08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	610	0.000	0	0.0	0.0	0.000	A
B-A	61	15	463	0.132	61	0.1	0.1	8.938	A
C-AB	0	0	1044	0.000	0	0.0	0.0	0.000	A
C-A	64	16			64				
A-B	239	60			239				
A-C	155	39			155				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	590	0.000	0	0.0	0.0	0.000	A
B-A	75	19	447	0.167	75	0.1	0.2	9.648	A
C-AB	0	0	1002	0.000	0	0.0	0.0	0.000	A
C-A	78	20			78				
A-B	293	73			293				
A-C	190	48			190				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	590	0.000	0	0.0	0.0	0.000	A
B-A	75	19	447	0.167	75	0.2	0.2	9.658	A
C-AB	0	0	1002	0.000	0	0.0	0.0	0.000	A
C-A	78	20			78				
A-B	293	73			293				
A-C	190	48			190				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	610	0.000	0	0.0	0.0	0.000	A
B-A	61	15	463	0.132	61	0.2	0.2	8.953	A
C-AB	0	0	1044	0.000	0	0.0	0.0	0.000	A
C-A	64	16			64				
A-B	239	60			239				
A-C	155	39			155				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	625	0.000	0	0.0	0.0	0.000	A
B-A	51	13	475	0.108	51	0.2	0.1	8.496	A
C-AB	0	0	1074	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
A-B	200	50			200				
A-C	130	33			130				

2023_Option 1+Option 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3b	B2233 Slip road/ A29	T-Junction	Two-way		2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	232	100.000
B - B2233 Slip Road		ONE HOUR	✓	142	100.000
C - A29 Nyton Road North		ONE HOUR	✓	111	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	160	72
	B - B2233 Slip Road	142	0	0
	C - A29 Nyton Road North	111	0	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.69	0.31
	B - B2233 Slip Road	1.00	0.00	0.00
	C - A29 Nyton Road North	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	1	4
	B - B2233 Slip Road	1	0	0
	C - A29 Nyton Road North	5	0	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.012	1.037
	B - B2233 Slip Road	1.006	1.000	1.000
	C - A29 Nyton Road North	1.055	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	16:45-17:00	175	178
	17:00-17:15	208	213
	17:15-17:30	255	260
	17:30-17:45	255	260
	17:45-18:00	208	213
	18:00-18:15	175	178
B - B2233 Slip Road	16:45-17:00	107	107
	17:00-17:15	127	128
	17:15-17:30	156	157
	17:30-17:45	156	157
	17:45-18:00	127	128
	18:00-18:15	107	107
C - A29 Nyton Road North	16:45-17:00	83	88
	17:00-17:15	99	105
	17:15-17:30	122	128
	17:30-17:45	122	128
	17:45-18:00	99	105
	18:00-18:15	83	88

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.31	10.26	0.4	B	130	195
C-AB	0.00	0.00	0.0	A	0	0
C-A					101	152
A-B					147	221
A-C					66	98

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	638	0.000	0	0.0	0.0	0.000	A
B-A	107	27	525	0.203	106	0.0	0.3	8.557	A
C-AB	0	0	1149	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
A-B	121	30			121				
A-C	54	13			54				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	625	0.000	0	0.0	0.0	0.000	A
B-A	127	32	518	0.246	127	0.3	0.3	9.212	A
C-AB	0	0	1133	0.000	0	0.0	0.0	0.000	A
C-A	99	25			99				
A-B	144	36			144				
A-C	64	16			64				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	608	0.000	0	0.0	0.0	0.000	A
B-A	156	39	507	0.308	156	0.3	0.4	10.235	B
C-AB	0	0	1111	0.000	0	0.0	0.0	0.000	A
C-A	122	30			122				
A-B	176	44			176				
A-C	79	20			79				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	608	0.000	0	0.0	0.0	0.000	A
B-A	156	39	507	0.308	156	0.4	0.4	10.261	B
C-AB	0	0	1111	0.000	0	0.0	0.0	0.000	A
C-A	122	30			122				
A-B	176	44			176				
A-C	79	20			79				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	625	0.000	0	0.0	0.0	0.000	A
B-A	127	32	518	0.246	128	0.4	0.3	9.248	A
C-AB	0	0	1133	0.000	0	0.0	0.0	0.000	A
C-A	99	25			99				
A-B	144	36			144				
A-C	64	16			64				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	637	0.000	0	0.0	0.0	0.000	A
B-A	107	27	525	0.203	107	0.3	0.3	8.609	A
C-AB	0	0	1149	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
A-B	121	30			121				
A-C	54	13			54				

2038_Option 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3b	B2233 Slip road/ A29	T-Junction	Two-way		0.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2038_Option 1	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	963	100.000
B - B2233 Slip Road		ONE HOUR	✓	57	100.000
C - A29 Nyton Road North		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	290	673
	B - B2233 Slip Road	57	0	0
	C - A29 Nyton Road North	653	0	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.30	0.70
	B - B2233 Slip Road	1.00	0.00	0.00
	C - A29 Nyton Road North	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	2	3
	B - B2233 Slip Road	8	0	0
	C - A29 Nyton Road North	3	0	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.022	1.034
	B - B2233 Slip Road	1.077	1.000	1.000
	C - A29 Nyton Road North	1.029	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	07:45-08:00	725	747
	08:00-08:15	866	892
	08:15-08:30	1060	1092
	08:30-08:45	1060	1092
	08:45-09:00	866	892
	09:00-09:15	725	747
B - B2233 Slip Road	07:45-08:00	43	47
	08:00-08:15	52	56
	08:15-08:30	63	68
	08:30-08:45	63	68
	08:45-09:00	52	56
	09:00-09:15	43	47
C - A29 Nyton Road North	07:45-08:00	492	506
	08:00-08:15	587	604
	08:15-08:30	719	740
	08:30-08:45	719	740
	08:45-09:00	587	604
	09:00-09:15	492	506

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.30	24.70	0.4	C	53	79
C-AB	0.00	0.00	0.0	A	0	0
C-A					600	899
A-B					266	400
A-C					617	926

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	520	0.000	0	0.0	0.0	0.000	A
B-A	43	11	310	0.139	43	0.0	0.2	13.455	B
C-AB	0	0	887	0.000	0	0.0	0.0	0.000	A
C-A	492	123			492				
A-B	219	55			219				
A-C	506	127			506				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	483	0.000	0	0.0	0.0	0.000	A
B-A	52	13	267	0.193	51	0.2	0.2	16.637	C
C-AB	0	0	820	0.000	0	0.0	0.0	0.000	A
C-A	587	147			587				
A-B	261	65			261				
A-C	605	151			605				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	429	0.000	0	0.0	0.0	0.000	A
B-A	63	16	209	0.302	62	0.2	0.4	24.471	C
C-AB	0	0	728	0.000	0	0.0	0.0	0.000	A
C-A	719	180			719				
A-B	320	80			320				
A-C	741	185			741				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	429	0.000	0	0.0	0.0	0.000	A
B-A	63	16	209	0.302	63	0.4	0.4	24.700	C
C-AB	0	0	728	0.000	0	0.0	0.0	0.000	A
C-A	719	180			719				
A-B	320	80			320				
A-C	741	185			741				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	483	0.000	0	0.0	0.0	0.000	A
B-A	52	13	267	0.193	52	0.4	0.2	16.795	C
C-AB	0	0	820	0.000	0	0.0	0.0	0.000	A
C-A	587	147			587				
A-B	261	65			261				
A-C	605	151			605				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	520	0.000	0	0.0	0.0	0.000	A
B-A	43	11	310	0.139	43	0.2	0.2	13.541	B
C-AB	0	0	887	0.000	0	0.0	0.0	0.000	A
C-A	492	123			492				
A-B	219	55			219				
A-C	506	127			506				

2038_Option 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3b	B2233 Slip road/ A29	T-Junction	Two-way		1.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2038_Option 1	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	773	100.000
B - B2233 Slip Road		ONE HOUR	✓	98	100.000
C - A29 Nyton Road North		ONE HOUR	✓	752	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	196	578
	B - B2233 Slip Road	98	0	0
	C - A29 Nyton Road North	752	0	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.25	0.75
	B - B2233 Slip Road	1.00	0.00	0.00
	C - A29 Nyton Road North	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	1	2
	B - B2233 Slip Road	1	0	0
	C - A29 Nyton Road North	2	0	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.010	1.016
	B - B2233 Slip Road	1.009	1.000	1.000
	C - A29 Nyton Road North	1.018	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	16:45-17:00	582	590
	17:00-17:15	695	705
	17:15-17:30	851	864
	17:30-17:45	851	864
	17:45-18:00	695	705
	18:00-18:15	582	590
B - B2233 Slip Road	16:45-17:00	74	74
	17:00-17:15	88	89
	17:15-17:30	108	109
	17:30-17:45	108	109
	17:45-18:00	88	89
	18:00-18:15	74	74
C - A29 Nyton Road North	16:45-17:00	566	576
	17:00-17:15	676	688
	17:15-17:30	827	842
	17:30-17:45	827	842
	17:45-18:00	676	688
	18:00-18:15	566	576

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.44	25.70	0.8	D	90	135
C-AB	0.00	0.00	0.0	A	0	0
C-A					690	1034
A-B					179	269
A-C					530	795

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	538	0.000	0	0.0	0.0	0.000	A
B-A	74	18	348	0.212	73	0.0	0.3	13.041	B
C-AB	0	0	959	0.000	0	0.0	0.0	0.000	A
C-A	566	141			566				
A-B	147	37			147				
A-C	435	109			435				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	503	0.000	0	0.0	0.0	0.000	A
B-A	88	22	306	0.288	88	0.3	0.4	16.459	C
C-AB	0	0	906	0.000	0	0.0	0.0	0.000	A
C-A	676	169			676				
A-B	176	44			176				
A-C	519	130			519				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	452	0.000	0	0.0	0.0	0.000	A
B-A	108	27	248	0.435	106	0.4	0.7	25.249	D
C-AB	0	0	834	0.000	0	0.0	0.0	0.000	A
C-A	827	207			827				
A-B	215	54			215				
A-C	636	159			636				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	451	0.000	0	0.0	0.0	0.000	A
B-A	108	27	248	0.435	108	0.7	0.8	25.696	D
C-AB	0	0	834	0.000	0	0.0	0.0	0.000	A
C-A	827	207			827				
A-B	215	54			215				
A-C	636	159			636				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	502	0.000	0	0.0	0.0	0.000	A
B-A	88	22	306	0.288	89	0.8	0.4	16.741	C
C-AB	0	0	906	0.000	0	0.0	0.0	0.000	A
C-A	676	169			676				
A-B	176	44			176				
A-C	519	130			519				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	537	0.000	0	0.0	0.0	0.000	A
B-A	74	18	348	0.212	74	0.4	0.3	13.196	B
C-AB	0	0	959	0.000	0	0.0	0.0	0.000	A
C-A	566	141			566				
A-B	147	37			147				
A-C	435	109			435				

2038_Option 1+Option 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3b	B2233 Slip road/ A29	T-Junction	Two-way		1.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	712	100.000
B - B2233 Slip Road		ONE HOUR	✓	82	100.000
C - A29 Nyton Road North		ONE HOUR	✓	79	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	545	167
	B - B2233 Slip Road	82	0	0
	C - A29 Nyton Road North	79	0	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.77	0.23
	B - B2233 Slip Road	1.00	0.00	0.00
	C - A29 Nyton Road North	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	1	9
	B - B2233 Slip Road	6	0	0
	C - A29 Nyton Road North	4	0	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.011	1.090
	B - B2233 Slip Road	1.056	1.000	1.000
	C - A29 Nyton Road North	1.037	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	07:45-08:00	536	552
	08:00-08:15	640	659
	08:15-08:30	784	807
	08:30-08:45	784	807
	08:45-09:00	640	659
	09:00-09:15	536	552
B - B2233 Slip Road	07:45-08:00	62	65
	08:00-08:15	74	78
	08:15-08:30	90	95
	08:30-08:45	90	95
	08:45-09:00	74	78
	09:00-09:15	62	65
C - A29 Nyton Road North	07:45-08:00	59	62
	08:00-08:15	71	74
	08:15-08:30	87	90
	08:30-08:45	87	90
	08:45-09:00	71	74
	09:00-09:15	59	62

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.22	10.92	0.3	B	75	113
C-AB	0.00	0.00	0.0	A	0	0
C-A					72	109
A-B					500	750
A-C					153	229

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	599	0.000	0	0.0	0.0	0.000	A
B-A	62	15	457	0.135	61	0.0	0.2	9.069	A
C-AB	0	0	977	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
A-B	410	103			410				
A-C	125	31			125				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	580	0.000	0	0.0	0.0	0.000	A
B-A	74	18	442	0.167	74	0.2	0.2	9.773	A
C-AB	0	0	928	0.000	0	0.0	0.0	0.000	A
C-A	71	18			71				
A-B	490	123			490				
A-C	150	37			150				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	552	0.000	0	0.0	0.0	0.000	A
B-A	90	23	420	0.215	90	0.2	0.3	10.903	B
C-AB	0	0	860	0.000	0	0.0	0.0	0.000	A
C-A	87	22			87				
A-B	600	150			600				
A-C	183	46			183				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	552	0.000	0	0.0	0.0	0.000	A
B-A	90	23	420	0.215	90	0.3	0.3	10.922	B
C-AB	0	0	860	0.000	0	0.0	0.0	0.000	A
C-A	87	22			87				
A-B	600	150			600				
A-C	183	46			183				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	580	0.000	0	0.0	0.0	0.000	A
B-A	74	18	442	0.167	74	0.3	0.2	9.799	A
C-AB	0	0	928	0.000	0	0.0	0.0	0.000	A
C-A	71	18			71				
A-B	490	123			490				
A-C	150	37			150				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	599	0.000	0	0.0	0.0	0.000	A
B-A	62	15	457	0.135	62	0.2	0.2	9.106	A
C-AB	0	0	977	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
A-B	410	103			410				
A-C	125	31			125				

2038_Option 1+Option 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3b	B2233 Slip road/ A29	T-Junction	Two-way		2.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	327	100.000
B - B2233 Slip Road		ONE HOUR	✓	145	100.000
C - A29 Nyton Road North		ONE HOUR	✓	200	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	238	88
	B - B2233 Slip Road	145	0	0
	C - A29 Nyton Road North	200	0	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.73	0.27
	B - B2233 Slip Road	1.00	0.00	0.00
	C - A29 Nyton Road North	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	1	7
	B - B2233 Slip Road	1	0	0
	C - A29 Nyton Road North	5	0	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Slip Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.009	1.069
	B - B2233 Slip Road	1.006	1.000	1.000
	C - A29 Nyton Road North	1.055	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	16:45-17:00	246	252
	17:00-17:15	294	301
	17:15-17:30	360	369
	17:30-17:45	360	369
	17:45-18:00	294	301
	18:00-18:15	246	252
B - B2233 Slip Road	16:45-17:00	109	109
	17:00-17:15	130	131
	17:15-17:30	159	160
	17:30-17:45	159	160
	17:45-18:00	130	131
	18:00-18:15	109	109
C - A29 Nyton Road North	16:45-17:00	151	159
	17:00-17:15	180	190
	17:15-17:30	221	233
	17:30-17:45	221	233
	17:45-18:00	180	190
	18:00-18:15	151	159

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.33	11.35	0.5	B	133	199
C-AB	0.00	0.00	0.0	A	0	0
C-A					184	276
A-B					219	328
A-C					81	122

