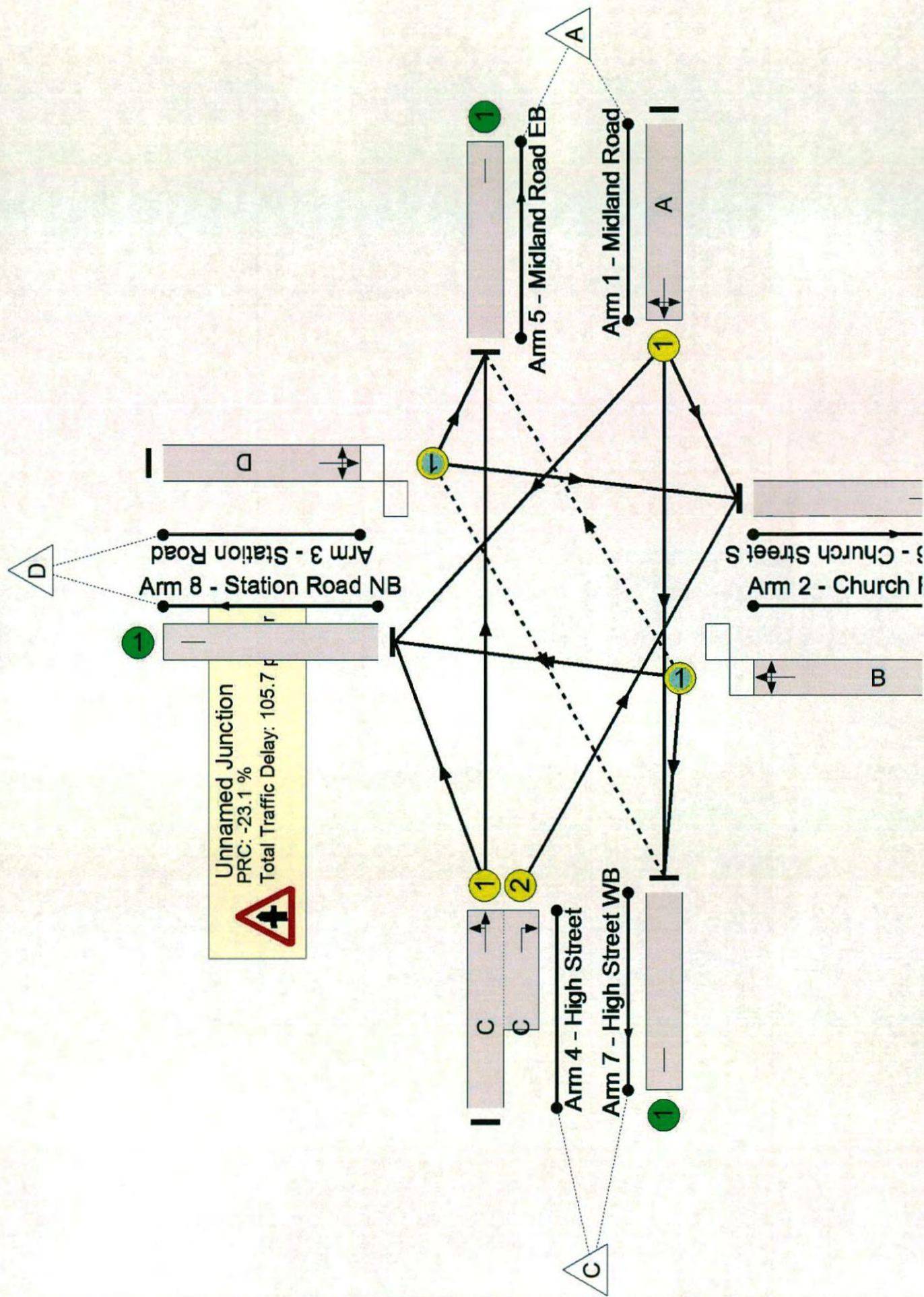
Stage Timings

Stage	1	3	2	4	1	3	2
Duration	21	10	10	8	20	36	23
Change Point	0	27	44	61	77	107	150

Signal Timings Diagram







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	110.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	110.8%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A		2	41	-	475	1794	429	110.8%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B		2	46	-	417	1664	379	110.1%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D		2	46	-	261	1709	456	57.3%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C		2	33	-	515	1880-1926	475	108.4%
5/1	Midland Road EB	U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-		-	-	-	446	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%

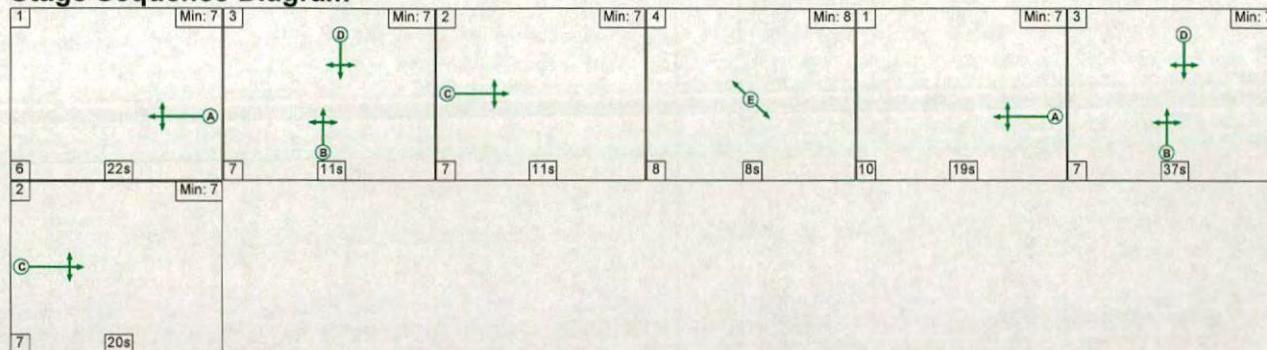
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	139	0	30	28.8	76.9	0.1	105.7	-	-	-	-
Unnamed Junction	-	-	139	0	30	28.8	76.9	0.1	105.7	-	-	-	-
1/1	475	429	-	-	-	9.0	27.5	-	36.6	277.2	15.6	27.5	43.1
2/1	417	379	100	0	27	8.2	23.5	0.1	31.8	274.9	17.7	23.5	41.3
3/1	261	261	39	0	3	2.1	0.7	0.0	2.8	38.8	6.0	0.7	6.7
4/1+4/2	515	475	-	-	-	9.4	25.1	-	34.5	241.3	17.7	25.1	42.8
5/1	464	464	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1													
PRC for Signalled Lanes (%):					-23.1	Total Delay for Signalled Lanes (pcuHr):			105.75	Cycle Time (s):			
PRC Over All Lanes (%):					-23.1	Total Delay Over All Lanes (pcuHr):			105.75				

Full Input Data And Results

Scenario 4: '2019 PM BASE + COM' (FG4: '2019 PM BASE + COM', Plan 1: 'Network Control Plan 1')

