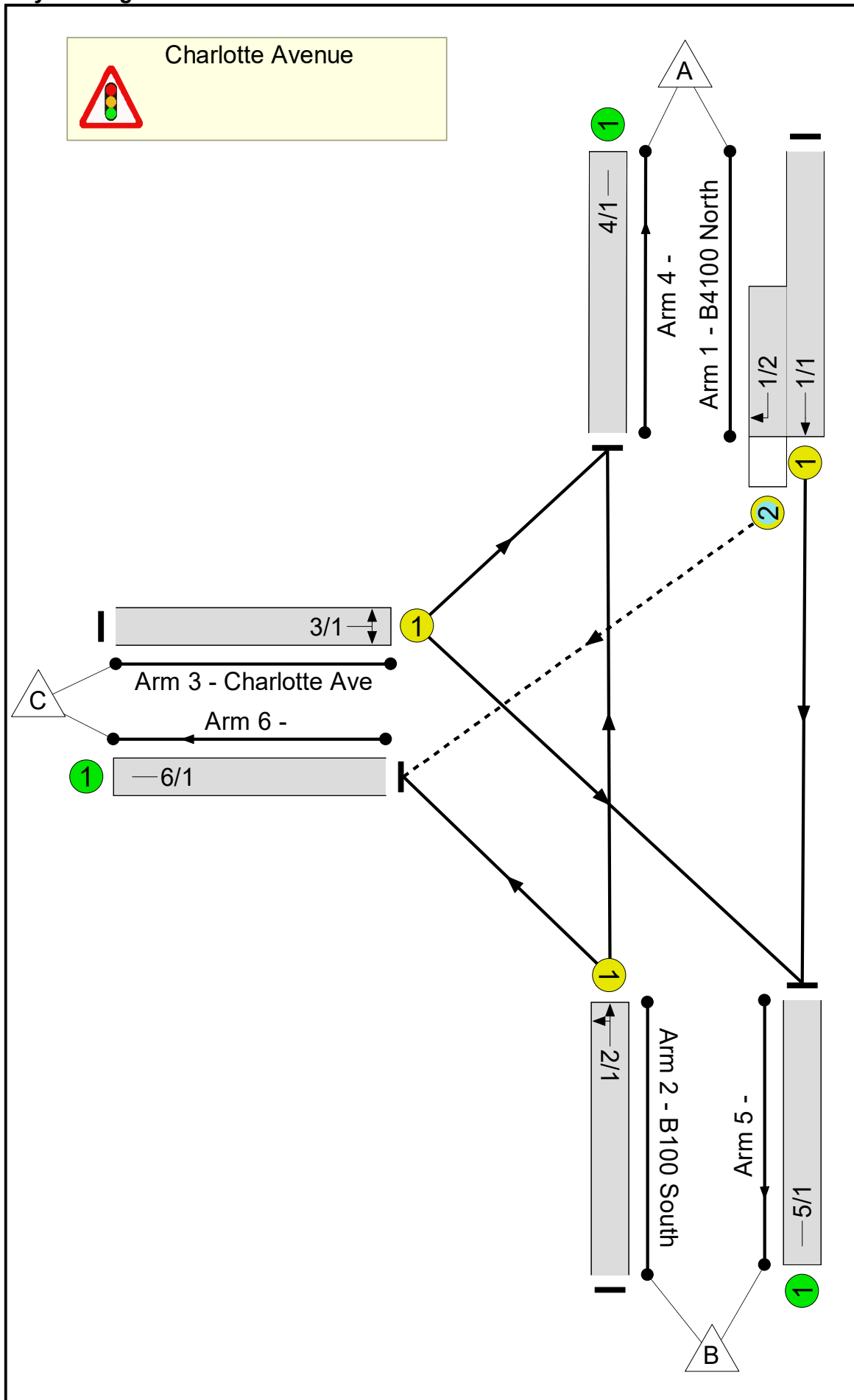


Full Input Data And Results

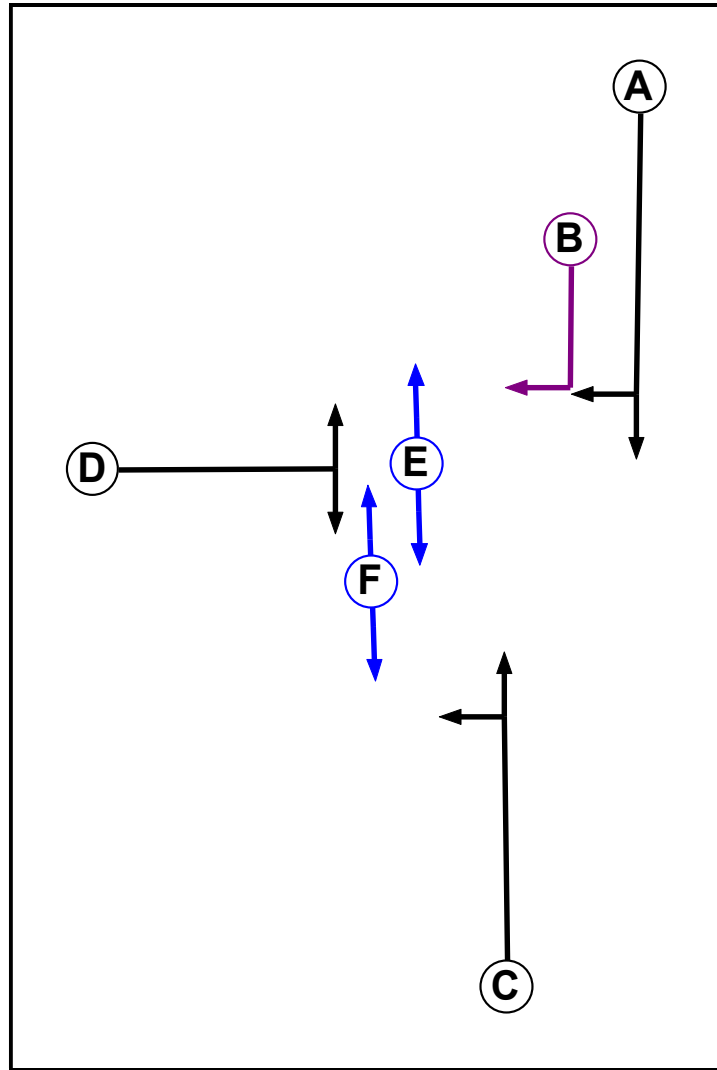
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Charlotte Ave traffic signals V3.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Ind. Arrow	A	4	4
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		6	6
F	Pedestrian		6	6

Full Input Data And Results

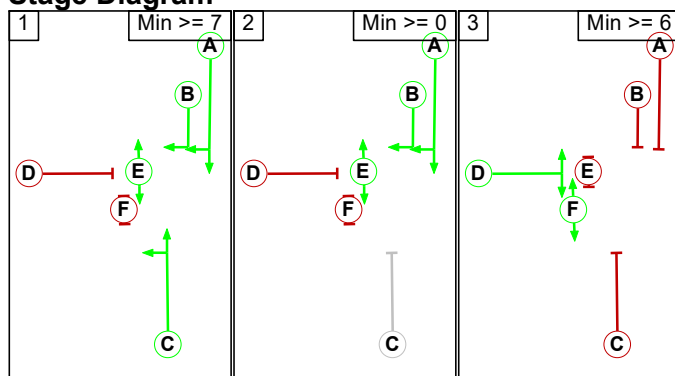
Phase Intergrens Matrix

		Starting Phase					
		A	B	C	D	E	F
Terminating Phase	A	-	-	-	5	-	10
	B	-	-	-	5	-	10
	C	-	-	-	5	-	8
	D	6	6	5	-	5	-
	E	-	-	-	6	-	-
	F	6	6	6	-	-	-

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1	-	0	10
	2	2	-	10
	3	6	6	-

Full Input Data And Results

Give-Way Lane Input Data

Junction: Charlotte Avenue											
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 (B4100 North)	6/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Charlotte Avenue												
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 (B4100 North)	U	A	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 5 Ahead	Inf
1/2 (B4100 North)	O	A B	2	3	6.0	Geom	-	3.70	0.00	Y	Arm 6 Right	8.00
2/1 (B100 South)	U	C	2	3	35.7	Geom	-	5.00	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	18.00
3/1 (Charlotte Ave)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	12.00
											Arm 5 Right	13.00
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: '2031 + Dev AM Peak'	08:00	09:00	01:00	
2: '2031 + Dev PM Peak'	17:00	18:00	01:00	
3: '2031 Sensitivity Test 1 AM Peak'	08:00	09:00	01:00	
4: '2031 Sensitivity Test 1 PM Peak'	17:00	18:00	01:00	
5: '2031 Sensitivity Test 2 AM Peak'	08:00	09:00	01:00	
6: '2031 Sensitivity Test 2 PM Peak'	17:00	18:00	01:00	

Scenario 1: '2031 + Dev AM Peak' (FG1: '2031 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	1224	45	1269
	B	689	0	350	1039
	C	15	227	0	242
	Tot.	704	1451	395	2550

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2031 + Dev AM Peak
Junction: Charlotte Avenue	
1/1 (with short)	1269(In) 1224(Out)
1/2 (short)	45
2/1	1039
3/1	242
4/1	704
5/1	1451
6/1	395