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	626	0.000	0	0.0	0.0	0.000	A
B-A	109	27	504	0.216	108	0.0	0.3	9.052	A
C-AB	0	0	1115	0.000	0	0.0	0.0	0.000	A
C-A	151	38			151				
A-B	179	45			179				
A-C	67	17			67				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	611	0.000	0	0.0	0.0	0.000	A
B-A	130	32	493	0.264	130	0.3	0.4	9.909	A
C-AB	0	0	1092	0.000	0	0.0	0.0	0.000	A
C-A	180	45			180				
A-B	214	54			214				
A-C	79	20			79				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	590	0.000	0	0.0	0.0	0.000	A
B-A	159	40	476	0.334	159	0.4	0.5	11.314	B
C-AB	0	0	1061	0.000	0	0.0	0.0	0.000	A
C-A	221	55			221				
A-B	262	66			262				
A-C	97	24			97				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	590	0.000	0	0.0	0.0	0.000	A
B-A	159	40	476	0.334	159	0.5	0.5	11.352	B
C-AB	0	0	1061	0.000	0	0.0	0.0	0.000	A
C-A	221	55			221				
A-B	262	66			262				
A-C	97	24			97				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	611	0.000	0	0.0	0.0	0.000	A
B-A	130	32	493	0.264	130	0.5	0.4	9.958	A
C-AB	0	0	1092	0.000	0	0.0	0.0	0.000	A
C-A	180	45			180				
A-B	214	54			214				
A-C	79	20			79				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	626	0.000	0	0.0	0.0	0.000	A
B-A	109	27	504	0.216	109	0.4	0.3	9.115	A
C-AB	0	0	1115	0.000	0	0.0	0.0	0.000	A
C-A	151	38			151				
A-B	179	45			179				
A-C	67	17			67				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: 3c_A29_B2233.j9
Path: C:\Users\INVN01911\Desktop\A29
Report generation date: 5/12/2020 1:48:05 PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2023_Option 1								
Stream B-C	1.0	15.71	0.51	C	2.2	22.52	0.70	C
Stream B-A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	24.2	81.24	0.99	F	1.2	14.01	0.53	B
2023_Option 1+Option 2								
Stream B-C	0.6	9.96	0.39	A	2.2	18.45	0.70	C
Stream B-A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	6.8	44.63	0.89	E	1.2	12.90	0.55	B
2038_Option 1								
Stream B-C	1.3	18.57	0.58	C	3.9	37.01	0.81	E
Stream B-A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	75.3	303.87	1.11	F	0.6	12.00	0.37	B
2038_Option 1+Option 2								
Stream B-C	0.7	10.25	0.41	B	3.4	25.62	0.78	D
Stream B-A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	20.3	106.64	1.01	F	1.2	12.46	0.53	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

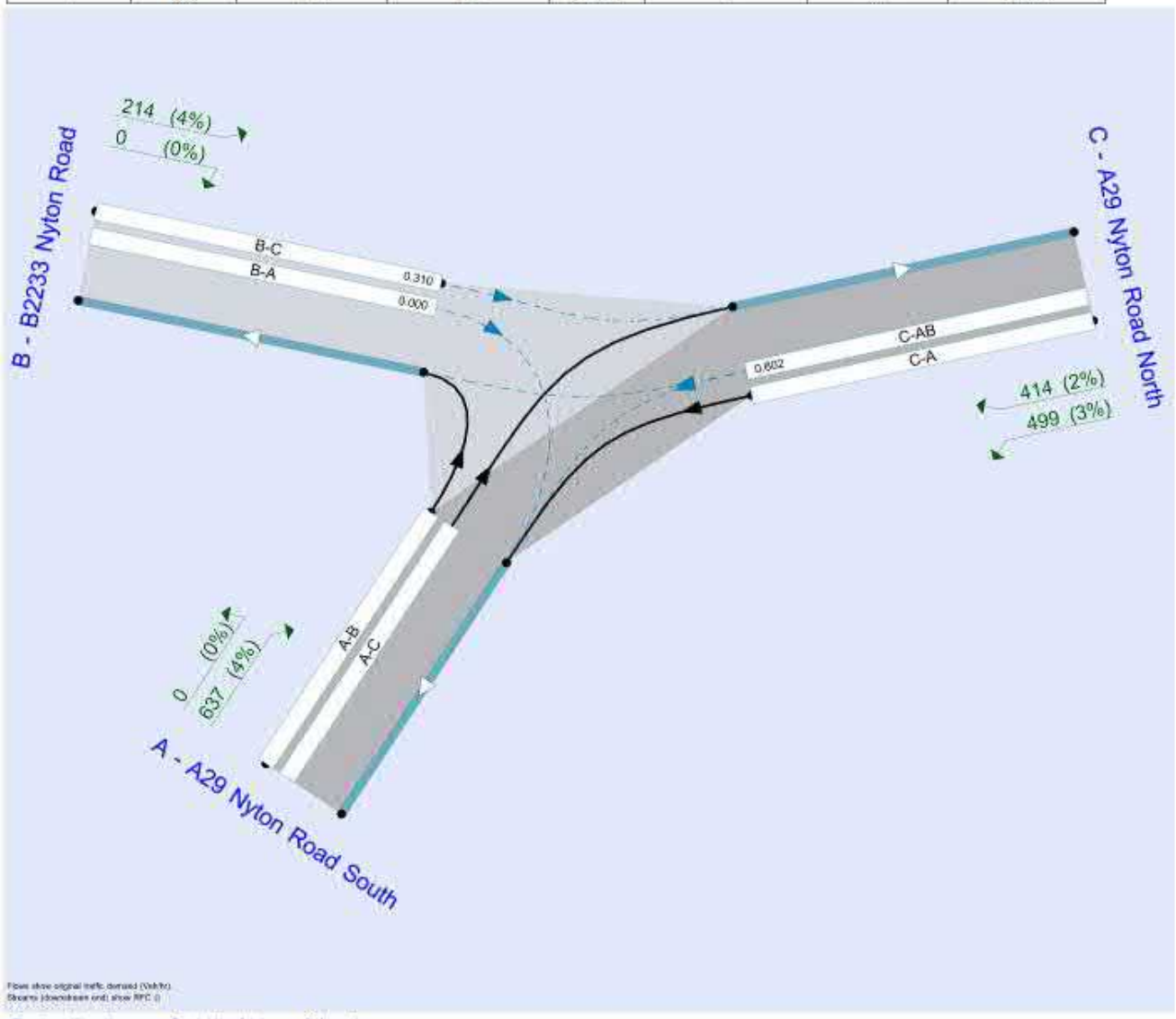
File summary

File Description

Title	Nyton Road, A29
Location	50.842164°, -0.687523°
Site number	3a
Date	3/24/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INAA02374
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023_Option 1	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023_Option 1	PM	ONE HOUR	16:45	18:15	15	✓
D3	2023_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓
D4	2023_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓
D5	2038_Option 1	AM	ONE HOUR	07:45	09:15	15	✓
D6	2038_Option 1	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023_Option 1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		31.21	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A29 Nyton Road South		Major
B	B2233 Nyton Road		Minor
C	A29 Nyton Road North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A29 Nyton Road North	6.70		✓	3.00	36.1	✓	4.43

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B2233 Nyton Road	One lane plus flare	10.00	3.20	2.80	2.70	2.60	✓	1.00	67	36

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
J3c	B-A	621	0.110	0.277	0.174	0.396
J3c	B-C	664	0.099	0.249	-	-
J3c	C-B	647	0.243	0.243	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023_Option 1	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	637	100.000
B - B2233 Nyton Road		ONE HOUR	✓	214	100.000
C - A29 Nyton Road North		ONE HOUR	✓	913	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	637
	B - B2233 Nyton Road	0	0	214
	C - A29 Nyton Road North	499	414	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.55	0.45	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	4
	B - B2233 Nyton Road	0	0	4
	C - A29 Nyton Road North	3	2	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.000	1.036
	B - B2233 Nyton Road	1.000	1.000	1.038
	C - A29 Nyton Road North	1.035	1.015	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	07:45-08:00	480	497
	08:00-08:15	573	594
	08:15-08:30	701	727
	08:30-08:45	701	727
	08:45-09:00	573	594
	09:00-09:15	480	497
B - B2233 Nyton Road	07:45-08:00	161	167
	08:00-08:15	192	200
	08:15-08:30	236	245
	08:30-08:45	236	245
	08:45-09:00	192	200
	09:00-09:15	161	167
C - A29 Nyton Road North	07:45-08:00	688	705
	08:00-08:15	821	842
	08:15-08:30	1006	1032
	08:30-08:45	1006	1032
	08:45-09:00	821	842
	09:00-09:15	688	705

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.51	15.71	1.0	C	196	295
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.99	81.24	24.2	F	589	884
C-A					249	374
A-B					0	0
A-C					585	877

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	520	0.310	159	0.0	0.4	9.941	A
B-A	0	0	290	0.000	0	0.0	0.0	0.000	A
C-AB	336	84	559	0.602	330	0.0	1.5	15.398	C
C-A	351	88			351				
A-B	0	0			0				
A-C	480	120			480				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	192	48	497	0.388	192	0.4	0.6	11.778	B
B-A	0	0	223	0.000	0	0.0	0.0	0.000	A
C-AB	469	117	624	0.753	463	1.5	3.3	21.842	C
C-A	352	88			352				
A-B	0	0			0				
A-C	573	143			573				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	236	59	465	0.507	234	0.6	1.0	15.519	C
B-A	0	0	132	0.000	0	0.0	0.0	0.000	A
C-AB	961	240	975	0.986	907	3.3	16.7	45.300	E
C-A	44	11			44				
A-B	0	0			0				
A-C	701	175			701				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	236	59	465	0.507	236	1.0	1.0	15.710	C
B-A	0	0	118	0.000	0	0.0	0.0	0.000	A
C-AB	961	240	976	0.984	932	16.7	24.1	81.244	F
C-A	44	11			44				
A-B	0	0			0				
A-C	701	175			701				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	192	48	497	0.388	194	1.0	0.6	11.948	B
B-A	0	0	198	0.000	0	0.0	0.0	0.000	A
C-AB	469	117	626	0.749	548	24.1	4.6	70.130	F
C-A	352	88			352				
A-B	0	0			0				
A-C	573	143			573				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	161	40	520	0.310	162	0.6	0.5	10.082	B
B-A	0	0	283	0.000	0	0.0	0.0	0.000	A
C-AB	336	84	560	0.601	348	4.6	1.7	17.958	C
C-A	351	88			351				
A-B	0	0			0				
A-C	480	120			480				

2023_Option 1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		6.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023_Option 1	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	480	100.000
B - B2233 Nyton Road		ONE HOUR	✓	335	100.000
C - A29 Nyton Road North		ONE HOUR	✓	853	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	480
	B - B2233 Nyton Road	0	0	335
	C - A29 Nyton Road North	614	239	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.72	0.28	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	2
	B - B2233 Nyton Road	0	0	0
	C - A29 Nyton Road North	2	3	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.003	1.020
	B - B2233 Nyton Road	1.000	1.000	1.003
	C - A29 Nyton Road North	1.021	1.031	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	16:45-17:00	361	368
	17:00-17:15	432	440
	17:15-17:30	529	539
	17:30-17:45	529	539
	17:45-18:00	432	440
	18:00-18:15	361	368
B - B2233 Nyton Road	16:45-17:00	252	253
	17:00-17:15	301	302
	17:15-17:30	369	370
	17:30-17:45	369	370
	17:45-18:00	301	302
	18:00-18:15	252	253
C - A29 Nyton Road North	16:45-17:00	642	657
	17:00-17:15	767	785
	17:15-17:30	939	961
	17:30-17:45	939	961
	17:45-18:00	767	785
	18:00-18:15	642	657

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.70	22.52	2.2	C	308	461
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.53	14.01	1.2	B	229	344
C-A					554	830
A-B					0	0
A-C					441	661

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	252	63	570	0.443	249	0.0	0.8	11.113	B
B-A	0	0	363	0.000	0	0.0	0.0	0.000	A
C-AB	181	45	545	0.333	179	0.0	0.5	9.809	A
C-A	461	115			461				
A-B	0	0			0				
A-C	361	90			361				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	301	75	552	0.546	300	0.8	1.2	14.161	B
B-A	0	0	312	0.000	0	0.0	0.0	0.000	A
C-AB	220	55	536	0.411	219	0.5	0.7	11.347	B
C-A	547	137			547				
A-B	0	0			0				
A-C	432	108			432				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	369	92	528	0.699	365	1.2	2.2	21.588	C
B-A	0	0	243	0.000	0	0.0	0.0	0.000	A
C-AB	286	71	543	0.526	284	0.7	1.2	13.823	B
C-A	653	163			653				
A-B	0	0			0				
A-C	529	132			529				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	369	92	528	0.699	369	2.2	2.2	22.521	C
B-A	0	0	242	0.000	0	0.0	0.0	0.000	A
C-AB	286	71	543	0.526	286	1.2	1.2	14.011	B
C-A	653	163			653				
A-B	0	0			0				
A-C	529	132			529				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	301	75	552	0.546	305	2.2	1.2	14.796	B
B-A	0	0	311	0.000	0	0.0	0.0	0.000	A
C-AB	220	55	536	0.411	222	1.2	0.7	11.538	B
C-A	547	137			547				
A-B	0	0			0				
A-C	432	108			432				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	252	63	570	0.443	254	1.2	0.8	11.451	B
B-A	0	0	362	0.000	0	0.0	0.0	0.000	A
C-AB	181	45	545	0.333	182	0.7	0.5	9.961	A
C-A	461	115			461				
A-B	0	0			0				
A-C	361	90			361				

2023_Option 1+Option 2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		25.77	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	173	100.000
B - B2233 Nyton Road		ONE HOUR	✓	208	100.000
C - A29 Nyton Road North		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	173
	B - B2233 Nyton Road	0	0	208
	C - A29 Nyton Road North	71	474	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.13	0.87	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	5
	B - B2233 Nyton Road	0	0	4
	C - A29 Nyton Road North	4	1	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.000	1.047
	B - B2233 Nyton Road	1.000	1.000	1.040
	C - A29 Nyton Road North	1.038	1.013	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	07:45-08:00	130	136
	08:00-08:15	155	163
	08:15-08:30	190	199
	08:30-08:45	190	199
	08:45-09:00	155	163
	09:00-09:15	130	136
B - B2233 Nyton Road	07:45-08:00	157	163
	08:00-08:15	187	195
	08:15-08:30	229	238
	08:30-08:45	229	238
	08:45-09:00	187	195
	09:00-09:15	157	163
C - A29 Nyton Road North	07:45-08:00	411	417
	08:00-08:15	490	498
	08:15-08:30	601	610
	08:30-08:45	601	610
	08:45-09:00	490	498
	09:00-09:15	411	417

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.39	9.96	0.6	A	191	286
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.89	44.63	6.8	E	453	680
C-A					47	71
A-B					0	0
A-C					158	238