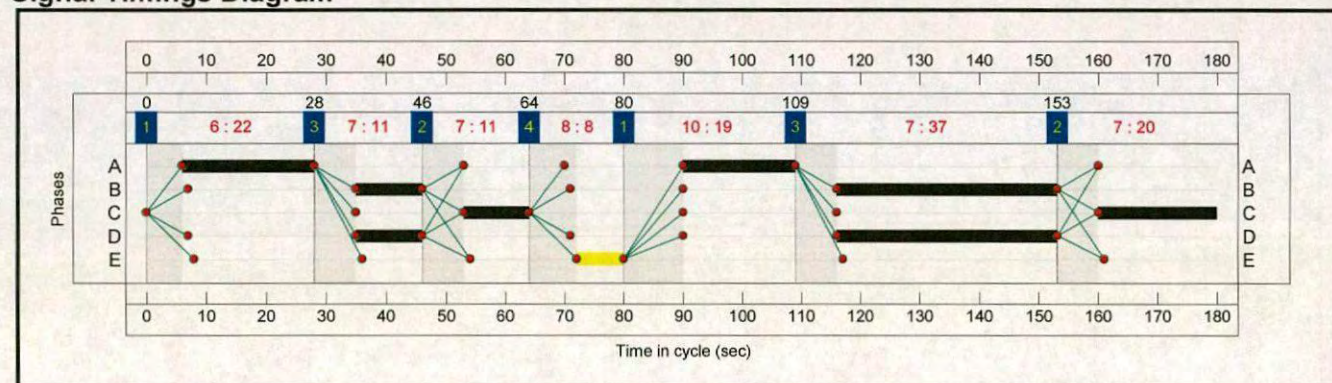
Stage Sequence Diagram

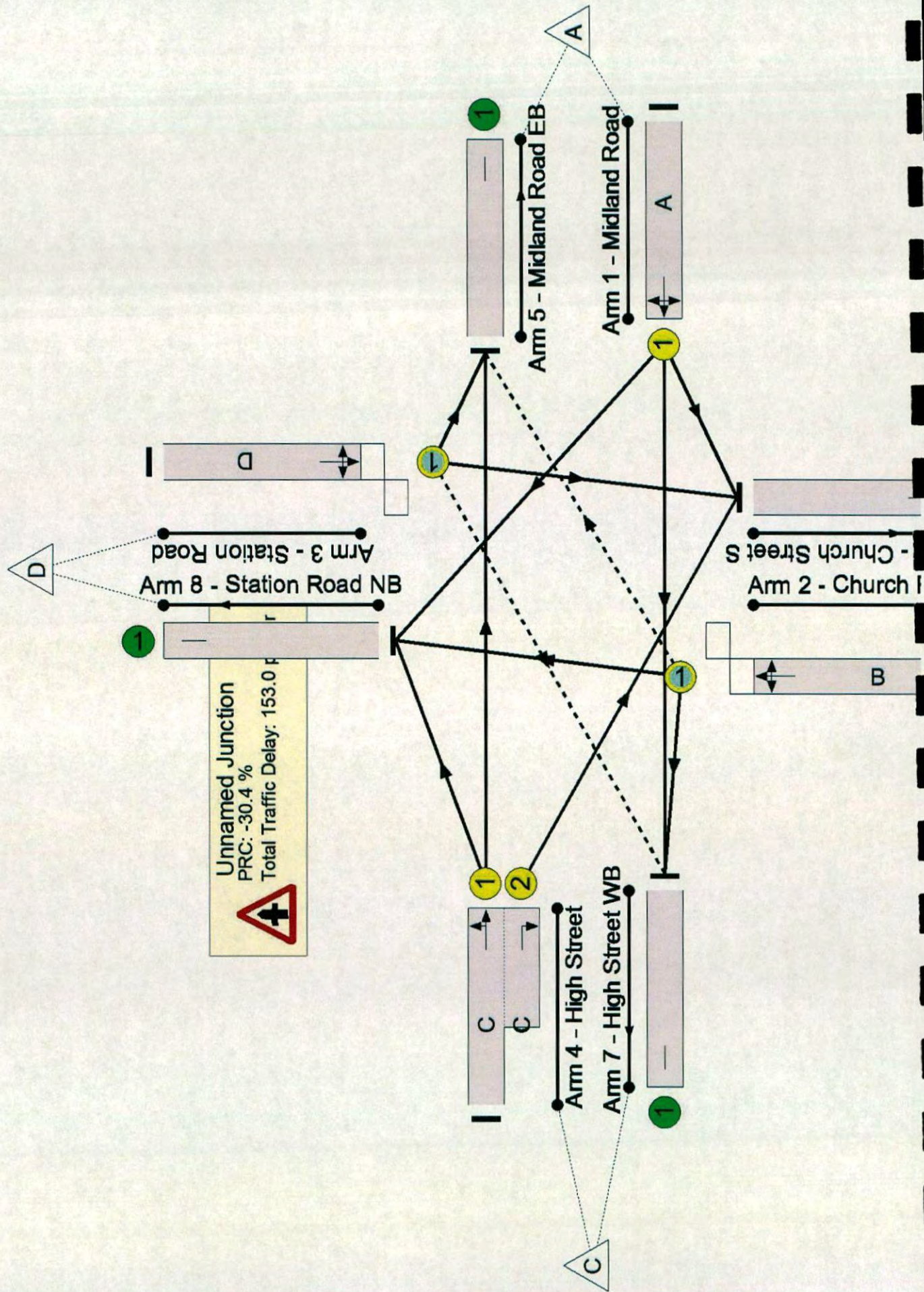


Stage Timings

Stage	1	3	2	4	1	3	2
Duration	22	11	11	8	19	37	20
Change Point	0	28	46	64	80	109	153

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	117.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	117.4%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A		2	41	-	502	1794	429	117.1%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B		2	48	-	444	1664	378	117.4%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D		2	48	-	281	1709	475	59.2%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C		2	31	-	524	1880:1926	454	115.5%
5/1	Midland Road EB	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-		-	-	-	479	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-		-	-	-	225	Inf	Inf	0.0%

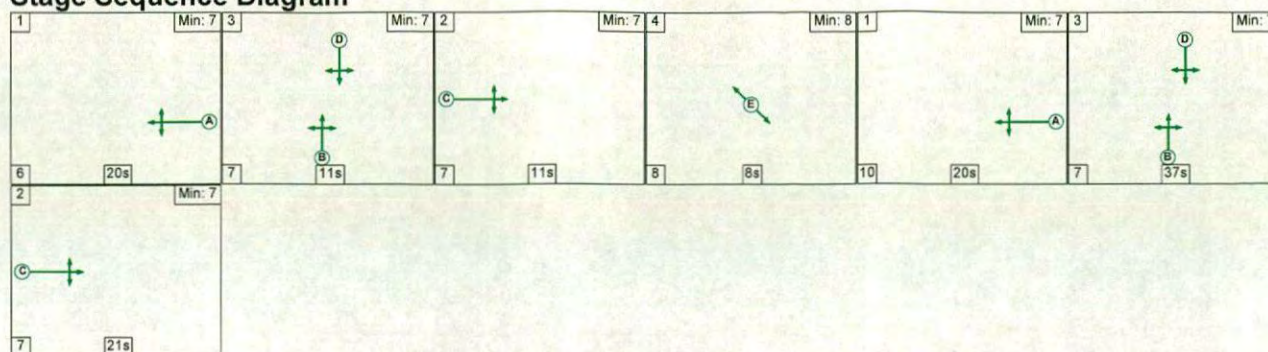
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	133	0	32	37.7	115.1	0.1	153.0	-	-	-	-
Unnamed Junction	-	-	133	0	32	37.7	115.1	0.1	153.0	-	-	-	-
1/1	502	429	-	-	-	12.5	39.9	-	52.4	375.5	18.8	39.9	58.7
2/1	444	378	100	0	29	10.4	35.9	0.1	46.5	377.0	20.4	35.9	56.3
3/1	281	281	33	0	2	2.2	0.7	0.0	2.9	37.5	6.4	0.7	7.1
4/1+4/2	524	454	-	-	-	12.6	38.6	-	51.2	351.8	20.6	38.6	59.2
5/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1										Cycle Time (s): 180			
PRC for Signalled Lanes (%): -30.4					Total Delay for Signalled Lanes (pcuHr): 153.00								
PRC Over All Lanes (%): -30.4					Total Delay Over All Lanes (pcuHr): 153.00								

Full Input Data And Results

Scenario 5: '2019 PM BASE + COM + DEV' (FG5: '2014 PM BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

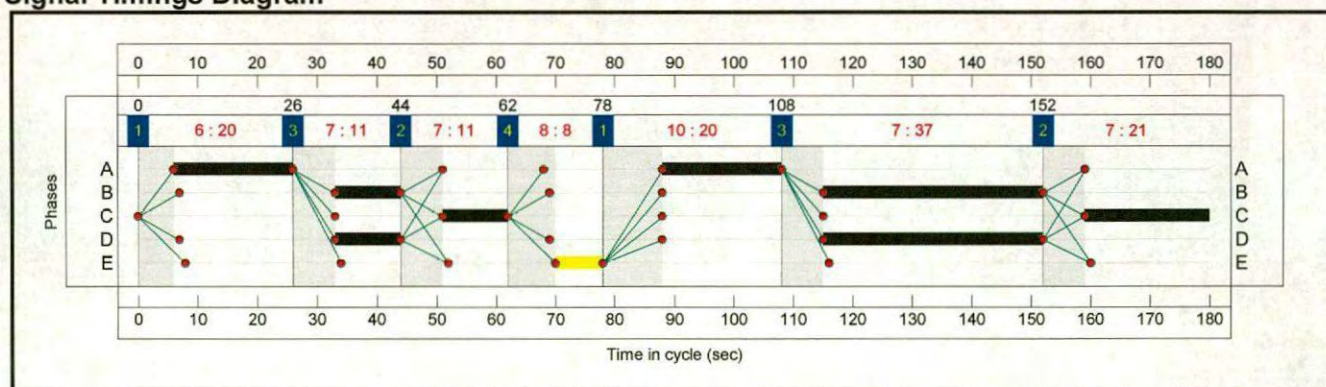
Stage Sequence Diagram

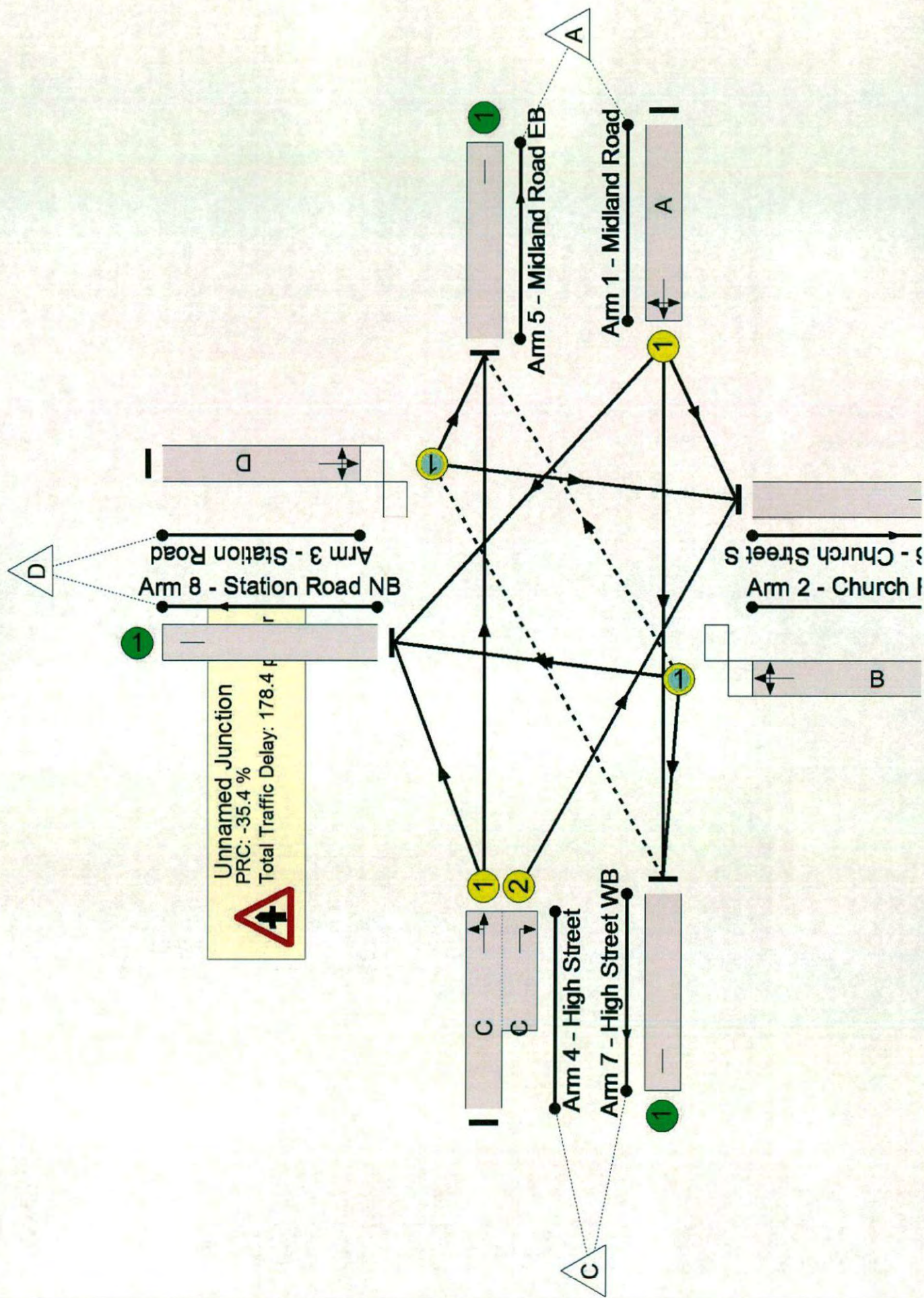


Stage Timings

Stage	1	3	2	4	1	3	2
Duration	20	11	11	8	20	37	21
Change Point	0	26	44	62	78	108	152

