

Appendix M A24 Hop Oast Detailed Junction Modelling Outputs

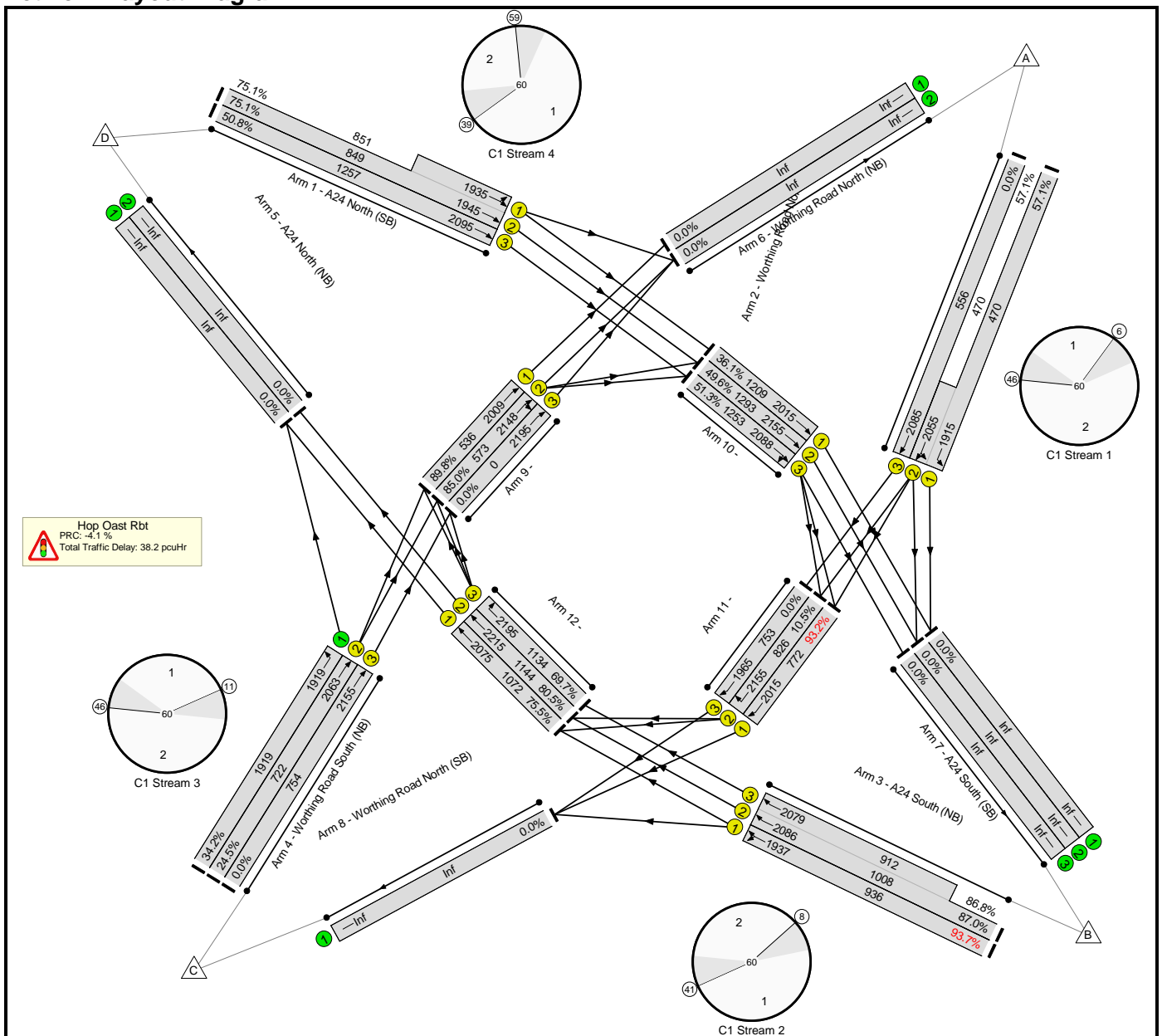
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	45539 – Horsham Transport Study
Title:	Hop Oast Mitigation Model – Bus Priority
Location:	Horsham
Additional detail:	Bus Priority
File name:	Hop Oast - 3 lane Circulatory.lsg3x
Author:	Matt Barney
Company:	Stantec UK
Address:	Ashford Office

