TOBIN

Rooaunalaghta Green Energy Project

Appendix 17-6

LinSig Analysis – R334/Church Road/N84 Signal-Controlled Crossroads

ROOAUNALAGHTA
Green Energy

BUILT ON KNOWLEDGE

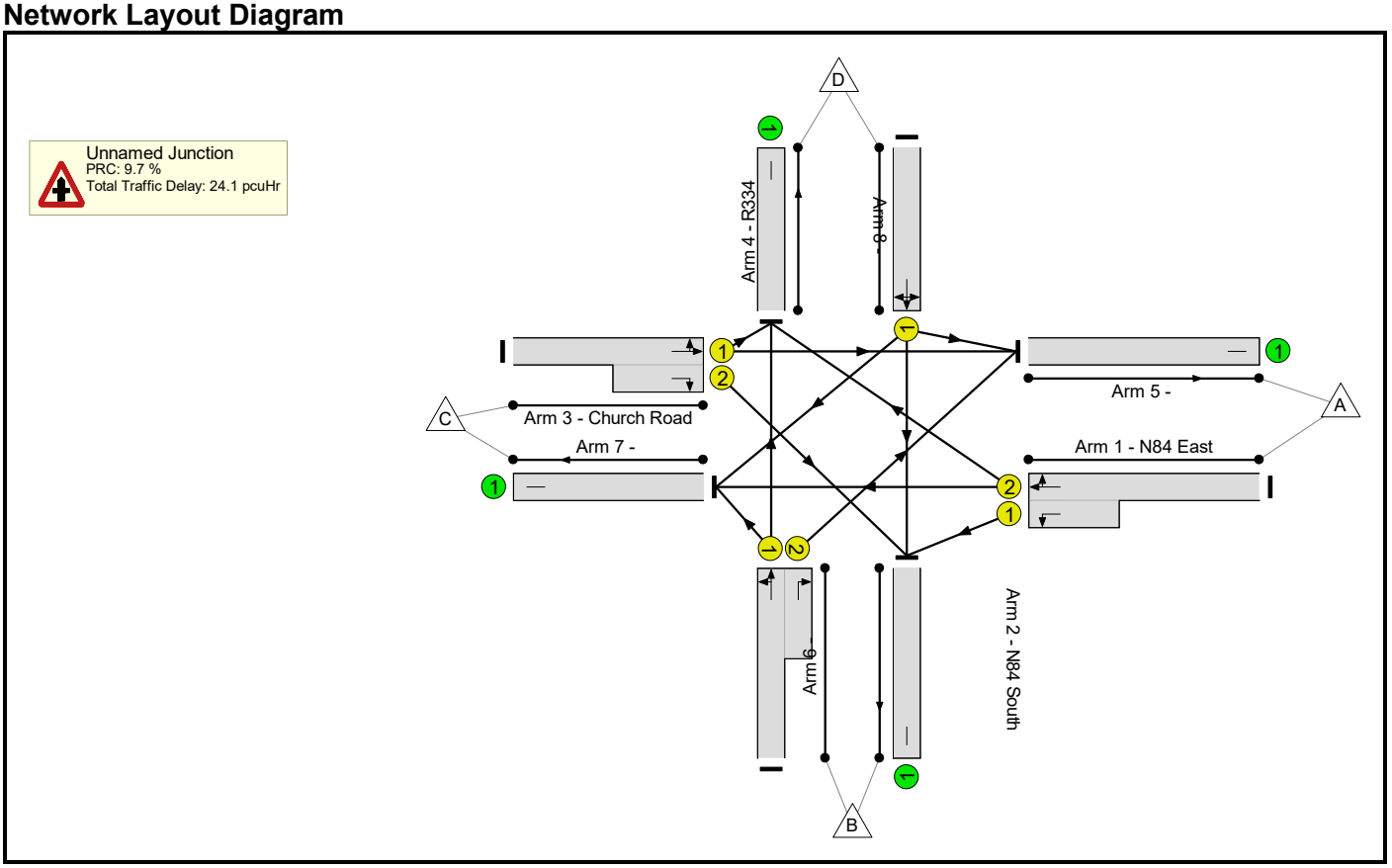
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
File name:	123289 - R334 - Church Rd - N84 Crossroads 2026 04 01.lsg3x
Author:	
Company:	
Address:	
Notes:	

Scenario 1: 'Scenario 1' (FG1: '2025 Survey Year AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**82.0%**	**0**	**0**	**0**	**24.1**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**82.0%**	**0**	**0**	**0**	**24.1**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	19:49		363	1869:1615	445	81.5%	-	-	-	5.6	55.7	8.4
2/1+2/2	N84 South Right Left Ahead	U	F G		1	26		383	1771:1718	477	80.3%	-	-	-	6.4	60.3	11.1
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		304	1822:1758	371	82.0%	-	-	-	6.4	75.6	7.1
4/1	R334 Left Ahead Right	U	C		1	20	-	271	1895	332	81.7%	-	-	-	5.7	75.4	10.7