Lane Saturation Flows

Junction: Charlotte Avenue								
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 (B4100 North)	3.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1995	1995
1/2 (B4100 North)	3.70	0.00	Y	Arm 6 Right	8.00	100.0 %	1672	1672
2/1 (B100 South)	5.00	0.00	Y	Arm 4 Ahead	Inf	66.3 %	2057	2057
				Arm 6 Left	18.00	33.7 %		
3/1 (Charlotte Ave)	3.50	0.00	Y	Arm 4 Left	12.00	6.2 %	1761	1761
				Arm 5 Right	13.00	93.8 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2031 + Dev PM Peak' (FG2: '2031 + Dev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	982	14	996
	B	1003	0	225	1228
	C	10	190	0	200
	Tot.	1013	1172	239	2424

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2031 + Dev PM Peak
Junction: Charlotte Avenue	
1/1 (with short)	996(In) 982(Out)
1/2 (short)	14
2/1	1228
3/1	200
4/1	1013
5/1	1172
6/1	239

Lane Saturation Flows

Junction: Charlotte Avenue								
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 (B4100 North)	3.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1995	1995
1/2 (B4100 North)	3.70	0.00	Y	Arm 6 Right	8.00	100.0 %	1672	1672
2/1 (B100 South)	5.00	0.00	Y	Arm 4 Ahead	Inf	81.7 %	2083	2083
				Arm 6 Left	18.00	18.3 %		
3/1 (Charlotte Ave)	3.50	0.00	Y	Arm 4 Left	12.00	5.0 %	1761	1761
				Arm 5 Right	13.00	95.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2031 Sensitivity Test 1 AM Peak' (FG3: '2031 Sensitivity Test 1 AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	1254	46	1300
	B	700	0	356	1056
	C	18	244	0	262
	Tot.	718	1498	402	2618

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2031 Sensitivity Test 1 AM Peak
Junction: Charlotte Avenue	
1/1 (with short)	1300(In) 1254(Out)
1/2 (short)	46
2/1	1056
3/1	262
4/1	718
5/1	1498
6/1	402

Lane Saturation Flows

Junction: Charlotte Avenue								
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 (B4100 North)	3.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1995	1995
1/2 (B4100 North)	3.70	0.00	Y	Arm 6 Right	8.00	100.0 %	1672	1672
2/1 (B100 South)	5.00	0.00	Y	Arm 4 Ahead	Inf	66.3 %	2057	2057
				Arm 6 Left	18.00	33.7 %		
3/1 (Charlotte Ave)	3.50	0.00	Y	Arm 4 Left	12.00	6.9 %	1761	1761
				Arm 5 Right	13.00	93.1 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2031 Sensitivity Test 1 PM Peak' (FG4: '2031 Sensitivity Test 1 PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
	A	B	C	Tot.	
Origin	A	0	997	17	1014
	B	1024	0	238	1262
	C	12	199	0	211
	Tot.	1036	1196	255	2487

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2031 Sensitivity Test 1 PM Peak
Junction: Charlotte Avenue	
1/1 (with short)	1014(In) 997(Out)
1/2 (short)	17
2/1	1262
3/1	211
4/1	1036
5/1	1196
6/1	255

Lane Saturation Flows

Junction: Charlotte Avenue								
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 (B4100 North)	3.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1995	1995
1/2 (B4100 North)	3.70	0.00	Y	Arm 6 Right	8.00	100.0 %	1672	1672
2/1 (B100 South)	5.00	0.00	Y	Arm 4 Ahead	Inf	81.1 %	2082	2082
				Arm 6 Left	18.00	18.9 %		
3/1 (Charlotte Ave)	3.50	0.00	Y	Arm 4 Left	12.00	5.7 %	1761	1761
				Arm 5 Right	13.00	94.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2031 Sensitivity Test 2 AM Peak' (FG5: '2031 Sensitivity Test 2 AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	1225	45	1270
	B	690	0	350	1040
	C	15	227	0	242
	Tot.	705	1452	395	2552

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2031 Sensitivity Test 2 AM Peak
Junction: Charlotte Avenue	
1/1 (with short)	1270(In) 1225(Out)
1/2 (short)	45
2/1	1040
3/1	242
4/1	705
5/1	1452
6/1	395

Lane Saturation Flows

Junction: Charlotte Avenue								
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 (B4100 North)	3.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1995	1995
1/2 (B4100 North)	3.70	0.00	Y	Arm 6 Right	8.00	100.0 %	1672	1672
2/1 (B100 South)	5.00	0.00	Y	Arm 4 Ahead	Inf	66.3 %	2057	2057
				Arm 6 Left	18.00	33.7 %		
3/1 (Charlotte Ave)	3.50	0.00	Y	Arm 4 Left	12.00	6.2 %	1761	1761
				Arm 5 Right	13.00	93.8 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2031 Sensitivity Test 2 PM Peak' (FG6: '2031 Sensitivity Test 2 PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	982	14	996
	B	1003	0	226	1229
	C	10	190	0	200
	Tot.	1013	1172	240	2425

Full Input Data And Results

Traffic Lane Flows

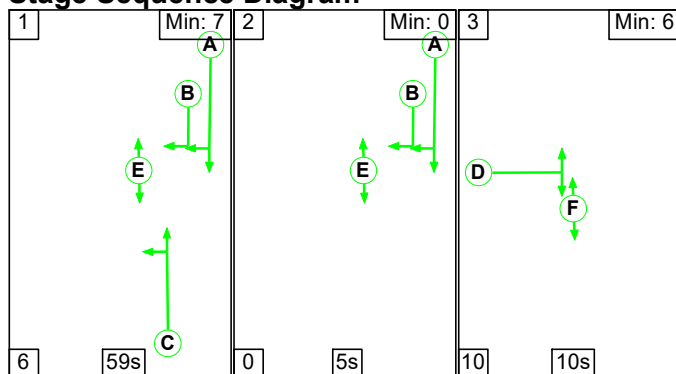
Lane	Scenario 6: 2031 Sensitivity Test 2 PM Peak
Junction: Charlotte Avenue	
1/1 (with short)	996(In) 982(Out)
1/2 (short)	14
2/1	1229
3/1	200
4/1	1013
5/1	1172
6/1	240

Lane Saturation Flows

Junction: Charlotte Avenue								
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 (B4100 North)	3.80	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1995	1995
1/2 (B4100 North)	3.70	0.00	Y	Arm 6 Right	8.00	100.0 %	1672	1672
2/1 (B100 South)	5.00	0.00	Y	Arm 4 Ahead	Inf	81.6 %	2083	2083
				Arm 6 Left	18.00	18.4 %		
3/1 (Charlotte Ave)	3.50	0.00	Y	Arm 4 Left	12.00	5.0 %	1761	1761
				Arm 5 Right	13.00	95.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2031 + Dev AM Peak' (FG1: '2031 + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