Scenario 3: 'Local Plan Mitigation AM - Bus Priority' (FG3: 'Local Plan Mitigation AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

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 PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	93.7%	0	0	0	38.2	-	-
Hop Oast Rbt	-	-	-		-	-	-	-	-	-	93.7%	0	0	0	38.2	-	-
1/2+1/1	A24 North (SB) Left Ahead	U	D		1	35	-	1277	1945:1935	849+851	75.1 : 75.1%	-	-	-	4.0 (2.0+2.0)	11.4 (11.4:11.4)	7.7
1/3	A24 North (SB) Ahead	U	D		1	35	-	639	2095	1257	50.8%	-	-	-	1.7	9.8	6.6
2/1+2/2	Worthing Road North (SB) Left Ahead	U	A		1	15	-	536	1915:2055	470+470	57.1 : 57.1%	-	-	-	3.4 (1.7+1.7)	23.1 (23.2:23.0)	4.5
2/3	Worthing Road North (SB) Ahead	U	A		1	15	-	0	2085	556	0.0%	-	-	-	0.0	0.0	0.0
3/1	A24 South (NB) Left Ahead	U	B		1	28	-	877	1937	936	93.7%	-	-	-	9.7	39.8	19.8
3/2+3/3	A24 South (NB) Ahead	U	B F		1	28	-	1668	2086:2079	1008+912	87.0 : 86.8%	-	-	-	9.4 (5.1+4.4)	20.4 (20.8:19.9)	16.1
4/1	Worthing Road South (NB) Left	U	-		-	-	-	657	1919	1919	34.2%	-	-	-	0.3	1.4	0.3
4/2	Worthing Road South (NB) Ahead	U	C		1	20	-	177	2063	722	24.5%	-	-	-	0.8	17.2	2.2
4/3	Worthing Road South (NB) Ahead	U	G		1	20	-	0	2155	754	0.0%	-	-	-	0.0	0.0	0.0
9/1	Ahead	U	J		1	15	-	481	2009	536	89.8%	-	-	-	2.4	17.9	7.5
9/2	Ahead Right	U	J		1	15	-	487	2148	573	85.0%	-	-	-	1.9	14.2	7.9
9/3	Ahead	U	M		0	0	-	0	2195	0	0.0%	-	-	-	0.0	0.0	0.0
10/1	Ahead	U	K		1	35	-	436	2015	1209	36.1%	-	-	-	0.3	2.3	0.3
10/2	Ahead	U	K		1	35	-	641	2155	1293	49.6%	-	-	-	0.0	0.1	0.1

