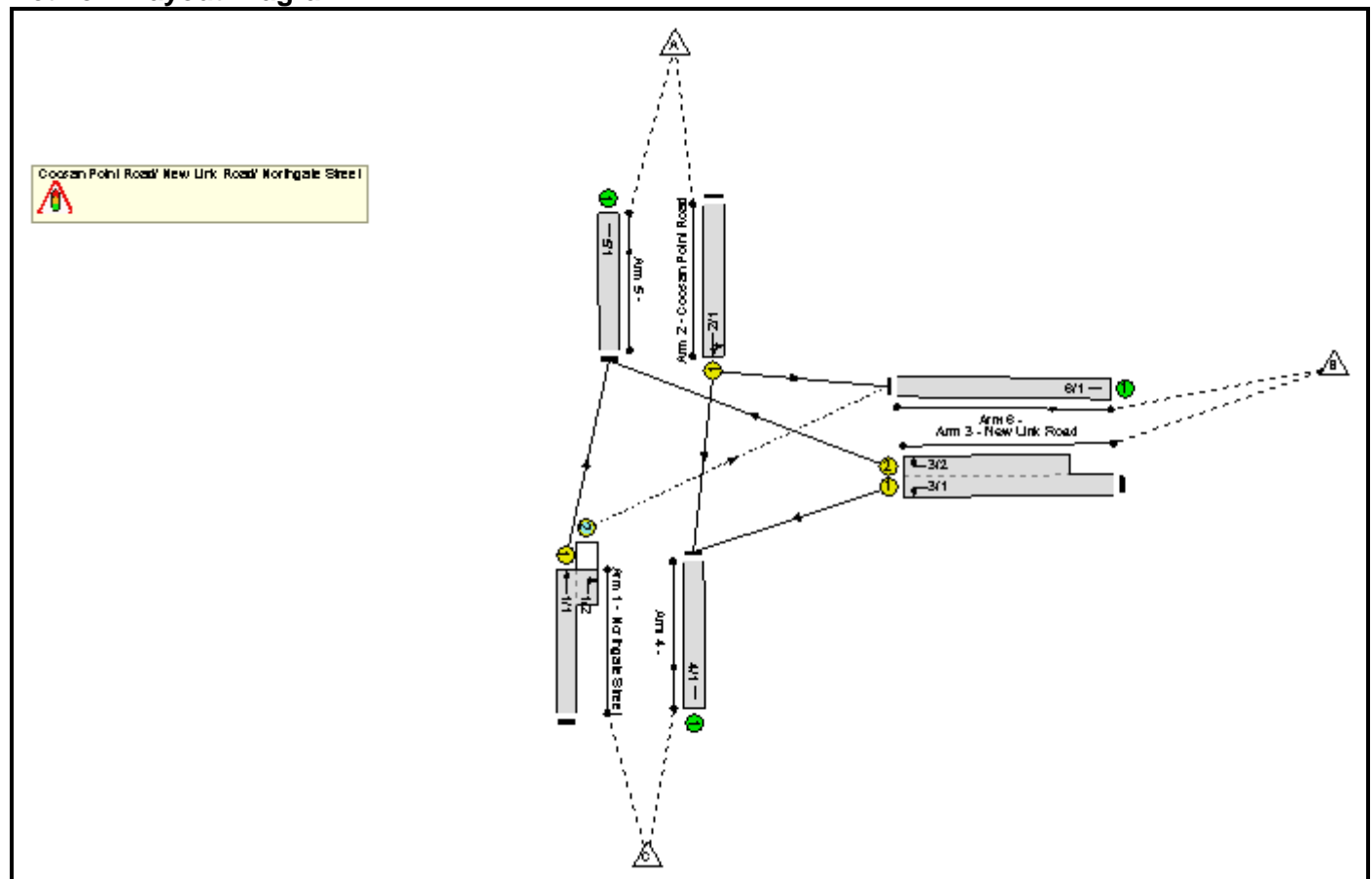
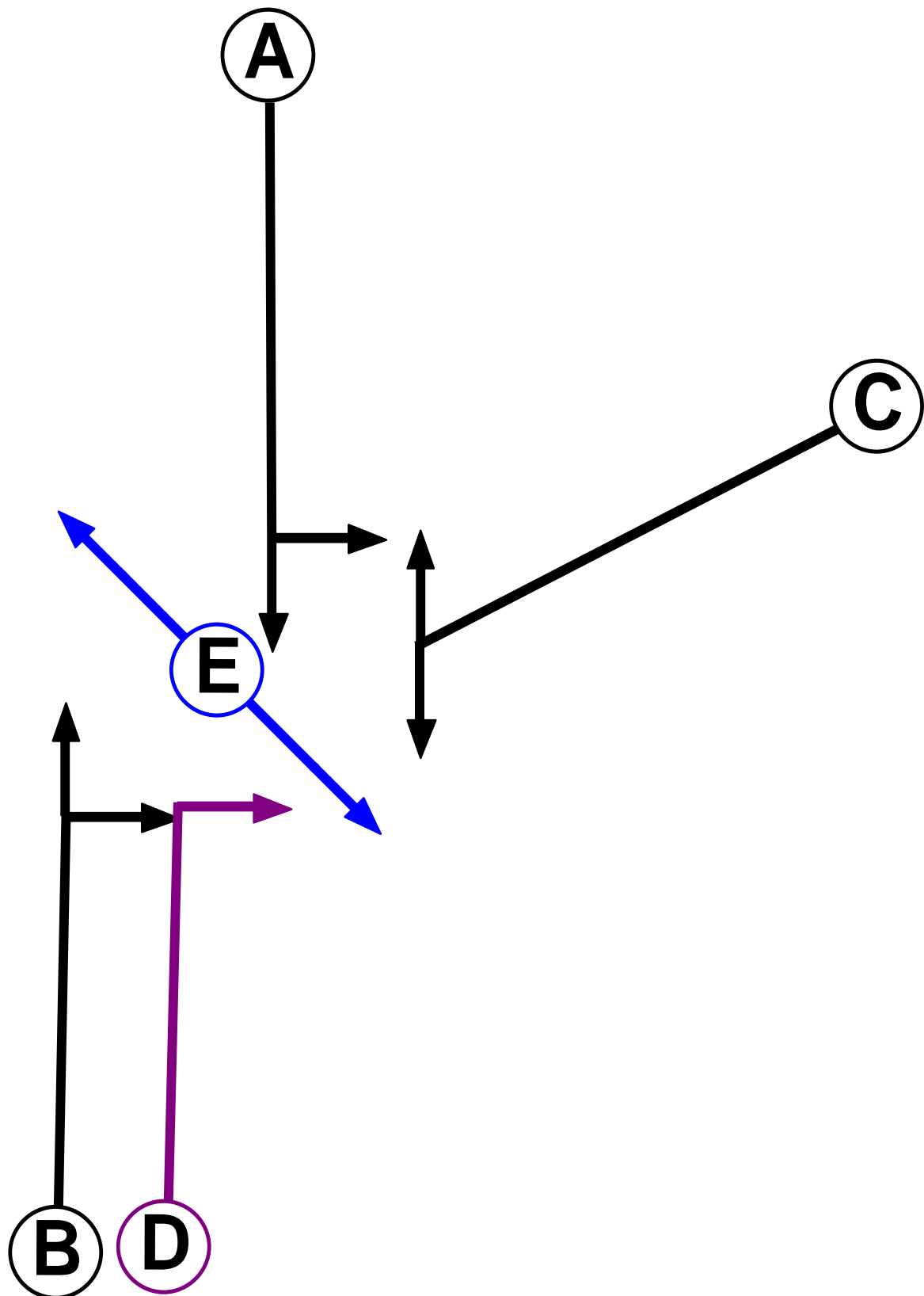


Full Input Data And Results**User and Project Details**

Project:	
Title:	
Location:	
File name:	Coosan Point Traffic Signals (New Link Road).lsg3x
Author:	
Company:	
Address:	
Notes:	

Network Layout Diagram

Phase Diagram



Full Input Data And Results

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	Ind. Arrow	B	4	4
E	Pedestrian		7	7

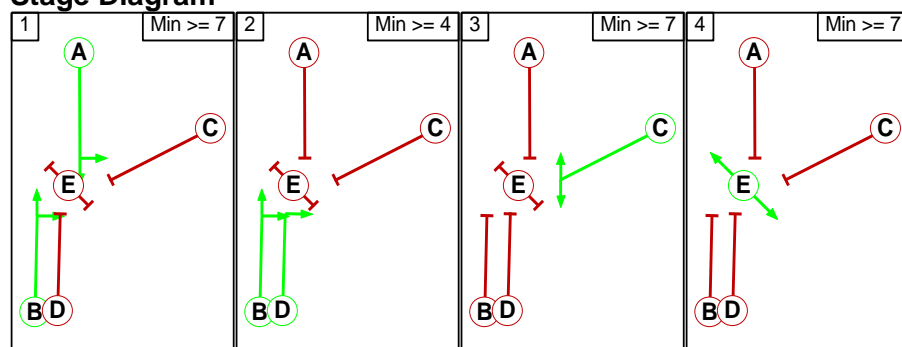
Phase Intergreens Matrix

		Starting Phase					
Terminating Phase		A	B	C	D	E	
	A		-	5	5	6	
	B	-		5	-	5	
	C	6	5		5	5	
	D	6	-	5		5	
	E	11	11	11	11		

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		5	5	6
	2	6		5	5
	3	6	5		5
	4	11	11	11	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Coosan Point Road/ New Link Road/ Northgate Street											
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)
1/2 (Northgate Street)	6/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	3.00

Lane Input Data

Junction: Coosan Point Road/ New Link Road/ Northgate Street												
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 (Northgate Street)	U	B	2	3	22.8	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
1/2 (Northgate Street)	O	B D	2	3	2.6	Geom	-	3.25	0.00	N	Arm 6 Right	15.00
2/1 (Coosan Point Road)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	10.00
3/1 (New Link Road)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Left	10.00
3/2 (New Link Road)	U	C	2	3	12.2	Geom	-	3.00	0.00	N	Arm 5 Right	15.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Option C AM'	08:00	09:00	01:00	
2: 'Option C PM '	17:00	18:00	01:00	
3: 'Option B AM'	08:00	09:00	01:00	
4: 'Option B PM'	17:00	18:00	01:00	
5: 'Option D AM '	08:00	09:00	01:00	
6: 'Option D PM '	17:00	18:00	01:00	
7: 'AM Base'	08:00	09:00	01:00	
8: 'PM Base'	08:00	09:00	01:00	

Scenario 1: 'AM Base' (FG7: 'AM Base', Plan 1: 'Network Control Plan 1')
Traffic Flows, Desired
Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	286	299	585
	B	66	0	117	183
	C	101	156	0	257
	Tot.	167	442	416	1025

Traffic Lane Flows

Lane	Scenario 1: AM Base
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	257(In) 101(Out)
1/2 (short)	156
2/1	585
3/1 (with short)	183(In) 117(Out)
3/2 (short)	66
4/1	416
5/1	167
6/1	442