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	157	39	606	0.259	155	0.0	0.3	7.969	A
B-A	0	0	430	0.000	0	0.0	0.0	0.000	A
C-AB	360	90	611	0.590	355	0.0	1.4	13.784	B
C-A	50	13			50				
A-B	0	0			0				
A-C	130	33			130				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	187	47	599	0.312	187	0.3	0.4	8.714	A
B-A	0	0	391	0.000	0	0.0	0.0	0.000	A
C-AB	437	109	614	0.712	433	1.4	2.4	19.537	C
C-A	53	13			53				
A-B	0	0			0				
A-C	155	39			155				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	229	57	591	0.388	228	0.4	0.6	9.919	A
B-A	0	0	338	0.000	0	0.0	0.0	0.000	A
C-AB	563	141	636	0.885	548	2.4	6.0	36.637	E
C-A	38	9			38				
A-B	0	0			0				
A-C	190	48			190				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	229	57	591	0.388	229	0.6	0.6	9.956	A
B-A	0	0	333	0.000	0	0.0	0.0	0.000	A
C-AB	563	141	636	0.885	560	6.0	6.8	44.632	E
C-A	38	9			38				
A-B	0	0			0				
A-C	190	48			190				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	187	47	599	0.312	188	0.6	0.5	8.760	A
B-A	0	0	383	0.000	0	0.0	0.0	0.000	A
C-AB	437	109	614	0.711	453	6.8	2.7	24.357	C
C-A	53	13			53				
A-B	0	0			0				
A-C	155	39			155				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	157	39	606	0.259	157	0.5	0.4	8.032	A
B-A	0	0	426	0.000	0	0.0	0.0	0.000	A
C-AB	360	90	611	0.590	365	2.7	1.5	14.942	B
C-A	50	13			50				
A-B	0	0			0				
A-C	130	33			130				

2023_Option 1+Option 2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		12.72	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	72	100.000
B - B2233 Nyton Road		ONE HOUR	✓	406	100.000
C - A29 Nyton Road North		ONE HOUR	✓	417	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	72
	B - B2233 Nyton Road	0	0	406
	C - A29 Nyton Road North	111	306	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.27	0.73	0.00

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
	A - A29 Nyton Road South	0	0	4
	B - B2233 Nyton Road	0	0	0
	C - A29 Nyton Road North	5	2	0

Average PCU Per Veh

	To			
From		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
	A - A29 Nyton Road South	1.000	1.003	1.037
	B - B2233 Nyton Road	1.000	1.000	1.003
	C - A29 Nyton Road North	1.055	1.024	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	16:45-17:00	54	56
	17:00-17:15	64	67
	17:15-17:30	79	82
	17:30-17:45	79	82
	17:45-18:00	64	67
	18:00-18:15	54	56
B - B2233 Nyton Road	16:45-17:00	306	307
	17:00-17:15	365	366
	17:15-17:30	447	448
	17:30-17:45	447	448
	17:45-18:00	365	366
	18:00-18:15	306	307
C - A29 Nyton Road North	16:45-17:00	314	324
	17:00-17:15	375	387
	17:15-17:30	459	474
	17:30-17:45	459	474
	17:45-18:00	375	387
	18:00-18:15	314	324

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.70	18.45	2.2	C	373	559
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.55	12.90	1.2	B	283	425
C-A					99	149
A-B					0	0
A-C					66	98

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	306	76	648	0.472	302	0.0	0.9	10.322	B
B-A	0	0	497	0.000	0	0.0	0.0	0.000	A
C-AB	231	58	619	0.373	229	0.0	0.6	9.159	A
C-A	83	21			83				
A-B	0	0			0				
A-C	54	13			54				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	365	91	645	0.566	363	0.9	1.3	12.715	B
B-A	0	0	471	0.000	0	0.0	0.0	0.000	A
C-AB	277	69	618	0.447	276	0.6	0.8	10.475	B
C-A	98	25			98				
A-B	0	0			0				
A-C	64	16			64				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	447	112	641	0.697	443	1.3	2.2	17.887	C
B-A	0	0	438	0.000	0	0.0	0.0	0.000	A
C-AB	342	86	621	0.551	340	0.8	1.2	12.755	B
C-A	117	29			117				
A-B	0	0			0				
A-C	79	20			79				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	447	112	641	0.697	447	2.2	2.2	18.452	C
B-A	0	0	437	0.000	0	0.0	0.0	0.000	A
C-AB	342	86	621	0.551	342	1.2	1.2	12.896	B
C-A	117	29			117				
A-B	0	0			0				
A-C	79	20			79				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	365	91	645	0.566	368	2.2	1.3	13.190	B
B-A	0	0	470	0.000	0	0.0	0.0	0.000	A
C-AB	277	69	619	0.447	278	1.2	0.8	10.628	B
C-A	98	25			98				
A-B	0	0			0				
A-C	64	16			64				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	306	76	648	0.472	307	1.3	0.9	10.837	B
B-A	0	0	495	0.000	0	0.0	0.0	0.000	A
C-AB	231	58	619	0.373	232	0.8	0.6	9.314	A
C-A	83	21			83				
A-B	0	0			0				
A-C	54	13			54				

2038_Option 1, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		125.25	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2038_Option 1	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	673	100.000
B - B2233 Nyton Road		ONE HOUR	✓	242	100.000
C - A29 Nyton Road North		ONE HOUR	✓	1111	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	673
	B - B2233 Nyton Road	0	0	242
	C - A29 Nyton Road North	653	457	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.59	0.41	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	3
	B - B2233 Nyton Road	0	0	3
	C - A29 Nyton Road North	3	1	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.000	1.034
	B - B2233 Nyton Road	1.000	1.000	1.028
	C - A29 Nyton Road North	1.029	1.015	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	07:45-08:00	506	524
	08:00-08:15	605	625
	08:15-08:30	741	766
	08:30-08:45	741	766
	08:45-09:00	605	625
	09:00-09:15	506	524
B - B2233 Nyton Road	07:45-08:00	182	187
	08:00-08:15	218	224
	08:15-08:30	267	274
	08:30-08:45	267	274
	08:45-09:00	218	224
	09:00-09:15	182	187
C - A29 Nyton Road North	07:45-08:00	836	855
	08:00-08:15	998	1021
	08:15-08:30	1223	1251
	08:30-08:45	1223	1251
	08:45-09:00	998	1021
	09:00-09:15	836	855

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.58	18.57	1.3	C	222	333
B-A	0.00	0.00	0.0	A	0	0
C-AB	1.11	303.87	75.3	F	757	1136
C-A					262	393
A-B					0	0
A-C					617	926

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	46	519	0.351	180	0.0	0.5	10.568	B
B-A	0	0	249	0.000	0	0.0	0.0	0.000	A
C-AB	403	101	599	0.672	394	0.0	2.2	17.070	C
C-A	433	108			433				
A-B	0	0			0				
A-C	506	127			506				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	218	54	494	0.441	217	0.5	0.8	12.933	B
B-A	0	0	174	0.000	0	0.0	0.0	0.000	A
C-AB	646	161	765	0.844	631	2.2	6.0	25.904	D
C-A	352	88			352				
A-B	0	0			0				
A-C	605	151			605				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	267	67	460	0.580	264	0.8	1.3	18.195	C
B-A	0	0	70	0.000	0	0.0	0.0	0.000	A
C-AB	1223	306	1102	1.110	1075	6.0	42.9	88.437	F
C-A	0	0			0				
A-B	0	0			0				
A-C	741	185			741				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	267	67	460	0.580	267	1.3	1.3	18.571	C
B-A	0	0	31	0.000	0	0.0	0.0	0.000	A
C-AB	1223	306	1103	1.109	1094	42.9	75.2	213.497	F
C-A	0	0			0				
A-B	0	0			0				
A-C	741	185			741				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	218	54	494	0.441	220	1.3	0.8	13.228	B
B-A	0	0	96	0.000	0	0.0	0.0	0.000	A
C-AB	646	161	767	0.841	832	75.2	28.7	303.867	F
C-A	352	88			352				
A-B	0	0			0				
A-C	605	151			605				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	182	46	519	0.351	183	0.8	0.6	10.765	B
B-A	0	0	212	0.000	0	0.0	0.0	0.000	A
C-AB	403	101	599	0.671	507	28.7	2.7	69.801	F
C-A	433	108			433				
A-B	0	0			0				
A-C	506	127			506				

2038_Option 1, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		8.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2038_Option 1	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	578	100.000
B - B2233 Nyton Road		ONE HOUR	✓	370	100.000
C - A29 Nyton Road North		ONE HOUR	✓	910	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	578
	B - B2233 Nyton Road	0	0	370
	C - A29 Nyton Road North	752	159	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	2
	B - B2233 Nyton Road	0	0	0
	C - A29 Nyton Road North	2	5	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.004	1.016
	B - B2233 Nyton Road	1.000	1.000	1.004
	C - A29 Nyton Road North	1.018	1.049	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	16:45-17:00	435	442
	17:00-17:15	519	528
	17:15-17:30	636	646
	17:30-17:45	636	646
	17:45-18:00	519	528
	18:00-18:15	435	442
B - B2233 Nyton Road	16:45-17:00	278	279
	17:00-17:15	332	334
	17:15-17:30	407	409
	17:30-17:45	407	409
	17:45-18:00	332	334
	18:00-18:15	278	279
C - A29 Nyton Road North	16:45-17:00	685	701
	17:00-17:15	818	838
	17:15-17:30	1002	1026
	17:30-17:45	1002	1026
	17:45-18:00	818	838
	18:00-18:15	685	701

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.81	37.01	3.9	E	339	509
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.37	12.00	0.6	B	148	222
C-A					688	1031
A-B					0	0
A-C					530	795

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	278	70	551	0.505	274	0.0	1.0	12.831	B
B-A	0	0	348	0.000	0	0.0	0.0	0.000	A
C-AB	120	30	515	0.233	119	0.0	0.3	9.052	A
C-A	566	141			566				
A-B	0	0			0				
A-C	435	109			435				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	332	83	530	0.627	330	1.0	1.6	17.772	C
B-A	0	0	295	0.000	0	0.0	0.0	0.000	A
C-AB	144	36	498	0.289	143	0.3	0.4	10.149	B
C-A	675	169			675				
A-B	0	0			0				
A-C	519	130			519				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	407	102	500	0.813	399	1.6	3.7	32.944	D
B-A	0	0	222	0.000	0	0.0	0.0	0.000	A
C-AB	180	45	480	0.374	179	0.4	0.6	11.938	B
C-A	823	206			823				
A-B	0	0			0				
A-C	636	159			636				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	407	102	500	0.813	406	3.7	3.9	37.009	E
B-A	0	0	221	0.000	0	0.0	0.0	0.000	A
C-AB	180	45	480	0.375	180	0.6	0.6	11.998	B
C-A	823	206			823				
A-B	0	0			0				
A-C	636	159			636				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	332	83	530	0.627	341	3.9	1.8	19.853	C
B-A	0	0	294	0.000	0	0.0	0.0	0.000	A
C-AB	144	36	497	0.289	145	0.6	0.4	10.218	B
C-A	675	169			675				
A-B	0	0			0				
A-C	519	130			519				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	278	70	551	0.505	281	1.8	1.0	13.471	B
B-A	0	0	348	0.000	0	0.0	0.0	0.000	A
C-AB	120	30	515	0.233	120	0.4	0.3	9.126	A
C-A	566	141			566				
A-B	0	0			0				
A-C	435	109			435				

2038_Option 1+Option 2, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		62.84	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	167	100.000
B - B2233 Nyton Road		ONE HOUR	✓	223	100.000
C - A29 Nyton Road North		ONE HOUR	✓	618	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	167
	B - B2233 Nyton Road	0	0	223
	C - A29 Nyton Road North	79	539	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.13	0.87	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	9
	B - B2233 Nyton Road	0	0	3
	C - A29 Nyton Road North	4	1	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.000	1.090
	B - B2233 Nyton Road	1.000	1.000	1.028
	C - A29 Nyton Road North	1.037	1.014	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	07:45-08:00	125	137
	08:00-08:15	150	163
	08:15-08:30	183	200
	08:30-08:45	183	200
	08:45-09:00	150	163
	09:00-09:15	125	137
B - B2233 Nyton Road	07:45-08:00	168	173
	08:00-08:15	201	206
	08:15-08:30	246	253
	08:30-08:45	246	253
	08:45-09:00	201	206
	09:00-09:15	168	173
C - A29 Nyton Road North	07:45-08:00	465	473
	08:00-08:15	556	565
	08:15-08:30	681	692
	08:30-08:45	681	692
	08:45-09:00	556	565
	09:00-09:15	465	473

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.41	10.25	0.7	B	205	307
B-A	0.00	0.00	0.0	A	0	0
C-AB	1.01	106.64	20.3	F	534	801
C-A					34	50
A-B					0	0
A-C					153	229

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	612	0.275	167	0.0	0.4	8.052	A
B-A	0	0	409	0.000	0	0.0	0.0	0.000	A
C-AB	413	103	616	0.671	405	0.0	2.0	16.569	C
C-A	52	13			52				
A-B	0	0			0				
A-C	125	31			125				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	606	0.331	200	0.4	0.5	8.867	A
B-A	0	0	365	0.000	0	0.0	0.0	0.000	A
C-AB	508	127	627	0.810	500	2.0	3.8	26.988	D
C-A	48	12			48				
A-B	0	0			0				
A-C	150	37			150				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	246	61	597	0.412	245	0.5	0.7	10.207	B
B-A	0	0	305	0.000	0	0.0	0.0	0.000	A
C-AB	681	170	676	1.007	639	3.8	14.2	65.209	F
C-A	0	0			0				
A-B	0	0			0				
A-C	183	46			183				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	246	61	597	0.412	246	0.7	0.7	10.251	B
B-A	0	0	290	0.000	0	0.0	0.0	0.000	A
C-AB	681	170	676	1.006	656	14.2	20.2	106.637	F
C-A	0	0			0				
A-B	0	0			0				
A-C	183	46			183				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	606	0.331	201	0.7	0.5	8.922	A
B-A	0	0	338	0.000	0	0.0	0.0	0.000	A
C-AB	508	127	627	0.809	567	20.2	5.4	72.052	F
C-A	48	12			48				
A-B	0	0			0				
A-C	150	37			150				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	612	0.275	169	0.5	0.4	8.124	A
B-A	0	0	401	0.000	0	0.0	0.0	0.000	A
C-AB	413	103	616	0.671	426	5.4	2.2	20.092	C
C-A	52	13			52				
A-B	0	0			0				
A-C	125	31			125				

2038_Option 1+Option 2, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	B - B2233 Nyton Road - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J3c	B2233 Nyton Road/ A29	T-Junction	Two-way		14.53	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Nyton Road South		ONE HOUR	✓	88	100.000
B - B2233 Nyton Road		ONE HOUR	✓	450	100.000
C - A29 Nyton Road North		ONE HOUR	✓	494	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	88
	B - B2233 Nyton Road	0	0	450
	C - A29 Nyton Road North	200	293	0

Proportions

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0.00	0.00	1.00
	B - B2233 Nyton Road	0.00	0.00	1.00
	C - A29 Nyton Road North	0.41	0.59	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	0	0	7
	B - B2233 Nyton Road	0	0	1
	C - A29 Nyton Road North	5	3	0

Average PCU Per Veh

		To		
		A - A29 Nyton Road South	B - B2233 Nyton Road	C - A29 Nyton Road North
From	A - A29 Nyton Road South	1.000	1.000	1.069
	B - B2233 Nyton Road	1.000	1.000	1.007
	C - A29 Nyton Road North	1.055	1.027	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Nyton Road South	16:45-17:00	67	71
	17:00-17:15	79	85
	17:15-17:30	97	104
	17:30-17:45	97	104
	17:45-18:00	79	85
	18:00-18:15	67	71
B - B2233 Nyton Road	16:45-17:00	339	341
	17:00-17:15	404	407
	17:15-17:30	495	499
	17:30-17:45	495	499
	17:45-18:00	404	407
	18:00-18:15	339	341
C - A29 Nyton Road North	16:45-17:00	372	386
	17:00-17:15	444	461
	17:15-17:30	544	565
	17:30-17:45	544	565
	17:45-18:00	444	461
	18:00-18:15	372	386

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.78	25.62	3.4	D	413	619
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.53	12.46	1.2	B	273	409
C-A					180	271
A-B					0	0
A-C					81	122