Basic Results Summary

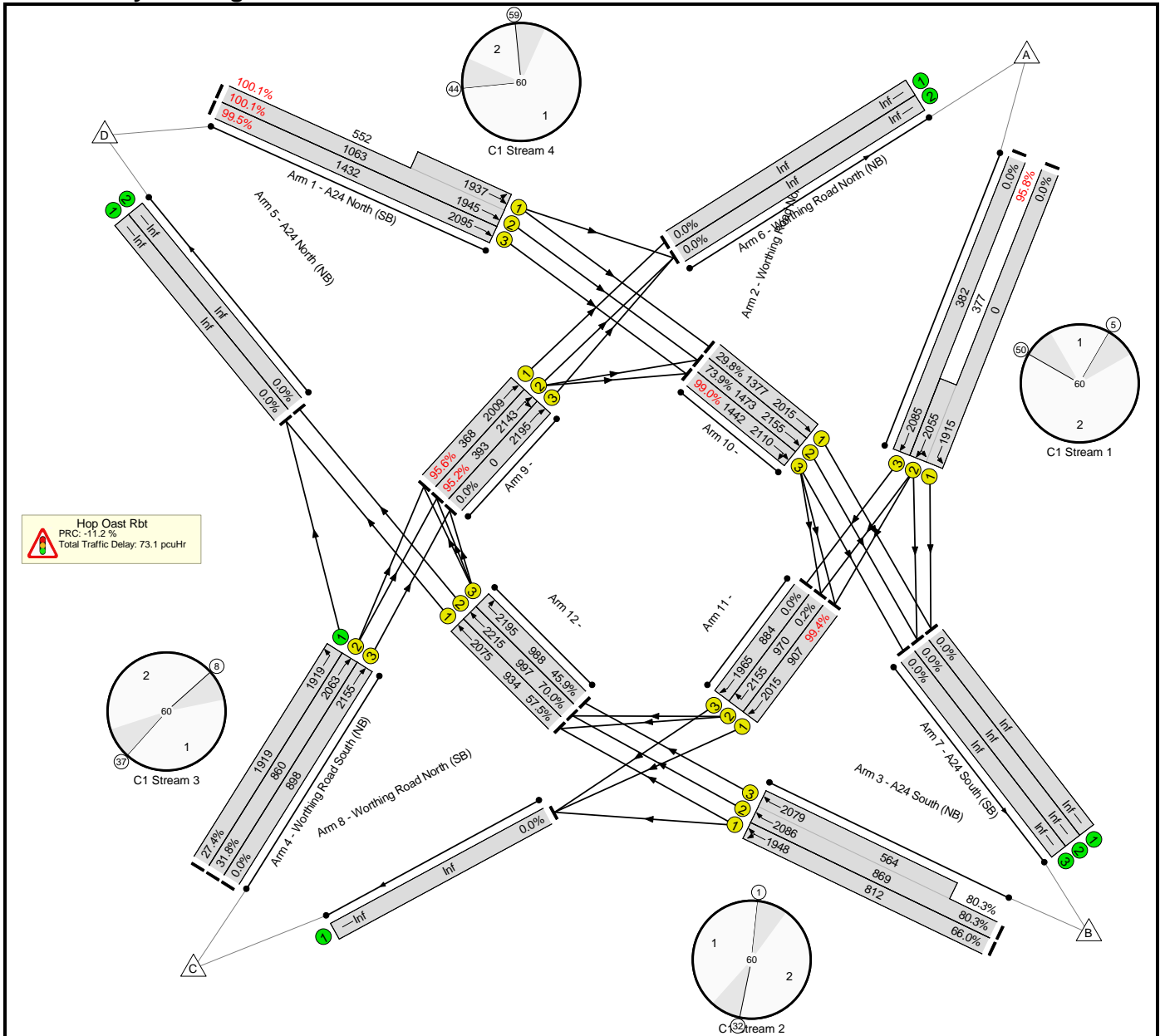
10/3	Ahead Right	U	K		1	35	-	643	2088	1253	51.3%	-	-	-	0.0	0.1	5.9
11/1	Ahead	U	H		1	22	-	720	2015	772	93.2%	-	-	-	3.7	18.7	11.9
11/2	Right	U	H		1	22	-	87	2155	826	10.5%	-	-	-	0.1	3.5	0.1
11/3	Ahead	U	H		1	22	-	0	1965	753	0.0%	-	-	-	0.0	0.0	0.0
12/1	Ahead	U	I		1	30	-	809	2075	1072	75.5%	-	-	-	0.1	0.6	0.7
12/2	Ahead	U	I		1	30	-	921	2215	1144	80.5%	-	-	-	0.1	0.5	0.7
12/3	Right	U	I		1	30	-	791	2195	1134	69.7%	-	-	-	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%):	57.7	Total Delay for Signalled Lanes (pcuHr):	3.76	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-4.1	Total Delay for Signalled Lanes (pcuHr):	22.97	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	11.8	Total Delay for Signalled Lanes (pcuHr):	1.10	Cycle Time (s):	60
C1	Stream: 4 PRC for Signalled Lanes (%):	0.2	Total Delay for Signalled Lanes (pcuHr):	10.09	Cycle Time (s):	60
	PRC Over All Lanes (%):	-4.1	Total Delay Over All Lanes(pcuHr):	38.18		