Lane Saturation Flows

Junction: Coosan Point Road/ New Link Road/ Northgate Street								
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 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	51.1 %	1831	1831
				Arm 6 Left	10.00	48.9 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM Base' (FG8: 'PM Base', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	174	166	340
	B	101	0	151	252
	C	132	179	0	311
	Tot.	233	353	317	903

Traffic Lane Flows

Lane	Scenario 2: PM Base
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	311(In) 132(Out)
1/2 (short)	179
2/1	340
3/1 (with short)	252(In) 151(Out)
3/2 (short)	101
4/1	317
5/1	233
6/1	353

Lane Saturation Flows

Junction: Coosan Point Road/ New Link Road/ Northgate Street								
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 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	48.8 %	1825	1825
				Arm 6 Left	10.00	51.2 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'Option B AM' (FG3: 'Option B AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin	A	A	B	C	Tot.
	A	0	286	299	585
	B	72	0	472	544
	C	101	156	0	257
	Tot.	173	442	771	1386

Traffic Lane Flows

Lane	Scenario 3: Option B AM
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	257(In) 101(Out)
1/2 (short)	156
2/1	585
3/1 (with short)	544(In) 472(Out)
3/2 (short)	72
4/1	771
5/1	173
6/1	442

Lane Saturation Flows

Junction: Coosan Point Road/ New Link Road/ Northgate Street								
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 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	51.1 %	1831	1831
				Arm 6 Left	10.00	48.9 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'Option B PM' (FG4: 'Option B PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	174	166	340
	B	111	0	661	772
	C	132	179	0	311
	Tot.	243	353	827	1423

Traffic Lane Flows

Lane	Scenario 4: Option B PM
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	311(In) 132(Out)
1/2 (short)	179
2/1	340
3/1 (with short)	772(In) 661(Out)
3/2 (short)	111
4/1	827
5/1	243
6/1	353

Lane Saturation Flows

Junction: Coosan Point Road/ New Link Road/ Northgate Street								
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 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	48.8 %	1825	1825
				Arm 6 Left	10.00	51.2 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'Option C AM' (FG1: 'Option C AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	381	299	680
	B	66	0	117	183
	C	101	504	0	605
	Tot.	167	885	416	1468

Traffic Lane Flows

Lane	Scenario 5: Option C AM
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	605(In) 101(Out)
1/2 (short)	504
2/1	680
3/1 (with short)	183(In) 117(Out)
3/2 (short)	66
4/1	416
5/1	167
6/1	885

Lane Saturation Flows

Junction: Coosan Point Road/ New Link Road/ Northgate Street								
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 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	44.0 %	1813	1813
				Arm 6 Left	10.00	56.0 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'Option C PM' (FG2: 'Option C PM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	305	166	471
	B	101	0	151	252
	C	132	494	0	626
	Tot.	233	799	317	1349

Traffic Lane Flows

Lane	Scenario 6: Option C PM
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	626(In) 132(Out)
1/2 (short)	494
2/1	471
3/1 (with short)	252(In) 151(Out)
3/2 (short)	101
4/1	317
5/1	233
6/1	799

Lane Saturation Flows

Junction: Coosan Point Road/ New Link Road/ Northgate Street								
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 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	35.2 %	1791	1791
				Arm 6 Left	10.00	64.8 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: 'Option D AM' (FG5: 'Option D AM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	381	299	680
	B	72	0	460	532
	C	101	493	0	594
	Tot.	173	874	759	1806

Traffic Lane Flows

Lane	Scenario 7: Option D AM
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	594(In) 101(Out)
1/2 (short)	493
2/1	680
3/1 (with short)	532(In) 460(Out)
3/2 (short)	72
4/1	759
5/1	173
6/1	874

Lane Saturation Flows

Junction: Coosan Point Road/ New Link Road/ Northgate Street								
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 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	44.0 %	1813	1813
				Arm 6 Left	10.00	56.0 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: 'Option D PM' (FG6: 'Option D PM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	166	269	435
	B	111	0	525	636
	C	132	485	0	617
	Tot.	243	651	794	1688

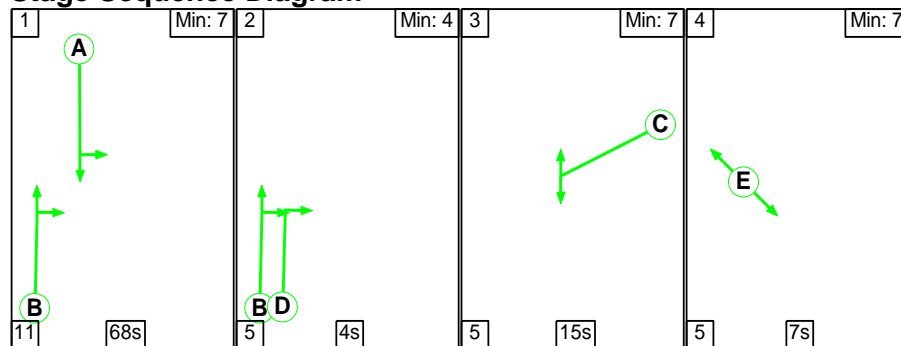
Traffic Lane Flows

Lane	Scenario 8: Option D PM
Junction: Coosan Point Road/ New Link Road/ Northgate Street	
1/1 (with short)	617(In) 132(Out)
1/2 (short)	485
2/1	435
3/1 (with short)	636(In) 525(Out)
3/2 (short)	111
4/1	794
5/1	243
6/1	651

Lane Saturation Flows

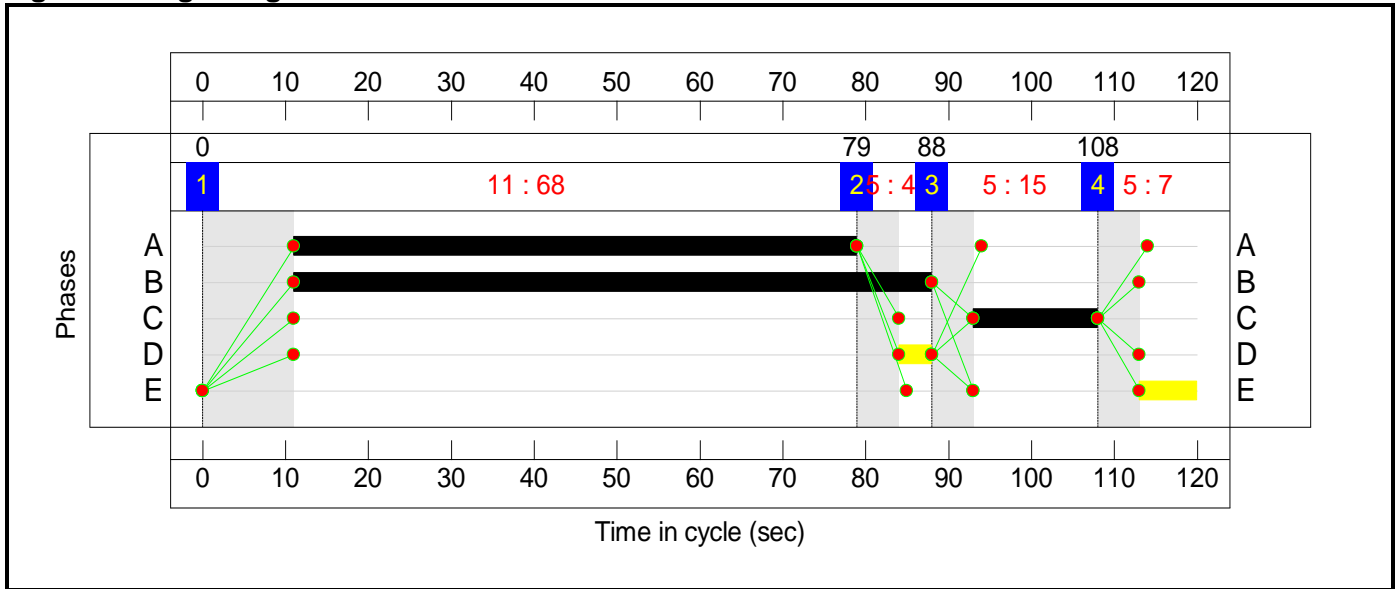
Junction: Coosan Point Road/ New Link Road/ Northgate Street								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Northgate Street)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (Northgate Street)	3.25	0.00	N	Arm 6 Right	15.00	100.0 %	1891	1891
2/1 (Coosan Point Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	61.8 %	1859	1859
				Arm 6 Left	10.00	38.2 %		
3/1 (New Link Road)	3.00	0.00	Y	Arm 4 Left	10.00	100.0 %	1665	1665
3/2 (New Link Road)	3.00	0.00	N	Arm 5 Right	15.00	100.0 %	1868	1868
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'AM Base' (FG7: 'AM Base', Plan 1: 'Network Control Plan 1')