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	121.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	121.8%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A		2	40	-	510	1794	419	121.8%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B		2	48	-	451	1664	383	117.8%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D		2	48	-	285	1709	475	60.0%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C		2	32	-	558	1880:1926	465	120.1%
5/1	Midland Road EB	U	N/A	N/A	-		-	-	-	540	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-		-	-	-	486	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-		-	-	-	230	Inf	Inf	0.0%

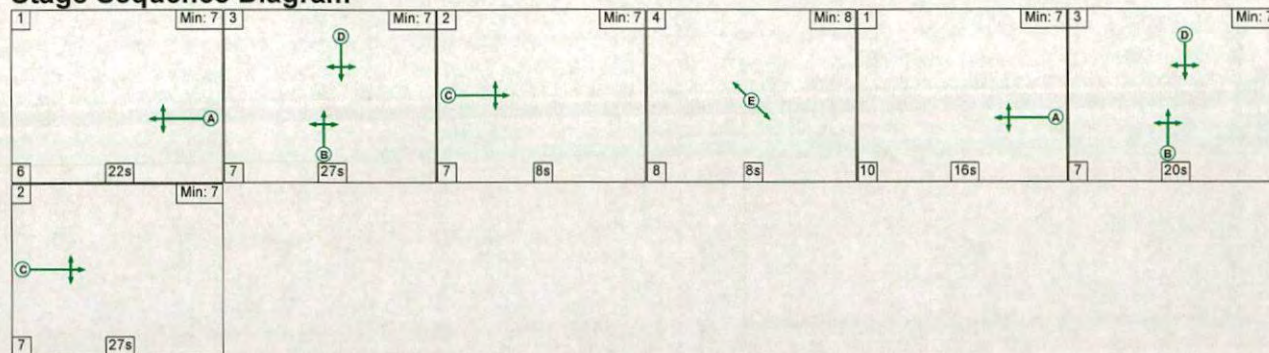
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	139	0	32	42.6	135.7	0.2	178.4	-	-	-	-
Unnamed Junction	-	-	139	0	32	42.6	135.7	0.2	178.4	-	-	-	-
1/1	510	419	-	-	-	14.2	48.3	-	62.6	441.8	20.8	48.3	69.1
2/1	451	383	98	0	29	10.6	37.1	0.1	47.8	381.2	20.7	37.1	57.8
3/1	285	285	42	0	3	2.2	0.7	0.0	3.0	37.9	6.7	0.7	7.4
4/1+4/2	558	465	-	-	-	15.5	49.5	-	65.1	419.9	24.6	49.5	74.1
5/1	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	463	463	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	192	192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1										Cycle Time (s): 180			
PRC for Signalled Lanes (%): -35.4					Total Delay for Signalled Lanes (pcuHr): 178.43								
PRC Over All Lanes (%): -35.4					Total Delay Over All Lanes (pcuHr): 178.43								

Full Input Data And Results

Scenario 6: '2013 SAT BASE' (FG6: '2013 SAT BASE', Plan 1: 'Network Control Plan 1')

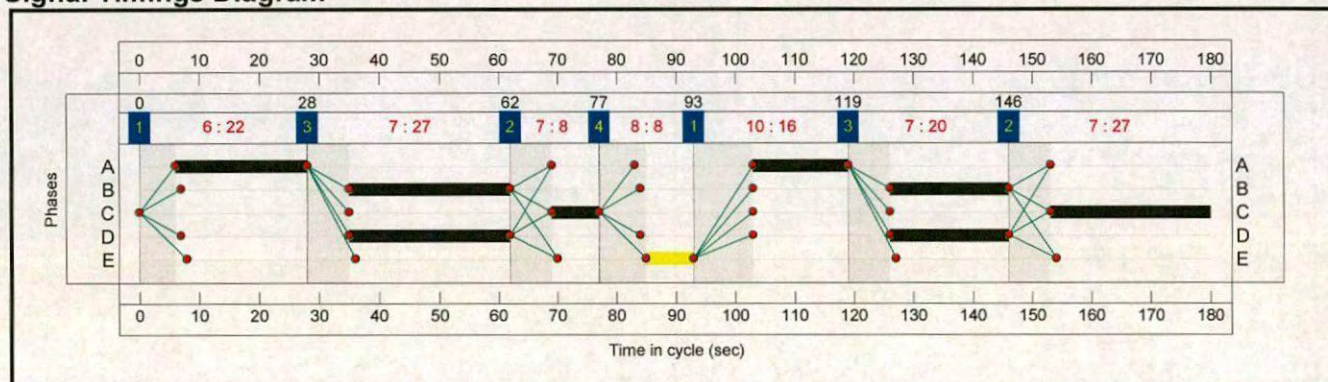
Stage Sequence Diagram

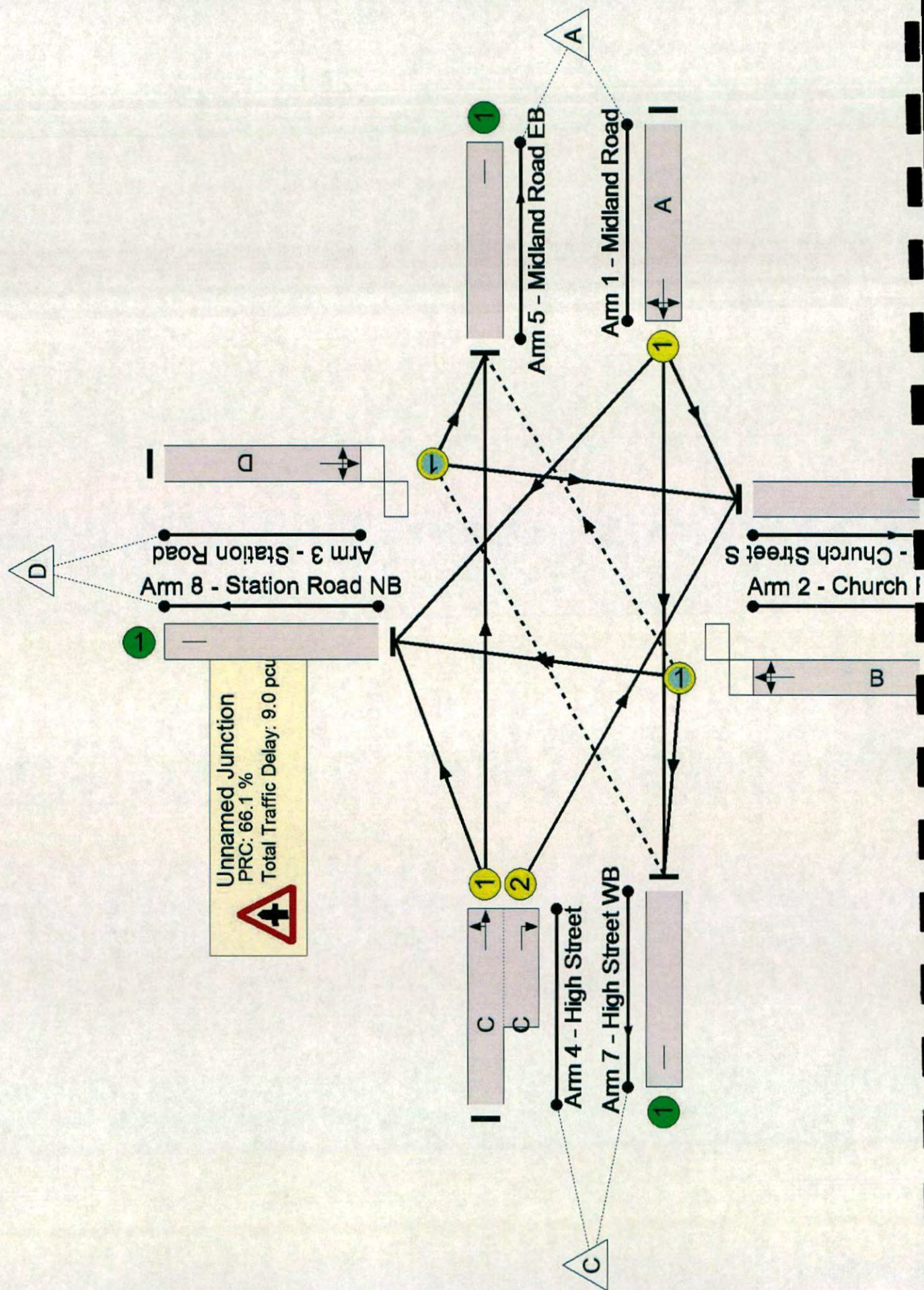


Stage Timings

Stage	1	3	2	4	1	3	2
Duration	22	27	8	8	16	20	27
Change Point	0	28	62	77	93	119	146