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	339	85	642	0.528	334	0.0	1.1	11.561	B
B-A	0	0	483	0.000	0	0.0	0.0	0.000	A
C-AB	222	55	615	0.360	219	0.0	0.6	9.054	A
C-A	150	38			150				
A-B	0	0			0				
A-C	67	17			67				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	404	101	638	0.634	402	1.1	1.7	15.095	C
B-A	0	0	456	0.000	0	0.0	0.0	0.000	A
C-AB	266	66	615	0.433	265	0.6	0.8	10.278	B
C-A	178	45			178				
A-B	0	0			0				
A-C	79	20			79				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	495	124	633	0.782	489	1.7	3.2	23.914	C
B-A	0	0	419	0.000	0	0.0	0.0	0.000	A
C-AB	331	83	620	0.534	329	0.8	1.1	12.333	B
C-A	213	53			213				
A-B	0	0			0				
A-C	97	24			97				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	495	124	633	0.782	495	3.2	3.4	25.624	D
B-A	0	0	418	0.000	0	0.0	0.0	0.000	A
C-AB	331	83	620	0.534	331	1.1	1.2	12.457	B
C-A	213	53			213				
A-B	0	0			0				
A-C	97	24			97				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	404	101	638	0.634	411	3.4	1.8	16.234	C
B-A	0	0	455	0.000	0	0.0	0.0	0.000	A
C-AB	266	66	615	0.433	267	1.2	0.8	10.416	B
C-A	178	45			178				
A-B	0	0			0				
A-C	79	20			79				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	339	85	642	0.528	341	1.8	1.1	12.091	B
B-A	0	0	482	0.000	0	0.0	0.0	0.000	A
C-AB	222	55	615	0.360	222	0.8	0.6	9.156	A
C-A	150	38			150				
A-B	0	0			0				
A-C	67	17			67				

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

Filename: 4_A29 Fontwell Avenue_B2233 Barnham Road.j9
Path: C:\Users\INVN01911\Desktop\A29
Report generation date: 5/12/2020 1:49:07 PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2023_Option 1								
A - A29 Fontwell Avenue	1.6	11.41	0.62	B	4.0	24.20	0.81	C
B - B2233 Barnham Road	2.0	12.17	0.67	B	1.2	8.89	0.54	A
C - Nyton Road	1.3	5.01	0.57	A	1.1	4.48	0.53	A
2023_Option 1+Option 2								
A - A29 Fontwell Avenue	0.3	4.95	0.20	A	0.4	6.30	0.29	A
B - B2233 Barnham Road	0.9	6.20	0.48	A	0.5	4.91	0.33	A
C - Nyton Road	0.3	2.93	0.25	A	0.4	3.03	0.31	A
2038_Option 1								
A - A29 Fontwell Avenue	3.3	19.01	0.77	C	11.8	82.70	0.95	F
B - B2233 Barnham Road	5.2	27.90	0.85	D	1.2	9.49	0.54	A
C - Nyton Road	1.5	5.52	0.61	A	1.6	5.45	0.61	A
2038_Option 1+Option 2								
A - A29 Fontwell Avenue	0.3	5.16	0.24	A	0.7	7.91	0.43	A
B - B2233 Barnham Road	1.2	7.34	0.55	A	0.5	5.29	0.35	A
C - Nyton Road	0.4	3.03	0.27	A	0.5	3.26	0.35	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

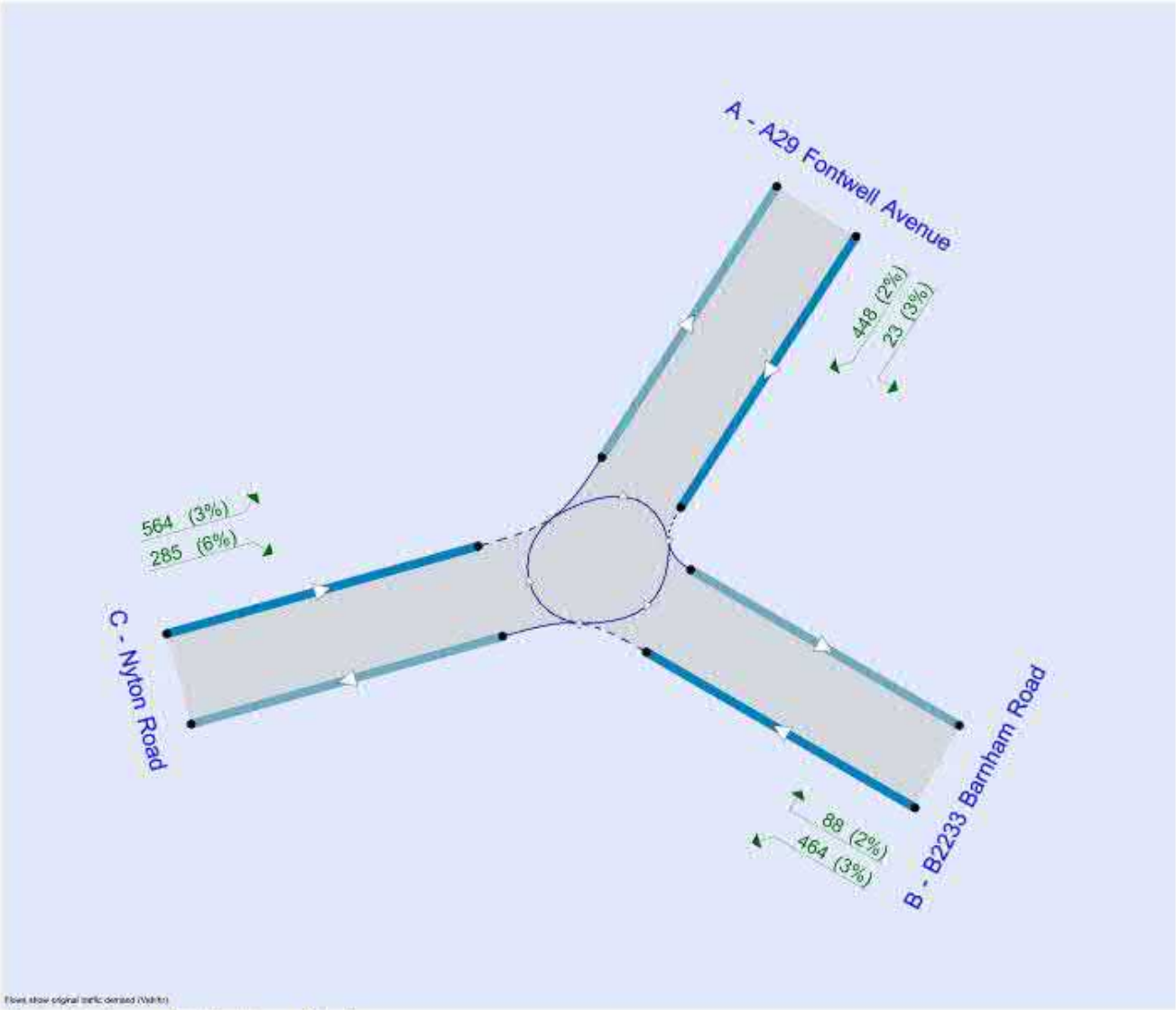
File summary

File Description

Title	A29, B2233, Nyton Road
Location	50.842179°, -0.660600°
Site number	4
Date	3/24/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INAA02374
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023_Option 1	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023_Option 1	PM	ONE HOUR	16:45	18:15	15	✓
D3	2023_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓
D4	2023_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓
D5	2038_Option 1	AM	ONE HOUR	07:45	09:15	15	✓
D6	2038_Option 1	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023_Option 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	8.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A29 Fontwell Avenue	
B	B2233 Barnham Road	
C	Nyton Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A29 Fontwell Avenue	4.50	4.50	0.0	6.3	25.0	77.0	
B - B2233 Barnham Road	2.70	4.00	15.4	999.0	25.0	18.0	
C - Nyton Road	3.60	6.50	16.3	999.0	25.0	20.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A29 Fontwell Avenue	0.433	996
B - B2233 Barnham Road	0.593	1229
C - Nyton Road	0.706	1787

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023_Option 1	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	471	100.000
B - B2233 Barnham Road		ONE HOUR	✓	552	100.000
C - Nyton Road		ONE HOUR	✓	851	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	23	448
	B - B2233 Barnham Road	88	0	464
	C - Nyton Road	564	285	2

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.05	0.95
	B - B2233 Barnham Road	0.16	0.00	0.84
	C - Nyton Road	0.66	0.34	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	3	2
	B - B2233 Barnham Road	2	0	3
	C - Nyton Road	3	6	1

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.032	1.021
	B - B2233 Barnham Road	1.023	1.000	1.030
	C - Nyton Road	1.027	1.058	1.013

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	07:45-08:00	354	362
	08:00-08:15	423	432
	08:15-08:30	518	530
	08:30-08:45	518	530
	08:45-09:00	423	432
	09:00-09:15	354	362
B - B2233 Barnham Road	07:45-08:00	416	428
	08:00-08:15	496	511
	08:15-08:30	608	626
	08:30-08:45	608	626
	08:45-09:00	496	511
	09:00-09:15	416	428
C - Nyton Road	07:45-08:00	641	664
	08:00-08:15	765	793
	08:15-08:30	937	972
	08:30-08:45	937	972
	08:45-09:00	765	793
	09:00-09:15	641	664

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.62	11.41	1.6	B	432	648
B - B2233 Barnham Road	0.67	12.17	2.0	B	507	760
C - Nyton Road	0.57	5.01	1.3	A	781	1172

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	354	89	215	878	0.403	352	489	0.0	0.7	6.800	A
B - B2233 Barnham Road	416	104	336	997	0.417	413	231	0.0	0.7	6.137	A
C - Nyton Road	641	160	66	1677	0.382	638	683	0.0	0.6	3.454	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	423	106	258	859	0.492	422	586	0.7	1.0	8.207	A
B - B2233 Barnham Road	496	124	403	957	0.519	495	276	0.7	1.1	7.764	A
C - Nyton Road	765	191	79	1668	0.459	764	819	0.6	0.8	3.977	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	518	130	315	834	0.622	516	717	1.0	1.6	11.231	B
B - B2233 Barnham Road	608	152	493	904	0.672	604	338	1.1	2.0	11.843	B
C - Nyton Road	937	234	97	1656	0.566	935	1000	0.8	1.3	4.982	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	518	130	316	833	0.622	518	718	1.6	1.6	11.410	B
B - B2233 Barnham Road	608	152	495	903	0.673	608	339	2.0	2.0	12.165	B
C - Nyton Road	937	234	97	1656	0.566	937	1005	1.3	1.3	5.009	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	423	106	259	859	0.493	426	588	1.6	1.0	8.355	A
B - B2233 Barnham Road	496	124	407	955	0.520	500	278	2.0	1.1	7.971	A
C - Nyton Road	765	191	80	1668	0.459	767	827	1.3	0.9	4.005	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	354	89	216	878	0.404	356	492	1.0	0.7	6.906	A
B - B2233 Barnham Road	416	104	340	994	0.418	417	232	1.1	0.7	6.250	A
C - Nyton Road	641	160	67	1677	0.382	642	690	0.9	0.6	3.482	A

2023_Option 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	11.75	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023_Option 1	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	566	100.000
B - B2233 Barnham Road		ONE HOUR	✓	428	100.000
C - Nyton Road		ONE HOUR	✓	815	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	61	505
	B - B2233 Barnham Road	80	0	347
	C - Nyton Road	386	429	0.31

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.11	0.89
	B - B2233 Barnham Road	0.19	0.00	0.81
	C - Nyton Road	0.47	0.53	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	1	3
	B - B2233 Barnham Road	2	0	2
	C - Nyton Road	2	1	3

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.010	1.029
	B - B2233 Barnham Road	1.019	1.000	1.016
	C - Nyton Road	1.019	1.007	1.028

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	16:45-17:00	426	438
	17:00-17:15	509	523
	17:15-17:30	624	640
	17:30-17:45	624	640
	17:45-18:00	509	523
	18:00-18:15	426	438
B - B2233 Barnham Road	16:45-17:00	322	328
	17:00-17:15	385	391
	17:15-17:30	471	479
	17:30-17:45	471	479
	17:45-18:00	385	391
	18:00-18:15	322	328
C - Nyton Road	16:45-17:00	614	622
	17:00-17:15	733	742
	17:15-17:30	898	909
	17:30-17:45	898	909
	17:45-18:00	733	742
	18:00-18:15	614	622

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.81	24.20	4.0	C	520	780
B - B2233 Barnham Road	0.54	8.89	1.2	A	393	589
C - Nyton Road	0.53	4.48	1.1	A	748	1122

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	426	107	322	833	0.512	422	350	0.0	1.0	8.675	A
B - B2233 Barnham Road	322	81	377	983	0.328	320	368	0.0	0.5	5.417	A
C - Nyton Road	614	153	60	1722	0.356	612	637	0.0	0.6	3.234	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	509	127	386	806	0.631	507	419	1.0	1.7	11.909	B
B - B2233 Barnham Road	385	96	452	938	0.410	384	440	0.5	0.7	6.490	A
C - Nyton Road	733	183	72	1714	0.428	732	764	0.6	0.7	3.664	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	624	156	472	770	0.810	615	512	1.7	3.8	22.137	C
B - B2233 Barnham Road	471	118	549	880	0.536	469	538	0.7	1.1	8.734	A
C - Nyton Road	898	224	88	1702	0.527	896	930	0.7	1.1	4.459	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	624	156	473	769	0.811	623	513	3.8	4.0	24.205	C
B - B2233 Barnham Road	471	118	556	876	0.538	471	540	1.1	1.2	8.894	A
C - Nyton Road	898	224	89	1702	0.527	898	938	1.1	1.1	4.476	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	509	127	387	806	0.632	518	420	4.0	1.8	12.874	B
B - B2233 Barnham Road	385	96	462	932	0.413	386	443	1.2	0.7	6.625	A
C - Nyton Road	733	183	73	1713	0.428	734	776	1.1	0.8	3.682	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	426	107	324	833	0.512	429	352	1.8	1.1	8.984	A
B - B2233 Barnham Road	322	81	383	979	0.329	323	370	0.7	0.5	5.494	A
C - Nyton Road	614	153	61	1722	0.357	615	645	0.8	0.6	3.255	A

2023_Option 1+Option 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	4.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	170	100.000
B - B2233 Barnham Road		ONE HOUR	✓	481	100.000
C - Nyton Road		ONE HOUR	✓	381	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	19	151
	B - B2233 Barnham Road	89	0	392
	C - Nyton Road	271	108	2

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.11	0.89
	B - B2233 Barnham Road	0.18	0.00	0.82
	C - Nyton Road	0.71	0.28	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	4	3
	B - B2233 Barnham Road	2	0	1
	C - Nyton Road	3	7	1

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.038	1.026
	B - B2233 Barnham Road	1.023	1.000	1.013
	C - Nyton Road	1.032	1.070	1.013

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	07:45-08:00	128	132
	08:00-08:15	153	157
	08:15-08:30	187	193
	08:30-08:45	187	193
	08:45-09:00	153	157
	09:00-09:15	128	132
B - B2233 Barnham Road	07:45-08:00	362	367
	08:00-08:15	432	439
	08:15-08:30	530	537
	08:30-08:45	530	537
	08:45-09:00	432	439
	09:00-09:15	362	367
C - Nyton Road	07:45-08:00	287	299
	08:00-08:15	342	357
	08:15-08:30	419	437
	08:30-08:45	419	437
	08:45-09:00	342	357
	09:00-09:15	287	299