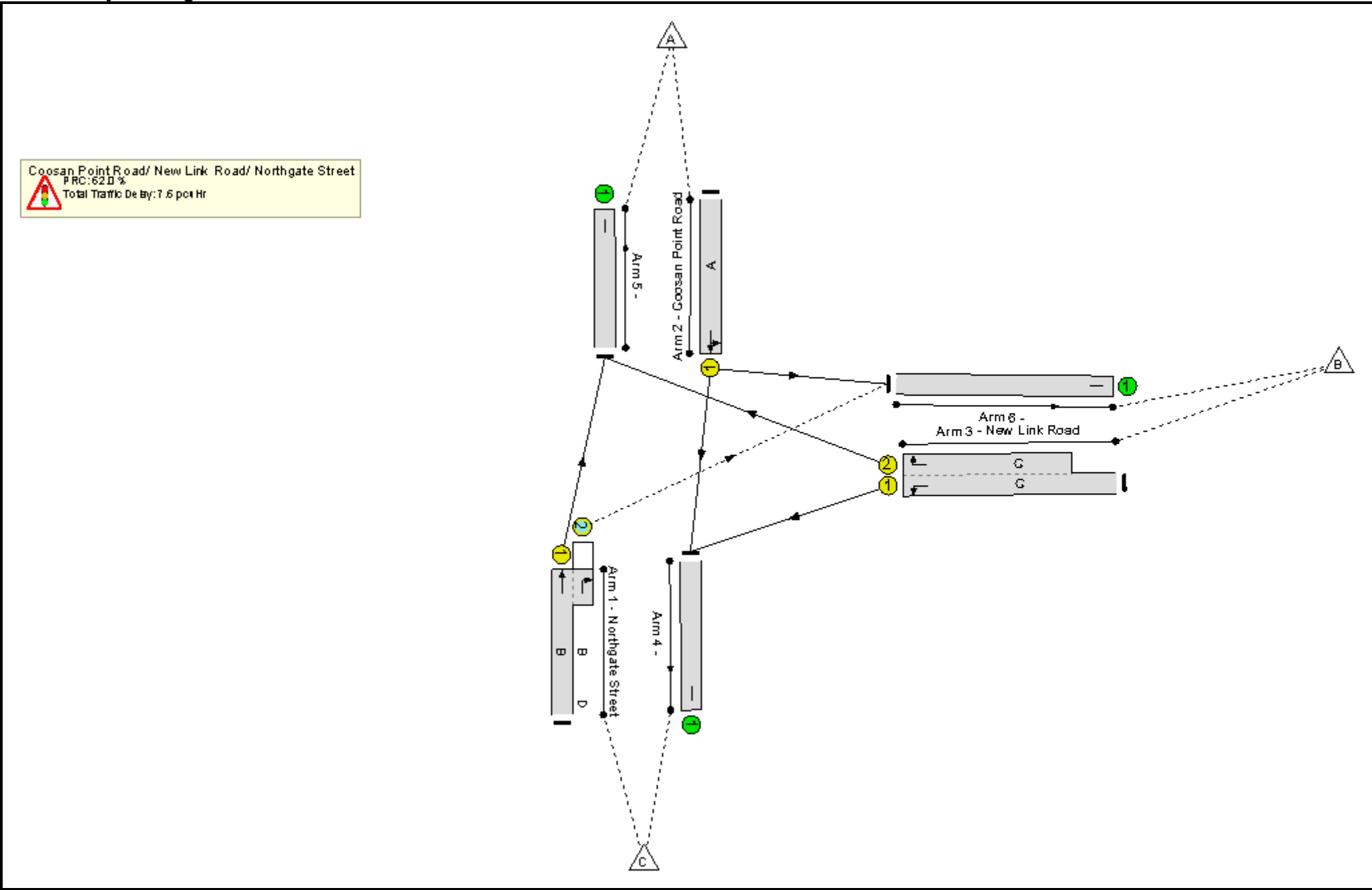
Stage Sequence Diagram**Stage Timings**

Stage	1	2	3	4
Duration	68	4	15	7
Change Point	0	79	88	108

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

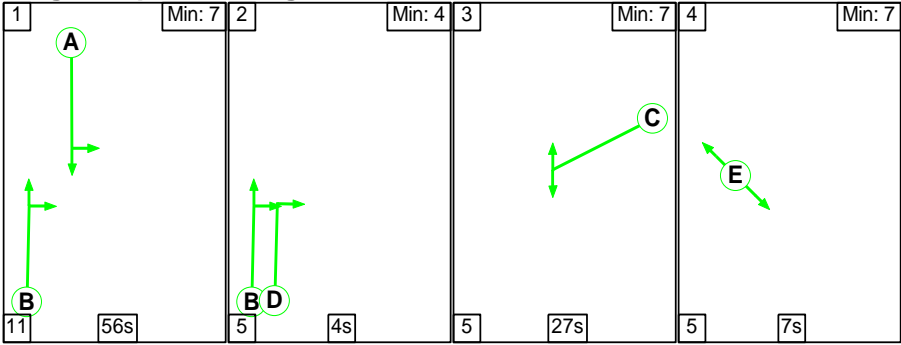
Network Results

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	-	-		-	-	-	-	-	-	55.6%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	55.6%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	77	4	257	1940:1891	305+471	33.1 : 33.1%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	68	-	585	1831	1053	55.6%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	15	-	183	1665:1868	222+125	52.7 : 52.7%
4/1		U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	144	9	3	5.7	1.4	0.5	7.6	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	144	9	3	5.7	1.4	0.5	7.6	-	-	-	-
1/1+1/2	257	257	144	9	3	0.7	0.2	0.5	1.4	20.2	1.9	0.2	2.2
2/1	585	585	-	-	-	2.6	0.6	-	3.2	19.8	12.0	0.6	12.6
3/1+3/2	183	183	-	-	-	2.4	0.6	-	3.0	58.7	3.6	0.6	4.2
4/1	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 62.0 Total Delay for Signalled Lanes (pcuHr): 7.64 Cycle Time (s): 120 PRC Over All Lanes (%): 62.0 Total Delay Over All Lanes(pcuHr): 7.64													

Full Input Data And Results

Scenario 2: 'PM Base' (FG8: 'PM Base', Plan 1: 'Network Control Plan 1')

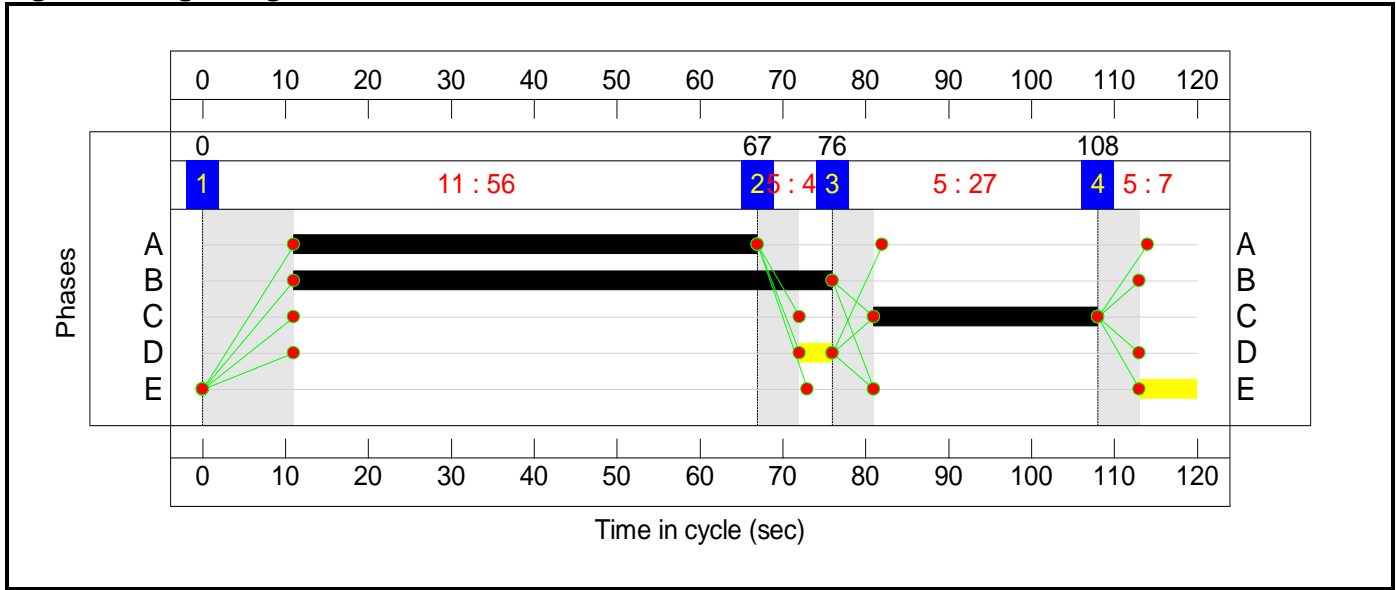
Stage Sequence Diagram



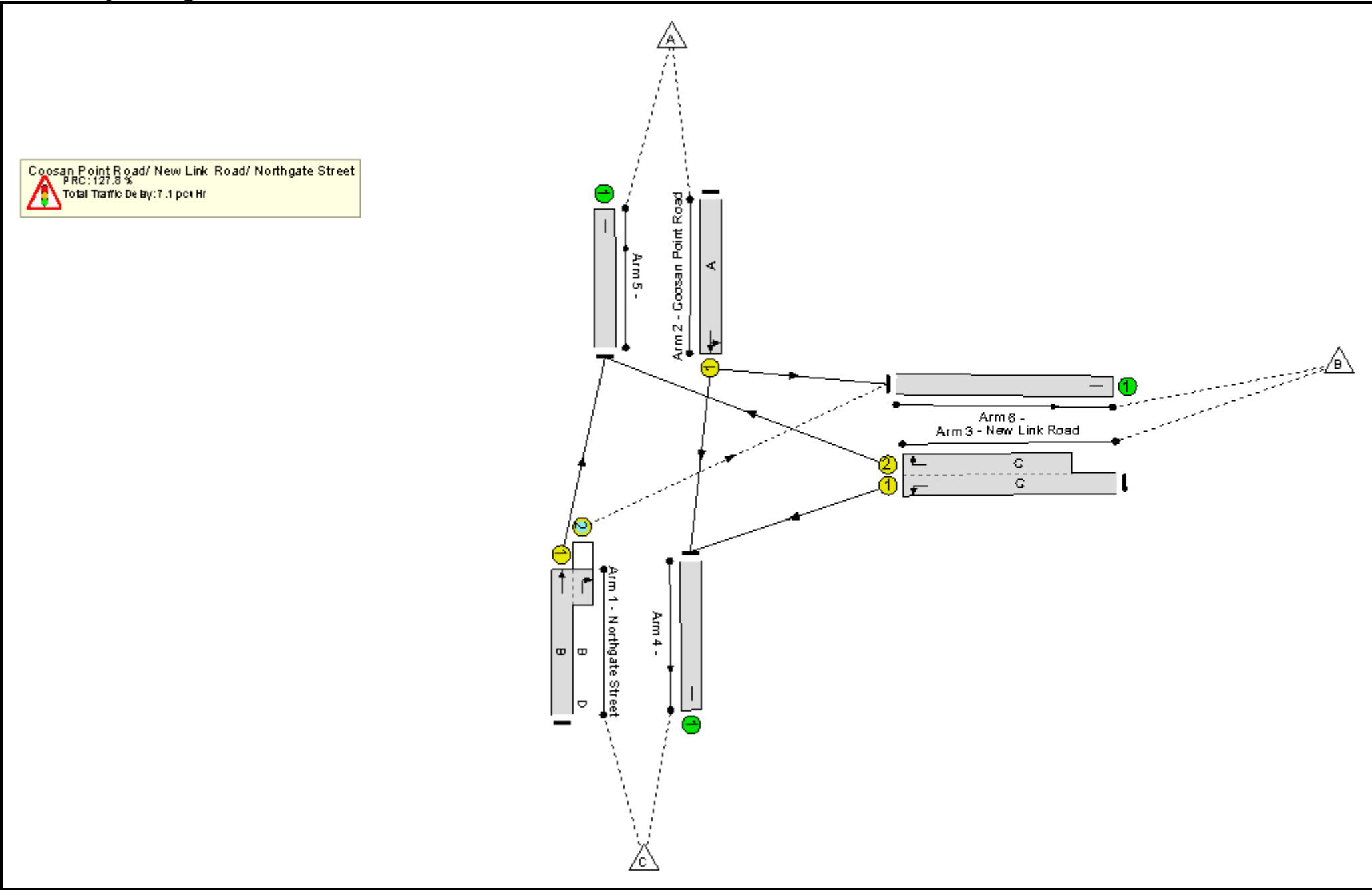
Stage Timings

Stage	1	2	3	4
Duration	56	4	27	7
Change Point	0	67	76	108

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

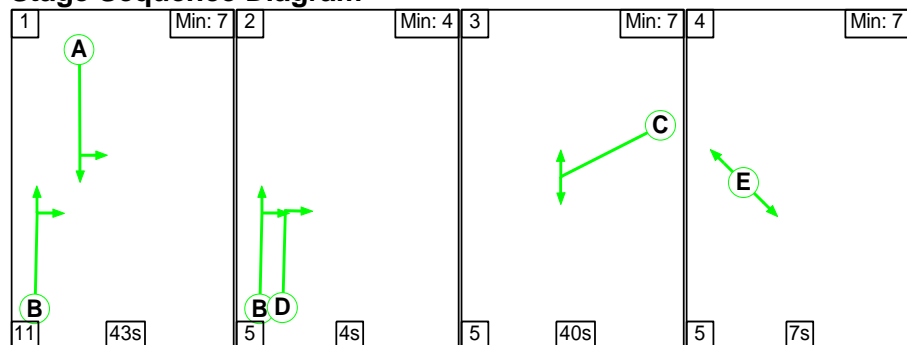
Network Results

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	-	-		-	-	-	-	-	-	39.5%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	39.5%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	65	4	311	1940:1891	396+537	33.3 : 33.3%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	56	-	340	1825	867	39.2%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	27	-	252	1665:1868	382+256	39.5 : 39.5%
4/1		U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	233	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	166	10	3	5.9	0.9	0.3	7.1	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	166	10	3	5.9	0.9	0.3	7.1	-	-	-	-
1/1+1/2	311	311	166	10	3	1.3	0.2	0.3	1.9	22.0	3.8	0.2	4.0
2/1	340	340	-	-	-	1.9	0.3	-	2.2	23.7	7.3	0.3	7.6
3/1+3/2	252	252	-	-	-	2.7	0.3	-	3.0	42.8	4.2	0.3	4.6
4/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 127.8 Total Delay for Signalled Lanes (pcuHr): 7.14 Cycle Time (s): 120 PRC Over All Lanes (%): 127.8 Total Delay Over All Lanes(pcuHr): 7.14													