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-	-	-	-	-	-	-	-	54.2%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	54.2%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A	-	2	38	-	216	1794	399	54.2%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B	-	2	47	-	244	1664	453	53.9%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D	-	2	47	-	152	1709	447	34.0%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C	-	2	35	-	243	1880:1926	451	53.9%
5/1	Midland Road EB	U	N/A	N/A	-	-	-	-	-	249	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-	-	-	-	-	196	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-	-	-	-	-	268	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-	-	-	-	-	142	Inf	Inf	0.0%

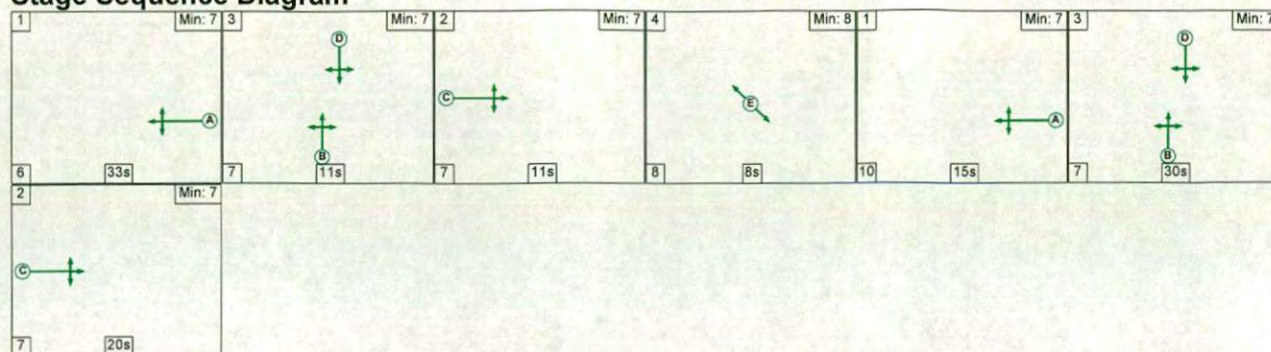
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	74	0	1	7.0	2.0	0.0	9.0	-	-	-	-
Unnamed Junction	-	-	74	0	1	7.0	2.0	0.0	9.0	-	-	-	-
1/1	216	216	-	-	-	1.9	0.6	-	2.5	40.8	5.0	0.6	5.6
2/1	244	244	47	0	1	1.9	0.6	0.0	2.5	36.9	5.4	0.6	5.9
3/1	152	152	27	0	0	1.1	0.3	0.0	1.4	32.9	3.1	0.3	3.4
4/1+4/2	243	243	-	-	-	2.1	0.6	-	2.7	39.6	4.1	0.6	4.7
5/1	249	249	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	196	196	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	142	142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1										Cycle Time (s): 180			
PRC for Signalled Lanes (%):					66.1	Total Delay for Signalled Lanes (pcuHr):			9.01				
PRC Over All Lanes (%):					66.1	Total Delay Over All Lanes (pcuHr):			9.01				

Full Input Data And Results

Scenario 7: '2014 SAT BASE + COM' (FG7: '2014 SAT BASE + COM', Plan 1: 'Network Control Plan 1')

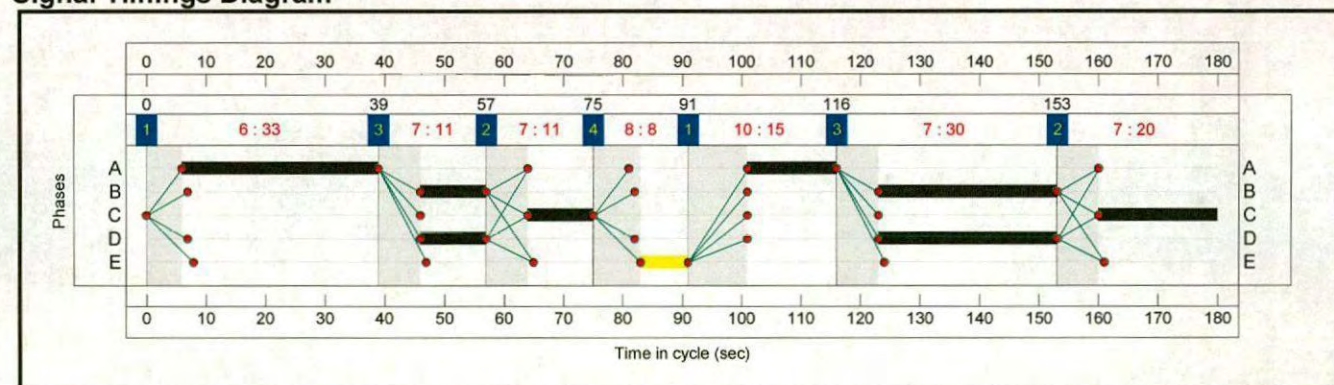
Stage Sequence Diagram



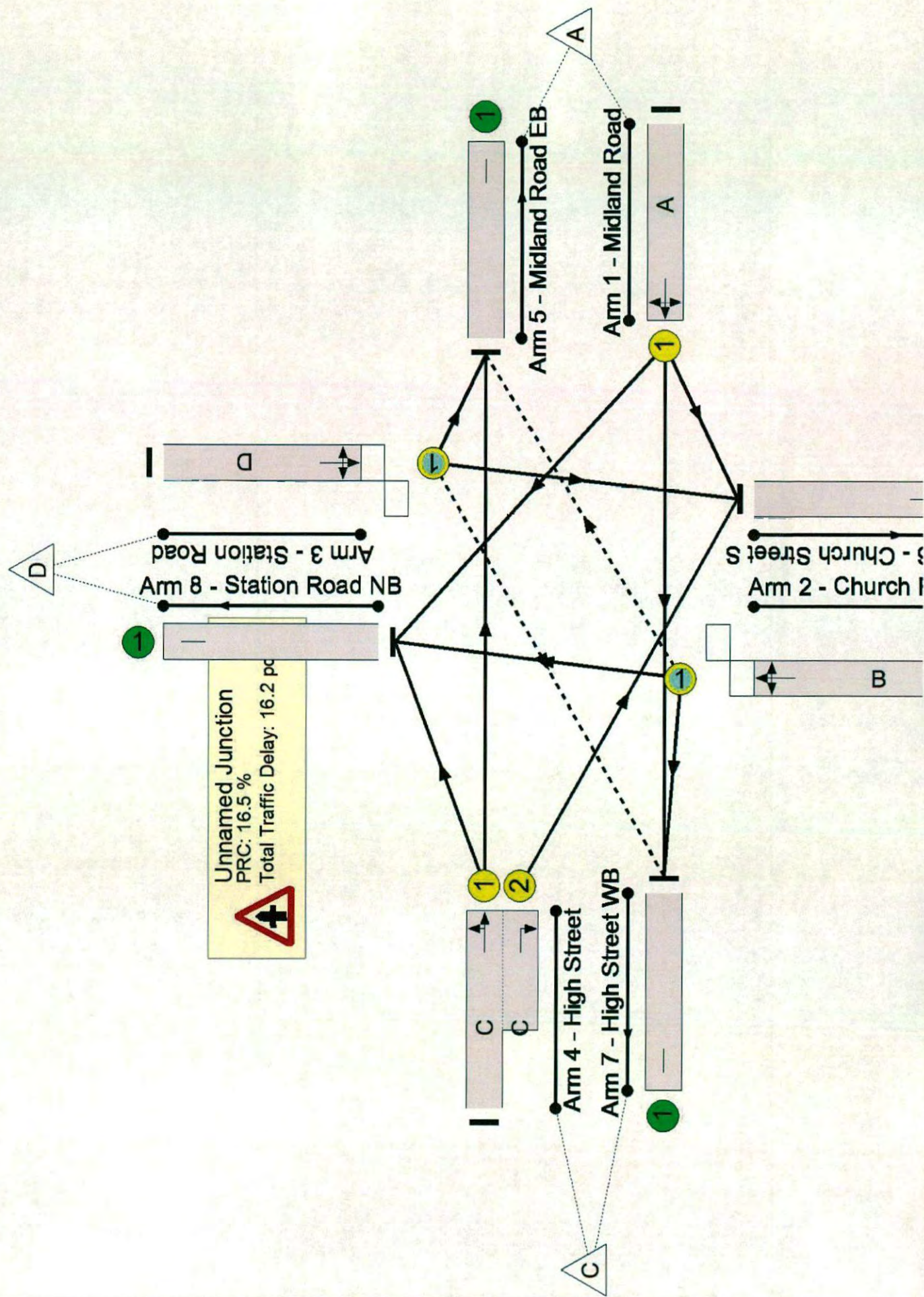
Stage Timings

Stage	1	3	2	4	1	3	2
Duration	33	11	11	8	15	30	20
Change Point	0	39	57	75	91	116	153

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-	-	-	-	-	-	-	-	77.3%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	77.3%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A	-	2	48	-	385	1794	498	77.3%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B	-	2	41	-	297	1664	386	77.0%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D	-	2	41	-	185	1709	408	45.3%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C	-	2	31	-	295	1880:1926	392	75.3%
5/1	Midland Road EB	U	N/A	N/A	-	-	-	-	-	371	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-	-	-	-	-	248	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-	-	-	-	-	379	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-	-	-	-	-	164	Inf	Inf	0.0%