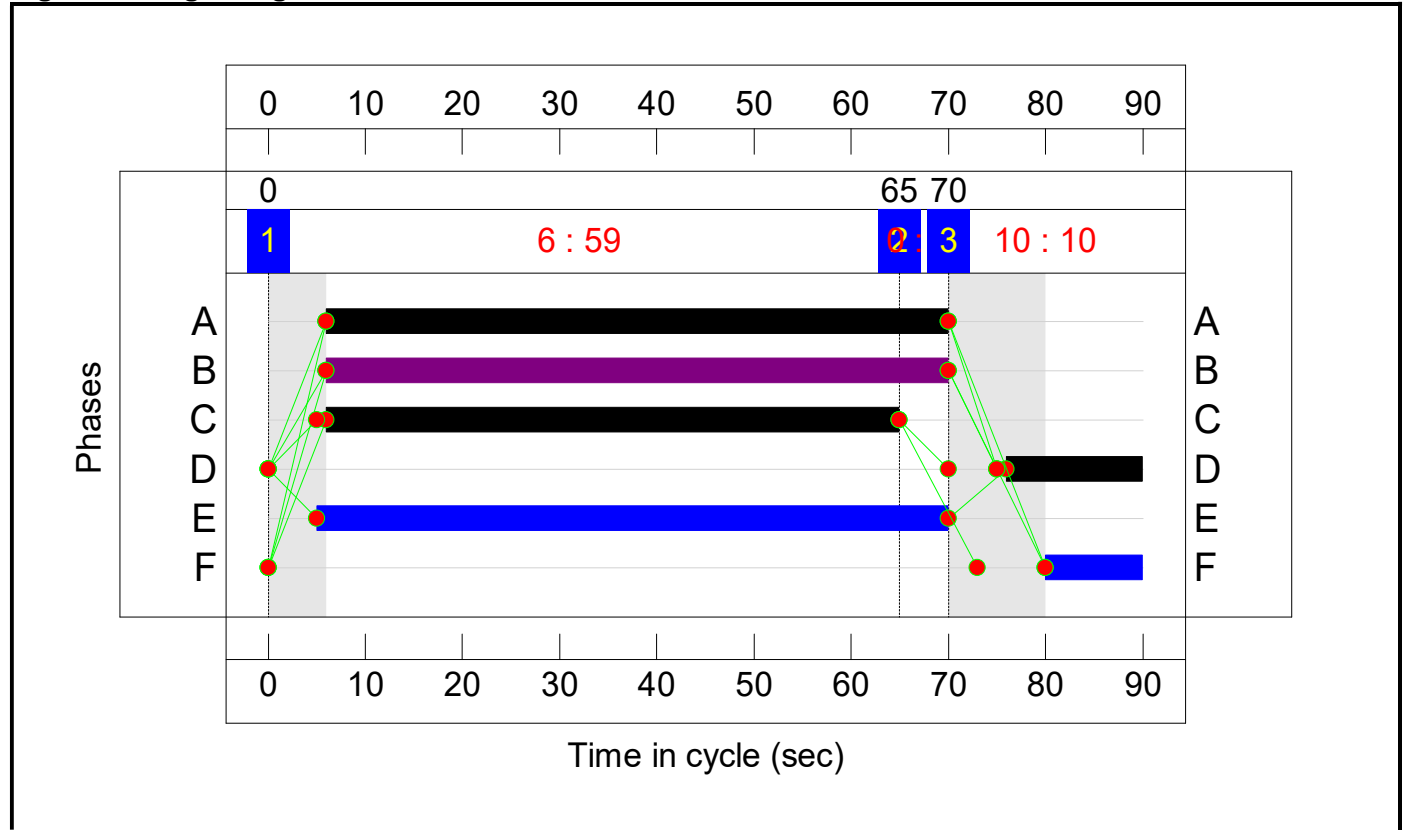


Full Input Data And Results

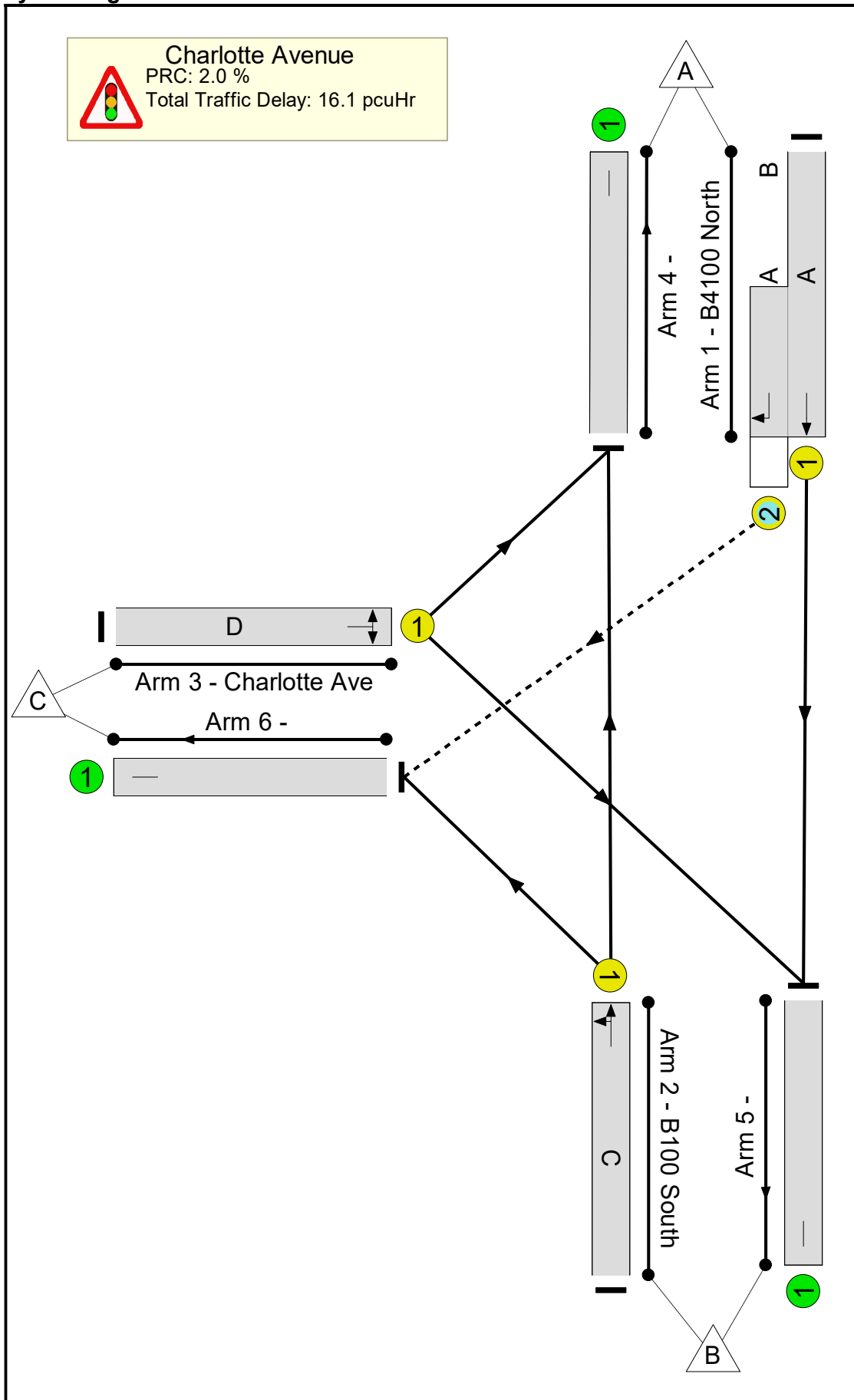
Stage Timings

Stage	1	2	3
Duration	59	5	10
Change Point	0	65	70

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

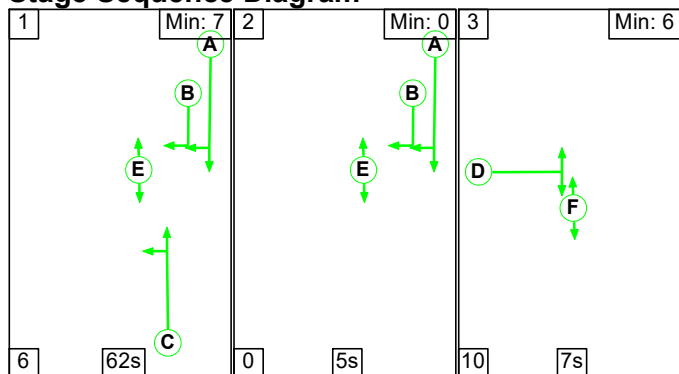
Network Results

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	-	-		-	-	-	-	-	-	88.3%
Charlotte Avenue	-	-	N/A	-	-		-	-	-	-	-	-	88.3%
1/1+1/2	B4100 North Ahead Right	U+O	N/A	N/A	A	B	1	64	64	1269	1995:1672	1387+51	88.3 : 88.3%
2/1	B100 South Ahead Left	U	N/A	N/A	C		1	59	-	1039	2057	1371	75.8%
3/1	Charlotte Ave Left Right	U	N/A	N/A	D		1	14	-	242	1761	294	82.5%
4/1		U	N/A	N/A	-		-	-	-	704	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1451	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	395	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	-	-	43	2	1	8.7	7.3	0.1	16.1	-	-	-	-
Charlotte Avenue	-	-	43	2	1	8.7	7.3	0.1	16.1	-	-	-	-
1/1+1/2	1269	1269	43	2	1	3.3	3.6	0.1	7.1	20.1	23.7	3.6	27.4
2/1	1039	1039	-	-	-	2.9	1.5	-	4.5	15.5	17.3	1.5	18.9
3/1	242	242	-	-	-	2.4	2.2	-	4.6	68.5	5.8	2.2	7.9
4/1	704	704	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1451	1451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	395	395	-	-	-	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):			16.14	Cycle Time (s): 90			
			PRC Over All Lanes (%):		2.0	Total Delay Over All Lanes(pcuHr):			16.14				

Full Input Data And Results

Scenario 2: '2031 + Dev PM Peak' (FG2: '2031 + Dev PM Peak', Plan 1: 'Network Control Plan 1')