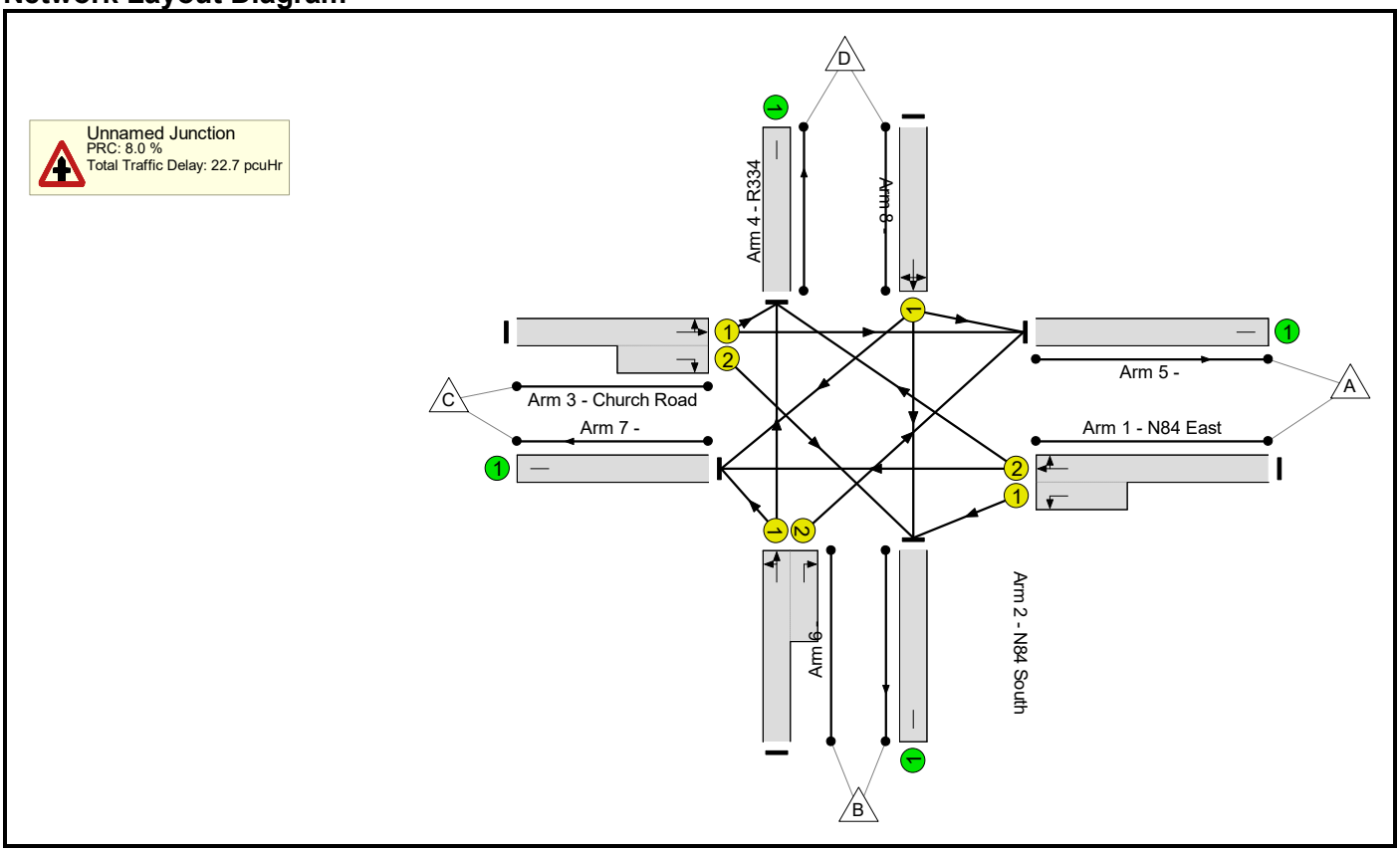
C1 PRC for Signalled Lanes (%): 9.7 Total Delay for Signalled Lanes (pcuHr): 24.10

PRC Over All Lanes (%): 9.7 Total Delay Over All Lanes(pcuHr): 24.10 Cycle Time (s): 120

Basic Results Summary

Scenario 2: 'Scenario 2' (FG2: '2025 Survey Year PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

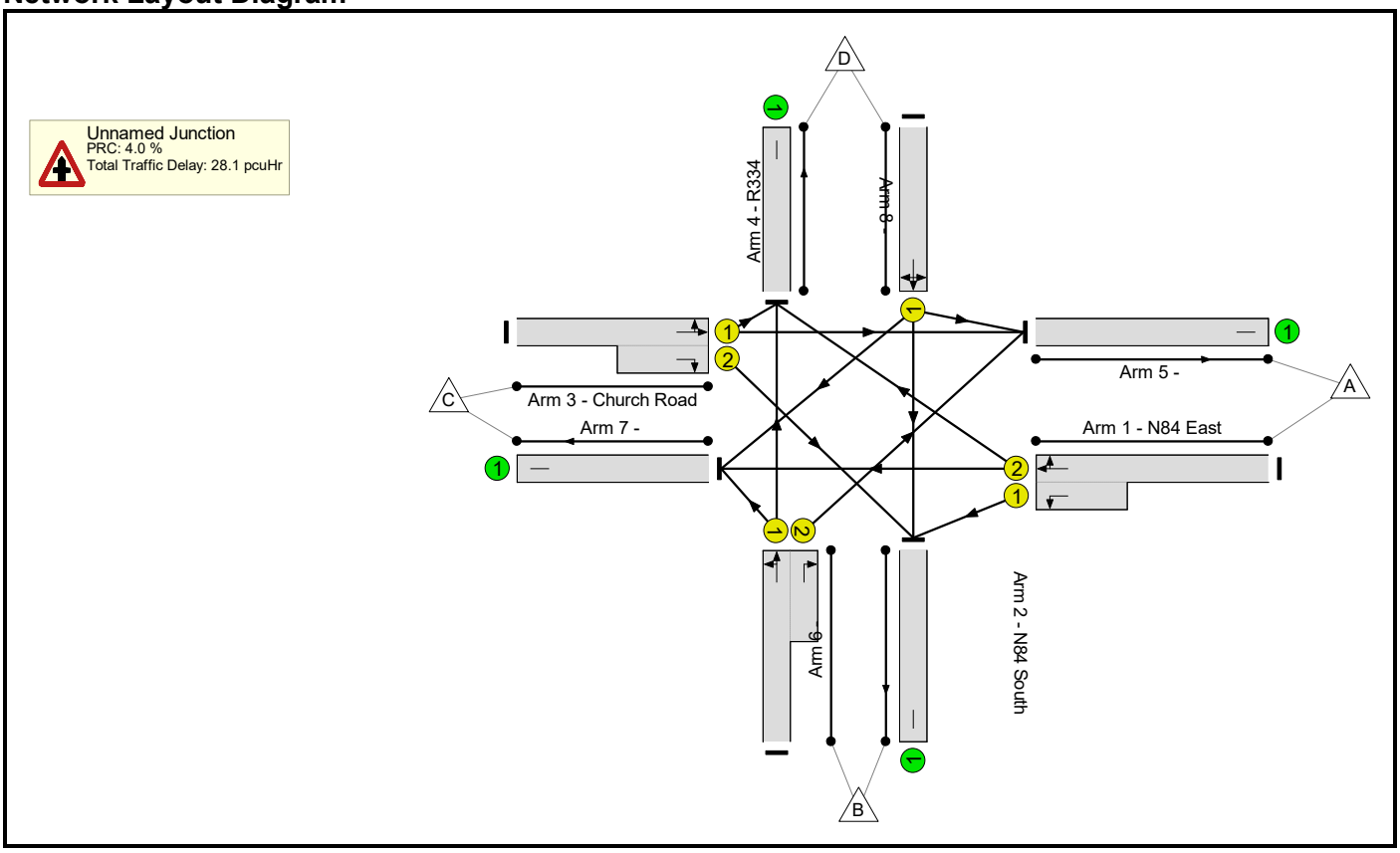
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**83.3%**	**0**	**0**	**0**	**22.7**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**83.3%**	**0**	**0**	**0**	**22.7**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	9:52		251	1841:1615	301	83.3%	-	-	-	4.9	70.0	6.4
2/1+2/2	N84 South Right Left Ahead	U	F G		1	39		565	1794:1718	682	82.9%	-	-	-	7.7	49.1	16.2
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		245	1792:1758	307	79.9%	-	-	-	5.3	77.1	7.0
4/1	R334 Left Ahead Right	U	C		1	17	-	225	1887	283	79.5%	-	-	-	4.9	78.4	9.0