Full Input Data And Results

Scenario 3: 'Option B AM' (FG3: 'Option B AM', Plan 1: 'Network Control Plan 1')

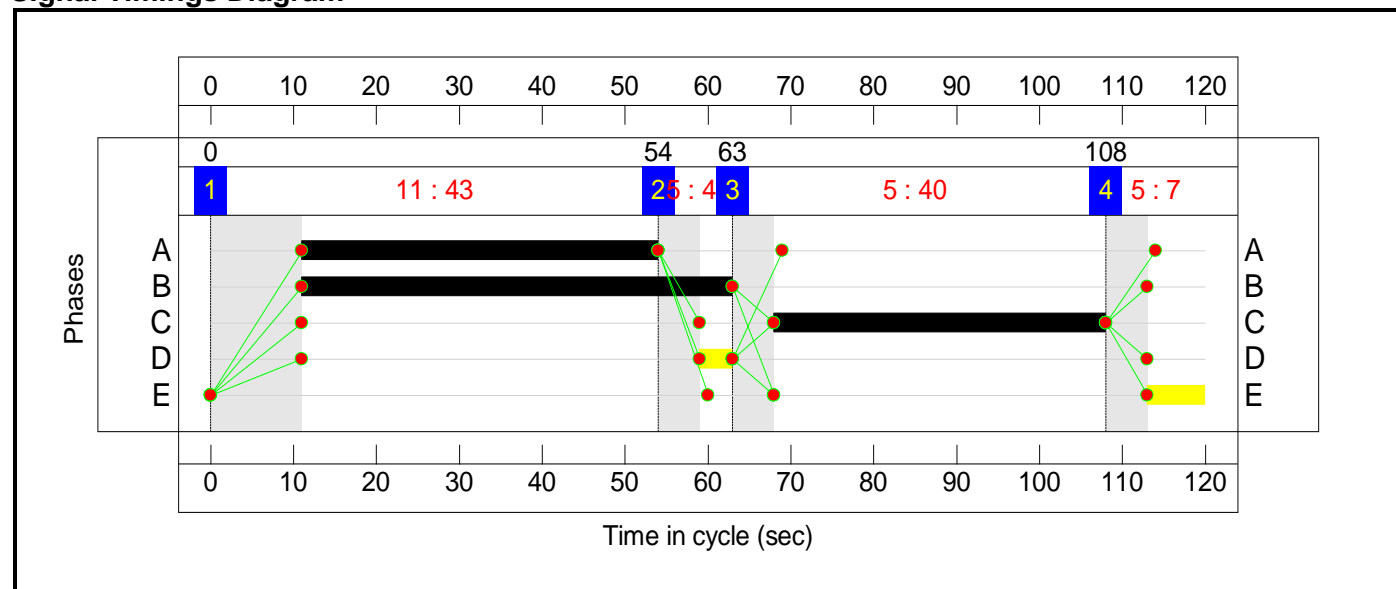
Stage Sequence Diagram



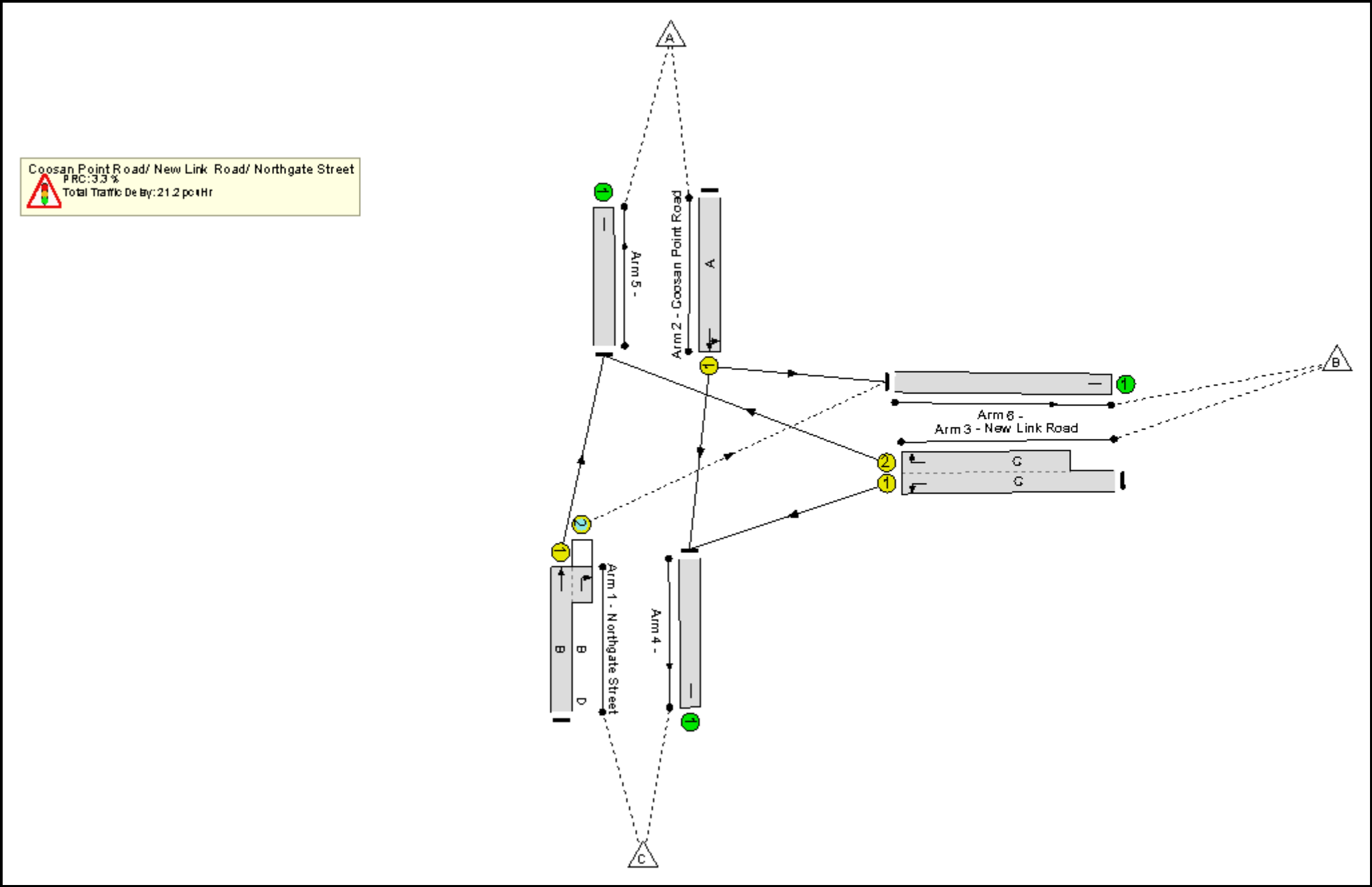
Stage Timings

Stage	1	2	3	4
Duration	43	4	40	7
Change Point	0	54	63	108

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

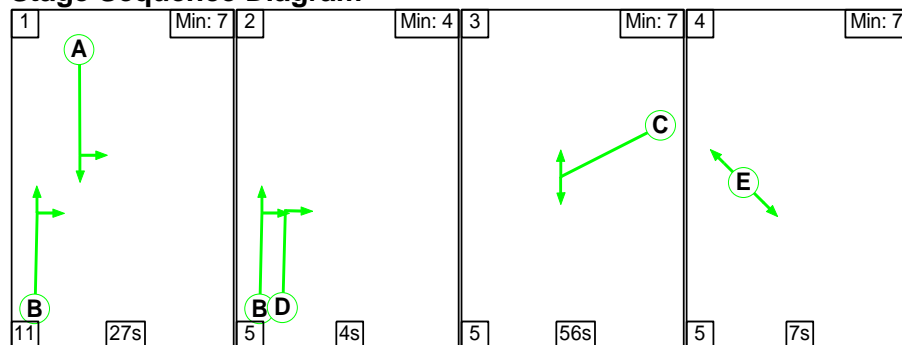
Network Results

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	-	-		-	-	-	-	-	-	87.1%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	87.1%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	52	4	257	1940:1891	143+220	70.8 : 70.8%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	43	-	585	1831	671	87.1%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	40	-	544	1665:1868	547+83	86.3 : 86.3%
4/1		U	N/A	N/A	-		-	-	-	771	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	173	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	53	100	3	13.2	7.3	0.7	21.2	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	53	100	3	13.2	7.3	0.7	21.2	-	-	-	-
1/1+1/2	257	257	53	100	3	2.1	1.2	0.7	4.0	55.9	5.0	1.2	6.2
2/1	585	585	-	-	-	5.7	3.2	-	8.9	54.8	18.0	3.2	21.2
3/1+3/2	544	544	-	-	-	5.3	2.9	-	8.3	54.7	14.8	2.9	17.7
4/1	771	771	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	173	173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 3.3 Total Delay for Signalled Lanes (pcuHr): 21.16 Cycle Time (s): 120 PRC Over All Lanes (%): 3.3 Total Delay Over All Lanes(pcuHr): 21.16													

Full Input Data And Results

Scenario 4: 'Option B PM' (FG4: 'Option B PM', Plan 1: 'Network Control Plan 1')