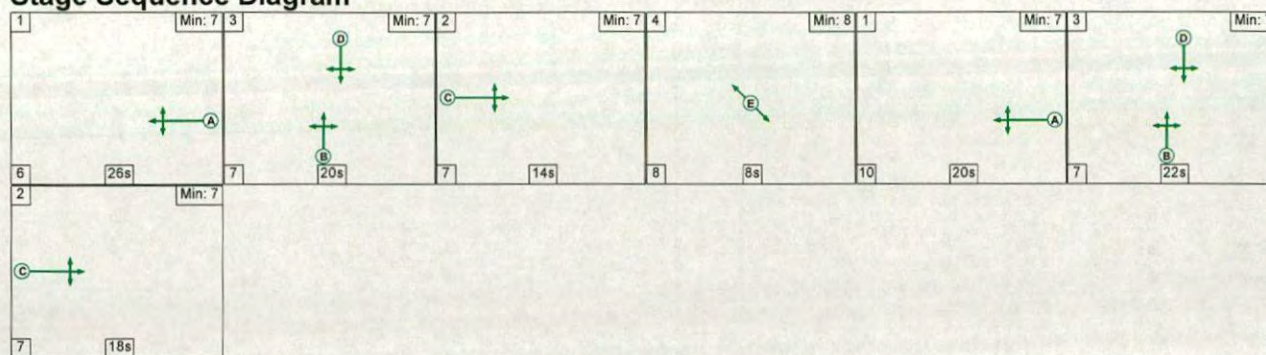
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	103	0	17	10.9	5.2	0.1	16.2	-	-	-	-
Unnamed Junction	-	-	103	0	17	10.9	5.2	0.1	16.2	-	-	-	-
1/1	385	385	-	-	-	3.3	1.7	-	5.0	46.6	9.7	1.7	11.3
2/1	297	297	75	0	16	3.3	1.6	0.1	4.9	60.0	8.3	1.6	9.9
3/1	185	185	29	0	0	1.5	0.4	0.0	1.9	37.5	4.1	0.4	4.5
4/1+4/2	295	295	-	-	-	2.8	1.5	-	4.3	52.4	6.5	1.5	8.0
5/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	248	248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	164	164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1													
PRC for Signalled Lanes (%):					16.5	Total Delay for Signalled Lanes (pcuHr):			16.16	Cycle Time (s):			
PRC Over All Lanes (%):					16.5	Total Delay Over All Lanes (pcuHr):			16.16				

Full Input Data And Results

Scenario 8: '2014 SAT BASE + COM + DEV' (FG8: '2014 SAT BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

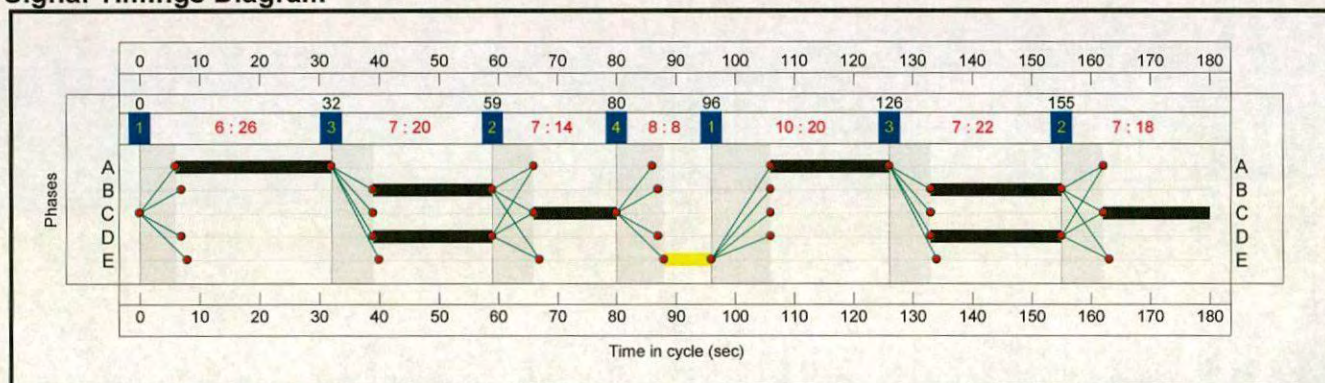
Stage Sequence Diagram

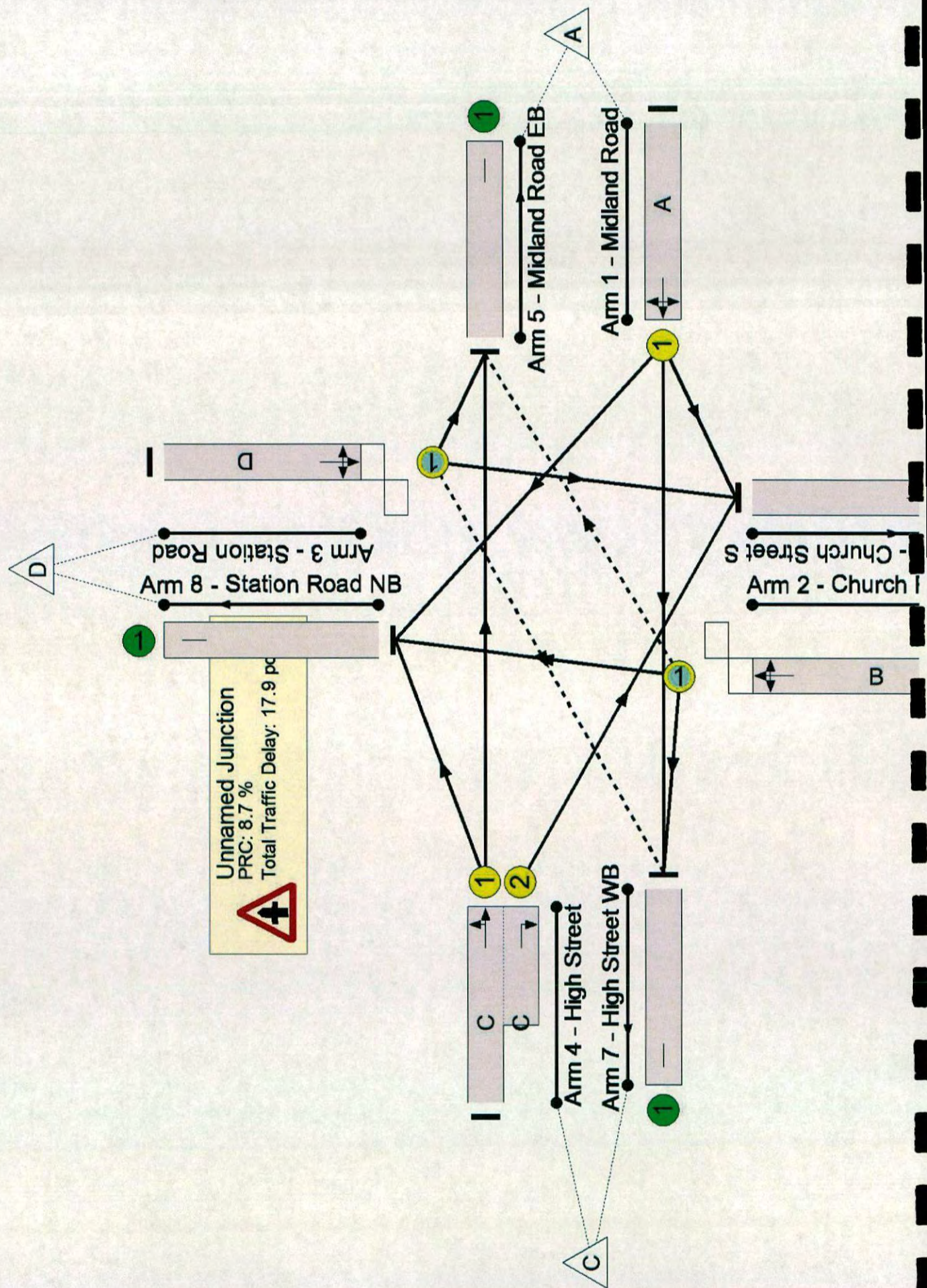


Stage Timings

Stage	1	3	2	4	1	3	2
Duration	26	20	14	8	20	22	18
Change Point	0	32	59	80	96	126	155

Signal Timings Diagram





Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-	-	-	-	-	-	-	-	82.8%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	82.8%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A	-	2	46	-	396	1794	478	82.8%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B	-	2	42	-	309	1664	380	81.3%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D	-	2	42	-	192	1709	418	46.0%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C	-	2	32	-	334	1880:1926	408	81.9%
5/1	Midland Road EB	U	N/A	N/A	-	-	-	-	-	378	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-	-	-	-	-	255	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-	-	-	-	-	425	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-	-	-	-	-	173	Inf	Inf	0.0%

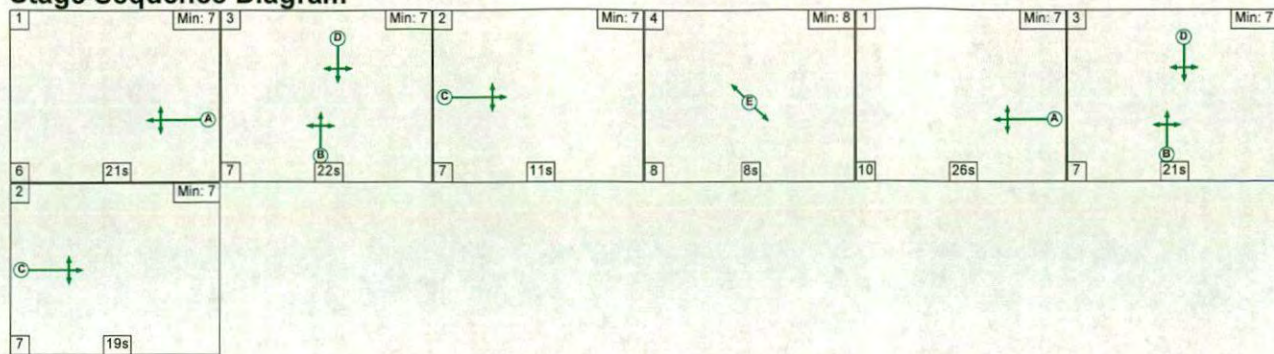
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	130	0	1	10.9	6.9	0.1	17.9	-	-	-	-
Unnamed Junction	-	-	130	0	1	10.9	6.9	0.1	17.9	-	-	-	-
1/1	396	396	-	-	-	3.5	2.3	-	5.7	52.1	10.2	2.3	12.5
2/1	309	309	87	0	1	2.8	2.0	0.1	4.9	56.7	7.9	2.0	9.9
3/1	192	192	43	0	0	1.6	0.4	0.0	2.0	37.5	4.4	0.4	4.8
4/1+4/2	334	334	-	-	-	3.2	2.1	-	5.3	57.2	7.3	2.1	9.4
5/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	425	425	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	173	173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1										Cycle Time (s): 180			
PRC for Signalised Lanes (%):					8.7	Total Delay for Signalised Lanes (pcuHr):			17.90				
PRC Over All Lanes (%):					8.7	Total Delay Over All Lanes (pcuHr):			17.90				