C1 PRC for Signalled Lanes (%): 8.0 Total Delay for Signalled Lanes (pcuHr): 22.74
PRC Over All Lanes (%): 8.0 Total Delay Over All Lanes(pcuHr): 22.74 Cycle Time (s): 120

Basic Results Summary

Scenario 3: 'Scenario 3' (FG3: '2029 Without Const. Traffic AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**86.5%**	**0**	**0**	**0**	**28.1**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**86.5%**	**0**	**0**	**0**	**28.1**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	19:49		383	1869:1615	445	86.0%	-	-	-	6.6	62.1	10.0
2/1+2/2	N84 South Right Left Ahead	U	F G		1	26		407	1772:1718	478	85.2%	-	-	-	7.5	66.2	12.8
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		320	1821:1758	371	86.3%	-	-	-	7.3	82.3	8.3
4/1	R334 Left Ahead Right	U	C		1	20	-	287	1895	332	86.5%	-	-	-	6.7	83.9	12.1

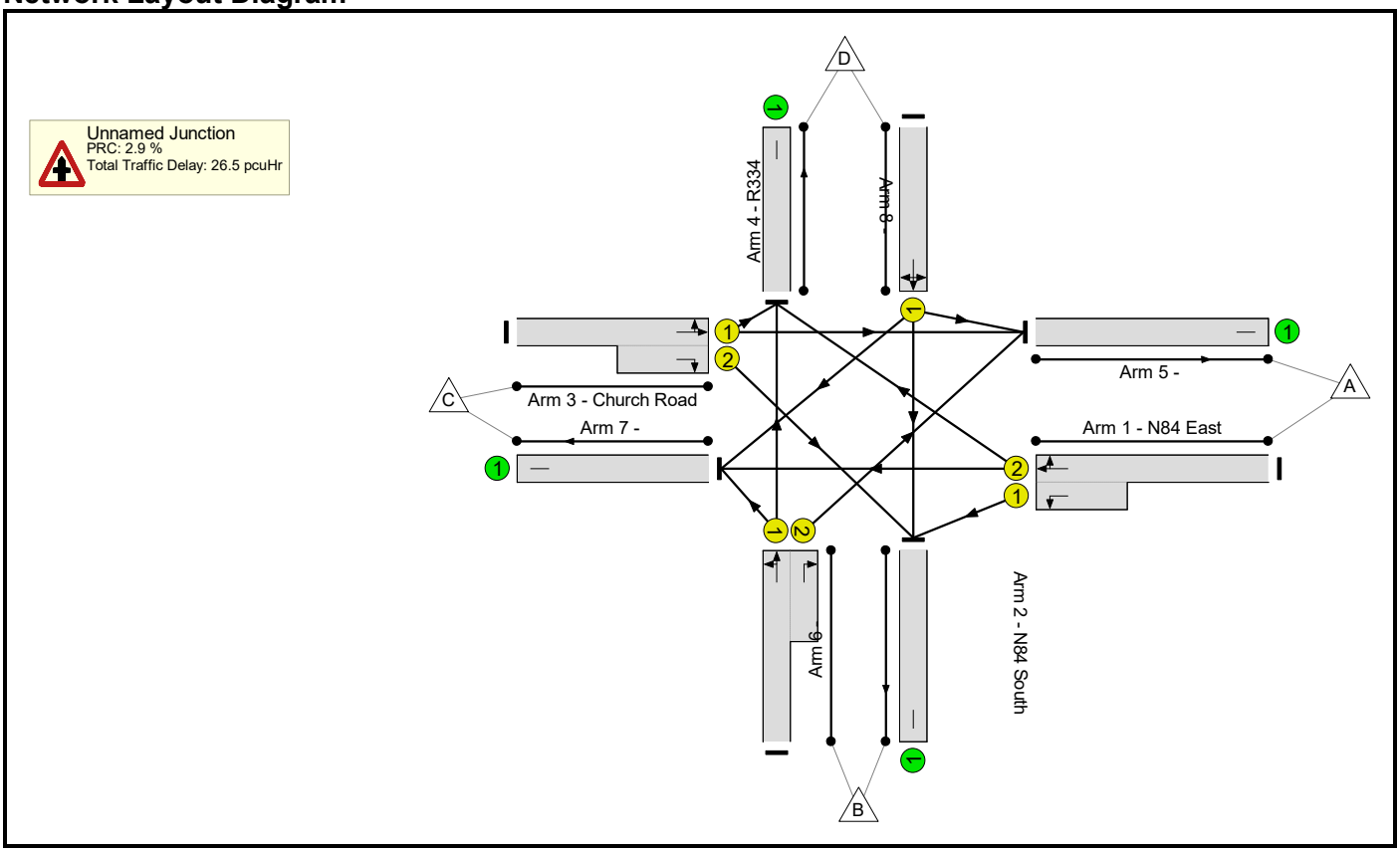
C1 PRC for Signalled Lanes (%): 4.0 Total Delay for Signalled Lanes (pcuHr): 28.10