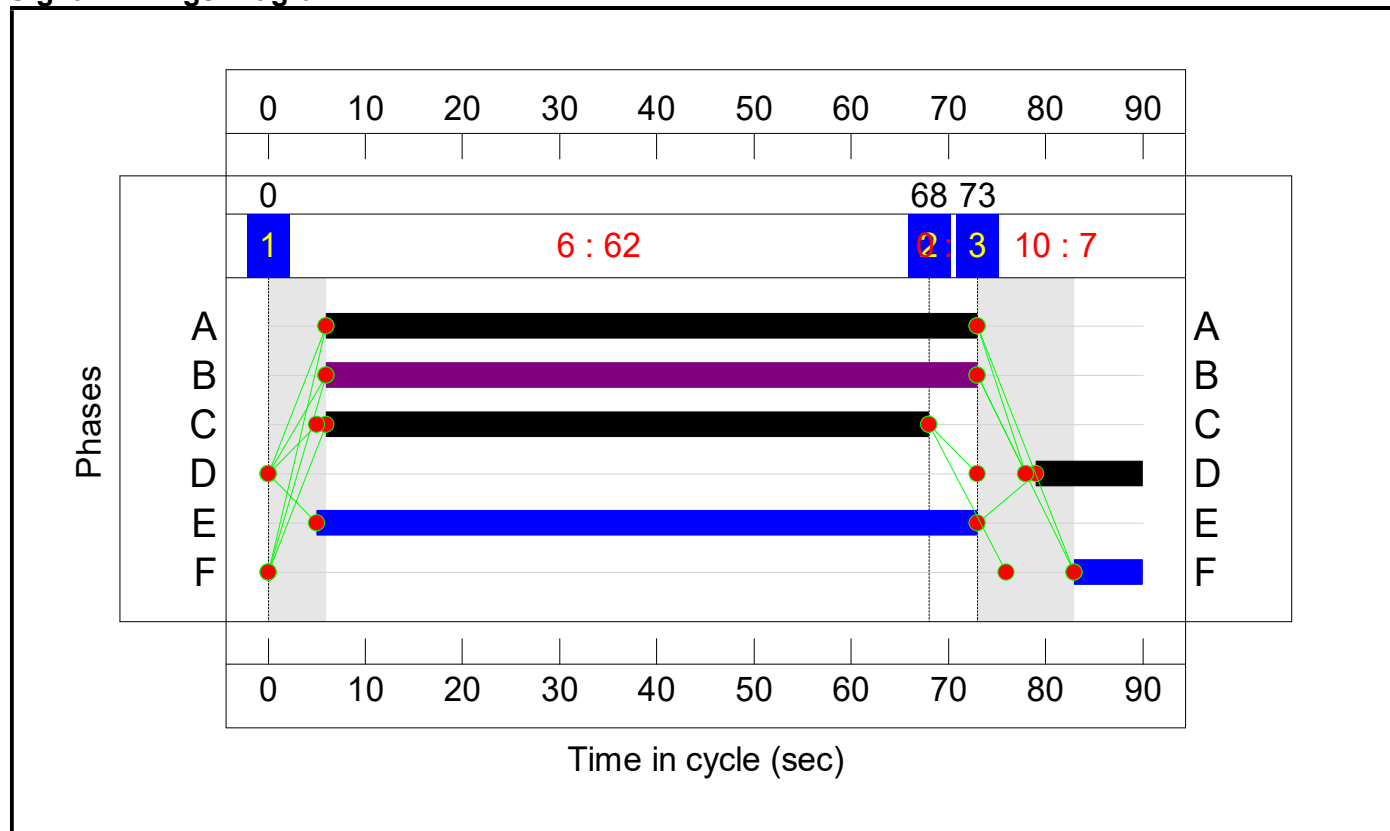
Stage Sequence Diagram



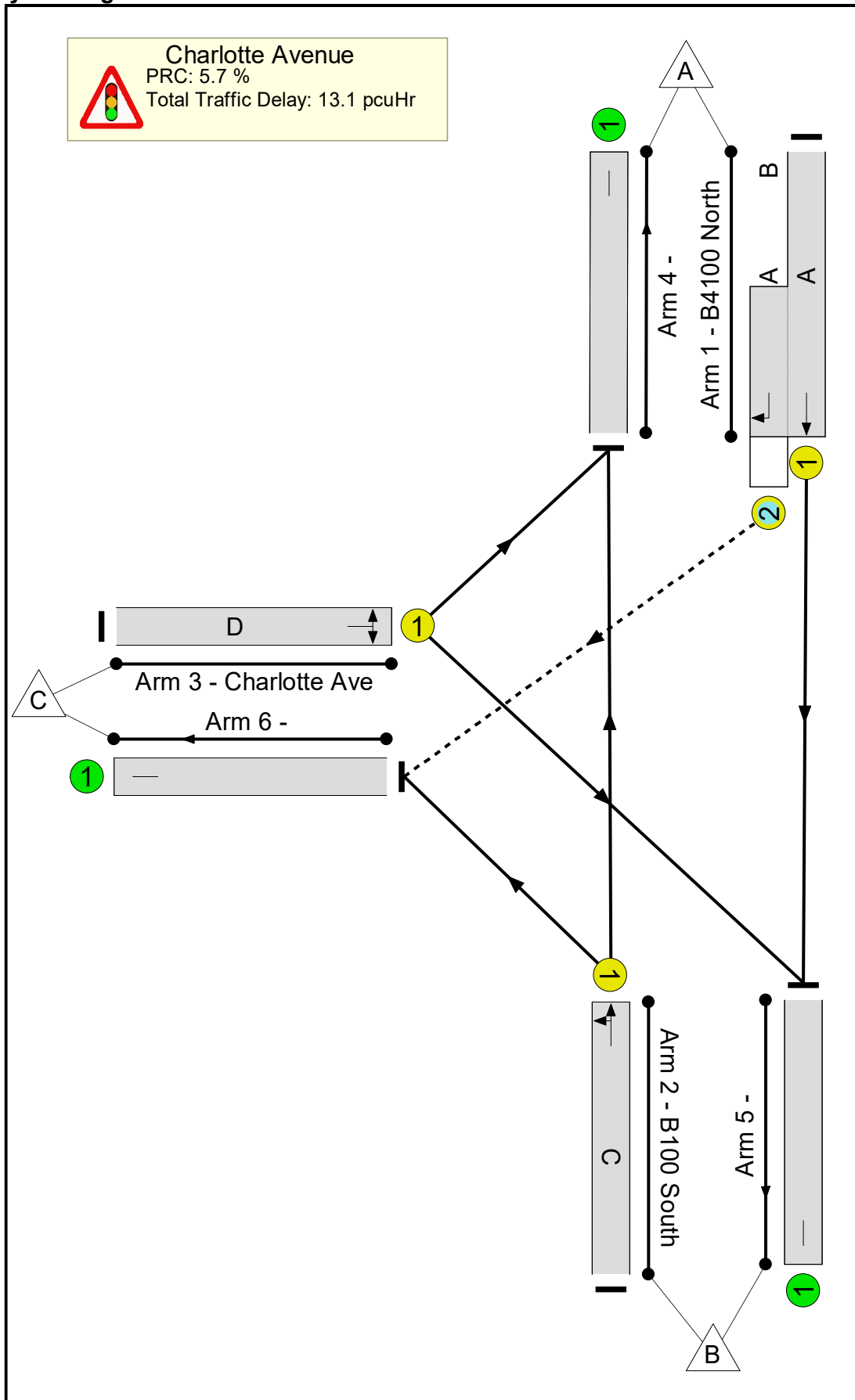
Stage Timings

Stage	1	2	3
Duration	62	5	7
Change Point	0	68	73

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

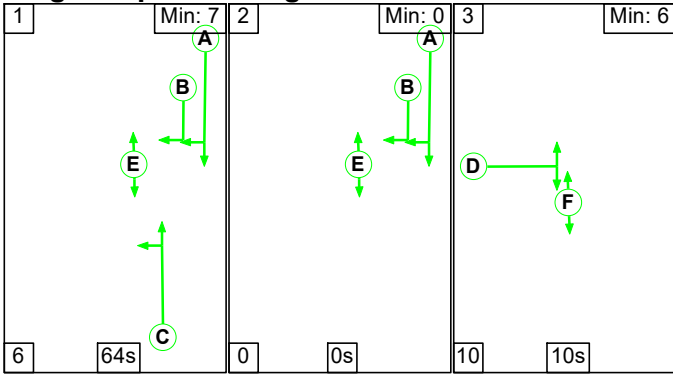
Network Results

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	-	-		-	-	-	-	-	-	85.2%
Charlotte Avenue	-	-	N/A	-	-		-	-	-	-	-	-	85.2%
1/1+1/2	B4100 North Ahead Right	U+O	N/A	N/A	A	B	1	67	67	996	1995:1672	1482+21	66.2 : 66.2%
2/1	B100 South Ahead Left	U	N/A	N/A	C		1	62	-	1228	2083	1458	84.2%
3/1	Charlotte Ave Left Right	U	N/A	N/A	D		1	11	-	200	1761	235	85.2%
4/1		U	N/A	N/A	-		-	-	-	1013	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1172	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	239	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	-	-	13	0	0	7.0	6.1	0.1	13.1	-	-	-	-
Charlotte Avenue	-	-	13	0	0	7.0	6.1	0.1	13.1	-	-	-	-
1/1+1/2	996	996	13	0	0	1.5	1.0	0.1	2.5	9.2	12.1	1.0	13.1
2/1	1228	1228	-	-	-	3.4	2.6	-	6.0	17.5	22.2	2.6	24.8
3/1	200	200	-	-	-	2.1	2.5	-	4.6	83.3	4.8	2.5	7.3
4/1	1013	1013	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1172	1172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	239	239	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		5.7	Total Delay for Signalled Lanes (pcuHr):			13.14	Cycle Time (s): 90			
			PRC Over All Lanes (%):		5.7	Total Delay Over All Lanes(pcuHr):			13.14				

Full Input Data And Results

Scenario 3: '2031 Sensitivity Test 1 AM Peak' (FG3: '2031 Sensitivity Test 1 AM Peak', Plan 1: 'Network Control Plan 1')