Full Input Data And Results

Scenario 9: '2019 SAT BASE + COM' (FG9: '2019 SAT BASE + COM', Plan 1: 'Network Control Plan 1')

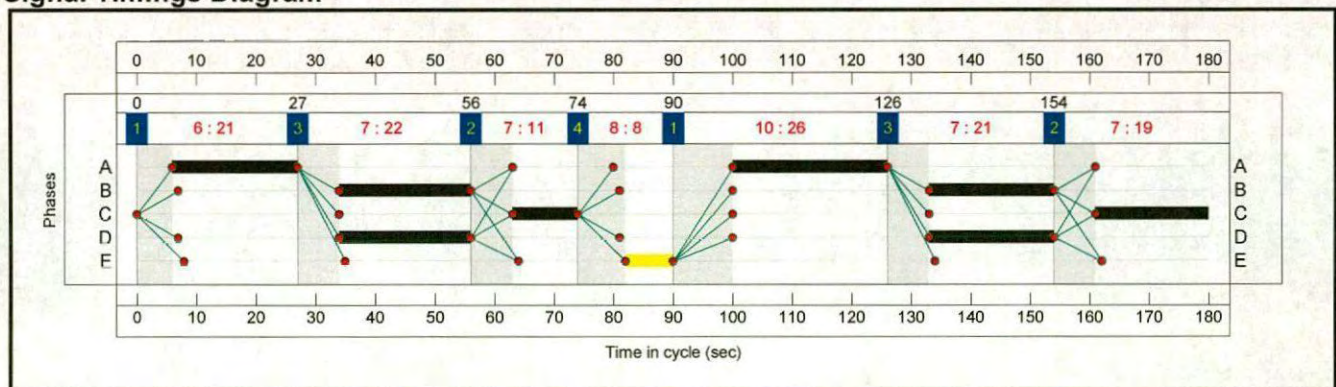
Stage Sequence Diagram



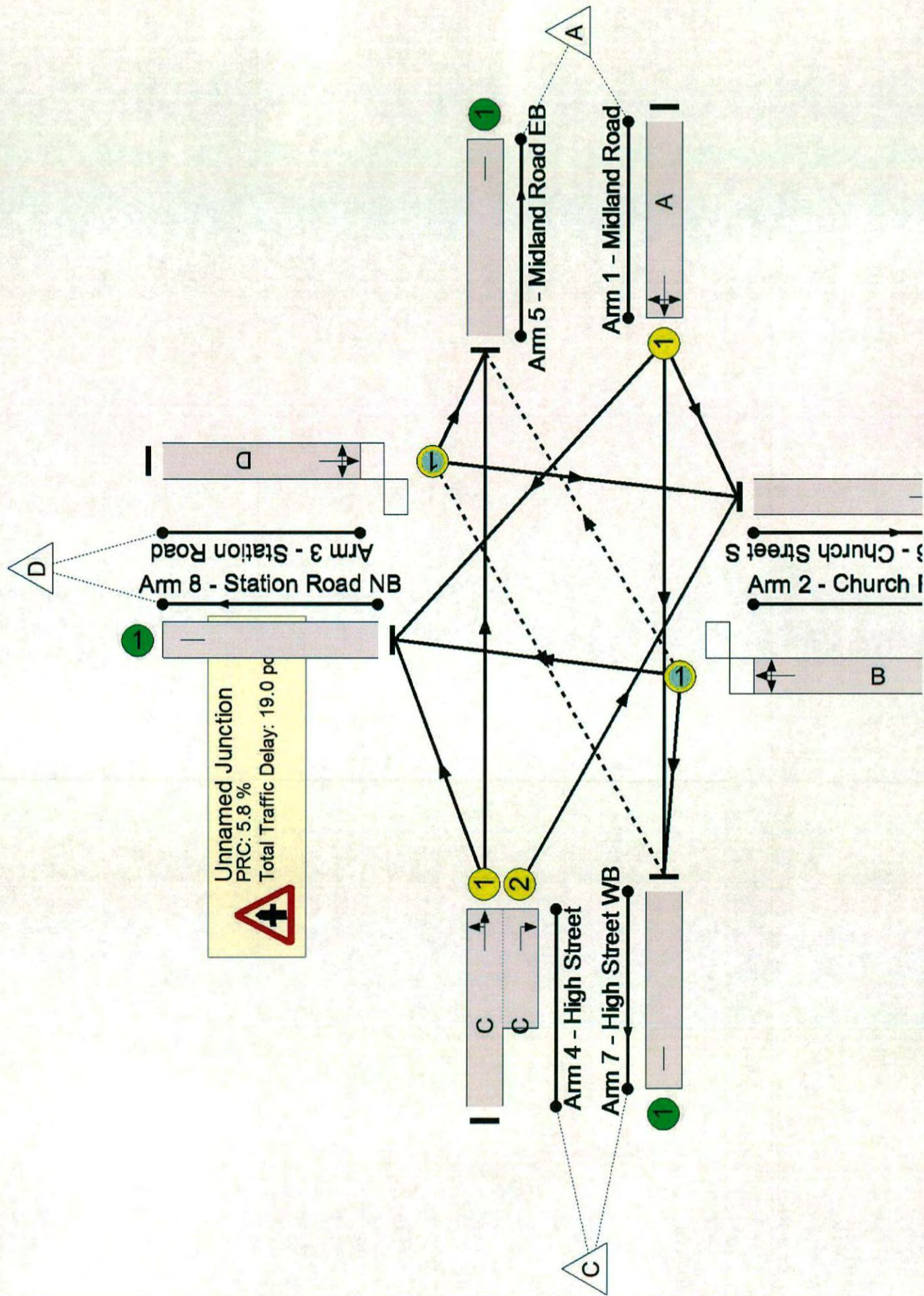
Stage Timings

Stage	1	3	2	4	1	3	2
Duration	21	22	11	8	26	21	19
Change Point	0	27	56	74	90	126	154

Signal Timings Diagram







Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-	-	-	-	-	-	-	-	85.1%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	85.1%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A	-	2	47	-	408	1794	488	83.5%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B	-	2	43	-	321	1664	377	85.1%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D	-	2	43	-	201	1709	427	47.0%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C	-	2	30	-	318	1880:1926	382	83.1%
5/1	Midland Road EB	U	N/A	N/A	-	-	-	-	-	395	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-	-	-	-	-	268	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-	-	-	-	-	406	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-	-	-	-	-	179	Inf	Inf	0.0%

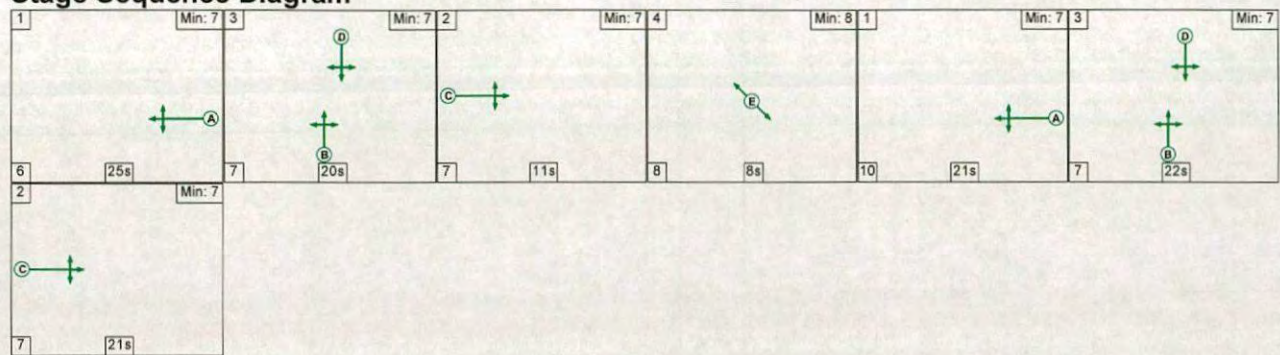
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	AV Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	124	0	4	11.2	7.7	0.1	19.0	-	-	-	-
Unnamed Junction	-	-	124	0	4	11.2	7.7	0.1	19.0	-	-	-	-
1/1	408	408	-	-	-	3.5	2.4	-	5.9	52.3	10.5	2.4	12.9
2/1	321	321	93	0	3	2.9	2.6	0.1	5.6	62.6	8.7	2.6	11.3
3/1	201	201	32	0	0	1.6	0.4	0.0	2.1	37.3	4.8	0.4	5.2
4/1+4/2	318	318	-	-	-	3.1	2.3	-	5.4	61.6	7.4	2.3	9.7
5/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	268	268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	179	179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1										Cycle Time (s): 180			
PRC for Signalled Lanes (%): 5.8					Total Delay for Signalled Lanes (pcuHr): 19.03								
PRC Over All Lanes (%): 5.8					Total Delay Over All Lanes (pcuHr): 18.03								

Full Input Data And Results

Scenario 10: '2019 SAT BASE + COM + DEV' (FG10: '2019 SAT BASE + COM + DEV', Plan 1: 'Network Control Plan 1')