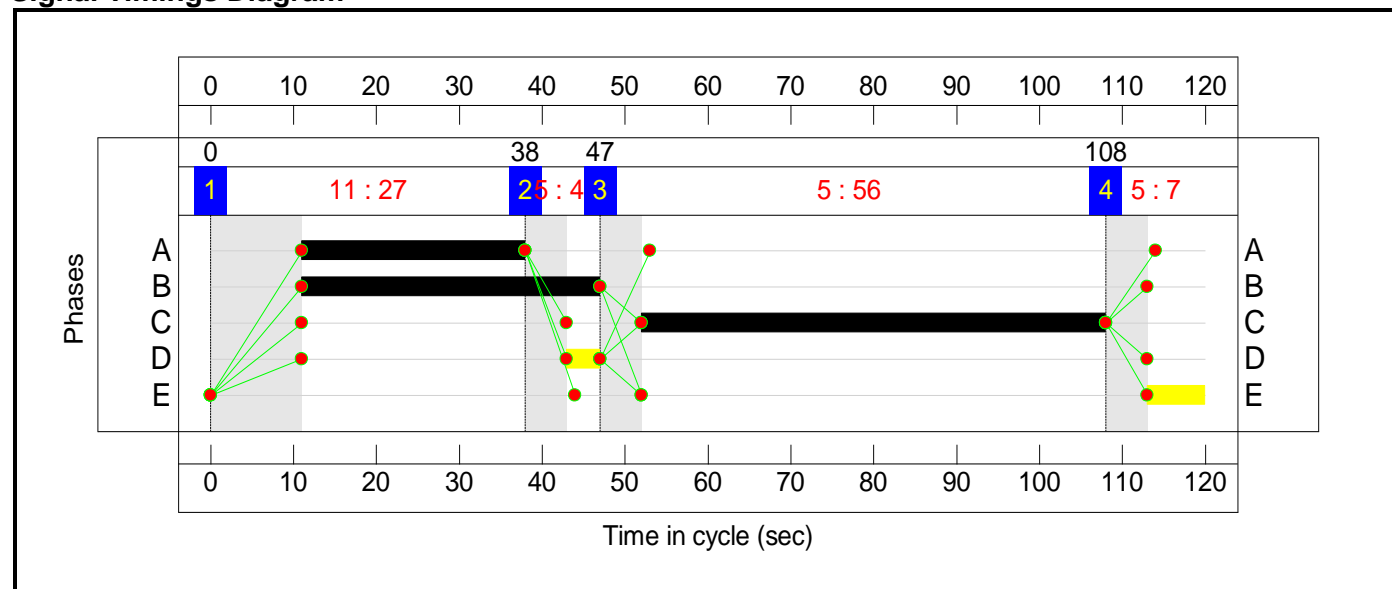
Stage Sequence Diagram



Stage Timings

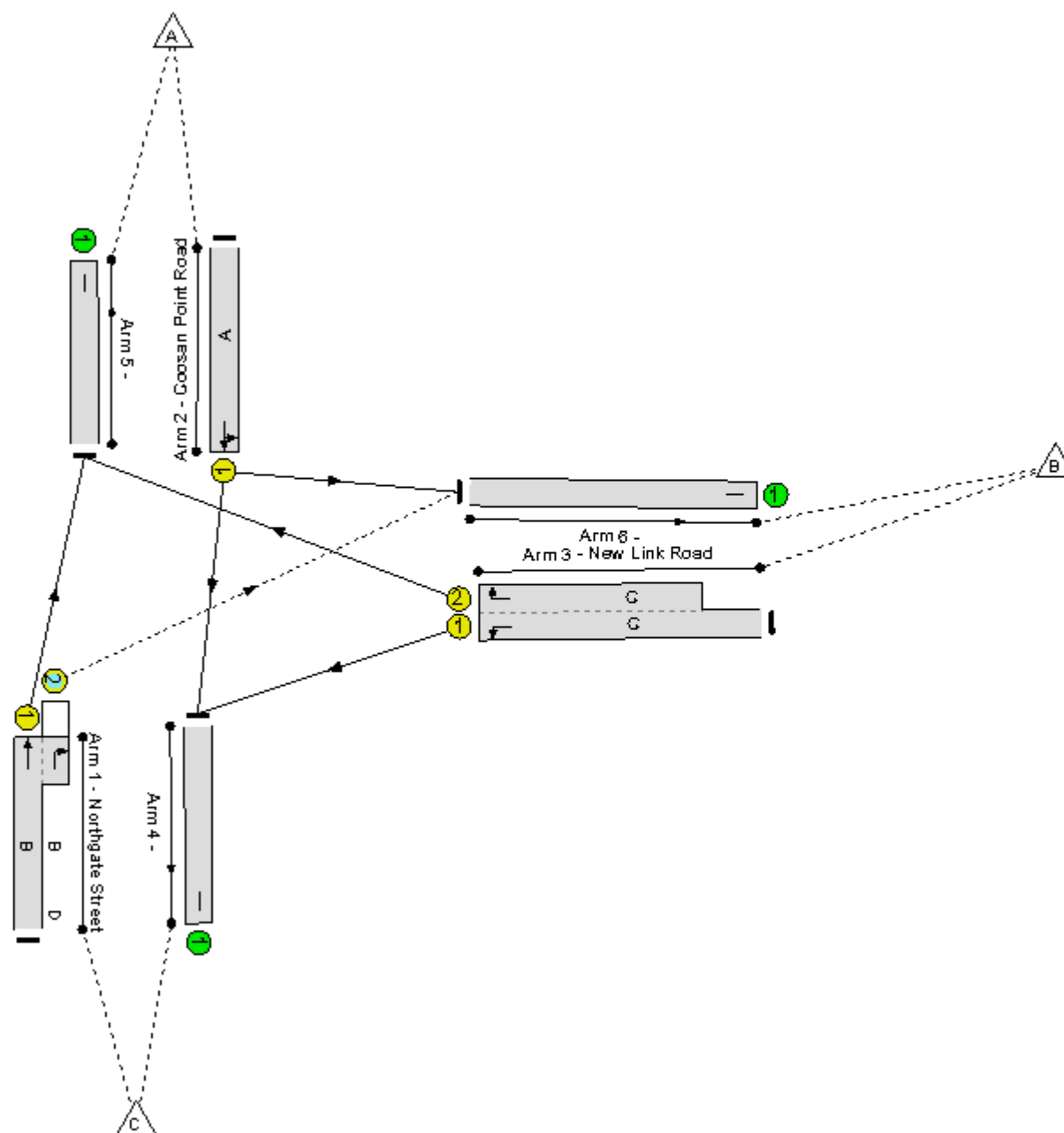
Stage	1	2	3	4
Duration	27	4	56	7
Change Point	0	38	47	108

Signal Timings Diagram



Network Layout Diagram

Coosan Point Road/ New Link Road/ Northgate Street
 PRC: 0.5 %
 Total Traffic Delay: 22.4 per Hr



Full Input Data And Results

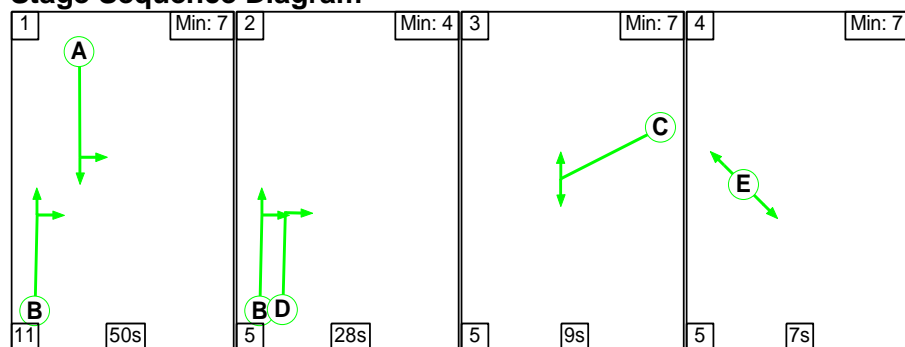
Network Results

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	-	-		-	-	-	-	-	-	89.6%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	89.6%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	36	4	311	1940:1891	153+207	86.4 : 86.4%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	27	-	340	1825	426	79.8%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	56	-	772	1665:1868	738+124	89.6 : 89.6%
4/1		U	N/A	N/A	-		-	-	-	827	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	61	110	7	13.2	8.7	0.4	22.4	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	61	110	7	13.2	8.7	0.4	22.4	-	-	-	-
1/1+1/2	311	311	61	110	7	3.4	2.9	0.4	6.7	77.4	8.1	2.9	11.0
2/1	340	340	-	-	-	4.1	1.9	-	6.0	63.4	10.7	1.9	12.6
3/1+3/2	772	772	-	-	-	5.8	3.9	-	9.7	45.3	21.1	3.9	25.1
4/1	827	827	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	243	243	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 0.5 Total Delay for Signalled Lanes (pcuHr): 22.39 Cycle Time (s): 120 PRC Over All Lanes (%): 0.5 Total Delay Over All Lanes(pcuHr): 22.39													

Full Input Data And Results

Scenario 5: 'Option C AM' (FG1: 'Option C AM', Plan 1: 'Network Control Plan 1')