Basic Results Summary

Scenario 4: 'Local Plan Mitigation PM - Bus Priority' (FG4: 'Local Plan Mitigation 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 PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	100.1%	0	0	0	73.1	-	-
Hop Oast Rbt	-	-	-		-	-	-	-	-	-	100.1%	0	0	0	73.1	-	-
1/2+1/1	A24 North (SB) Left Ahead	U	D		1	40	-	1616	1945:1937	1063+552	100.1 : 100.1%	-	-	-	23.4 (15.6+7.8)	52.2 (52.9:51.0)	43.5
1/3	A24 North (SB) Ahead	U	D		1	40	-	1425	2095	1432	99.5%	-	-	-	21.0	53.1	40.7
2/1+2/2	Worthing Road North (SB) Left Ahead	U	A		1	10	-	361	1915:2055	0+377	0.0 : 95.8%	-	-	-	8.8 (0.0+8.8)	87.6 (0.0:87.6)	12.3
2/3	Worthing Road North (SB) Ahead	U	A		1	10	-	0	2085	382	0.0%	-	-	-	0.0	0.0	0.0
3/1	A24 South (NB) Left Ahead	U	B		1	24	-	536	1948	812	66.0%	-	-	-	3.1	20.6	8.1
3/2+3/3	A24 South (NB) Ahead	U	B F		1	24	-	1151	2086:2079	869+564	80.3 : 80.3%	-	-	-	6.6 (4.2+2.4)	20.7 (21.6:19.3)	12.1
4/1	Worthing Road South (NB) Left	U	-		-	-	-	525	1919	1919	27.4%	-	-	-	0.2	1.3	0.2
4/2	Worthing Road South (NB) Ahead	U	C		1	24	-	273	2063	860	31.8%	-	-	-	1.1	14.8	3.3
4/3	Worthing Road South (NB) Ahead	U	G		1	24	-	0	2155	898	0.0%	-	-	-	0.0	0.0	0.0
9/1	Ahead	U	J		1	10	-	352	2009	368	95.6%	-	-	-	1.7	17.3	5.8
9/2	Ahead Right	U	J		1	10	-	374	2143	393	95.2%	-	-	-	2.0	18.9	6.2
9/3	Ahead	U	M		0	0	-	0	2195	0	0.0%	-	-	-	0.0	0.0	0.0
10/1	Ahead	U	K		1	40	-	410	2015	1377	29.8%	-	-	-	0.3	2.2	0.3
10/2	Ahead	U	K		1	40	-	1089	2155	1473	73.9%	-	-	-	0.2	0.7	1.9

Basic Results Summary

10/3	Ahead Right	U	K		1	40	-	1427	2110	1442	99.0%	-	-	-	0.2	0.4	0.5
11/1	Ahead	U	H		1	26	-	901	2015	907	99.4%	-	-	-	4.6	18.3	14.7
11/2	Right	U	H		1	26	-	2	2155	970	0.2%	-	-	-	0.0	0.6	0.0
11/3	Ahead	U	H		1	26	-	0	1965	884	0.0%	-	-	-	0.0	0.0	0.0
12/1	Ahead	U	I		1	26	-	537	2075	934	57.5%	-	-	-	0.0	0.1	0.0
12/2	Ahead	U	I		1	26	-	698	2215	997	70.0%	-	-	-	0.0	0.0	0.0
12/3	Right	U	I		1	26	-	453	2195	988	45.9%	-	-	-	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%)	-10.0	Total Delay for Signalled Lanes (pcuHr)	9.40	Cycle Time (s)	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-10.4	Total Delay for Signalled Lanes (pcuHr)	14.27	Cycle Time (s)	60
C1	Stream: 3 PRC for Signalled Lanes (%)	28.5	Total Delay for Signalled Lanes (pcuHr)	1.14	Cycle Time (s)	60
C1	Stream: 4 PRC for Signalled Lanes (%)	-11.2	Total Delay for Signalled Lanes (pcuHr)	48.12	Cycle Time (s)	60
	PRC Over All Lanes (%)	-11.2	Total Delay Over All Lanes(pcuHr)	73.11		