PRC Over All Lanes (%): 4.0 Total Delay Over All Lanes(pcuHr): 28.10 Cycle Time (s): 120

Basic Results Summary

Scenario 4: 'Scenario 4' (FG4: '2029 Without Const. Traffic PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**87.5%**	**0**	**0**	**0**	**26.5**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**87.5%**	**0**	**0**	**0**	**26.5**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	9:52		264	1842:1615	302	87.3%	-	-	-	5.7	77.9	7.3
2/1+2/2	N84 South Right Left Ahead	U	F G		1	39		596	1794:1718	681	87.5%	-	-	-	9.1	54.7	18.6
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		258	1792:1758	307	84.0%	-	-	-	6.0	83.2	7.9
4/1	R334 Left Ahead Right	U	C		1	17	-	239	1887	283	84.4%	-	-	-	5.7	86.4	10.1

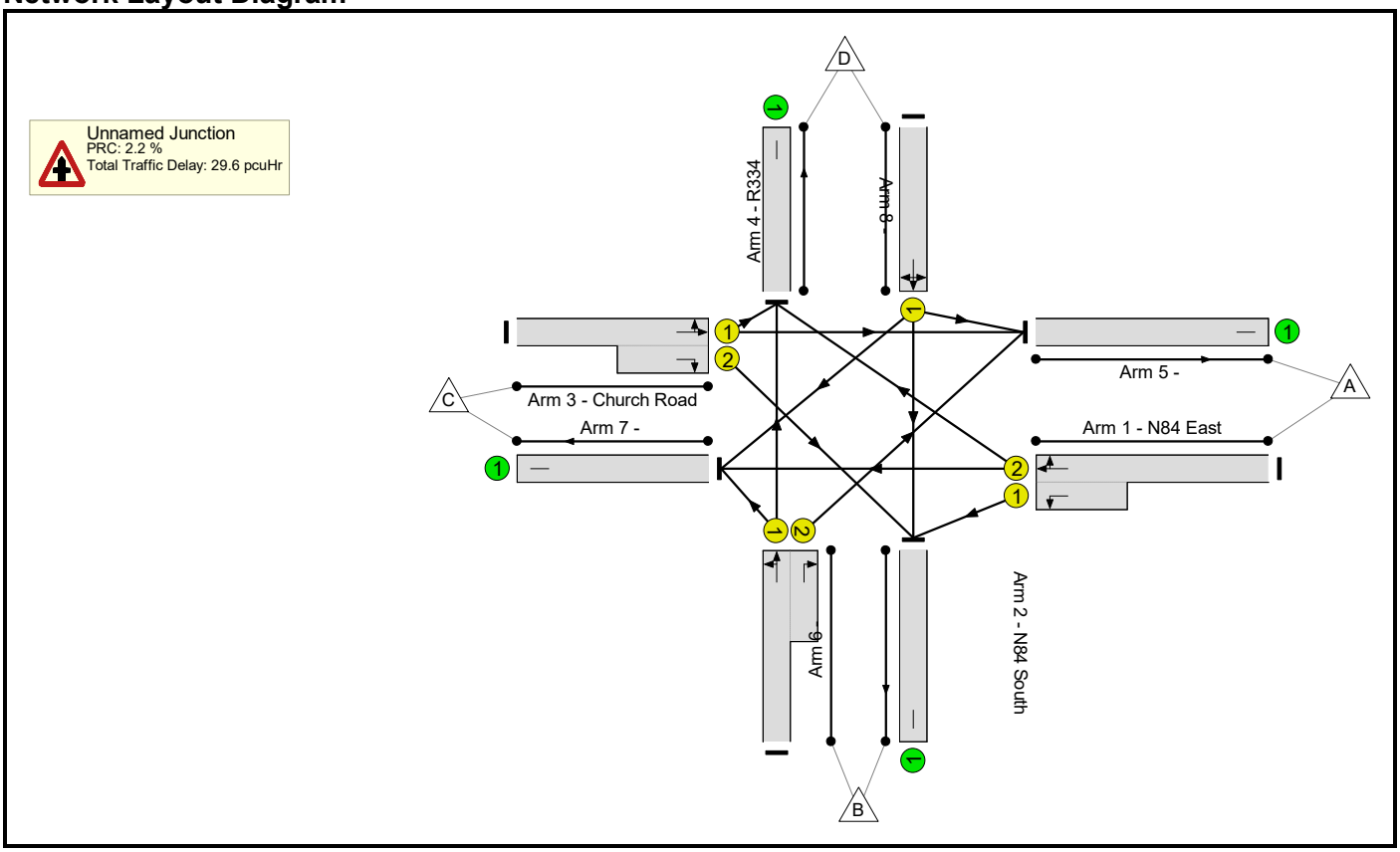
C1 PRC for Signalled Lanes (%): 2.9 Total Delay for Signalled Lanes (pcuHr): 26.47

PRC Over All Lanes (%): 2.9 Total Delay Over All Lanes(pcuHr): 26.47 Cycle Time (s): 120

Basic Results Summary

Scenario 5: 'Scenario 5' (FG5: '2030 Without Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