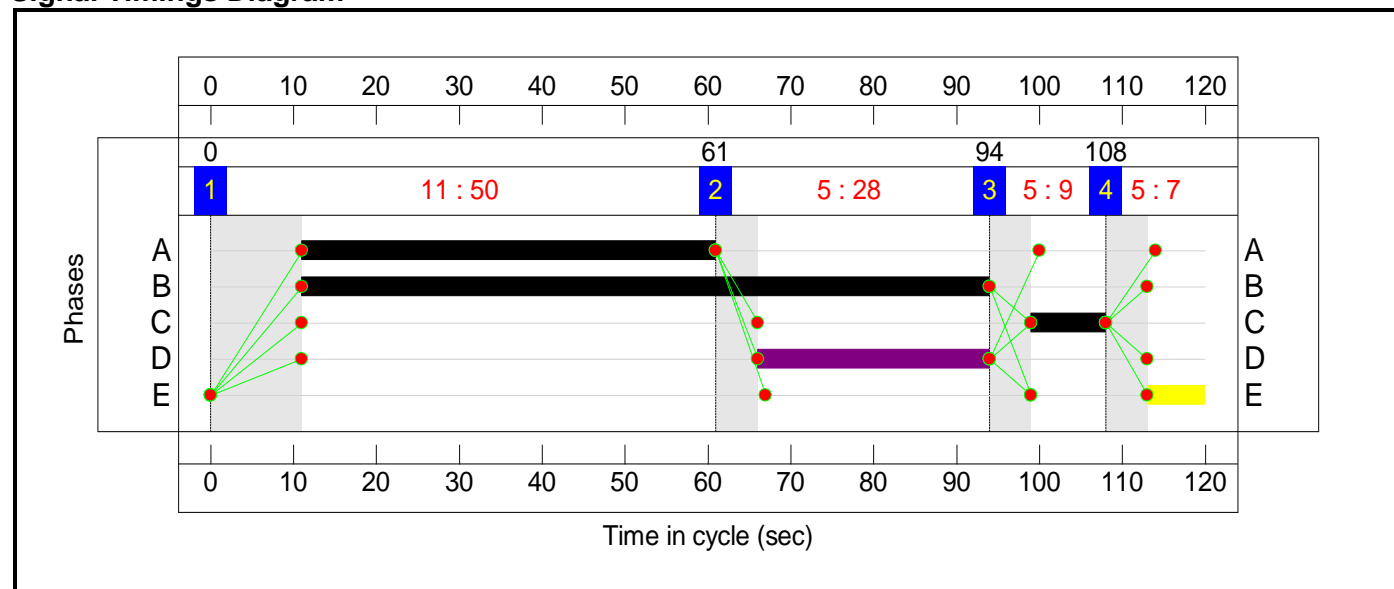
Stage Sequence Diagram



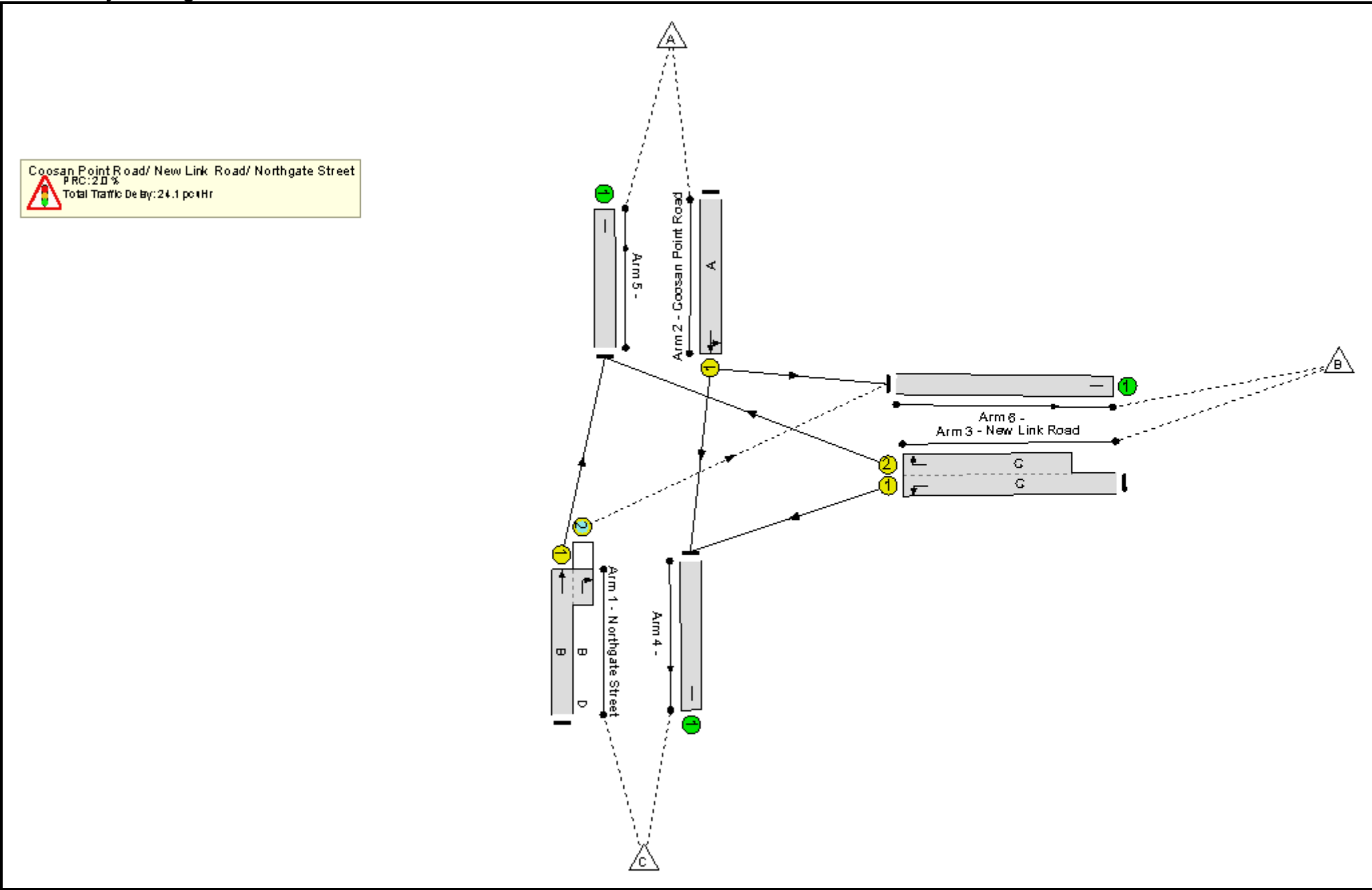
Stage Timings

Stage	1	2	3	4
Duration	50	28	9	7
Change Point	0	61	94	108

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

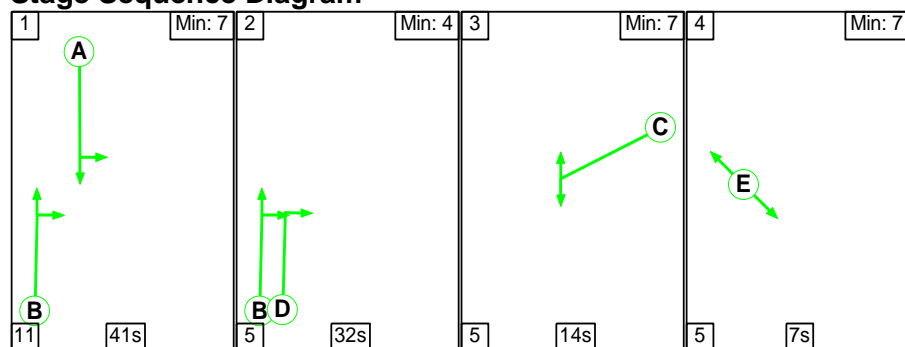
Network Results

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	-	-		-	-	-	-	-	-	88.3%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	88.3%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	83	28	605	1940:1891	115+574	87.8 : 87.8%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	50	-	680	1813	771	88.3%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	9	-	183	1665:1868	139+78	84.3 : 84.3%
4/1		U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	167	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	885	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	54	442	8	13.9	9.2	1.0	24.1	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	54	442	8	13.9	9.2	1.0	24.1	-	-	-	-
1/1+1/2	605	605	54	442	8	5.2	3.3	1.0	9.5	56.7	18.3	3.3	21.6
2/1	680	680	-	-	-	6.0	3.5	-	9.5	50.2	20.8	3.5	24.3
3/1+3/2	183	183	-	-	-	2.7	2.4	-	5.1	100.0	3.8	2.4	6.2
4/1	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	885	885	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 2.0 Total Delay for Signalled Lanes (pcuHr): 24.10 Cycle Time (s): 120 PRC Over All Lanes (%): 2.0 Total Delay Over All Lanes(pcuHr): 24.10													

Full Input Data And Results

Scenario 6: 'Option C PM' (FG2: 'Option C PM ', Plan 1: 'Network Control Plan 1')