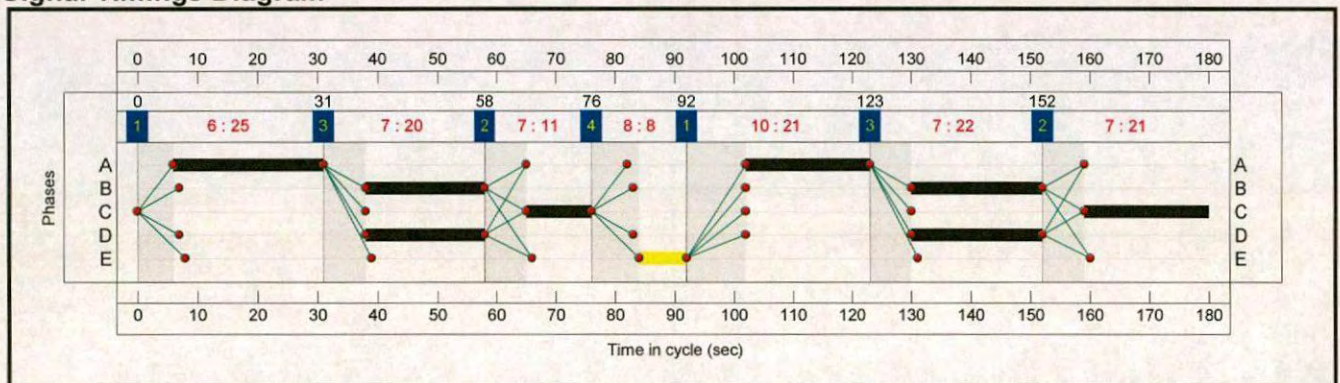
Stage Sequence Diagram

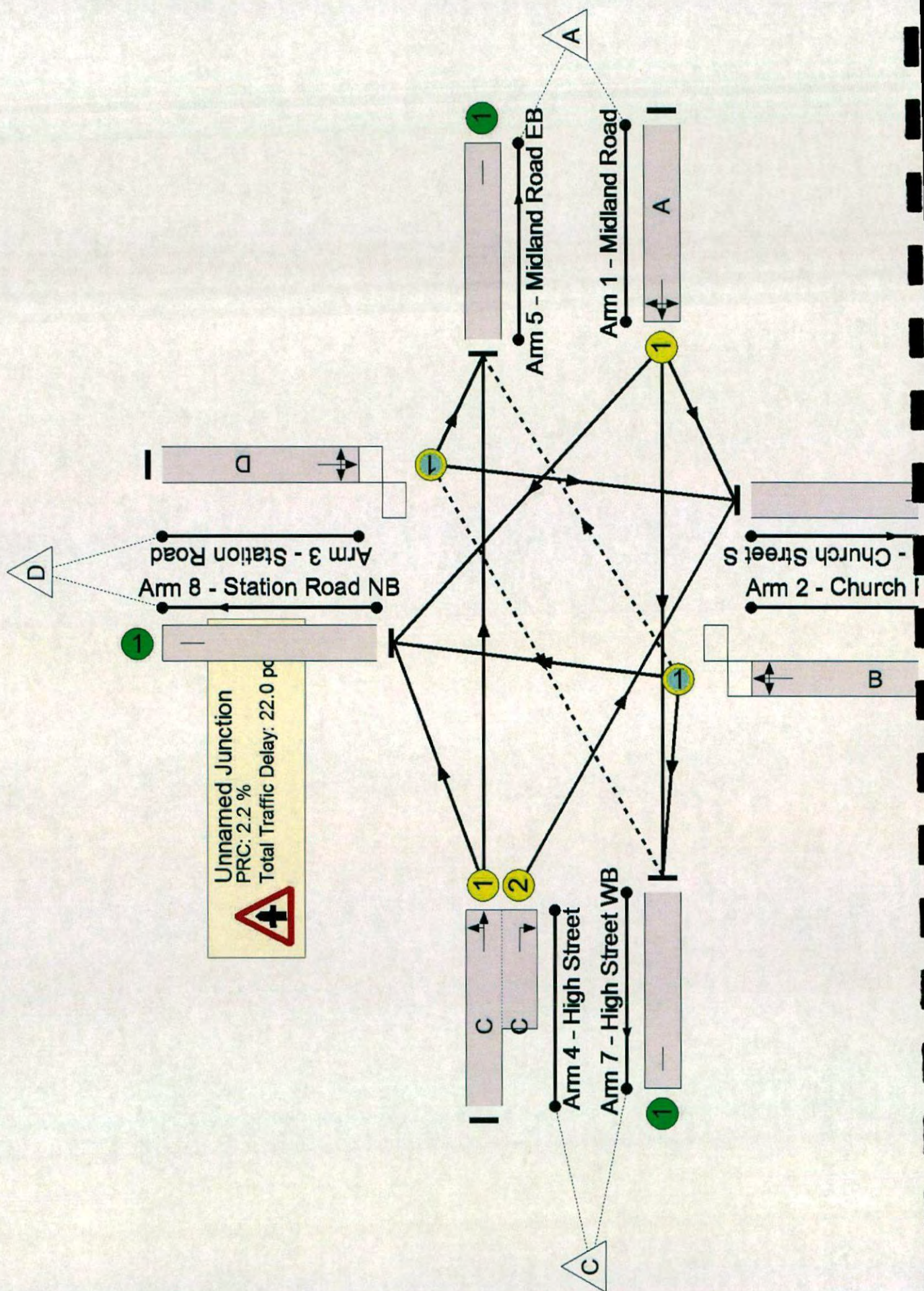


Stage Timings

Stage	1	3	2	4	1	3	2
Duration	25	20	11	8	21	22	21
Change Point	0	31	58	76	92	123	152

Signal Timings Diagram





Full Input Data And Results

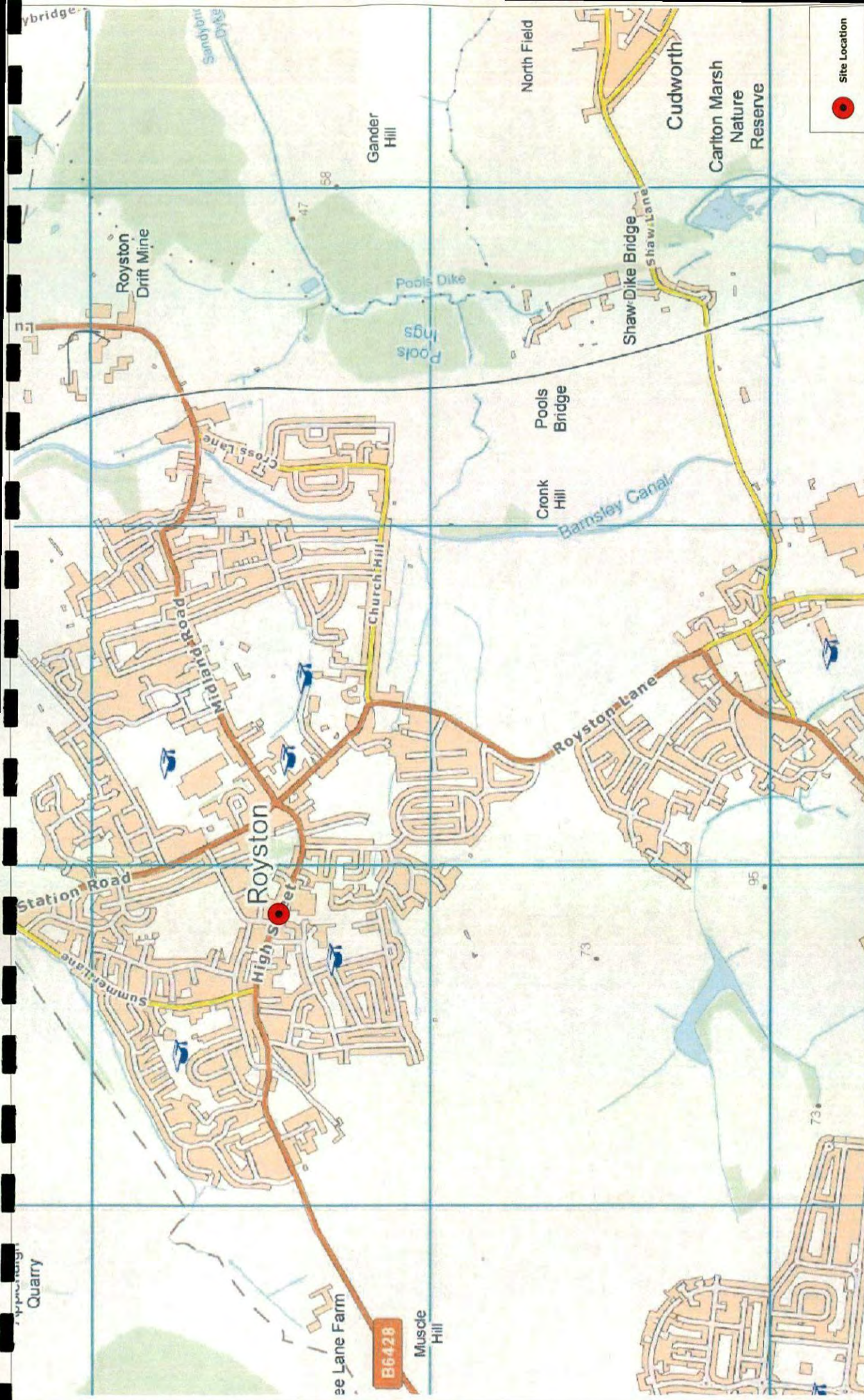
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-	-	-	-	-	-	-	-	88.0%
Unnamed Junction	-	-	N/A	-	-	-	-	-	-	-	-	-	88.0%
1/1	Midland Road Left Ahead Right	U	N/A	N/A	A	-	2	46	-	418	1794	478	87.4%
2/1	Church Road Right Left Ahead	O	N/A	N/A	B	-	2	42	-	333	1664	378	88.0%
3/1	Station Road Left Ahead Right	O	N/A	N/A	D	-	2	42	-	207	1709	418	49.6%
4/1+4/2	High Street Ahead Right Left	U	N/A	N/A	C	-	2	32	-	359	1880:1926	409	87.8%
5/1	Midland Road EB	U	N/A	N/A	-	-	-	-	-	404	Inf	Inf	0.0%
6/1	Church Street S	U	N/A	N/A	-	-	-	-	-	275	Inf	Inf	0.0%
7/1	High Street WB	U	N/A	N/A	-	-	-	-	-	451	Inf	Inf	0.0%
8/1	Station Road NB	U	N/A	N/A	-	-	-	-	-	187	Inf	Inf	0.0%