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.20	4.95	0.3	A	156	234
B - B2233 Barnham Road	0.48	6.20	0.9	A	441	662
C - Nyton Road	0.25	2.93	0.3	A	349	524

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	128	32	82	932	0.137	127	270	0.0	0.2	4.467	A
B - B2233 Barnham Road	362	91	115	1143	0.317	360	95	0.0	0.5	4.591	A
C - Nyton Road	287	72	66	1668	0.172	286	409	0.0	0.2	2.604	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	153	38	99	925	0.165	153	323	0.2	0.2	4.661	A
B - B2233 Barnham Road	432	108	138	1129	0.383	432	114	0.5	0.6	5.159	A
C - Nyton Road	342	86	80	1658	0.206	342	490	0.2	0.3	2.734	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	187	47	121	915	0.205	187	396	0.2	0.3	4.945	A
B - B2233 Barnham Road	530	132	168	1111	0.477	529	140	0.6	0.9	6.172	A
C - Nyton Road	419	105	98	1646	0.255	419	599	0.3	0.3	2.933	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	187	47	121	915	0.205	187	396	0.3	0.3	4.947	A
B - B2233 Barnham Road	530	132	169	1110	0.477	530	140	0.9	0.9	6.197	A
C - Nyton Road	419	105	98	1646	0.255	419	601	0.3	0.3	2.934	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	153	38	99	925	0.165	153	324	0.3	0.2	4.666	A
B - B2233 Barnham Road	432	108	138	1129	0.383	434	114	0.9	0.6	5.187	A
C - Nyton Road	342	86	80	1658	0.206	343	491	0.3	0.3	2.738	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	128	32	83	932	0.137	128	271	0.2	0.2	4.479	A
B - B2233 Barnham Road	362	91	115	1142	0.317	363	96	0.6	0.5	4.623	A
C - Nyton Road	287	72	67	1667	0.172	287	411	0.3	0.2	2.610	A

2023_Option 1+Option 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	4.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	211	100.000
B - B2233 Barnham Road		ONE HOUR	✓	333	100.000
C - Nyton Road		ONE HOUR	✓	478	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	51	160
	B - B2233 Barnham Road	77	0	256
	C - Nyton Road	158	319	0.31

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.24	0.76
	B - B2233 Barnham Road	0.23	0.00	0.77
	C - Nyton Road	0.33	0.67	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	1	6
	B - B2233 Barnham Road	2	0	2
	C - Nyton Road	1	1	3

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.012	1.060
	B - B2233 Barnham Road	1.021	1.000	1.015
	C - Nyton Road	1.014	1.006	1.028

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	16:45-17:00	159	167
	17:00-17:15	190	199
	17:15-17:30	233	244
	17:30-17:45	233	244
	17:45-18:00	190	199
	18:00-18:15	159	167
B - B2233 Barnham Road	16:45-17:00	251	255
	17:00-17:15	300	304
	17:15-17:30	367	373
	17:30-17:45	367	373
	17:45-18:00	300	304
	18:00-18:15	251	255
C - Nyton Road	16:45-17:00	360	363
	17:00-17:15	429	433
	17:15-17:30	526	530
	17:30-17:45	526	530
	17:45-18:00	429	433
	18:00-18:15	360	363

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.29	6.30	0.4	A	194	291
B - B2233 Barnham Road	0.33	4.91	0.5	A	306	459
C - Nyton Road	0.31	3.03	0.4	A	438	657

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	159	40	240	851	0.187	158	176	0.0	0.2	5.191	A
B - B2233 Barnham Road	251	63	120	1135	0.221	250	278	0.0	0.3	4.061	A
C - Nyton Road	360	90	58	1731	0.208	358	312	0.0	0.3	2.622	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	190	47	287	831	0.228	190	211	0.2	0.3	5.609	A
B - B2233 Barnham Road	300	75	144	1120	0.267	299	333	0.3	0.4	4.381	A
C - Nyton Road	429	107	69	1723	0.249	429	374	0.3	0.3	2.782	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	233	58	351	804	0.289	232	259	0.3	0.4	6.287	A
B - B2233 Barnham Road	367	92	176	1100	0.333	366	407	0.4	0.5	4.901	A
C - Nyton Road	526	131	85	1712	0.307	525	458	0.3	0.4	3.034	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	233	58	352	804	0.289	233	259	0.4	0.4	6.296	A
B - B2233 Barnham Road	367	92	177	1100	0.333	367	408	0.5	0.5	4.908	A
C - Nyton Road	526	131	85	1712	0.307	526	459	0.4	0.4	3.034	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	190	47	287	831	0.229	190	212	0.4	0.3	5.624	A
B - B2233 Barnham Road	300	75	145	1120	0.267	300	333	0.5	0.4	4.394	A
C - Nyton Road	429	107	69	1723	0.249	430	375	0.4	0.3	2.784	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	159	40	241	850	0.187	159	177	0.3	0.2	5.212	A
B - B2233 Barnham Road	251	63	121	1134	0.221	251	279	0.4	0.3	4.076	A
C - Nyton Road	360	90	58	1731	0.208	360	314	0.3	0.3	2.625	A

2038_Option 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	15.92	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2038_Option 1	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	580	100.000
B - B2233 Barnham Road		ONE HOUR	✓	650	100.000
C - Nyton Road		ONE HOUR	✓	915	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	29	552
	B - B2233 Barnham Road	93	0	557
	C - Nyton Road	607	306	2

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.05	0.95
	B - B2233 Barnham Road	0.14	0.00	0.86
	C - Nyton Road	0.66	0.33	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	3	2
	B - B2233 Barnham Road	2	0	3
	C - Nyton Road	2	5	2

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.033	1.018
	B - B2233 Barnham Road	1.024	1.000	1.028
	C - Nyton Road	1.024	1.048	1.015

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	07:45-08:00	437	445
	08:00-08:15	522	532
	08:15-08:30	639	651
	08:30-08:45	639	651
	08:45-09:00	522	532
	09:00-09:15	437	445
B - B2233 Barnham Road	07:45-08:00	489	503
	08:00-08:15	584	600
	08:15-08:30	716	735
	08:30-08:45	716	735
	08:45-09:00	584	600
	09:00-09:15	489	503
C - Nyton Road	07:45-08:00	689	711
	08:00-08:15	822	849
	08:15-08:30	1007	1040
	08:30-08:45	1007	1040
	08:45-09:00	822	849
	09:00-09:15	689	711

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.77	19.01	3.3	C	532	799
B - B2233 Barnham Road	0.85	27.90	5.2	D	597	895
C - Nyton Road	0.61	5.52	1.5	A	839	1259

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	437	109	231	875	0.499	433	524	0.0	1.0	8.081	A
B - B2233 Barnham Road	489	122	413	954	0.513	485	251	0.0	1.0	7.609	A
C - Nyton Road	689	172	69	1683	0.409	686	829	0.0	0.7	3.601	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	522	130	277	854	0.611	519	628	1.0	1.5	10.678	B
B - B2233 Barnham Road	584	146	495	906	0.645	581	301	1.0	1.8	10.999	B
C - Nyton Road	822	206	83	1673	0.492	821	994	0.7	1.0	4.222	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	639	160	338	827	0.773	632	767	1.5	3.1	17.939	C
B - B2233 Barnham Road	716	179	603	843	0.850	704	368	1.8	4.8	24.046	C
C - Nyton Road	1007	252	100	1661	0.606	1005	1206	1.0	1.5	5.471	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	639	160	339	826	0.773	638	770	3.1	3.3	19.006	C
B - B2233 Barnham Road	716	179	609	839	0.853	714	369	4.8	5.2	27.895	D
C - Nyton Road	1007	252	102	1660	0.607	1007	1221	1.5	1.5	5.517	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	522	130	278	854	0.611	528	632	3.3	1.6	11.269	B
B - B2233 Barnham Road	584	146	504	901	0.649	598	302	5.2	1.9	12.355	B
C - Nyton Road	822	206	85	1671	0.492	825	1016	1.5	1.0	4.262	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	437	109	232	874	0.500	439	528	1.6	1.0	8.324	A
B - B2233 Barnham Road	489	122	419	951	0.515	493	253	1.9	1.1	7.914	A
C - Nyton Road	689	172	70	1682	0.410	690	841	1.0	0.7	3.635	A

2038_Option 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	25.01	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2038_Option 1	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	652	100.000
B - B2233 Barnham Road		ONE HOUR	✓	407	100.000
C - Nyton Road		ONE HOUR	✓	947	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	68	584
	B - B2233 Barnham Road	81	0	326
	C - Nyton Road	481	466	0.32

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.11	0.89
	B - B2233 Barnham Road	0.20	0.00	0.80
	C - Nyton Road	0.51	0.49	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	1	3
	B - B2233 Barnham Road	2	0	2
	C - Nyton Road	2	1	3

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.009	1.026
	B - B2233 Barnham Road	1.020	1.000	1.019
	C - Nyton Road	1.016	1.007	1.027

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	16:45-17:00	491	503
	17:00-17:15	586	601
	17:15-17:30	718	735
	17:30-17:45	718	735
	17:45-18:00	586	601
	18:00-18:15	491	503
B - B2233 Barnham Road	16:45-17:00	307	313
	17:00-17:15	366	373
	17:15-17:30	448	457
	17:30-17:45	448	457
	17:45-18:00	366	373
	18:00-18:15	307	313
C - Nyton Road	16:45-17:00	713	721
	17:00-17:15	852	861
	17:15-17:30	1043	1055
	17:30-17:45	1043	1055
	17:45-18:00	852	861
	18:00-18:15	713	721

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.95	62.70	11.8	F	598	898
B - B2233 Barnham Road	0.54	9.49	1.2	A	374	561
C - Nyton Road	0.61	5.45	1.6	A	869	1304

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	491	123	350	824	0.596	485	421	0.0	1.4	10.469	B
B - B2233 Barnham Road	307	77	435	947	0.324	305	401	0.0	0.5	5.592	A
C - Nyton Road	713	178	61	1724	0.414	710	679	0.0	0.7	3.541	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	586	147	419	794	0.738	581	504	1.4	2.6	16.536	C
B - B2233 Barnham Road	366	92	521	895	0.409	365	480	0.5	0.7	6.780	A
C - Nyton Road	852	213	73	1715	0.496	851	813	0.7	1.0	4.158	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	718	180	513	754	0.952	691	617	2.6	9.5	44.233	E
B - B2233 Barnham Road	448	112	619	837	0.536	447	585	0.7	1.1	9.181	A
C - Nyton Road	1043	261	89	1704	0.612	1041	976	1.0	1.6	5.411	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	718	180	514	754	0.952	709	618	9.5	11.8	62.696	F
B - B2233 Barnham Road	448	112	635	827	0.542	448	588	1.1	1.2	9.492	A
C - Nyton Road	1043	261	89	1704	0.612	1043	994	1.6	1.6	5.449	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	586	147	421	794	0.739	621	507	11.8	3.0	24.348	C
B - B2233 Barnham Road	366	92	556	874	0.419	368	486	1.2	0.7	7.135	A
C - Nyton Road	852	213	73	1715	0.497	854	851	1.6	1.0	4.193	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	491	123	352	823	0.597	497	424	3.0	1.5	11.247	B
B - B2233 Barnham Road	307	77	445	941	0.326	308	404	0.7	0.5	5.698	A
C - Nyton Road	713	178	61	1723	0.414	714	692	1.0	0.7	3.570	A

2038_Option 1+Option 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	5.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	195	100.000
B - B2233 Barnham Road		ONE HOUR	✓	554	100.000
C - Nyton Road		ONE HOUR	✓	390	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	29	166
	B - B2233 Barnham Road	104	0	450
	C - Nyton Road	271	117	2

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.15	0.85
	B - B2233 Barnham Road	0.19	0.00	0.81
	C - Nyton Road	0.69	0.30	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	3	3
	B - B2233 Barnham Road	2	0	1
	C - Nyton Road	6	5	2

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.028	1.026
	B - B2233 Barnham Road	1.022	1.000	1.013
	C - Nyton Road	1.057	1.050	1.015

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	07:45-08:00	147	151
	08:00-08:15	175	180
	08:15-08:30	215	221
	08:30-08:45	215	221
	08:45-09:00	175	180
	09:00-09:15	147	151
B - B2233 Barnham Road	07:45-08:00	417	423
	08:00-08:15	498	505
	08:15-08:30	610	619
	08:30-08:45	610	619
	08:45-09:00	498	505
	09:00-09:15	417	423
C - Nyton Road	07:45-08:00	294	310
	08:00-08:15	351	370
	08:15-08:30	429	453
	08:30-08:45	429	453
	08:45-09:00	351	370
	09:00-09:15	294	310

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.24	5.16	0.3	A	179	269
B - B2233 Barnham Road	0.55	7.34	1.2	A	509	763
C - Nyton Road	0.27	3.03	0.4	A	358	537

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	147	37	89	931	0.158	146	281	0.0	0.2	4.585	A
B - B2233 Barnham Road	417	104	126	1136	0.367	415	109	0.0	0.6	4.976	A
C - Nyton Road	294	73	78	1641	0.179	293	463	0.0	0.2	2.668	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	175	44	107	923	0.190	175	337	0.2	0.2	4.813	A
B - B2233 Barnham Road	498	125	151	1121	0.444	497	131	0.6	0.8	5.763	A
C - Nyton Road	351	88	93	1631	0.215	350	555	0.2	0.3	2.811	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	215	54	131	912	0.235	215	412	0.2	0.3	5.156	A
B - B2233 Barnham Road	610	153	185	1101	0.554	608	160	0.8	1.2	7.286	A
C - Nyton Road	429	107	114	1617	0.266	429	679	0.3	0.4	3.031	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	215	54	131	912	0.235	215	413	0.3	0.3	5.161	A
B - B2233 Barnham Road	610	153	185	1100	0.554	610	161	1.2	1.2	7.340	A
C - Nyton Road	429	107	115	1616	0.266	429	681	0.4	0.4	3.032	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	175	44	107	923	0.190	176	338	0.3	0.2	4.819	A
B - B2233 Barnham Road	498	125	151	1121	0.445	500	131	1.2	0.8	5.813	A
C - Nyton Road	351	88	94	1630	0.215	351	557	0.4	0.3	2.815	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	147	37	90	931	0.158	147	283	0.2	0.2	4.595	A
B - B2233 Barnham Road	417	104	127	1136	0.367	418	110	0.8	0.6	5.025	A
C - Nyton Road	294	73	79	1641	0.179	294	466	0.3	0.2	2.674	A

2038_Option 1+Option 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J4	A29 Fontwell Avenue/ Barnham Road/ Nyton Road	Standard Roundabout		A, B, C	5.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Fontwell Avenue		ONE HOUR	✓	308	100.000
B - B2233 Barnham Road		ONE HOUR	✓	326	100.000
C - Nyton Road		ONE HOUR	✓	538	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	61	247
	B - B2233 Barnham Road	79	0	247
	C - Nyton Road	199	339	0.32

Proportions

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0.00	0.20	0.80
	B - B2233 Barnham Road	0.24	0.00	0.76
	C - Nyton Road	0.37	0.63	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	0	1	6
	B - B2233 Barnham Road	2	0	2
	C - Nyton Road	3	1	3

Average PCU Per Veh

		To		
		A - A29 Fontwell Avenue	B - B2233 Barnham Road	C - Nyton Road
From	A - A29 Fontwell Avenue	1.000	1.011	1.059
	B - B2233 Barnham Road	1.023	1.000	1.017
	C - Nyton Road	1.033	1.007	1.027