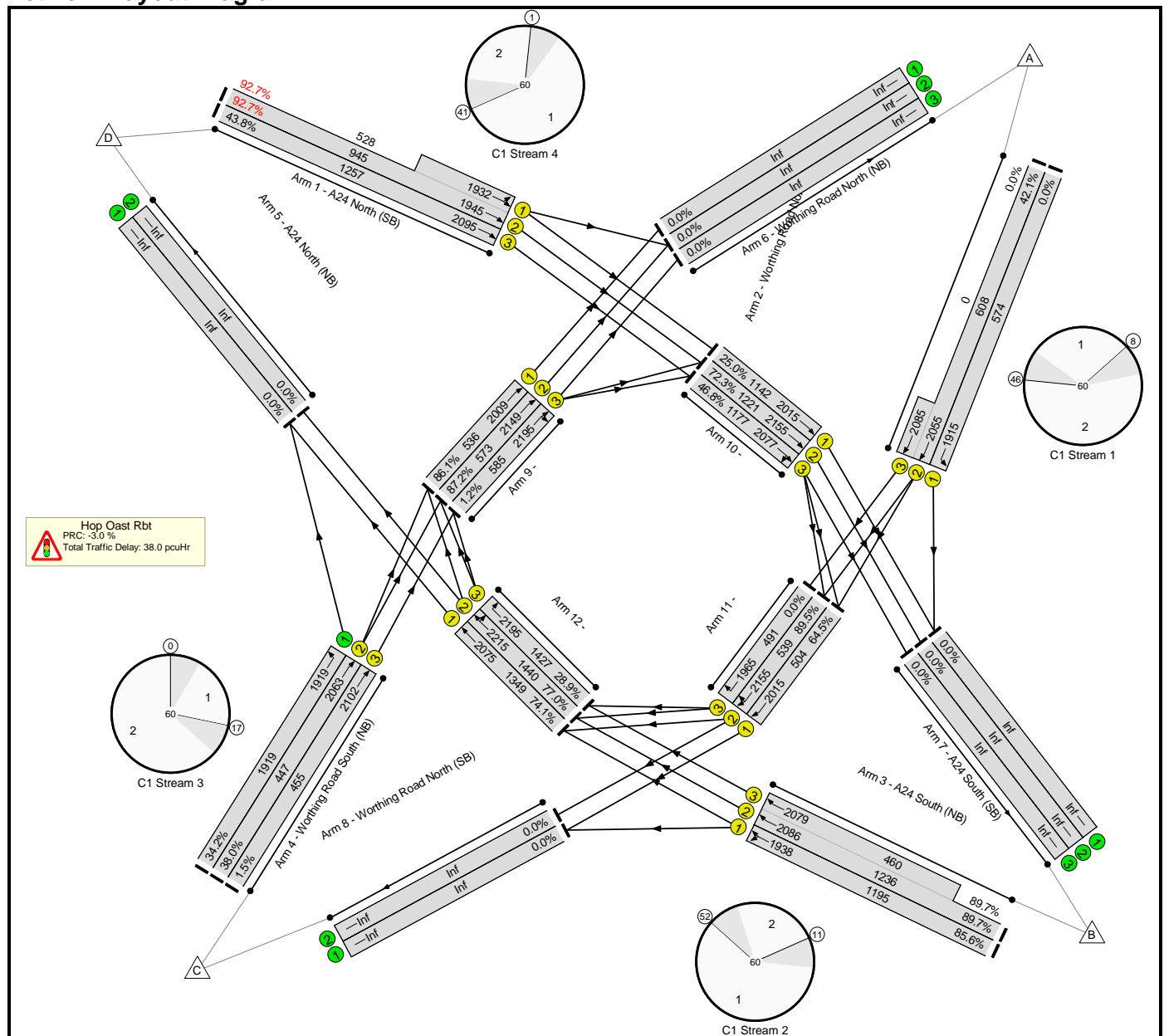
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	45539 – Horsham Transport Study
Title:	Hop Oast Mitigation Model
Location:	Horsham
Additional detail:	No PT link, 3 lane circulatory
File name:	Hop Oast - 3 lane Circulatory.lsg3x
Author:	Matt Barney
Company:	Stantec UK
Address:	Ashford Office