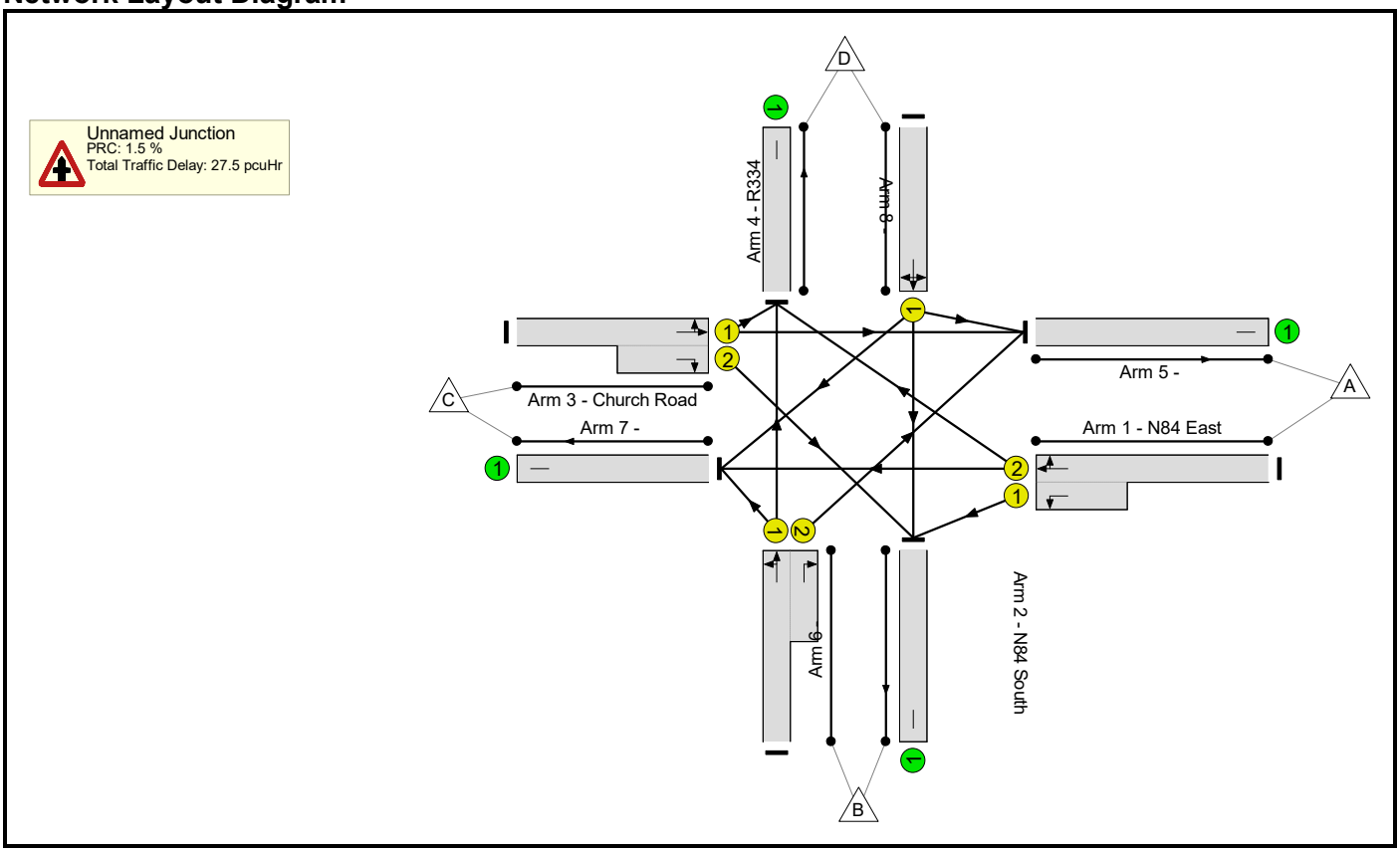
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**88.1%**	**0**	**0**	**0**	**29.6**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**88.1%**	**0**	**0**	**0**	**29.6**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	19:49		389	1869:1615	445	87.4%	-	-	-	7.0	64.6	10.5
2/1+2/2	N84 South Right Left Ahead	U	F G		1	26		413	1772:1718	478	86.4%	-	-	-	7.8	68.2	13.4
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		325	1820:1758	370	87.8%	-	-	-	7.7	85.7	8.8
4/1	R334 Left Ahead Right	U	C		1	20	-	292	1895	332	88.1%	-	-	-	7.1	87.4	12.7

C1 PRC for Signalled Lanes (%): 2.2 Total Delay for Signalled Lanes (pcuHr): 29.63
PRC Over All Lanes (%): 2.2 Total Delay Over All Lanes(pcuHr): 29.63 Cycle Time (s): 120

Basic Results Summary

Scenario 6: 'Scenario 6' (FG6: '2030 Without Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