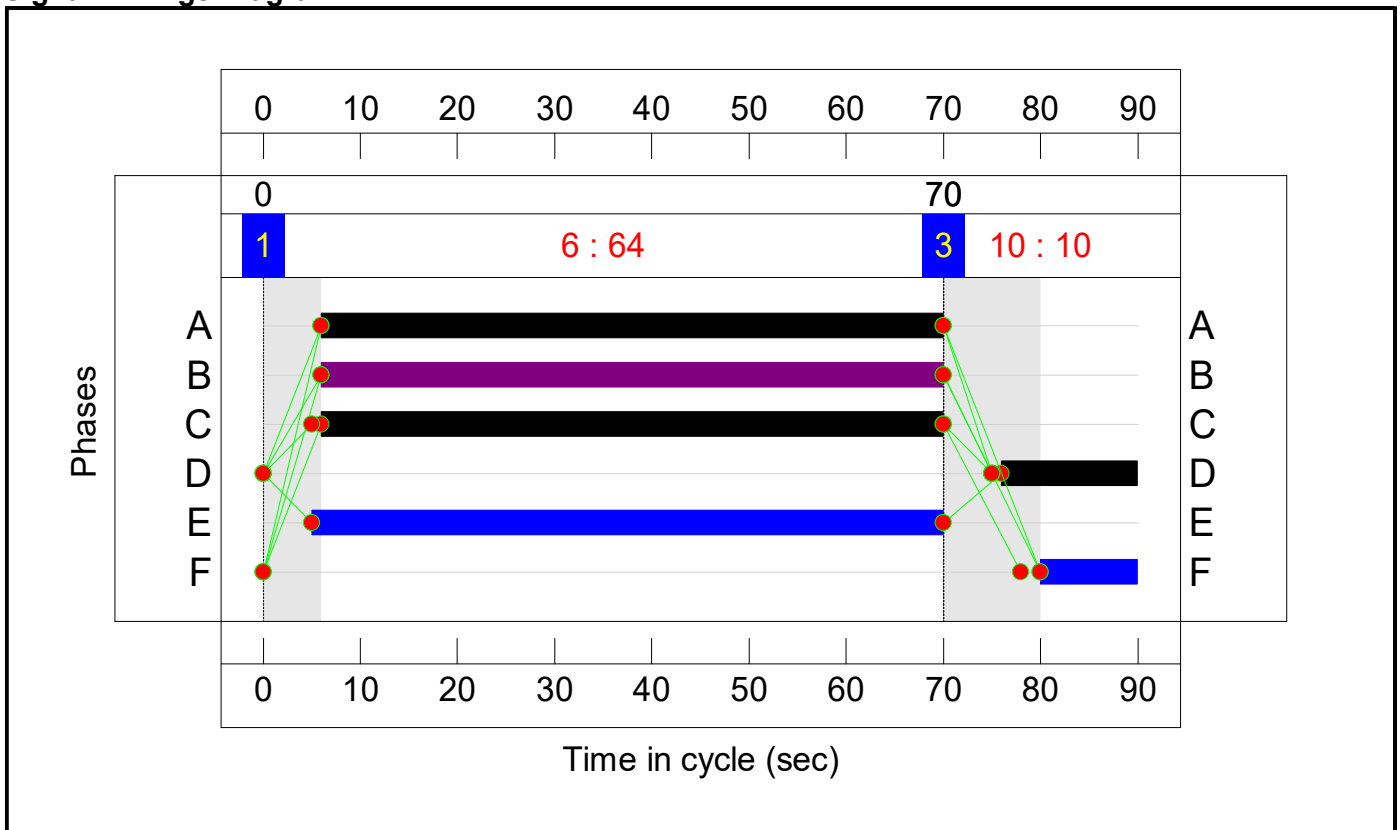
Stage Sequence Diagram



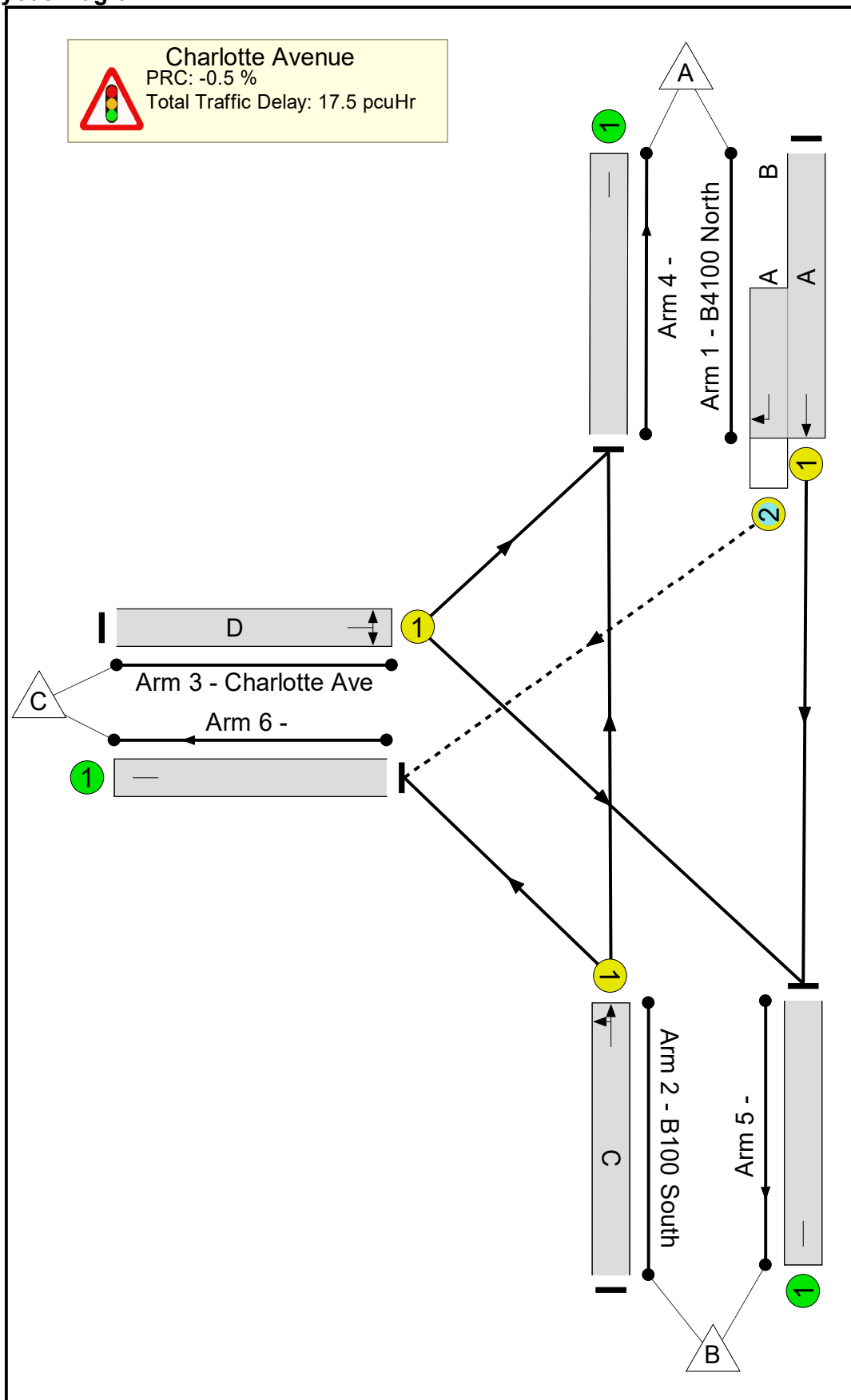
Stage Timings

Stage	1	2	3
Duration	64	0	10
Change Point	0	70	70

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

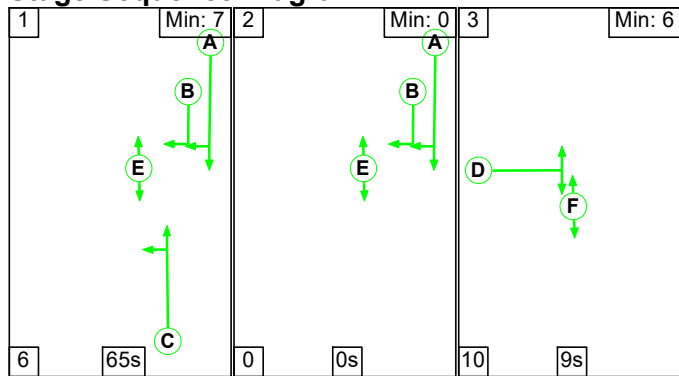
Network Results

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	-	-		-	-	-	-	-	-	90.4%
Charlotte Avenue	-	-	N/A	-	-		-	-	-	-	-	-	90.4%
1/1+1/2	B4100 North Ahead Right	U+O	N/A	N/A	A	B	1	64	64	1300	1995:1672	1387+51	90.4 : 90.4%
2/1	B100 South Ahead Left	U	N/A	N/A	C		1	64	-	1056	2057	1486	71.1%
3/1	Charlotte Ave Left Right	U	N/A	N/A	D		1	14	-	262	1761	294	89.3%
4/1		U	N/A	N/A	-		-	-	-	718	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1498	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	402	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	-	-	46	0	0	8.3	9.1	0.1	17.5	-	-	-	-
Charlotte Avenue	-	-	46	0	0	8.3	9.1	0.1	17.5	-	-	-	-
1/1+1/2	1300	1300	46	0	0	3.6	4.4	0.1	8.1	22.5	25.4	4.4	29.9
2/1	1056	1056	-	-	-	2.1	1.2	-	3.3	11.3	15.0	1.2	16.2
3/1	262	262	-	-	-	2.7	3.4	-	6.1	83.7	6.4	3.4	9.8
4/1	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1498	1498	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	402	402	-	-	-	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):			17.51	Cycle Time (s): 90			
			PRC Over All Lanes (%):		-0.5	Total Delay Over All Lanes(pcuHr):			17.51				

Full Input Data And Results

Scenario 4: '2031 Sensitivity Test 1 PM Peak' (FG4: '2031 Sensitivity Test 1 PM Peak', Plan 1: 'Network Control Plan 1')