Scenario 1: 'Local Plan Mitigation AM – 3 Lane Circulatory' (FG3: 'Local Plan Mitigation AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

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 PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	92.7%	0	0	0	38.0	-	-
Hop Oast Rbt	-	-	-		-	-	-	-	-	-	92.7%	0	0	0	38.0	-	-
1/2+1/1	A24 North (SB) Left Ahead	U	D		1	35	-	1365	1945:1932	945+528	92.7 : 92.7%	-	-	-	8.8 (5.8+3.0)	23.2 (23.9:21.9)	19.3
1/3	A24 North (SB) Ahead	U	D		1	35	-	551	2095	1257	43.8%	-	-	-	1.4	9.1	5.3
2/1	Worthing Road North (SB) Left	U	A		1	17	-	0	1915	574	0.0%	-	-	-	0.0	0.0	0.0
2/2+2/3	Worthing Road North (SB) Ahead	U	A		1	17	-	256	2055:2085	608+0	42.1 : 0.0%	-	-	-	1.6 (1.6+0.0)	21.9 (21.9:0.0)	3.7
3/1	A24 South (NB) Left Ahead	U	B		1	36	-	1023	1938	1195	85.6%	-	-	-	5.5	19.5	16.5
3/2+3/3	A24 South (NB) Ahead	U	B		1	36	-	1522	2086:2079	1236+460	89.7 : 89.7%	-	-	-	7.7 (5.9+1.8)	18.2 (19.3:15.4)	19.3
4/1	Worthing Road South (NB) Left	U	-		-	-	-	657	1919	1919	34.2%	-	-	-	0.3	1.4	0.3
4/2	Worthing Road South (NB) Ahead	U	C		1	12	-	170	2063	447	38.0%	-	-	-	1.3	26.6	2.7
4/3	Worthing Road South (NB) Ahead	U	C		1	12	-	7	2102	455	1.5%	-	-	-	0.0	22.8	0.1
9/1	Ahead	U	J		1	15	-	461	2009	536	86.1%	-	-	-	2.2	17.2	7.5
9/2	Ahead	U	J		1	15	-	500	2149	573	87.2%	-	-	-	2.9	20.9	8.2
9/3	Ahead Right	U	J		1	15	-	7	2195	585	1.2%	-	-	-	0.1	36.7	0.1
10/1	Ahead	U	K		1	33	-	286	2015	1142	25.0%	-	-	-	0.2	3.0	0.3
10/2	Ahead	U	K		1	33	-	883	2155	1221	72.3%	-	-	-	0.3	1.2	6.0