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Fontwell Avenue	16:45-17:00	232	243
	17:00-17:15	277	290
	17:15-17:30	339	356
	17:30-17:45	339	356
	17:45-18:00	277	290
	18:00-18:15	232	243
B - B2233 Barnham Road	16:45-17:00	245	250
	17:00-17:15	293	298
	17:15-17:30	359	365
	17:30-17:45	359	365
	17:45-18:00	293	298
	18:00-18:15	245	250
C - Nyton Road	16:45-17:00	405	412
	17:00-17:15	484	492
	17:15-17:30	593	603
	17:30-17:45	593	603
	17:45-18:00	484	492
	18:00-18:15	405	412

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Fontwell Avenue	0.43	7.91	0.7	A	282	424
B - B2233 Barnham Road	0.35	5.29	0.5	A	299	448
C - Nyton Road	0.35	3.26	0.5	A	494	741

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	232	58	255	843	0.275	230	209	0.0	0.4	5.859	A
B - B2233 Barnham Road	245	61	185	1093	0.224	244	300	0.0	0.3	4.234	A
C - Nyton Road	405	101	59	1715	0.236	404	370	0.0	0.3	2.743	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	277	69	305	822	0.336	276	250	0.4	0.5	6.586	A
B - B2233 Barnham Road	293	73	222	1071	0.274	293	359	0.3	0.4	4.625	A
C - Nyton Road	484	121	71	1707	0.284	484	444	0.3	0.4	2.942	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	339	85	373	794	0.427	338	306	0.5	0.7	7.879	A
B - B2233 Barnham Road	359	90	272	1040	0.345	358	440	0.4	0.5	5.275	A
C - Nyton Road	593	148	87	1696	0.350	592	543	0.4	0.5	3.260	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	339	85	374	794	0.427	339	306	0.7	0.7	7.914	A
B - B2233 Barnham Road	359	90	272	1039	0.345	359	440	0.5	0.5	5.287	A
C - Nyton Road	593	148	87	1696	0.350	593	544	0.5	0.5	3.263	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	277	69	305	822	0.337	278	250	0.7	0.5	6.624	A
B - B2233 Barnham Road	293	73	223	1070	0.274	293	360	0.5	0.4	4.639	A
C - Nyton Road	484	121	71	1707	0.284	485	445	0.5	0.4	2.948	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Fontwell Avenue	232	58	256	843	0.275	232	210	0.5	0.4	5.903	A
B - B2233 Barnham Road	245	61	187	1092	0.225	246	301	0.4	0.3	4.254	A
C - Nyton Road	405	101	60	1715	0.236	406	373	0.4	0.3	2.751	A

Basic Results Summary

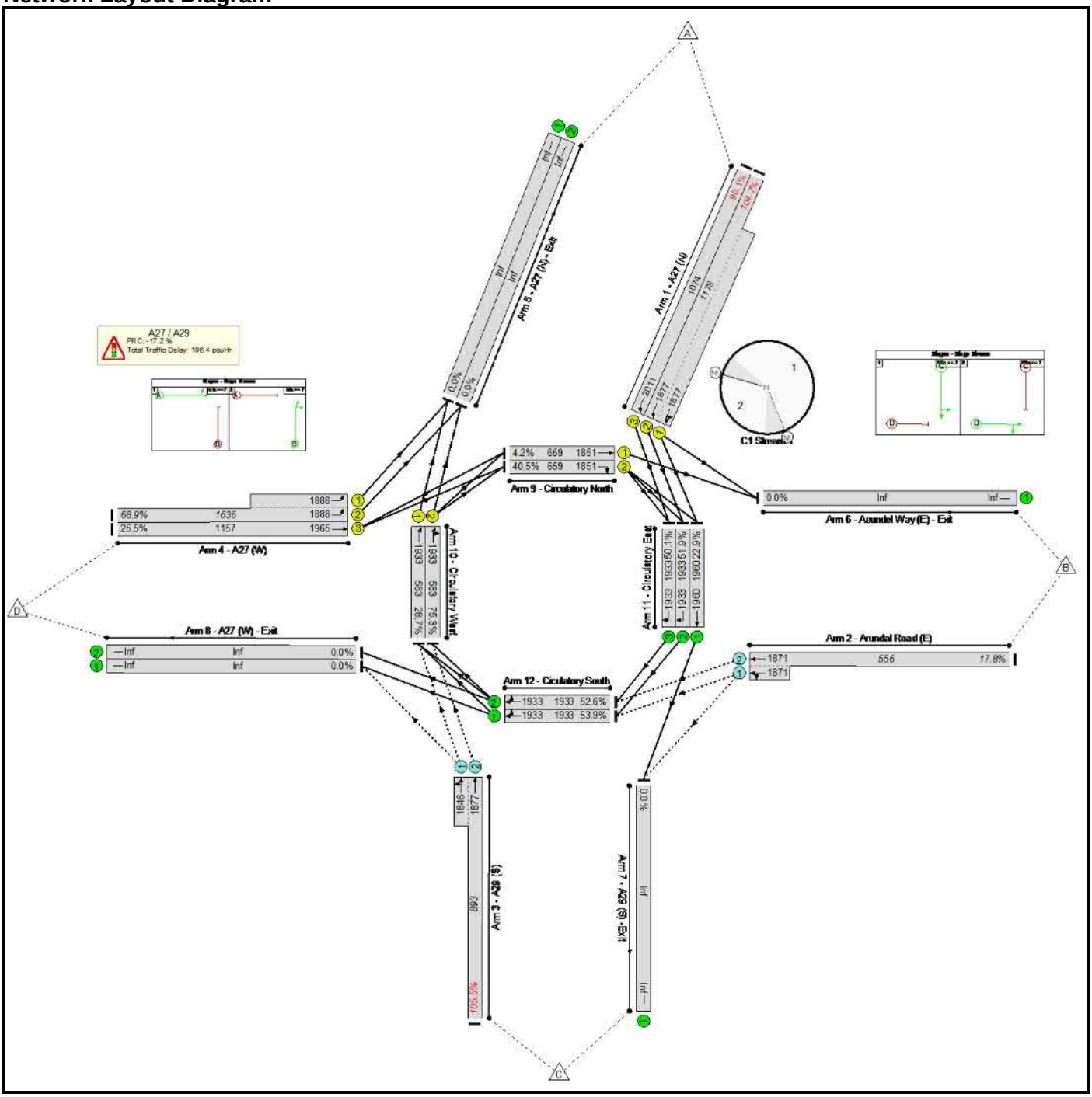
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	5_A27 - A29.lsg3x
Author:	
Company:	
Address:	

Basic Results Summary

Scenario 1: '2023 DM AM' (FG1: '2023 DM 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 PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**105.5%**	**1984**	**0**	**0**	**106.4**	-	-
A27 / A29	-	-	-		-	-	-	-	-	-	**105.5%**	**1984**	**0**	**0**	**106.4**	-	-
1/2+1/1	A27 (N) Left Ahead	U	C		1	38	-	1233	1877:1877	1178	104.7%	-	-	-	43.3	126.3	60.9
1/3	A27 (N) Ahead	U	C		1	38	-	968	2011	1074	90.1%	-	-	-	8.3	30.9	21.7
2/2+2/1	Arundal Road (E) Left Ahead	O	-		-	-	-	99	1871:1871	556	17.8%	198	0	0	0.3	11.4	0.7
3/2+3/1	A29 (S) Left Ahead	O	-		-	-	-	942	1877:1846	893	105.5%	1786	0	0	39.0	149.1	59.5
4/2+4/1	A27 (W) Left	U	A		1	42	-	1128	1888:1888	1636	68.9%	-	-	-	3.9	12.3	7.7
4/3	A27 (W) Ahead	U	A		1	42	-	295	1965	1157	25.5%	-	-	-	0.8	9.3	3.0
9/1	Circulatory North Ahead	U	D		1	25	-	28	1851	659	4.2%	-	-	-	0.1	19.1	0.3
9/2	Circulatory North Right	U	D		1	25	-	267	1851	659	40.5%	-	-	-	1.6	22.1	3.3
10/1	Circulatory West Ahead	U	B		1	21	-	173	1933	583	28.7%	-	-	-	1.5	31.4	2.4
10/2	Circulatory West Ahead Right	U	B		1	21	-	471	1933	583	75.3%	-	-	-	5.1	42.2	7.7
11/1	Circulatory East Ahead	U	-		-	-	-	449	1960	1960	22.9%	-	-	-	0.1	1.2	0.1
11/2	Circulatory East Right	U	-		-	-	-	1051	1933	1933	51.9%	-	-	-	0.5	1.9	0.5
11/3	Circulatory East Right	U	-		-	-	-	968	1933	1933	50.1%	-	-	-	0.6	2.4	17.8
12/1	Ciculatory South Ahead Right	U	-		-	-	-	1090	1933	1933	53.9%	-	-	-	0.6	2.0	0.6

Basic Results Summary

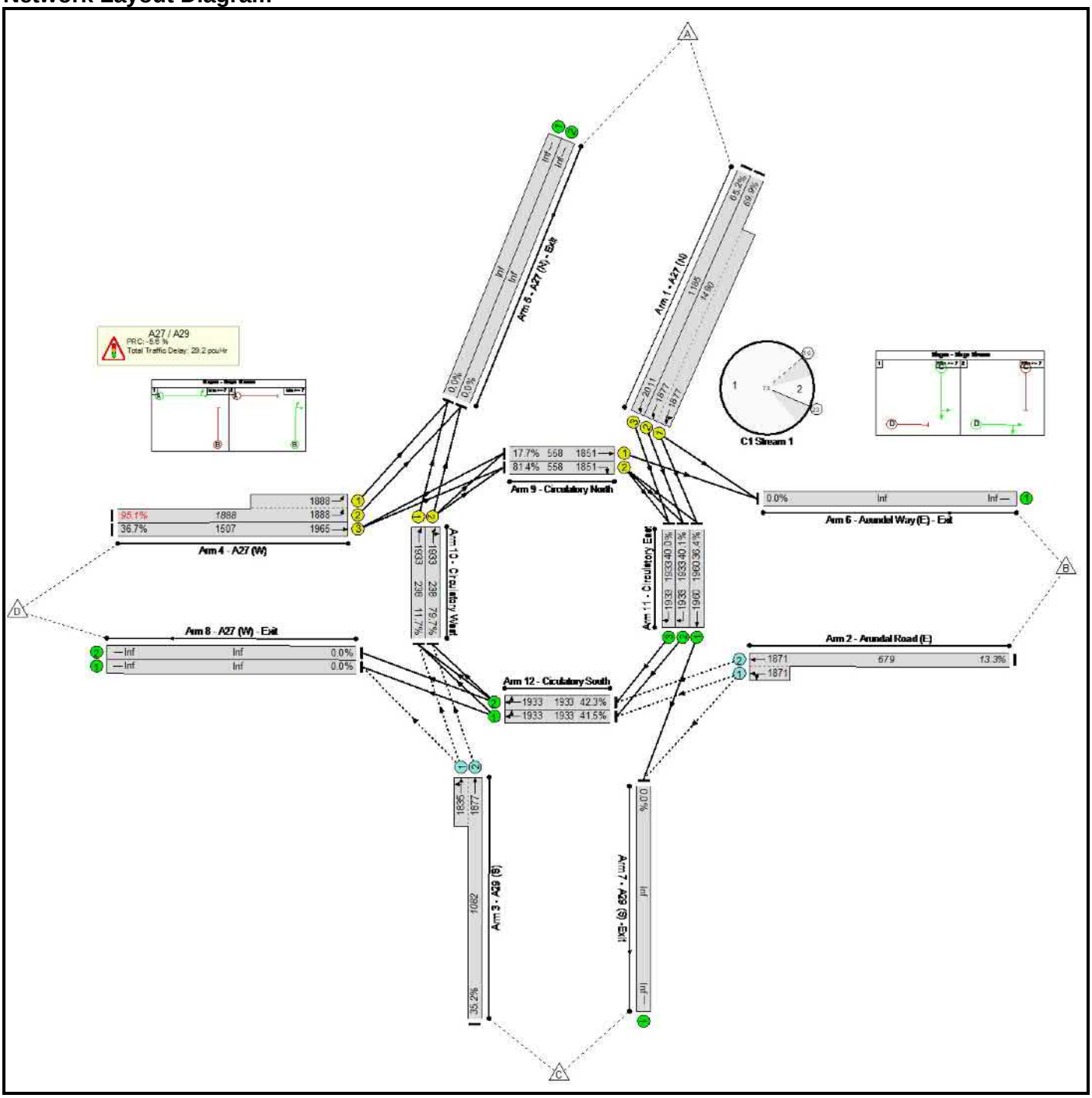
12/2	Ciculatory South Ahead Right	U	-		-	-	-	1017	1933	1933	52.6%	-	-	-	0.6	2.0	0.6

C1	Stream: 1 PRC for Signalled Lanes (%):	19.5	Total Delay for Signalled Lanes (pcuHr):	11.23	Cycle Time (s):	73	
C1	Stream: 2 PRC for Signalled Lanes (%):	-16.3	Total Delay for Signalled Lanes (pcuHr):	53.36	Cycle Time (s):	73	
	PRC Over All Lanes (%):	-17.2	Total Delay Over All Lanes(pcuHr):	106.39			

Basic Results Summary

Scenario 2: '2023 DM PM' (FG2: '2023 DM 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	-	-	-		-	-	-	-	-	-	**95.1%**	**942**	**0**	**0**	**29.2**	-	-
A27 / A29	-	-	-		-	-	-	-	-	-	**95.1%**	**942**	**0**	**0**	**29.2**	-	-
1/2+1/1	A27 (N) Left Ahead	U	C		1	42	-	1042	1877:1877	1490	69.9%	-	-	-	3.9	13.6	12.1
1/3	A27 (N) Ahead	U	C		1	42	-	772	2011	1185	65.2%	-	-	-	3.1	14.4	11.2
2/2+2/1	Arundal Road (E) Left Ahead	O	-		-	-	-	90	1871:1871	679	13.3%	180	0	0	0.2	6.2	0.4
3/2+3/1	A29 (S) Left Ahead	O	-		-	-	-	381	1877:1835	1082	35.2%	762	0	0	0.8	7.2	2.2
4/2+4/1	A27 (W) Left	U	A		1	55	-	1795	1888:1888	1888	95.1%	-	-	-	10.1	20.2	17.1
4/3	A27 (W) Ahead	U	A		1	55	-	553	1965	1507	36.7%	-	-	-	0.7	4.6	3.8
9/1	Circulatory North Ahead	U	D		1	21	-	99	1851	558	17.7%	-	-	-	0.6	20.8	1.1
9/2	Circulatory North Right	U	D		1	21	-	454	1851	558	81.4%	-	-	-	4.7	37.5	10.6
10/1	Circulatory West Ahead	U	B		1	8	-	28	1933	238	11.7%	-	-	-	0.3	33.0	0.5
10/2	Circulatory West Ahead Right	U	B		1	8	-	190	1933	238	79.7%	-	-	-	3.2	60.8	5.3
11/1	Circulatory East Ahead	U	-		-	-	-	713	1960	1960	36.4%	-	-	-	0.3	1.4	0.3
11/2	Circulatory East Right	U	-		-	-	-	775	1933	1933	40.1%	-	-	-	0.3	1.6	0.3
11/3	Circulatory East Right	U	-		-	-	-	773	1933	1933	40.0%	-	-	-	0.4	1.7	10.0
12/1	Ciculatory South Ahead Right	U	-		-	-	-	802	1933	1933	41.5%	-	-	-	0.4	1.6	0.4
12/2	Ciculatory South Ahead Right	U	-		-	-	-	818	1933	1933	42.3%	-	-	-	0.4	1.6	0.4