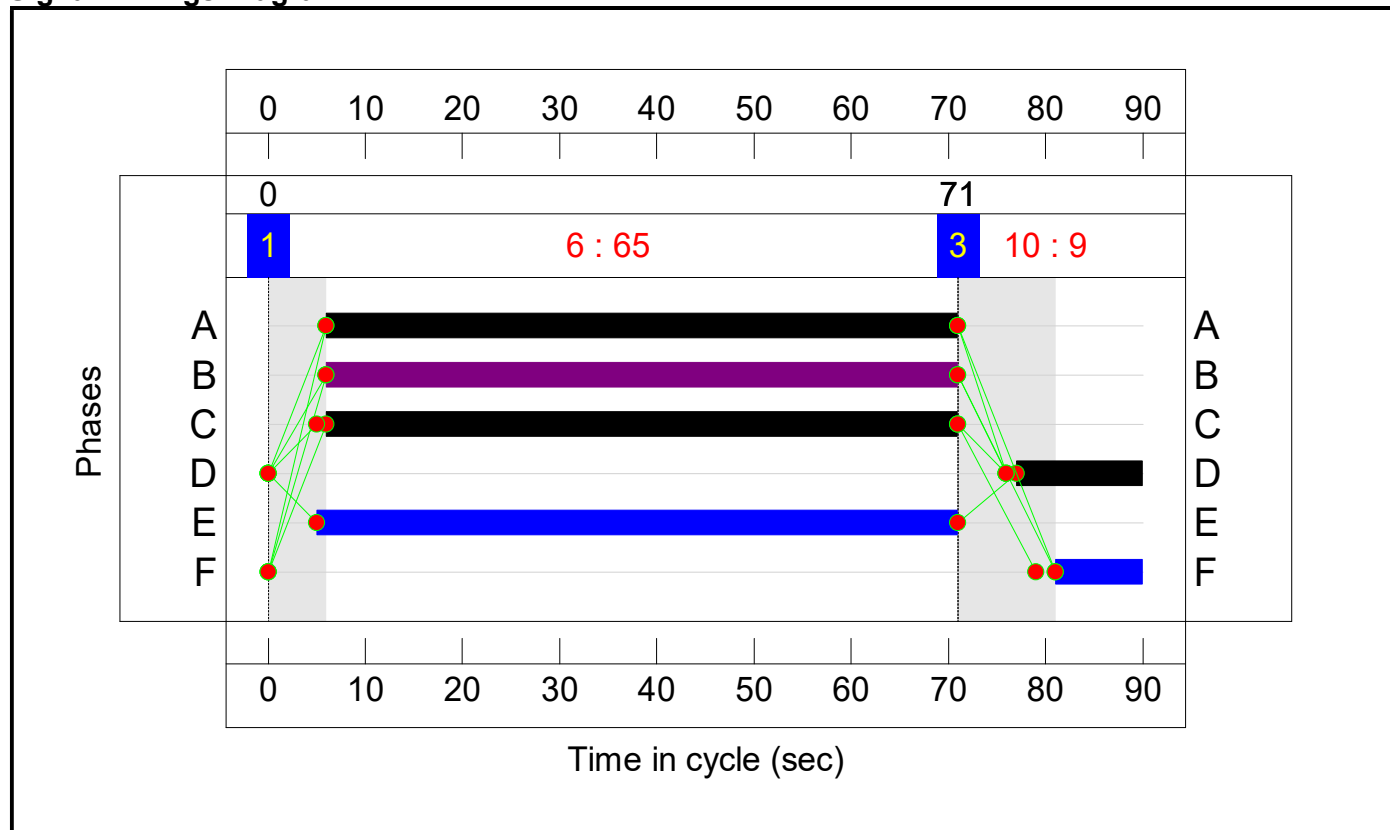
Stage Sequence Diagram



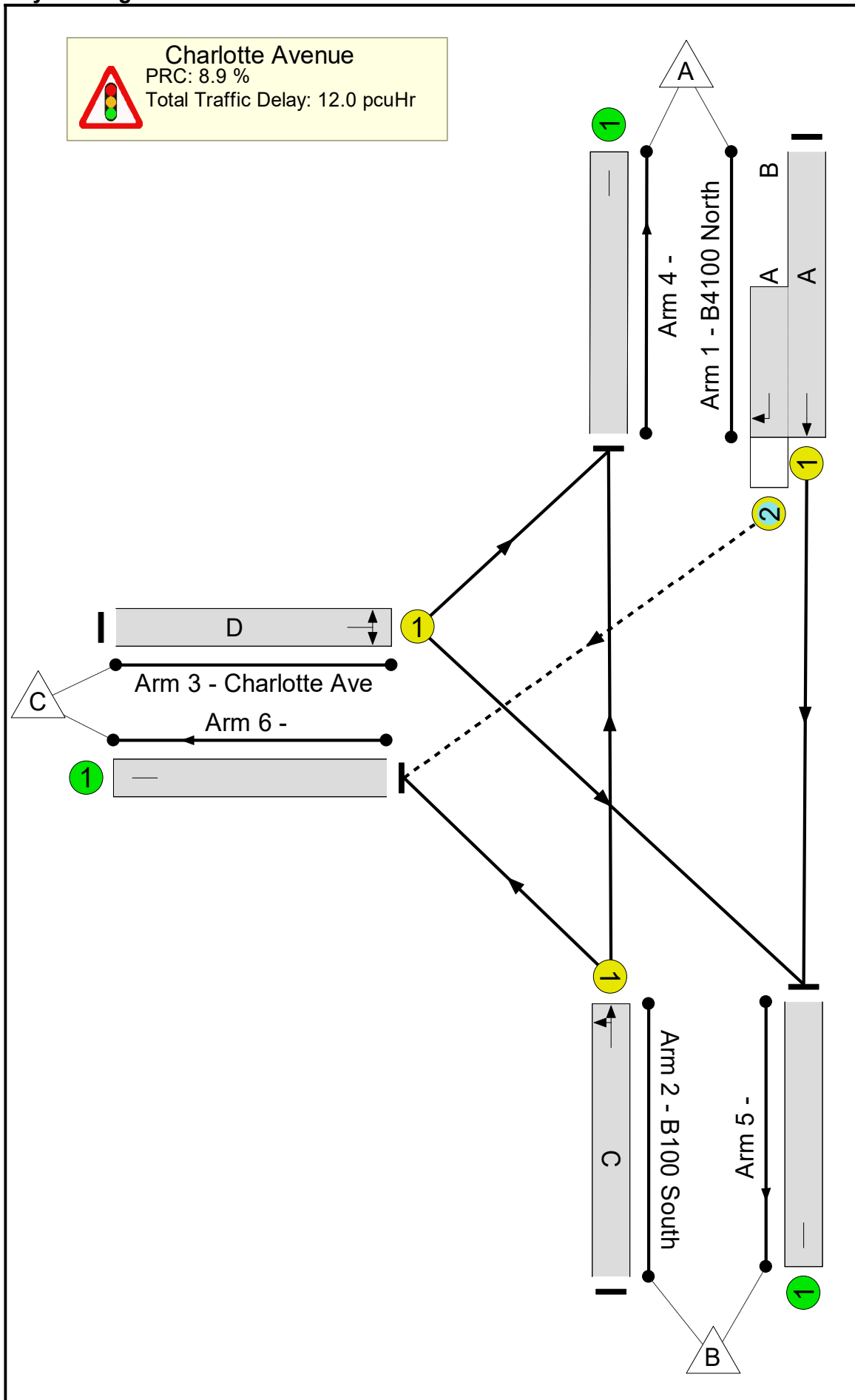
Stage Timings

Stage	1	2	3
Duration	65	0	9
Change Point	0	71	71

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

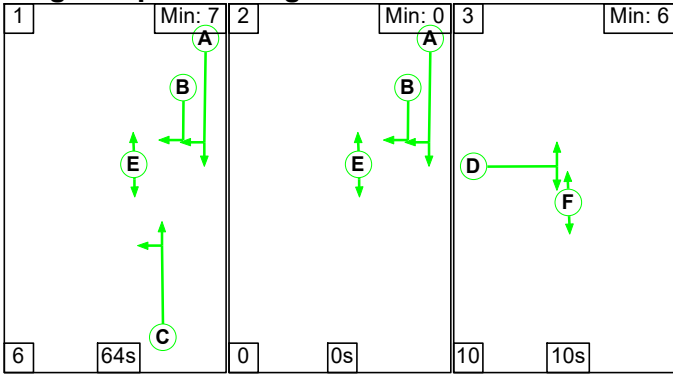
Network Results

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	-	-		-	-	-	-	-	-	82.7%
Charlotte Avenue	-	-	N/A	-	-		-	-	-	-	-	-	82.7%
1/1+1/2	B4100 North Ahead Right	U+O	N/A	N/A	A	B	1	65	65	1014	1995:1672	1435+24	69.5 : 69.5%
2/1	B100 South Ahead Left	U	N/A	N/A	C		1	65	-	1262	2082	1527	82.7%
3/1	Charlotte Ave Left Right	U	N/A	N/A	D		1	13	-	211	1761	274	77.0%
4/1		U	N/A	N/A	-		-	-	-	1036	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1196	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	255	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	-	-	17	0	0	6.8	5.1	0.1	12.0	-	-	-	-
Charlotte Avenue	-	-	17	0	0	6.8	5.1	0.1	12.0	-	-	-	-
1/1+1/2	1014	1014	17	0	0	1.8	1.1	0.1	3.1	10.9	13.4	1.1	14.6
2/1	1262	1262	-	-	-	2.8	2.3	-	5.2	14.8	21.0	2.3	23.4
3/1	211	211	-	-	-	2.1	1.6	-	3.7	63.7	5.0	1.6	6.6
4/1	1036	1036	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1196	1196	-	-	-	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
C1			PRC for Signalled Lanes (%):		8.9	Total Delay for Signalled Lanes (pcuHr):		11.99	Cycle Time (s):		90		
			PRC Over All Lanes (%):		8.9	Total Delay Over All Lanes(pcuHr):		11.99					

Full Input Data And Results

Scenario 5: '2031 Sensitivity Test 2 AM Peak' (FG5: '2031 Sensitivity Test 2 AM Peak', Plan 1: 'Network Control Plan 1')