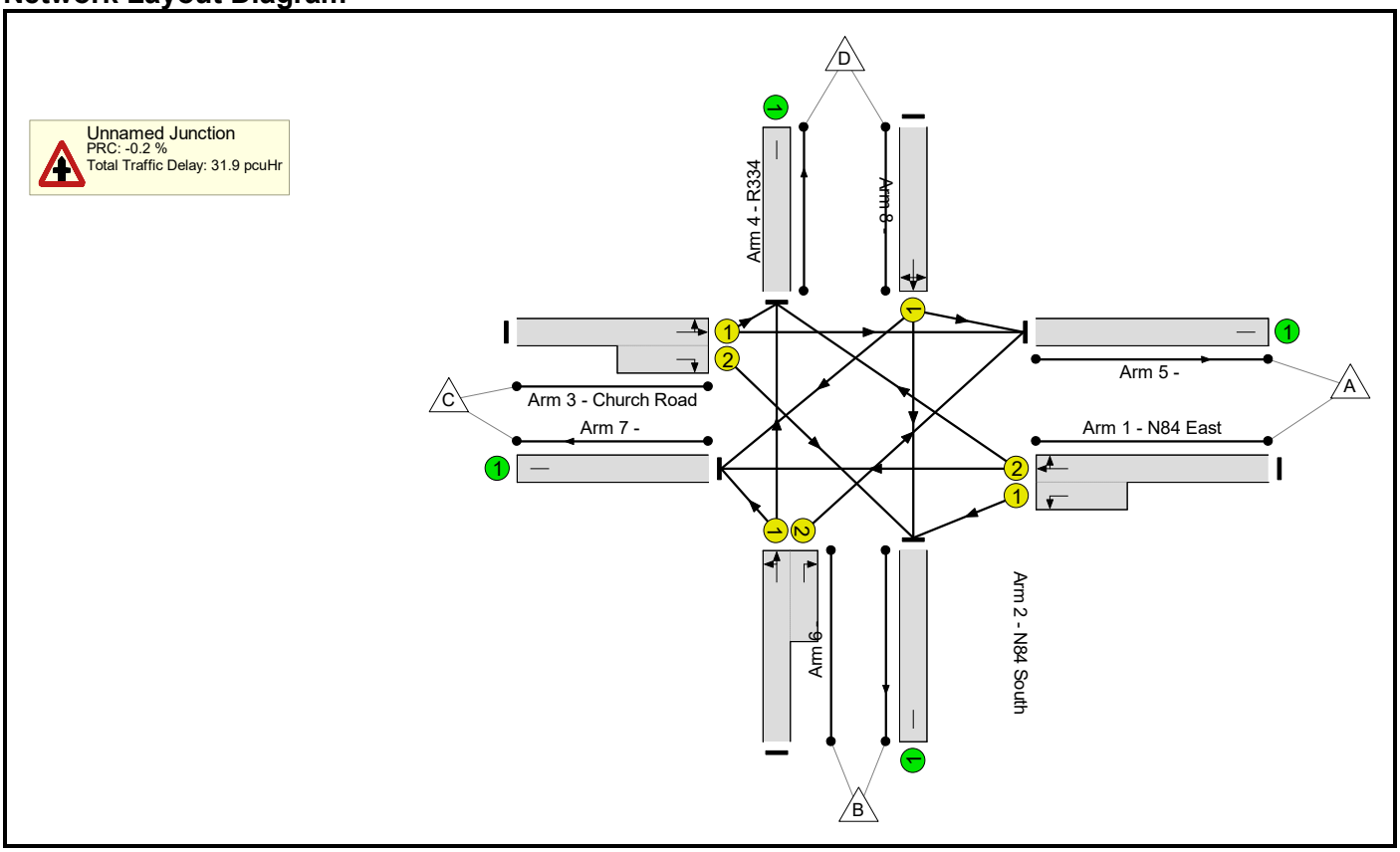
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**88.7%**	**0**	**0**	**0**	**27.5**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**88.7%**	**0**	**0**	**0**	**27.5**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	9:52		267	1842:1615	301	88.7%	-	-	-	6.0	81.5	7.6
2/1+2/2	N84 South Right Left Ahead	U	F G		1	39		603	1794:1718	682	88.5%	-	-	-	9.4	56.3	19.1
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		261	1792:1758	307	85.0%	-	-	-	6.2	85.1	8.2
4/1	R334 Left Ahead Right	U	C		1	17	-	241	1888	283	85.1%	-	-	-	5.9	87.8	10.3

C1 PRC for Signalled Lanes (%): 1.5 Total Delay for Signalled Lanes (pcuHr): 27.53
PRC Over All Lanes (%): 1.5 Total Delay Over All Lanes(pcuHr): 27.53 Cycle Time (s): 120

Basic Results Summary

Scenario 7: 'Scenario 7' (FG7: '2035 Without Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**90.2%**	**0**	**0**	**0**	**31.9**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**90.2%**	**0**	**0**	**0**	**31.9**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	19:49		395	1869:1615	445	88.7%	-	-	-	7.4	67.6	11.1
2/1+2/2	N84 South Right Left Ahead	U	F G		1	26		423	1772:1718	478	88.5%	-	-	-	8.5	72.0	14.3
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		331	1820:1758	370	89.5%	-	-	-	8.2	89.6	9.4
4/1	R334 Left Ahead Right	U	C		1	20	-	299	1895	332	90.2%	-	-	-	7.8	93.4	13.4

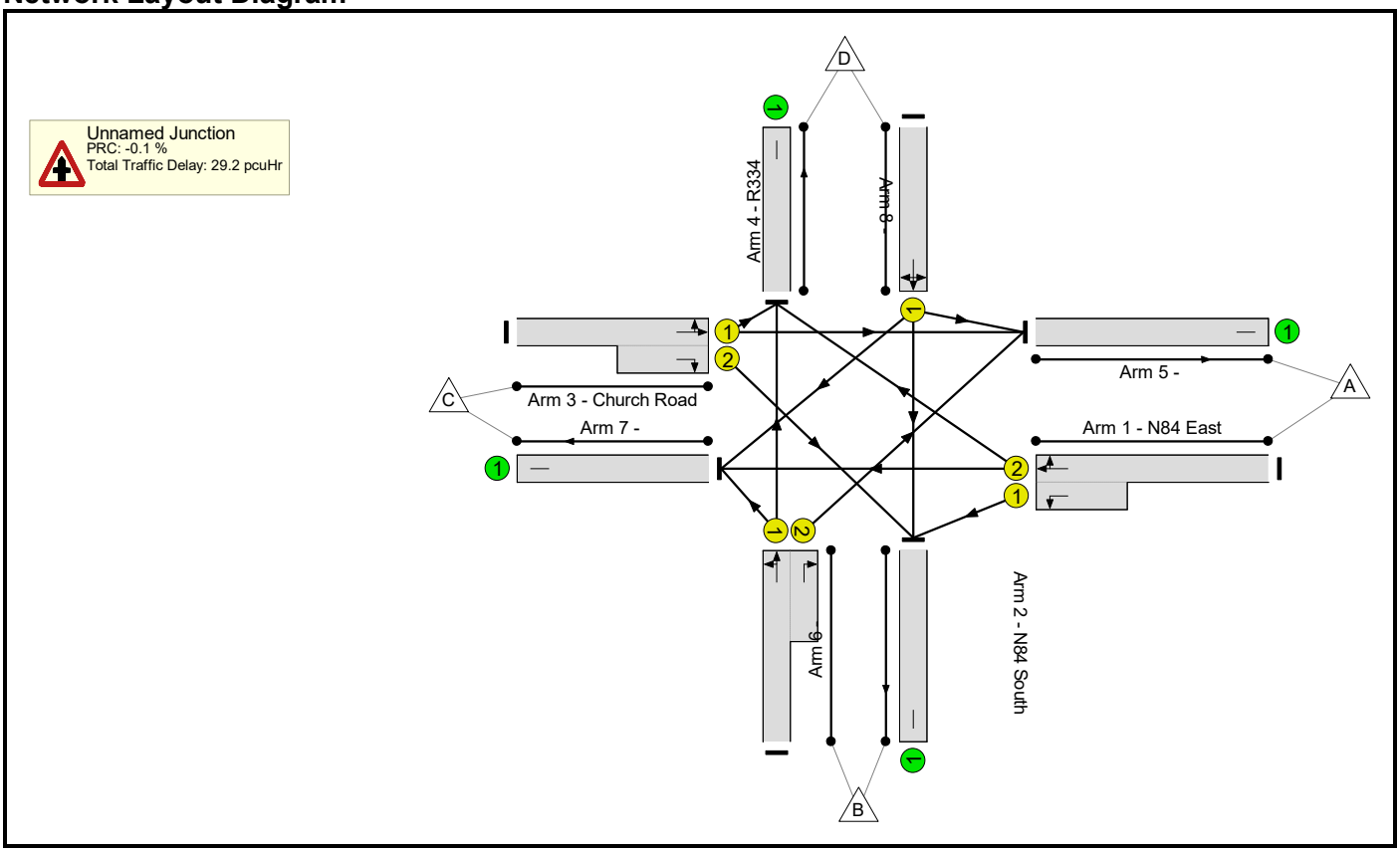
C1 PRC for Signalled Lanes (%): -0.2 Total Delay for Signalled Lanes (pcuHr): 31.87