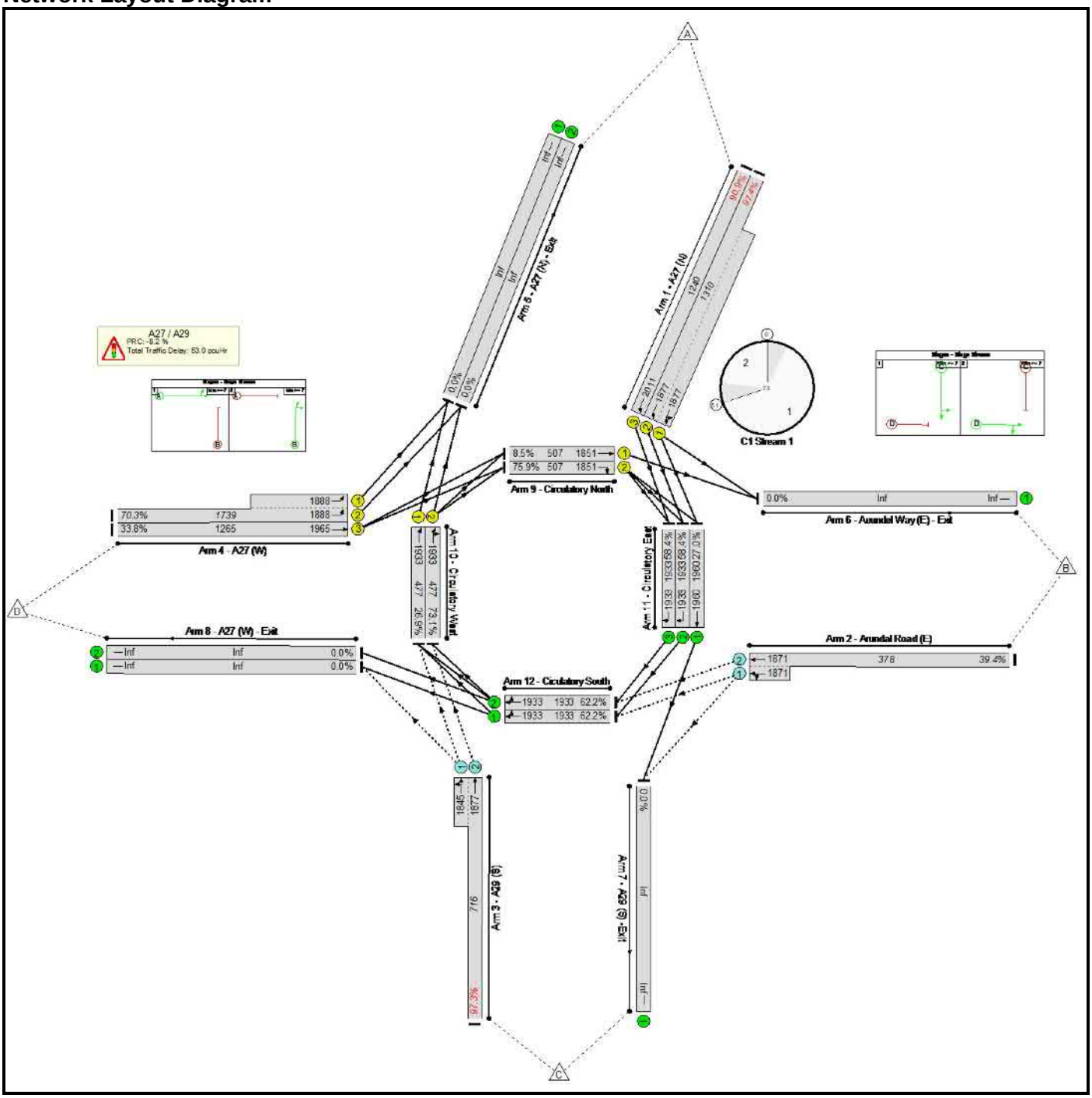
Basic Results Summary

C1	Stream: 1	PRC for Signalled Lanes (%):	-5.6	Total Delay for Signalled Lanes (pcuHr):	14.27	Cycle Time (s):	73
C1	Stream: 2	PRC for Signalled Lanes (%):	10.6	Total Delay for Signalled Lanes (pcuHr):	12.33	Cycle Time (s):	73
		PRC Over All Lanes (%):	-5.6	Total Delay Over All Lanes(pcuHr):	29.23		

Basic Results Summary

Scenario 3: '2038 DM AM' (FG3: '2038 DM 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 PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**97.4%**	**1689**	**0**	**0**	**53.0**	-	-
A27 / A29	-	-	-		-	-	-	-	-	-	**97.4%**	**1689**	**0**	**0**	**53.0**	-	-
1/2+1/1	A27 (N) Left Ahead	U	C		1	44	-	1276	1877:1877	1310	97.4%	-	-	-	15.7	44.4	33.2
1/3	A27 (N) Ahead	U	C		1	44	-	1127	2011	1240	90.9%	-	-	-	8.4	27.0	24.3
2/2+2/1	Arundal Road (E) Left Ahead	O	-		-	-	-	149	1871:1871	378	39.4%	298	0	0	0.8	18.5	1.3
3/2+3/1	A29 (S) Left Ahead	O	-		-	-	-	697	1877:1845	716	97.3%	1391	0	0	13.5	69.5	23.3
4/2+4/1	A27 (W) Left	U	A		1	46	-	1222	1888:1888	1739	70.3%	-	-	-	3.5	10.3	7.6
4/3	A27 (W) Ahead	U	A		1	46	-	428	1965	1265	33.8%	-	-	-	1.0	8.1	4.2
9/1	Circulatory North Ahead	U	D		1	19	-	43	1851	507	8.5%	-	-	-	0.3	24.4	0.8
9/2	Circulatory North Right	U	D		1	19	-	385	1851	507	75.9%	-	-	-	4.4	40.9	9.3
10/1	Circulatory West Ahead	U	B		1	17	-	128	1933	477	26.9%	-	-	-	0.3	8.6	1.5
10/2	Circulatory West Ahead Right	U	B		1	17	-	350	1933	477	73.1%	-	-	-	1.7	17.9	6.4
11/1	Circulatory East Ahead	U	-		-	-	-	529	1960	1960	27.0%	-	-	-	0.2	1.3	0.2
11/2	Circulatory East Right	U	-		-	-	-	1129	1933	1933	58.4%	-	-	-	0.7	2.2	0.7
11/3	Circulatory East Right	U	-		-	-	-	1128	1933	1933	58.4%	-	-	-	0.9	2.8	20.6
12/1	Ciculatory South Ahead Right	U	-		-	-	-	1203	1933	1933	62.2%	-	-	-	0.8	2.5	0.8
12/2	Ciculatory South Ahead Right	U	-		-	-	-	1203	1933	1933	62.2%	-	-	-	0.8	2.5	0.8

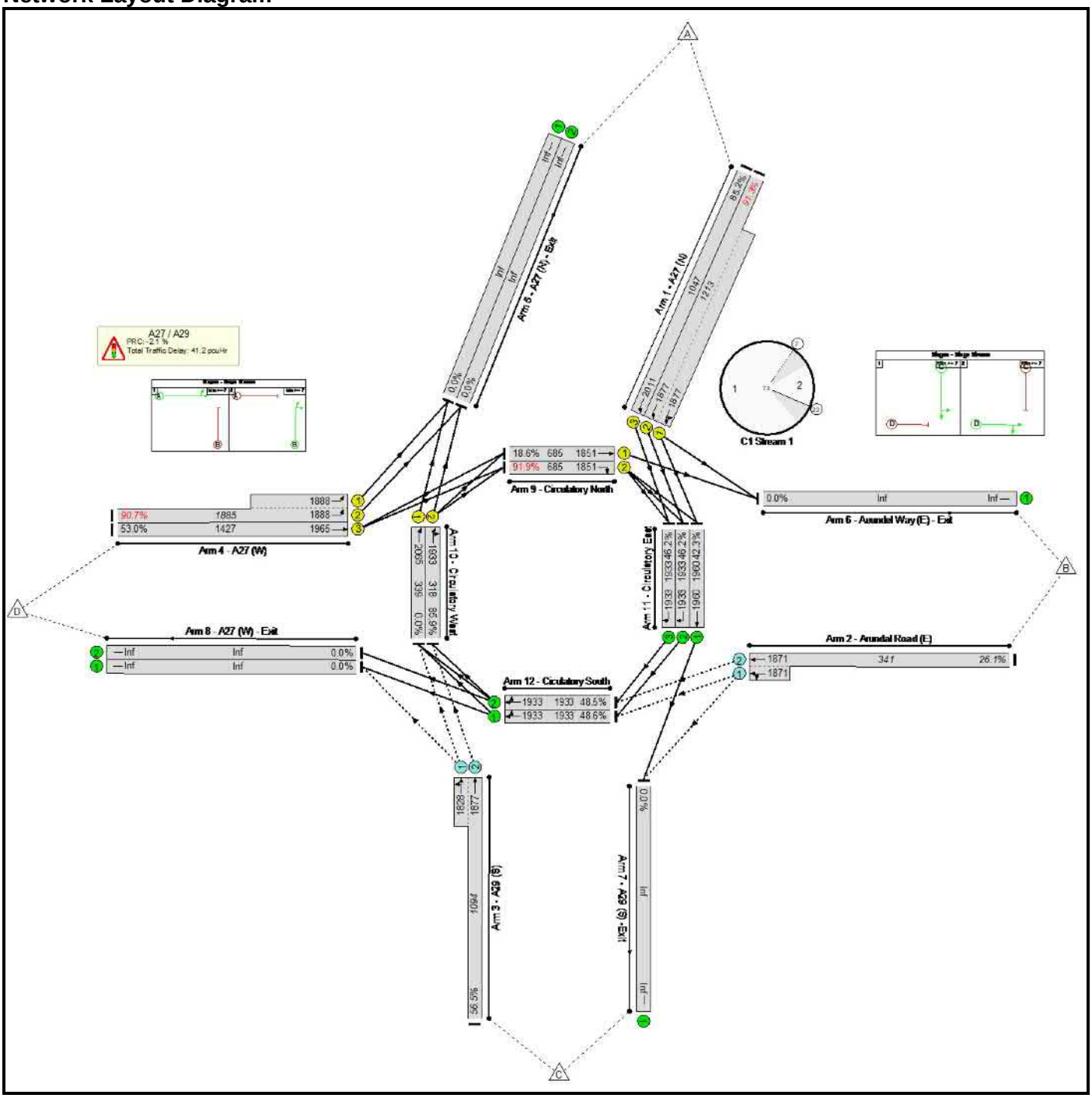
Basic Results Summary

C1	Stream: 1	PRC for Signalled Lanes (%):	23.1	Total Delay for Signalled Lanes (pcuHr):	6.50	Cycle Time (s):	73
C1	Stream: 2	PRC for Signalled Lanes (%):	-8.2	Total Delay for Signalled Lanes (pcuHr):	28.83	Cycle Time (s):	73
		PRC Over All Lanes (%):	-8.2	Total Delay Over All Lanes(pcuHr):	52.96		

Basic Results Summary

Scenario 4: '2038 DM PM' (FG4: '2038 DM 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	-	-	-		-	-	-	-	-	-	**91.9%**	**1414**	**0**	**0**	**41.2**	-	-
A27 / A29	-	-	-		-	-	-	-	-	-	**91.9%**	**1414**	**0**	**0**	**41.2**	-	-
1/2+1/1	A27 (N) Left Ahead	U	C		1	37	-	1107	1877:1877	1213	91.3%	-	-	-	9.3	30.4	21.2
1/3	A27 (N) Ahead	U	C		1	37	-	892	2011	1047	85.2%	-	-	-	6.5	26.3	18.1
2/2+2/1	Arundal Road (E) Left Ahead	O	-		-	-	-	89	1871:1871	341	26.1%	178	0	0	0.3	13.4	0.6
3/2+3/1	A29 (S) Left Ahead	O	-		-	-	-	618	1877:1828	1094	56.5%	1236	0	0	1.6	9.1	4.4
4/2+4/1	A27 (W) Left	U	A		1	52	-	1709	1888:1888	1885	90.7%	-	-	-	7.0	14.7	13.2
4/3	A27 (W) Ahead	U	A		1	52	-	756	1965	1427	53.0%	-	-	-	1.5	7.1	7.3
9/1	Circulatory North Ahead	U	D		1	26	-	127	1851	685	18.6%	-	-	-	0.5	14.4	1.8
9/2	Circulatory North Right	U	D		1	26	-	629	1851	685	91.9%	-	-	-	7.9	45.1	16.9
10/1	Circulatory West Ahead	U	B		1	11	-	0	2065	339	0.0%	-	-	-	0.0	0.0	0.0
10/2	Circulatory West Ahead Right	U	B		1	11	-	273	1933	318	85.9%	-	-	-	4.3	57.2	8.3
11/1	Circulatory East Ahead	U	-		-	-	-	830	1960	1960	42.3%	-	-	-	0.4	1.6	0.4
11/2	Circulatory East Right	U	-		-	-	-	894	1933	1933	46.2%	-	-	-	0.4	1.7	0.4
11/3	Circulatory East Right	U	-		-	-	-	893	1933	1933	46.2%	-	-	-	0.5	2.1	15.5
12/1	Ciculatory South Ahead Right	U	-		-	-	-	939	1933	1933	48.6%	-	-	-	0.5	1.8	0.5
12/2	Ciculatory South Ahead Right	U	-		-	-	-	937	1933	1933	48.5%	-	-	-	0.5	1.8	0.5

Basic Results Summary

C1	Stream: 1	PRC for Signalled Lanes (%):	-0.8	Total Delay for Signalled Lanes (pcuHr):	12.84	Cycle Time (s):	73
C1	Stream: 2	PRC for Signalled Lanes (%):	-2.1	Total Delay for Signalled Lanes (pcuHr):	24.23	Cycle Time (s):	73
		PRC Over All Lanes (%):	-2.1	Total Delay Over All Lanes(pcuHr):	41.23		

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

Filename: 6_Site Access Roundabout.j9
Path: C:\Users\INVN01911\Desktop\A29
Report generation date: 5/12/2020 1:50:55 PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
	2023_Option 1							
A - A29 Realignment Road W	0.2	3.31	0.19	A	0.1	3.09	0.12	A
B - Site access	0.1	3.88	0.10	A	0.1	3.43	0.05	A
C - A29 Realignment Road E	0.2	2.80	0.14	A	0.3	3.20	0.25	A
	2023_Option 1+Option 2							
A - A29 Realignment Road W	0.6	4.45	0.39	A	0.4	3.68	0.27	A
B - Site access	0.1	4.59	0.12	A	0.1	3.76	0.05	A
C - A29 Realignment Road E	0.4	3.51	0.30	A	0.7	4.21	0.42	A
	2038_Option 1							
A - A29 Realignment Road W	0.2	3.36	0.19	A	0.4	3.81	0.28	A
B - Site access	0.3	4.37	0.21	A	0.1	3.93	0.10	A
C - A29 Realignment Road E	0.3	3.07	0.21	A	0.6	3.94	0.39	A
	2038_Option 1+Option 2							
A - A29 Realignment Road W	0.9	5.05	0.47	A	0.7	4.68	0.42	A
B - Site access	0.3	5.68	0.25	A	0.1	4.35	0.11	A
C - A29 Realignment Road E	0.8	4.42	0.44	A	1.4	5.95	0.59	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