Basic Results Summary

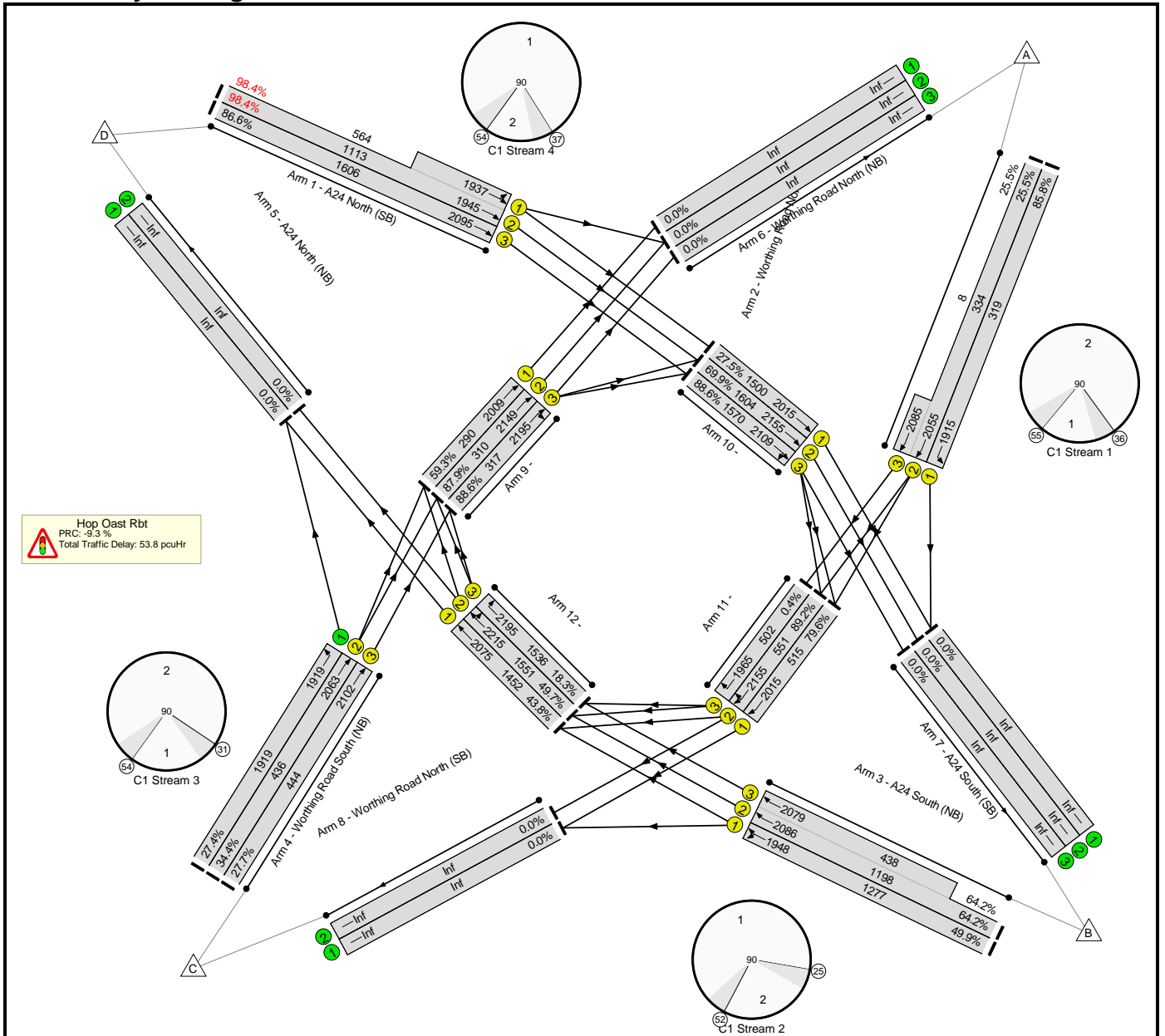
10/3	Ahead Right	U	K		1	33	-	551	2077	1177	46.8%	-	-	-	0.2	1.2	5.4
11/1	Ahead	U	H		1	14	-	325	2015	504	64.5%	-	-	-	2.6	29.1	5.4
11/2	Ahead Right	U	H		1	14	-	482	2155	539	89.5%	-	-	-	2.3	17.2	7.9
11/3	Right	U	H		1	14	-	0	1965	491	0.0%	-	-	-	0.0	0.0	0.0
12/1	Ahead	U	I		1	38	-	999	2075	1349	74.1%	-	-	-	0.6	2.0	10.5
12/2	Ahead Right	U	I		1	38	-	1109	2215	1440	77.0%	-	-	-	0.1	0.3	9.9
12/3	Right	U	I		1	38	-	413	2195	1427	28.9%	-	-	-	0.0	0.4	3.3

C1	Stream: 1 PRC for Signalled Lanes (%)	24.5	Total Delay for Signalled Lanes (pcuHr):	2.27	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	0.3	Total Delay for Signalled Lanes (pcuHr):	18.15	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%)	16.8	Total Delay for Signalled Lanes (pcuHr):	2.00	Cycle Time (s):	60
C1	Stream: 4 PRC for Signalled Lanes (%)	-3.0	Total Delay for Signalled Lanes (pcuHr):	15.36	Cycle Time (s):	60
	PRC Over All Lanes (%)	-3.0	Total Delay Over All Lanes(pcuHr):	38.04		