PRC Over All Lanes (%): -0.2 Total Delay Over All Lanes(pcuHr): 31.87 Cycle Time (s): 120

Basic Results Summary

Scenario 8: 'Scenario 8' (FG8: '2035 Without Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

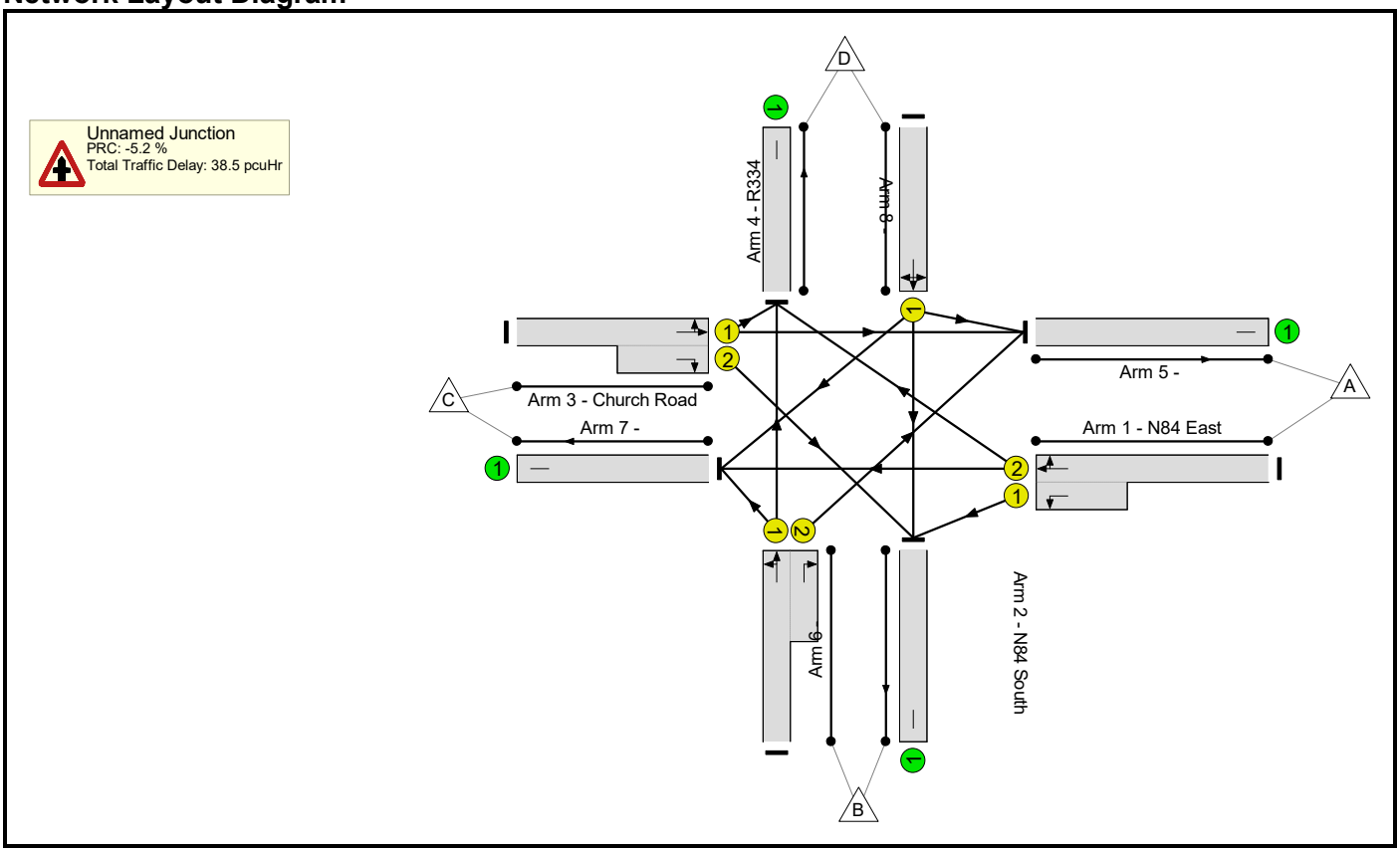
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**90.1%**	**0**	**0**	**0**	**29.2**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**90.1%**	**0**	**0**	**0**	**29.2**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	9:52		270	1842:1615	302	89.3%	-	-	-	6.2	83.3	7.8
2/1+2/2	N84 South Right Left Ahead	U	F G		1	39		614	1794:1718	682	90.1%	-	-	-	10.1	59.4	20.1
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		265	1792:1758	308	86.0%	-	-	-	6.4	87.3	8.5
4/1	R334 Left Ahead Right	U	C		1	17	-	247	1887	283	87.3%	-	-	-	6.4	92.8	11.0

C1 PRC for Signalled Lanes (%): -0.1 Total Delay for Signalled Lanes (pcuHr): 29.17
PRC Over All Lanes (%): -0.1 Total Delay Over All Lanes(pcuHr): 29.17 Cycle Time (s): 120