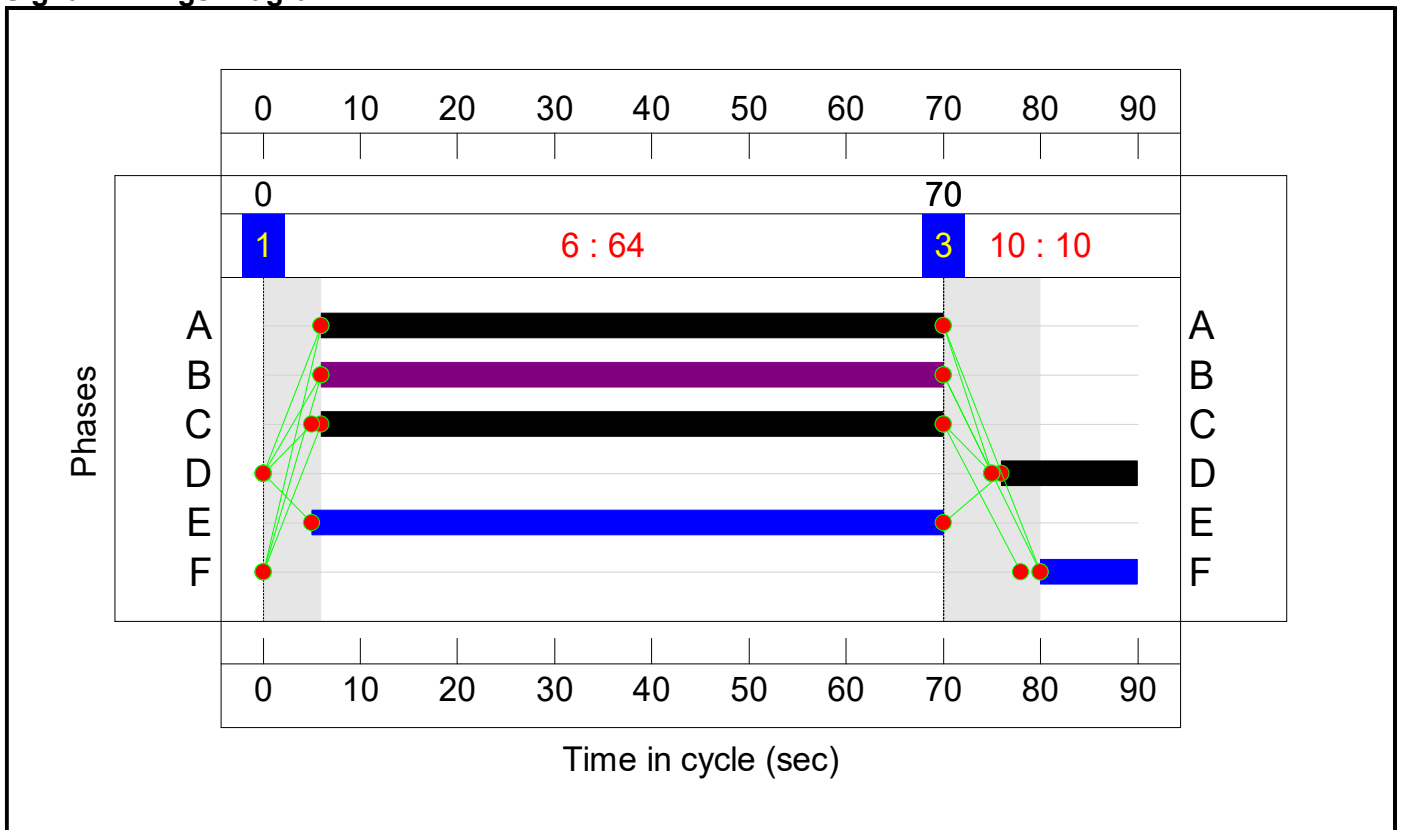
Stage Sequence Diagram



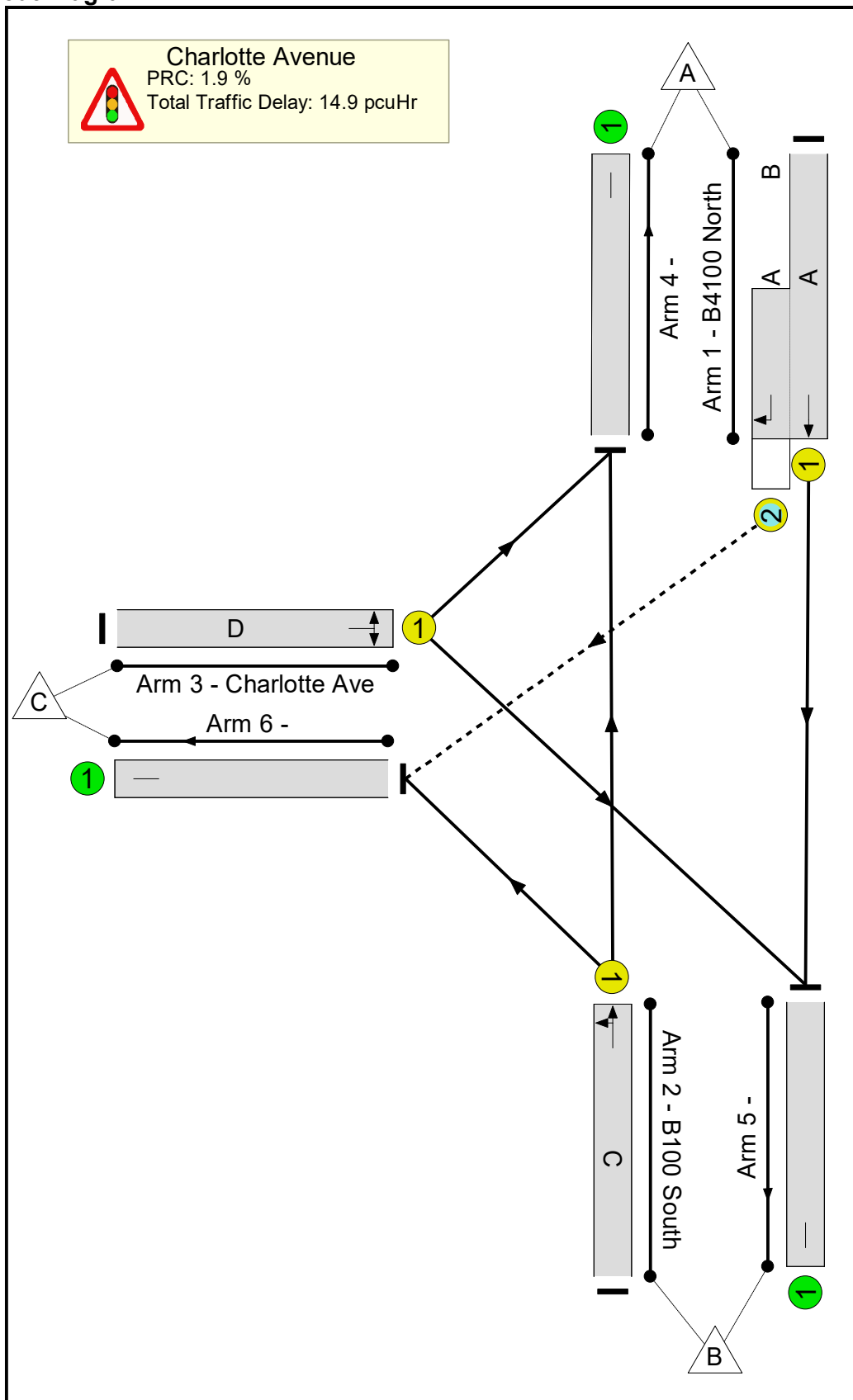
Stage Timings

Stage	1	2	3
Duration	64	0	10
Change Point	0	70	70

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

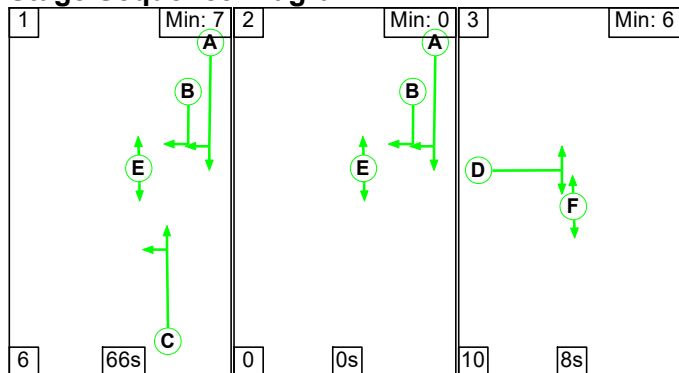
Network Results

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	-	-		-	-	-	-	-	-	88.3%
Charlotte Avenue	-	-	N/A	-	-		-	-	-	-	-	-	88.3%
1/1+1/2	B4100 North Ahead Right	U+O	N/A	N/A	A	B	1	64	64	1270	1995:1672	1387+51	88.3 : 88.3%
2/1	B100 South Ahead Left	U	N/A	N/A	C		1	64	-	1040	2057	1486	70.0%
3/1	Charlotte Ave Left Right	U	N/A	N/A	D		1	14	-	242	1761	294	82.5%
4/1		U	N/A	N/A	-		-	-	-	705	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1452	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	395	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	-	-	45	0	0	7.8	7.0	0.1	14.9	-	-	-	-
Charlotte Avenue	-	-	45	0	0	7.8	7.0	0.1	14.9	-	-	-	-
1/1+1/2	1270	1270	45	0	0	3.3	3.6	0.1	7.1	20.0	23.8	3.6	27.4
2/1	1040	1040	-	-	-	2.0	1.2	-	3.2	11.0	14.4	1.2	15.6
3/1	242	242	-	-	-	2.4	2.2	-	4.6	68.5	5.8	2.2	7.9
4/1	705	705	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1452	1452	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		1.9	Total Delay for Signalled Lanes (pcuHr):			14.86	Cycle Time (s): 90			
			PRC Over All Lanes (%):		1.9	Total Delay Over All Lanes(pcuHr):			14.86				