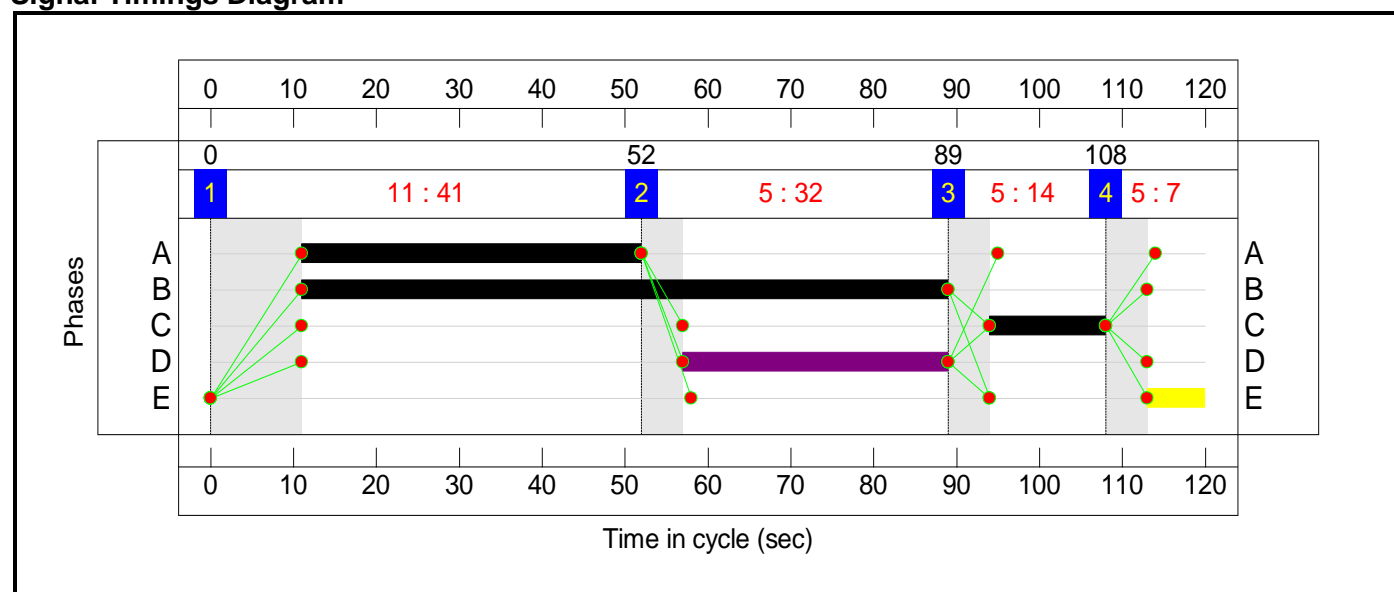
Stage Sequence Diagram



Stage Timings

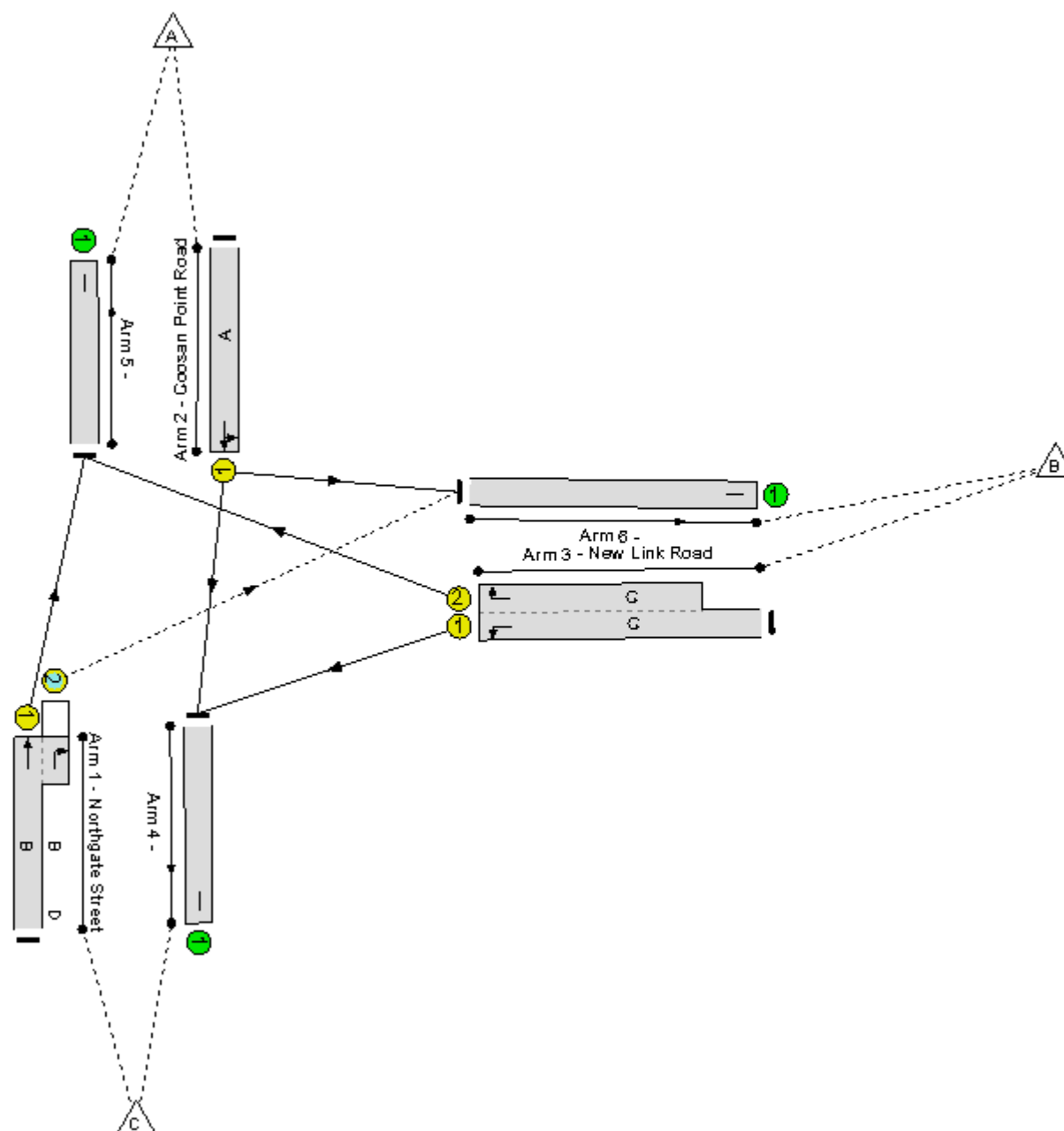
Stage	1	2	3	4
Duration	41	32	14	7
Change Point	0	52	89	108

Signal Timings Diagram



Network Layout Diagram

Coosan Point Road/ New Link Road/ Northgate Street
 PRC: 19.8 %
 Total Traffic Delay: 17.4 per Hr



Full Input Data And Results

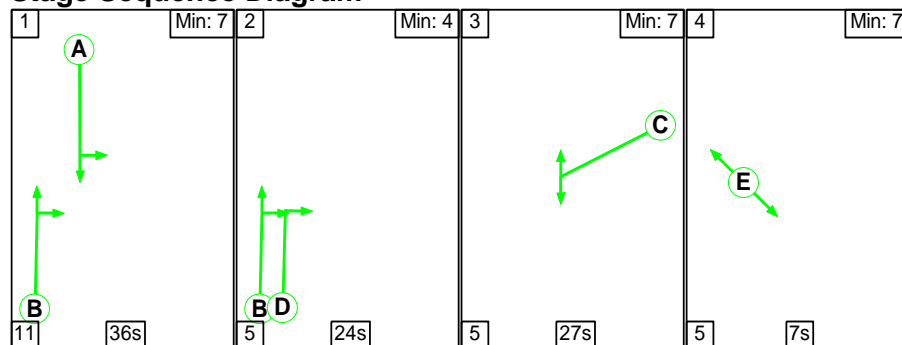
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	75.1%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	78	32	626	1940:1891	176+657	75.1 : 75.1%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	41	-	471	1791	627	75.1%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	14	-	252	1665:1868	208+139	72.6 : 72.6%
4/1		U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	233	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	799	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	108	378	8	12.3	4.3	0.8	17.4	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	108	378	8	12.3	4.3	0.8	17.4	-	-	-	-
1/1+1/2	626	626	108	378	8	4.4	1.5	0.8	6.6	38.0	16.7	1.5	18.2
2/1	471	471	-	-	-	4.5	1.5	-	6.0	45.7	13.7	1.5	15.2
3/1+3/2	252	252	-	-	-	3.5	1.3	-	4.8	68.1	4.8	1.3	6.1
4/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 19.8 Total Delay for Signalled Lanes (pcuHr): 17.36 Cycle Time (s): 120 PRC Over All Lanes (%): 19.8 Total Delay Over All Lanes(pcuHr): 17.36													

Full Input Data And Results

Scenario 7: 'Option D AM' (FG5: 'Option D AM ', Plan 1: 'Network Control Plan 1')

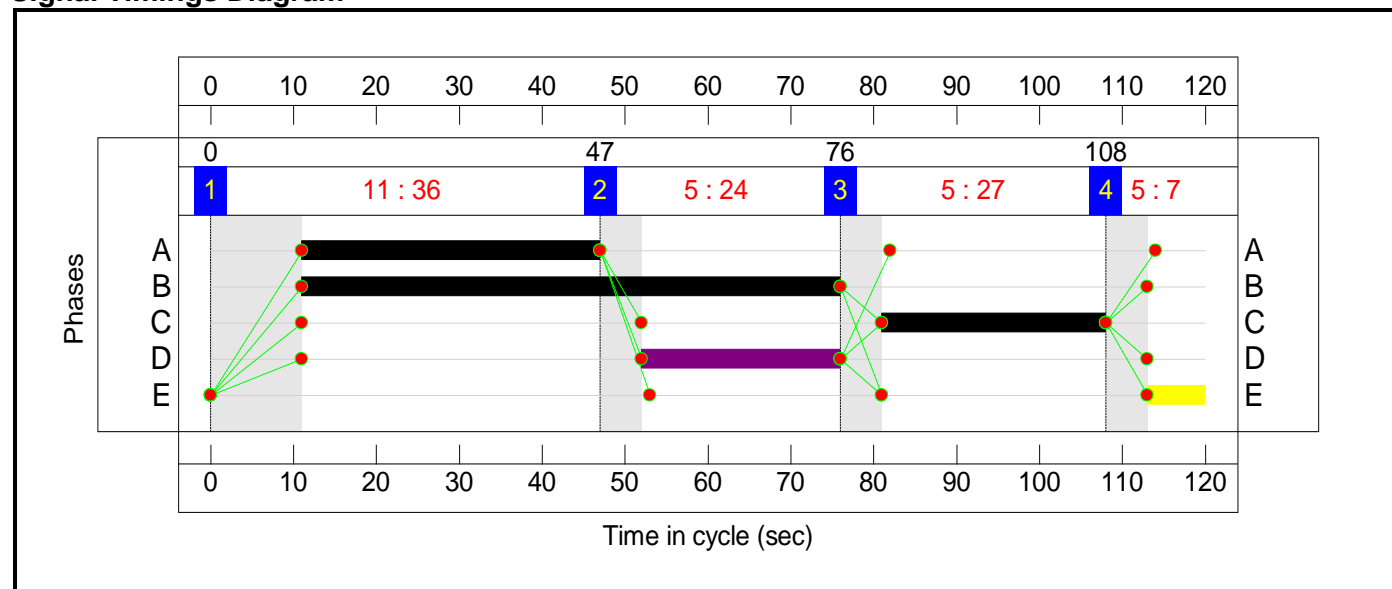
Stage Sequence Diagram



Stage Timings

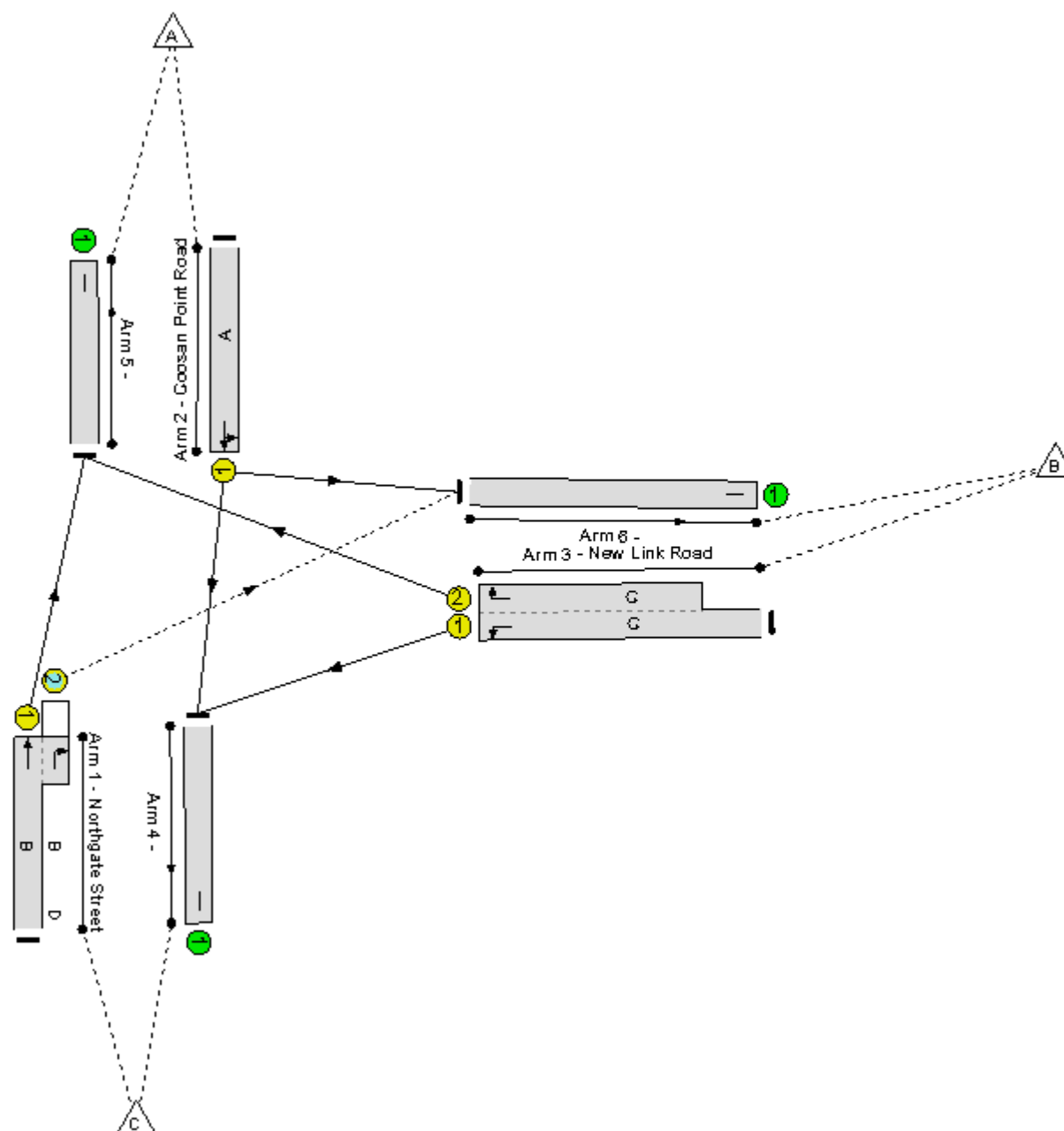
Stage	1	2	3	4
Duration	36	24	27	7
Change Point	0	47	76	108