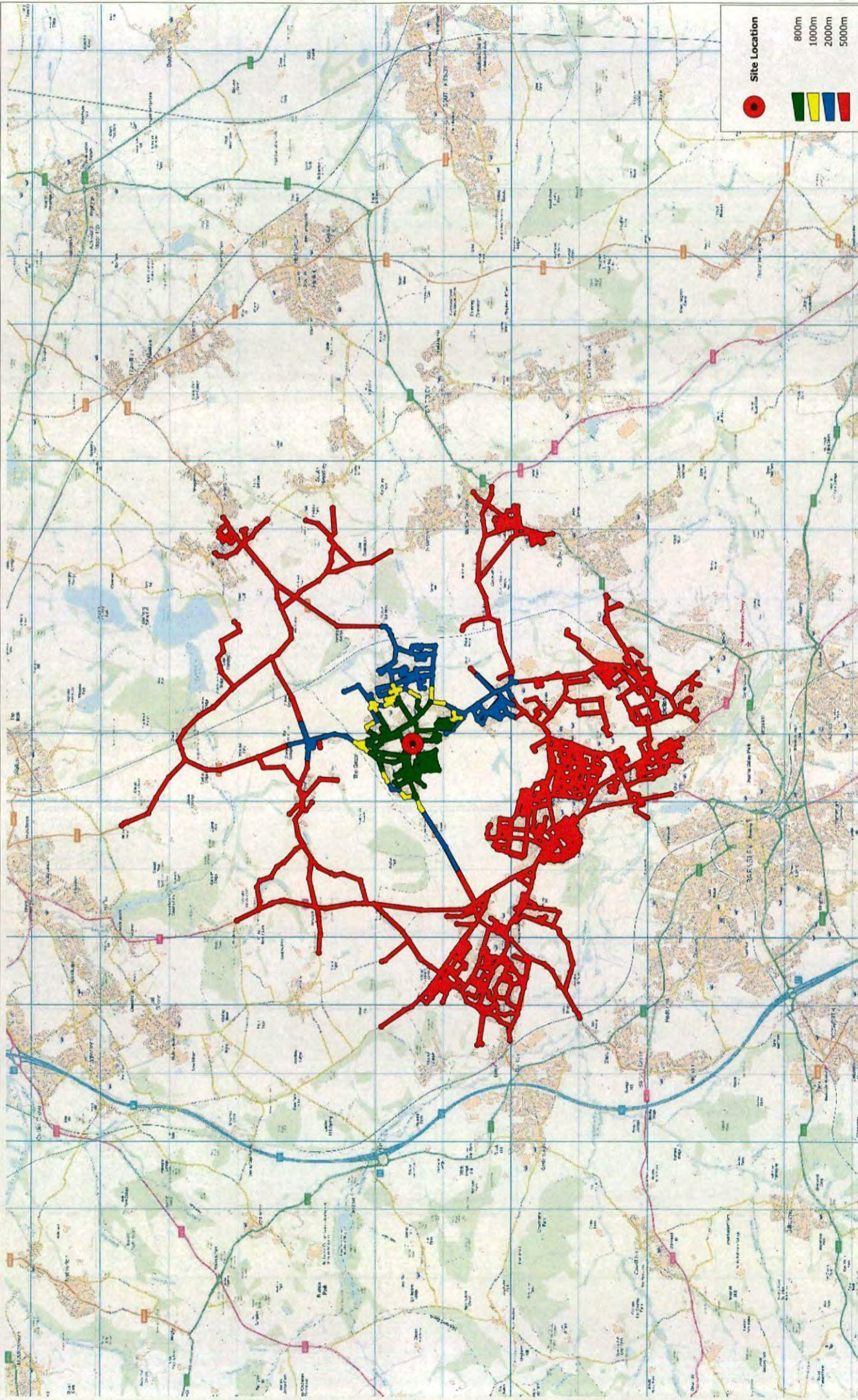
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	136	0	2	11.8	10.0	0.1	22.0	-	-	-	-
Unnamed Junction	-	-	136	0	2	11.8	10.0	0.1	22.0	-	-	-	-
1/1	418	418	-	-	-	3.7	3.1	-	6.8	58.7	10.6	3.1	13.7
2/1	333	333	92	0	1	3.0	3.2	0.1	6.3	68.2	8.4	3.2	11.6
3/1	207	207	45	0	1	1.7	0.5	0.0	2.2	38.2	4.6	0.5	5.1
4/1+4/2	359	359	-	-	-	3.5	3.2	-	6.7	66.7	8.2	3.2	11.4
5/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	275	275	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	187	187	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1													
PRC for Signalled Lanes (%):					2.2	Total Delay for Signalled Lanes (pcuHr):			21.97	Cycle Time (s):			
PRC Over All Lanes (%):					2.2	Total Delay Over All Lanes (pcuHr):			21.97				

DRAWINGS



DRAWING TITLE				Scheme		Location Plan	
Transport Potential				ON BEHALF OF		Client	
Transport Potential LTD, 1 Marner Court, Calder Park, Wakefield, WF4 3PL				Transport Potential LTD, 1 Marner Court, Calder Park, Wakefield, WF4 3PL		Transport Potential LTD, 1 Marner Court, Calder Park, Wakefield, WF4 3PL	
Scale	1:10,000	DRAWN BY	CHECKED BY	CAD REF		DATE	
		PR	CS	GIS/Full COA map - 2011		Jan 2014	
DRAWING REFERENCE				REV			
royst/gis/01							



Site Location

800m
1000m
2000m
5000m



DRAWING TITLE

1

SCHEME



Transport Potential

BY	
CS	
REV	

CHECKED	
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BY PR	/02	CAD REE
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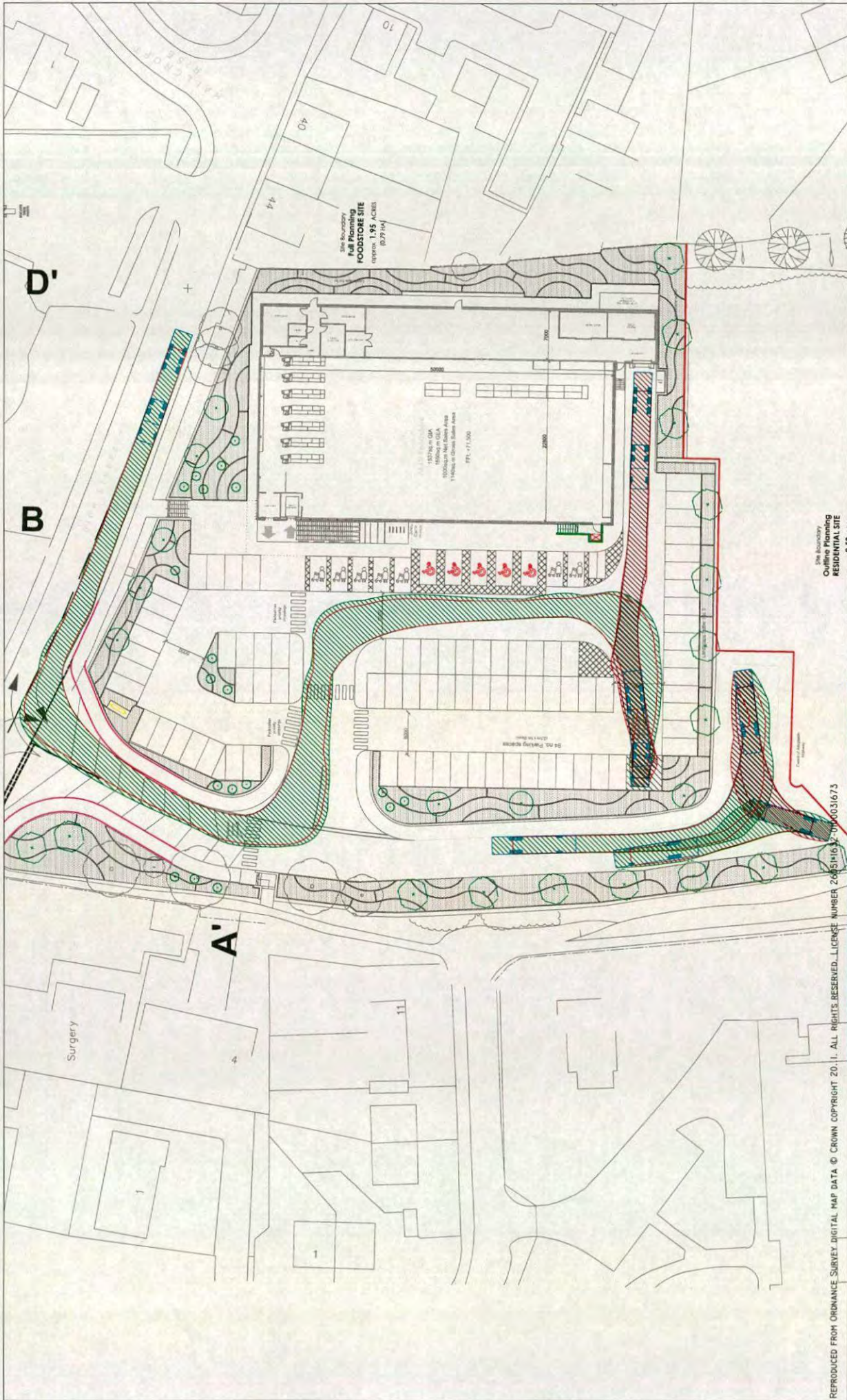
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Full COA ma



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SCALE @ A3	1:500	DRAWN BY	PR	CHECKED BY	CS
DRAWING REFERENCE	ROYST/10				
DATE	MARCH 2014	CAD REF	ROYST_10		



**Transport
Potential**

SCHEME

HIGH STREET
ROYSTON

DRAWING TITLE

SWEPT PATHS

ON BEHALF OF
ALDI STORES LTD

1 MARINER COURT, WAKEFIELD, WF3 4FL