Basic Results Summary

Scenario 2: 'Local Plan Mitigation PM - 3 Lane Circulatory' (FG4: 'Local Plan Mitigation 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 PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	98.4%	0	0	0	53.8	-	-
Hop Oast Rbt	-	-	-		-	-	-	-	-	-	98.4%	0	0	0	53.8	-	-
1/2+1/1	A24 North (SB) Left Ahead	U	D		1	68	-	1650	1945:1937	1113+564	98.4 : 98.4%	-	-	-	17.8 (11.9+5.8)	38.7 (39.2:37.9)	47.7
1/3	A24 North (SB) Ahead	U	D		1	68	-	1391	2095	1606	86.6%	-	-	-	6.0	15.4	27.1
2/1	Worthing Road North (SB) Left	U	A		1	14	-	274	1915	319	85.8%	-	-	-	5.5	72.1	9.3
2/2+2/3	Worthing Road North (SB) Ahead	U	A		1	14	-	87	2055:2085	334+8	25.5 : 25.5%	-	-	-	1.0 (0.9+0.0)	39.7 (39.7:38.7)	2.0
3/1	A24 South (NB) Left Ahead	U	B		1	58	-	637	1948	1277	49.9%	-	-	-	1.9	10.7	8.6
3/2+3/3	A24 South (NB) Ahead	U	B		1	58	-	1050	2086:2079	1198+438	64.2 : 64.2%	-	-	-	3.2 (2.5+0.7)	10.9 (11.5:9.2)	11.4
4/1	Worthing Road South (NB) Left	U	-		-	-	-	525	1919	1919	27.4%	-	-	-	0.2	1.3	0.2
4/2	Worthing Road South (NB) Ahead	U	C		1	18	-	150	2063	436	34.4%	-	-	-	1.5	36.5	3.4
4/3	Worthing Road South (NB) Ahead	U	C		1	18	-	123	2102	444	27.7%	-	-	-	1.2	35.4	2.8
9/1	Ahead	U	J		1	12	-	172	2009	290	59.3%	-	-	-	2.3	48.7	4.3
9/2	Ahead	U	J		1	12	-	273	2149	310	87.9%	-	-	-	2.1	27.9	6.7
9/3	Ahead Right	U	J		1	12	-	281	2195	317	88.6%	-	-	-	2.5	32.0	7.0
10/1	Ahead	U	K		1	66	-	413	2015	1500	27.5%	-	-	-	0.4	3.4	1.1
10/2	Ahead	U	K		1	66	-	1122	2155	1604	69.9%	-	-	-	0.7	2.1	3.1

Basic Results Summary

10/3	Ahead Right	U	K		1	66	-	1391	2109	1570	88.6%	-	-	-	0.7	1.9	3.1
11/1	Ahead	U	H		1	22	-	410	2015	515	79.6%	-	-	-	3.4	29.7	10.2
11/2	Ahead Right	U	H		1	22	-	491	2155	551	89.2%	-	-	-	3.5	26.0	10.5
11/3	Right	U	H		1	22	-	2	1965	502	0.4%	-	-	-	0.0	11.2	0.0
12/1	Ahead	U	I		1	62	-	636	2075	1452	43.8%	-	-	-	0.0	0.0	0.0
12/2	Ahead Right	U	I		1	62	-	771	2215	1551	49.7%	-	-	-	0.0	0.0	0.0
12/3	Right	U	I		1	62	-	281	2195	1536	18.3%	-	-	-	0.0	0.0	0.0

C1	Stream: 1 PRC for Signalled Lanes (%)	1.6	Total Delay for Signalled Lanes (pcuHr)	8.23	Cycle Time (s)	90
C1	Stream: 2 PRC for Signalled Lanes (%)	0.9	Total Delay for Signalled Lanes (pcuHr)	12.02	Cycle Time (s)	90
C1	Stream: 3 PRC for Signalled Lanes (%)	81.0	Total Delay for Signalled Lanes (pcuHr)	2.74	Cycle Time (s)	90
C1	Stream: 4 PRC for Signalled Lanes (%)	-9.3	Total Delay for Signalled Lanes (pcuHr)	30.65	Cycle Time (s)	90
	PRC Over All Lanes (%)	-9.3	Total Delay Over All Lanes (pcuHr)	53.83		