Signal Timings Diagram



Network Layout Diagram

Coosan Point Road/ New Link Road/ Northgate Street
 PRC: -35.2 %
 Total Traffic De By: 199.4 per Hr



Full Input Data And Results

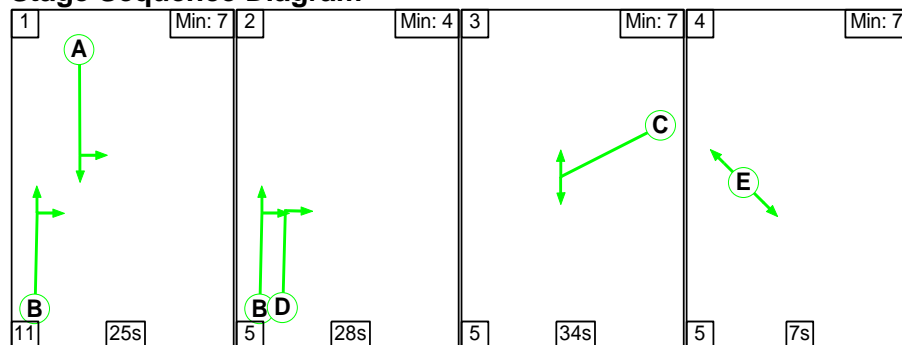
Network Results

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	-	-		-	-	-	-	-	-	121.6%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	121.6%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	65	24	594	1940:1891	83+407	121.3 : 121.3%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	36	-	680	1813	559	121.6%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	27	-	532	1665:1868	388+61	118.5 : 118.5%
4/1		U	N/A	N/A	-		-	-	-	759	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	173	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	874	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	380	26	36.3	162.5	0.6	199.4	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	0	380	26	36.3	162.5	0.6	199.4	-	-	-	-
1/1+1/2	594	490	0	380	26	11.6	54.8	0.6	67.0	406.2	23.1	54.8	77.9
2/1	680	559	-	-	-	14.9	63.2	-	78.0	413.2	26.7	63.2	89.9
3/1+3/2	532	449	-	-	-	9.8	44.5	-	54.4	367.8	19.9	44.5	64.5
4/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	144	144	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -35.2 Total Delay for Signalled Lanes (pcuHr): 199.43 Cycle Time (s): 120 PRC Over All Lanes (%): -35.2 Total Delay Over All Lanes(pcuHr): 199.43													

Full Input Data And Results

Scenario 8: 'Option D PM' (FG6: 'Option D PM ', Plan 1: 'Network Control Plan 1')

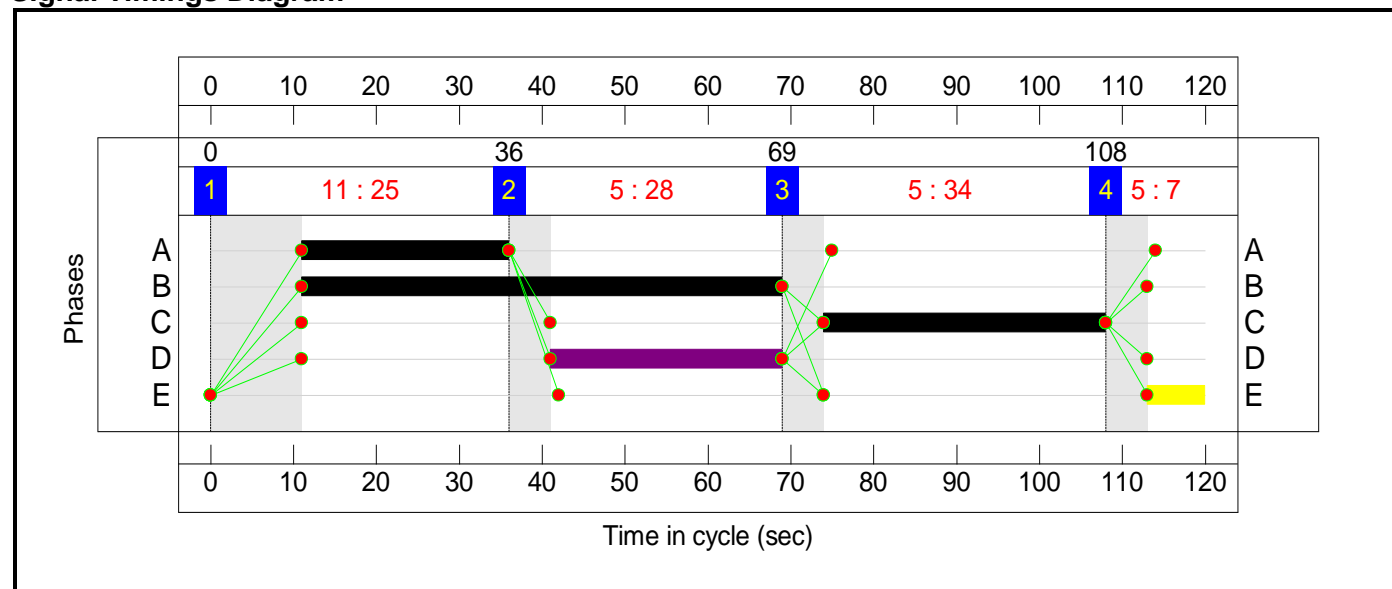
Stage Sequence Diagram

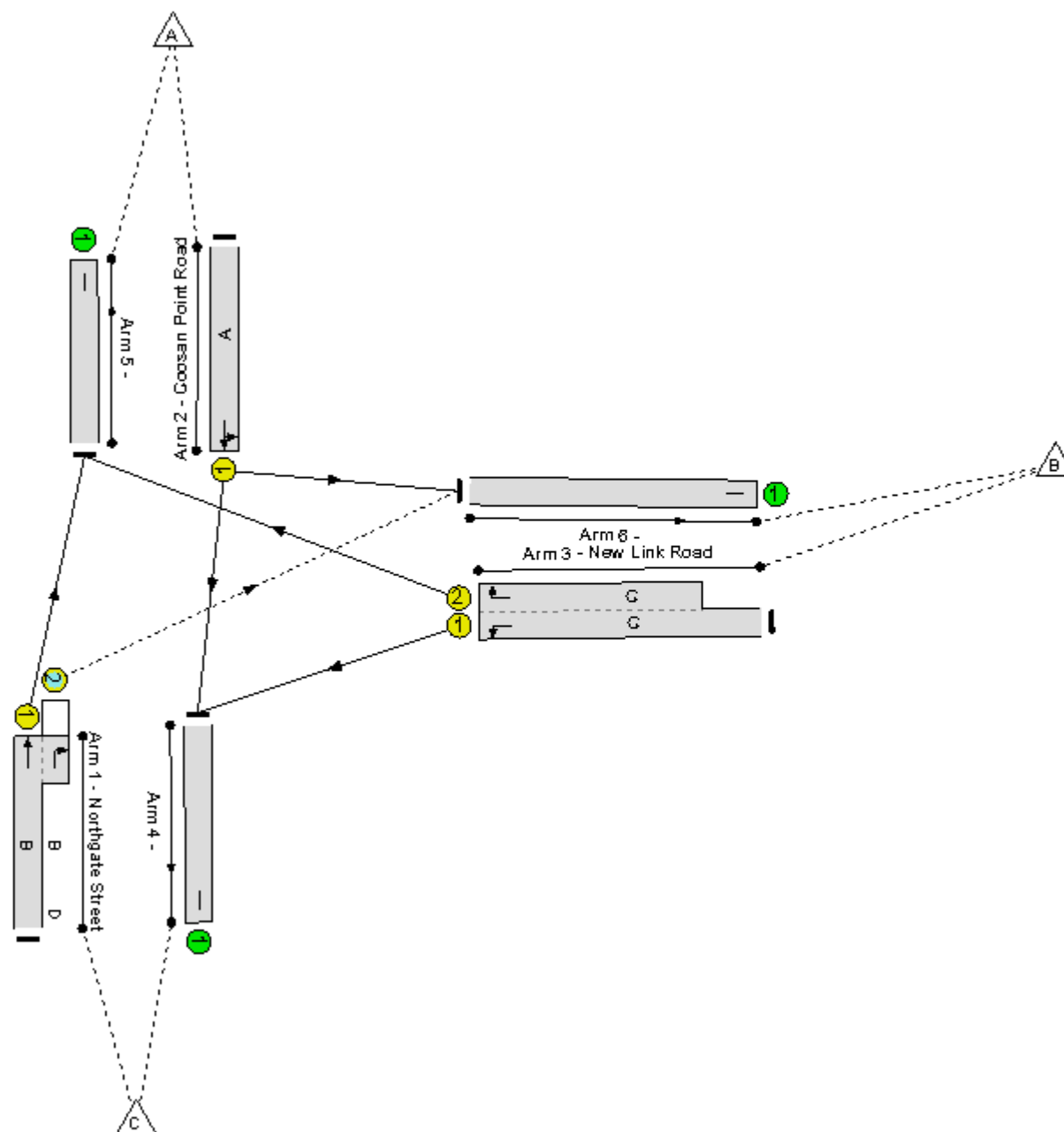


Stage Timings

Stage	1	2	3	4
Duration	25	28	34	7
Change Point	0	36	69	108

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	-	-		-	-	-	-	-	-	111.9%
Coosan Point Road/ New Link Road/ Northgate Street	-	-	N/A	-	-		-	-	-	-	-	-	111.9%
1/1+1/2	Northgate Street Ahead Right	U+O	N/A	N/A	B	D	1	58	28	617	1940:1891	120+443	109.6 : 109.6%
2/1	Coosan Point Road Ahead Left	U	N/A	N/A	A		1	25	-	435	1859	403	108.0%
3/1+3/2	New Link Road Left Right	U	N/A	N/A	C		1	34	-	636	1665:1868	469+99	111.9 : 111.9%
4/1		U	N/A	N/A	-		-	-	-	794	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	243	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	651	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	418	25	26.8	91.1	0.4	118.4	-	-	-	-
Coosan Point Road/ New Link Road/ Northgate Street	-	-	0	418	25	26.8	91.1	0.4	118.4	-	-	-	-
1/1+1/2	617	563	0	418	25	9.4	31.8	0.4	41.6	242.9	22.0	31.8	53.8
2/1	435	403	-	-	-	7.6	21.2	-	28.8	238.6	15.6	21.2	36.8
3/1+3/2	636	568	-	-	-	9.9	38.1	-	47.9	271.3	22.5	38.1	60.5
4/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	220	220	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -24.4 Total Delay for Signalled Lanes (pcuHr): 118.39 Cycle Time (s): 120 PRC Over All Lanes (%): -24.4 Total Delay Over All Lanes(pcuHr): 118.39													