Basic Results Summary

Scenario 9: 'Scenario 9' (FG9: '2045 Without Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**94.7%**	**0**	**0**	**0**	**38.5**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**94.7%**	**0**	**0**	**0**	**38.5**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	19:49		410	1869:1615	446	92.0%	-	-	-	8.7	76.6	12.8
2/1+2/2	N84 South Right Left Ahead	U	F G		1	26		444	1774:1718	480	92.6%	-	-	-	10.3	83.1	16.5
3/1+3/2	Church Road Ahead Right Left	U	D E		1	14		343	1820:1758	368	93.1%	-	-	-	9.7	102.0	11.2
4/1	R334 Left Ahead Right	U	C		1	20	-	314	1895	332	94.7%	-	-	-	9.8	111.9	15.8

C1

PRC for Signalled Lanes (%): -5.2
PRC Over All Lanes (%): -5.2

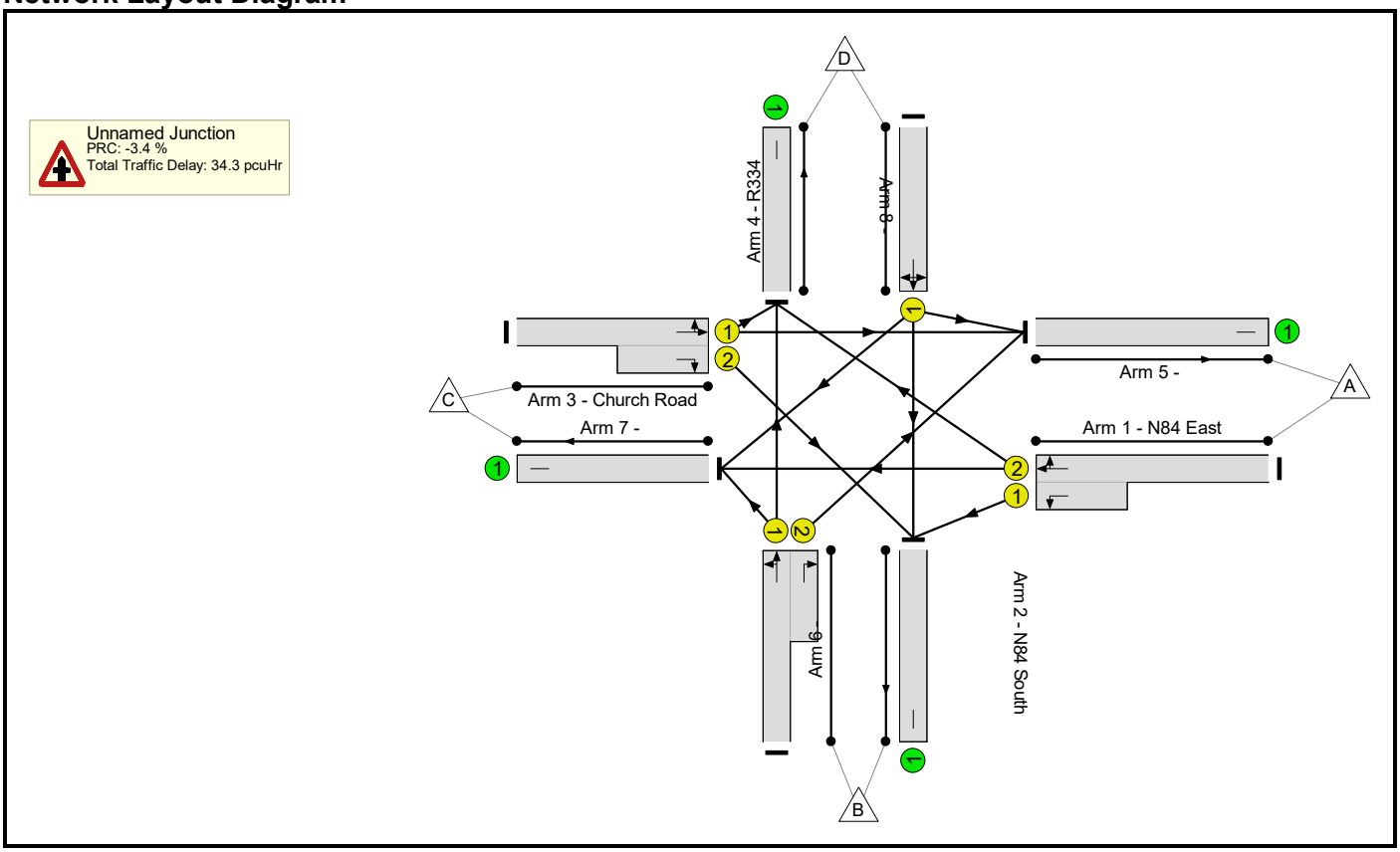
Total Delay for Signalled Lanes (pcuHr): 38.46
Total Delay Over All Lanes(pcuHr): 38.46

Cycle Time (s): 120

Basic Results Summary

Scenario 10: 'Scenario 10' (FG10: '2045 Without Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per Veh (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-	-	-	-	-	-	-	-	**93.1%**	**0**	**0**	**0**	**34.3**	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	**93.1%**	**0**	**0**	**0**	**34.3**	-	-
1/2+1/1	N84 East Left Ahead Right	U	B A		1	9:53		279	1841:1615	301	92.7%	-	-	-	7.4	95.1	9.0
2/1+2/2	N84 South Right Left Ahead	U	F G		1	40		636	1795:1718	696	91.3%	-	-	-	10.8	61.2	21.5
3/1+3/2	Church Road Ahead Right Left	U	D E		1	13		273	1792:1758	293	93.1%	-	-	-	8.5	112.2	10.8
4/1	R334 Left Ahead Right	U	C		1	17	-	259	1888	283	91.5%	-	-	-	7.6	106.1	12.5

C1

PRC for Signalled Lanes (%): -3.4
PRC Over All Lanes (%): -3.4

Total Delay for Signalled Lanes (pcuHr): 34.33
Total Delay Over All Lanes(pcuHr): 34.33

Cycle Time (s): 120