Full Input Data And Results

Scenario 6: '2031 Sensitivity Test 2 PM Peak' (FG6: '2031 Sensitivity Test 2 PM Peak', Plan 1: 'Network Control Plan 1')

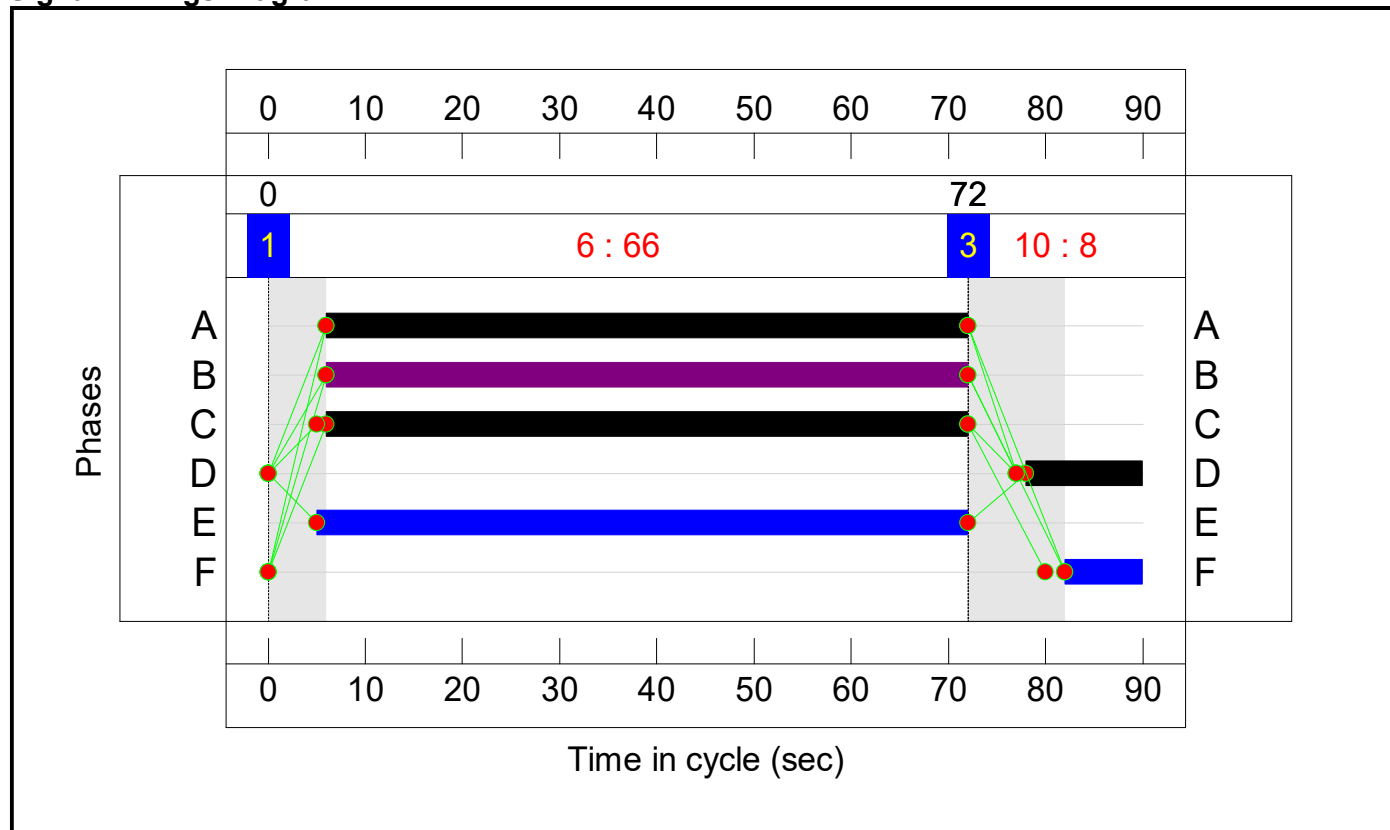
Stage Sequence Diagram



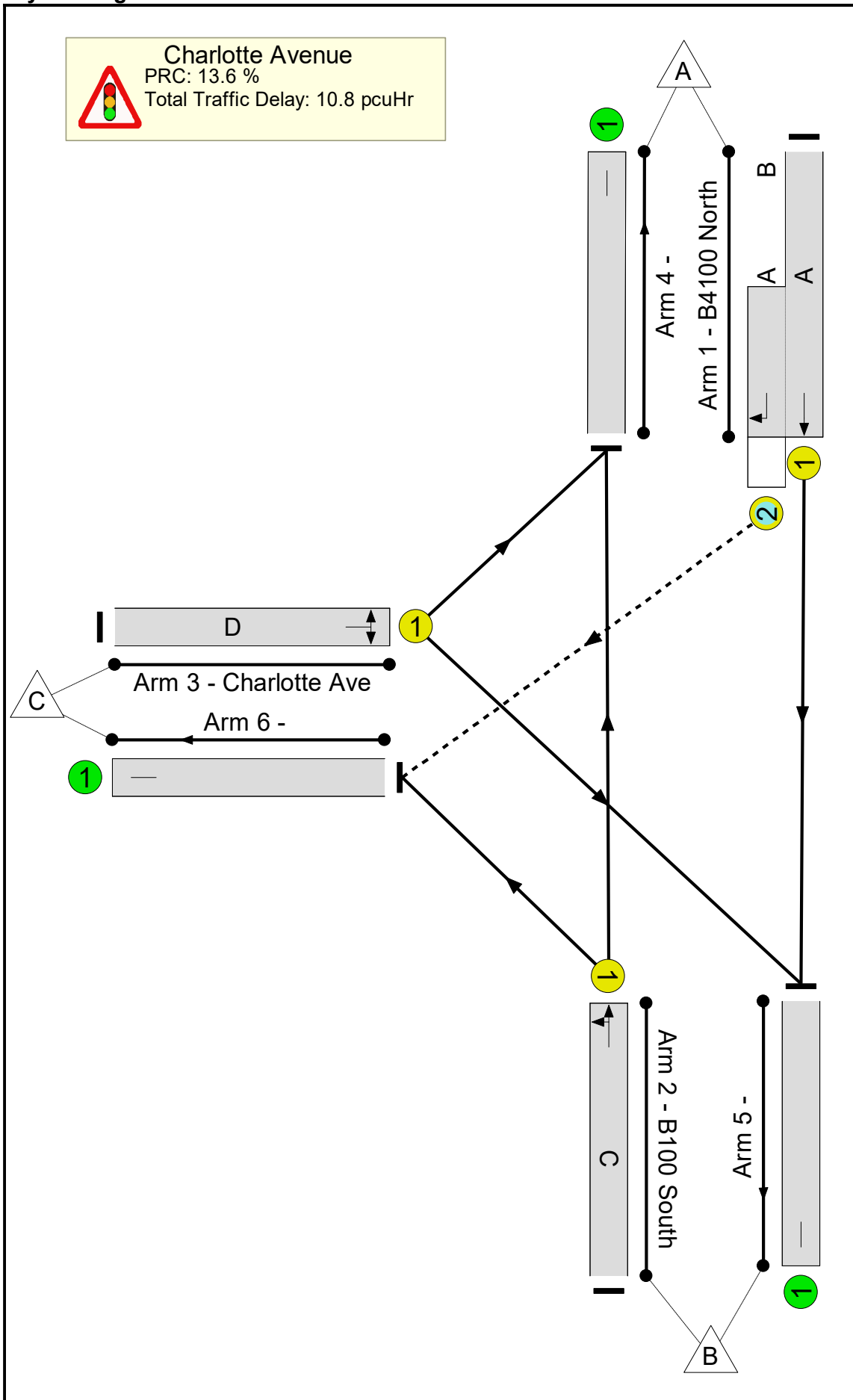
Stage Timings

Stage	1	2	3
Duration	66	0	8
Change Point	0	72	72

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	-	-		-	-	-	-	-	-	79.3%
Charlotte Avenue	-	-	N/A	-	-		-	-	-	-	-	-	79.3%
1/1+1/2	B4100 North Ahead Right	U+O	N/A	N/A	A	B	1	66	66	996	1995:1672	1461+21	67.2 : 67.2%
2/1	B100 South Ahead Left	U	N/A	N/A	C		1	66	-	1229	2083	1551	79.3%
3/1	Charlotte Ave Left Right	U	N/A	N/A	D		1	12	-	200	1761	254	78.6%
4/1		U	N/A	N/A	-		-	-	-	1013	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1172	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	240	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	-	-	14	0	0	6.1	4.6	0.1	10.8	-	-	-	-
Charlotte Avenue	-	-	14	0	0	6.1	4.6	0.1	10.8	-	-	-	-
1/1+1/2	996	996	14	0	0	1.6	1.0	0.1	2.7	9.8	12.6	1.0	13.7
2/1	1229	1229	-	-	-	2.4	1.9	-	4.3	12.7	19.1	1.9	21.0
3/1	200	200	-	-	-	2.1	1.7	-	3.8	68.3	4.8	1.7	6.5
4/1	1013	1013	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1172	1172	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		13.6	Total Delay for Signalled Lanes (pcuHr):			10.83	Cycle Time (s): 90			
			PRC Over All Lanes (%):		13.6	Total Delay Over All Lanes(pcuHr):			10.83				