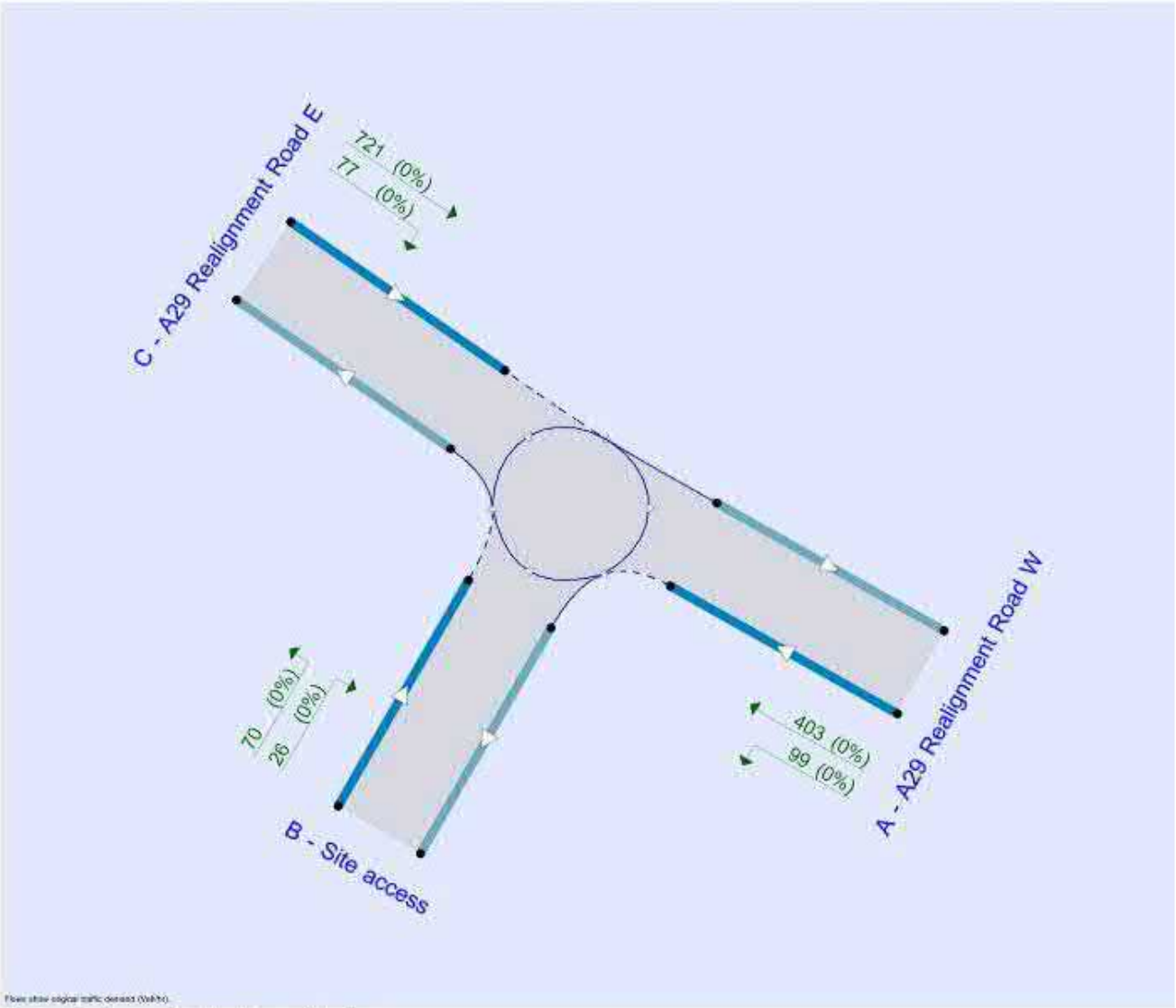
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	3/27/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INVN01911
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023_Option 1	AM	ONE HOUR	07:45	09:15	15	✓
D2	2023_Option 1	PM	ONE HOUR	16:45	18:15	15	✓
D3	2023_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓
D4	2023_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓
D5	2038_Option 1	AM	ONE HOUR	07:45	09:15	15	✓
D6	2038_Option 1	PM	ONE HOUR	16:45	18:15	15	✓
D7	2038_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓
D8	2038_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023_Option 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	3.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A29 Realignment Road W	
B	Site access	
C	A29 Realignment Road E	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A29 Realignment Road W	3.60	5.30	4.5	30.0	40.0	24.0	
B - Site access	3.50	4.50	2.3	20.0	40.0	34.0	
C - A29 Realignment Road E	3.60	6.20	12.7	20.0	40.0	42.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A29 Realignment Road W	0.588	1373
B - Site access	0.532	1171
C - A29 Realignment Road E	0.590	1501

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023_Option 1	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	234	100.000
B - Site access		ONE HOUR	✓	97	100.000
C - A29 Realignment Road E		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	5	229
	B - Site access	0.73	0	96
	C - A29 Realignment Road E	152	32	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.02	0.98
	B - Site access	0.01	0.00	0.99
	C - A29 Realignment Road E	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	0
	B - Site access	0	0	0
	C - A29 Realignment Road E	1	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.000	1.005
	B - Site access	1.005	1.000	1.000
	C - A29 Realignment Road E	1.012	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	07:45-08:00	176	177
	08:00-08:15	210	211
	08:15-08:30	258	259
	08:30-08:45	258	259
	08:45-09:00	210	211
	09:00-09:15	176	177
B - Site access	07:45-08:00	73	73
	08:00-08:15	87	87
	08:15-08:30	107	107
	08:30-08:45	107	107
	08:45-09:00	87	87
	09:00-09:15	73	73
C - A29 Realignment Road E	07:45-08:00	138	139
	08:00-08:15	165	167
	08:15-08:30	202	204
	08:30-08:45	202	204
	08:45-09:00	165	167
	09:00-09:15	138	139

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.19	3.31	0.2	A	215	322
B - Site access	0.10	3.88	0.1	A	89	134
C - A29 Realignment Road E	0.14	2.80	0.2	A	168	253

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	176	44	24	1353	0.130	176	115	0.0	0.1	3.056	A
B - Site access	73	18	172	1079	0.068	73	27	0.0	0.1	3.578	A
C - A29 Realignment Road E	138	35	0.55	1487	0.093	138	244	0.0	0.1	2.668	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	210	53	28	1350	0.156	210	137	0.1	0.2	3.157	A
B - Site access	87	22	206	1061	0.082	87	33	0.1	0.1	3.697	A
C - A29 Realignment Road E	165	41	0.66	1487	0.111	165	292	0.1	0.1	2.723	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	258	64	35	1346	0.191	257	168	0.2	0.2	3.305	A
B - Site access	107	27	252	1036	0.103	107	40	0.1	0.1	3.875	A
C - A29 Realignment Road E	202	51	0.80	1487	0.136	202	358	0.1	0.2	2.801	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	258	64	35	1346	0.191	258	168	0.2	0.2	3.305	A
B - Site access	107	27	252	1036	0.103	107	40	0.1	0.1	3.875	A
C - A29 Realignment Road E	202	51	0.80	1487	0.136	202	358	0.2	0.2	2.801	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	210	53	29	1350	0.156	211	137	0.2	0.2	3.158	A
B - Site access	87	22	206	1060	0.082	87	33	0.1	0.1	3.699	A
C - A29 Realignment Road E	165	41	0.66	1487	0.111	165	293	0.2	0.1	2.723	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	176	44	24	1353	0.130	176	115	0.2	0.2	3.059	A
B - Site access	73	18	173	1078	0.068	73	28	0.1	0.1	3.583	A
C - A29 Realignment Road E	138	35	0.55	1487	0.093	138	245	0.1	0.1	2.671	A

2023_Option 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	3.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023_Option 1	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	149	100.000
B - Site access		ONE HOUR	✓	48	100.000
C - A29 Realignment Road E		ONE HOUR	✓	339	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	34	115
	B - Site access	5	0	43
	C - A29 Realignment Road E	281	57	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.23	0.77
	B - Site access	0.11	0.00	0.89
	C - A29 Realignment Road E	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	1
	B - Site access	0	0	0
	C - A29 Realignment Road E	0	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.001	1.006
	B - Site access	1.000	1.000	1.000
	C - A29 Realignment Road E	1.001	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	16:45-17:00	112	113
	17:00-17:15	134	135
	17:15-17:30	164	165
	17:30-17:45	164	165
	17:45-18:00	134	135
	18:00-18:15	112	113
B - Site access	16:45-17:00	36	36
	17:00-17:15	43	43
	17:15-17:30	53	53
	17:30-17:45	53	53
	17:45-18:00	43	43
	18:00-18:15	36	36
C - A29 Realignment Road E	16:45-17:00	255	255
	17:00-17:15	304	305
	17:15-17:30	373	373
	17:30-17:45	373	373
	17:45-18:00	304	305
	18:00-18:15	255	255

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.12	3.09	0.1	A	137	205
B - Site access	0.05	3.43	0.1	A	44	66
C - A29 Realignment Road E	0.25	3.20	0.3	A	311	466

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	112	28	43	1342	0.084	112	215	0.0	0.1	2.927	A
B - Site access	36	9	87	1124	0.032	36	68	0.0	0.0	3.307	A
C - A29 Realignment Road E	255	64	4	1498	0.170	254	119	0.0	0.2	2.892	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	134	34	51	1337	0.100	134	257	0.1	0.1	2.992	A
B - Site access	43	11	104	1115	0.039	43	82	0.0	0.0	3.357	A
C - A29 Realignment Road E	304	76	5	1498	0.203	304	142	0.2	0.3	3.016	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	164	41	63	1330	0.123	164	315	0.1	0.1	3.087	A
B - Site access	53	13	127	1103	0.048	53	100	0.0	0.1	3.428	A
C - A29 Realignment Road E	373	93	6	1497	0.249	373	174	0.3	0.3	3.201	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	164	41	63	1330	0.123	164	315	0.1	0.1	3.087	A
B - Site access	53	13	127	1103	0.048	53	100	0.1	0.1	3.429	A
C - A29 Realignment Road E	373	93	6	1497	0.249	373	174	0.3	0.3	3.201	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	134	34	52	1337	0.100	134	258	0.1	0.1	2.995	A
B - Site access	43	11	104	1115	0.039	43	82	0.1	0.0	3.360	A
C - A29 Realignment Road E	304	76	5	1498	0.203	305	143	0.3	0.3	3.019	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	112	28	43	1342	0.084	112	216	0.1	0.1	2.927	A
B - Site access	36	9	87	1124	0.032	36	69	0.0	0.0	3.311	A
C - A29 Realignment Road E	255	64	4	1498	0.170	255	119	0.3	0.2	2.898	A

2023_Option 1+Option 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	4.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	477	100.000
B - Site access		ONE HOUR	✓	97	100.000
C - A29 Realignment Road E		ONE HOUR	✓	405	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	7	470
	B - Site access	15	0	82
	C - A29 Realignment Road E	375	30	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.01	0.99
	B - Site access	0.15	0.00	0.85
	C - A29 Realignment Road E	0.93	0.07	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	2
	B - Site access	0	0	0
	C - A29 Realignment Road E	2	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.000	1.015
	B - Site access	1.000	1.000	1.000
	C - A29 Realignment Road E	1.016	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	07:45-08:00	359	364
	08:00-08:15	429	435
	08:15-08:30	525	533
	08:30-08:45	525	533
	08:45-09:00	429	435
	09:00-09:15	359	364
B - Site access	07:45-08:00	73	73
	08:00-08:15	87	87
	08:15-08:30	107	107
	08:30-08:45	107	107
	08:45-09:00	87	87
	09:00-09:15	73	73
C - A29 Realignment Road E	07:45-08:00	305	309
	08:00-08:15	364	369
	08:15-08:30	446	452
	08:30-08:45	446	452
	08:45-09:00	364	369
	09:00-09:15	305	309

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.39	4.45	0.6	A	437	656
B - Site access	0.12	4.59	0.1	A	89	134
C - A29 Realignment Road E	0.30	3.51	0.4	A	371	557

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	359	90	22	1340	0.268	357	292	0.0	0.4	3.660	A
B - Site access	73	18	352	980	0.075	73	27	0.0	0.1	3.966	A
C - A29 Realignment Road E	305	76	11	1473	0.207	304	414	0.0	0.3	3.075	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	429	107	27	1337	0.320	428	350	0.4	0.5	3.958	A
B - Site access	87	22	422	943	0.093	87	33	0.1	0.1	4.208	A
C - A29 Realignment Road E	364	91	13	1472	0.247	364	496	0.3	0.3	3.247	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	525	131	33	1334	0.394	524	428	0.5	0.6	4.443	A
B - Site access	107	27	517	892	0.120	107	40	0.1	0.1	4.588	A
C - A29 Realignment Road E	446	111	16	1470	0.303	445	608	0.3	0.4	3.509	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	525	131	33	1334	0.394	525	429	0.6	0.6	4.450	A
B - Site access	107	27	518	891	0.120	107	40	0.1	0.1	4.590	A
C - A29 Realignment Road E	446	111	16	1470	0.303	446	608	0.4	0.4	3.512	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	429	107	27	1337	0.320	429	351	0.6	0.5	3.969	A
B - Site access	87	22	423	942	0.093	88	33	0.1	0.1	4.213	A
C - A29 Realignment Road E	364	91	13	1472	0.247	364	498	0.4	0.3	3.252	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	359	90	23	1340	0.268	359	294	0.5	0.4	3.675	A
B - Site access	73	18	354	979	0.075	73	28	0.1	0.1	3.973	A
C - A29 Realignment Road E	305	76	11	1473	0.207	305	417	0.3	0.3	3.081	A

2023_Option 1+Option 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	4.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	321	100.000
B - Site access		ONE HOUR	✓	48	100.000
C - A29 Realignment Road E		ONE HOUR	✓	569	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	51	270
	B - Site access	13	0	35
	C - A29 Realignment Road E	529	40	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.16	0.84
	B - Site access	0.27	0.00	0.73
	C - A29 Realignment Road E	0.93	0.07	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	1
	B - Site access	0	0	0
	C - A29 Realignment Road E	1	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.000	1.014
	B - Site access	1.000	1.000	1.000
	C - A29 Realignment Road E	1.009	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	16:45-17:00	242	244
	17:00-17:15	289	292
	17:15-17:30	353	357
	17:30-17:45	353	357
	17:45-18:00	289	292
	18:00-18:15	242	244
B - Site access	16:45-17:00	36	36
	17:00-17:15	43	43
	17:15-17:30	53	53
	17:30-17:45	53	53
	17:45-18:00	43	43
	18:00-18:15	36	36
C - A29 Realignment Road E	16:45-17:00	428	432
	17:00-17:15	511	516
	17:15-17:30	626	631
	17:30-17:45	626	631
	17:45-18:00	511	516
	18:00-18:15	428	432

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.27	3.68	0.4	A	295	442
B - Site access	0.05	3.76	0.1	A	44	66
C - A29 Realignment Road E	0.42	4.21	0.7	A	522	783

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	242	60	30	1340	0.180	241	407	0.0	0.2	3.271	A
B - Site access	36	9	203	1061	0.034	36	68	0.0	0.0	3.511	A
C - A29 Realignment Road E	428	107	10	1484	0.289	427	229	0.0	0.4	3.402	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	289	72	36	1336	0.216	288	487	0.2	0.3	3.434	A
B - Site access	43	11	243	1040	0.042	43	81	0.0	0.0	3.612	A
C - A29 Realignment Road E	511	128	12	1483	0.345	511	274	0.4	0.5	3.703	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	353	88	44	1332	0.265	353	596	0.3	0.4	3.678	A
B - Site access	53	13	297	1010	0.053	53	100	0.0	0.1	3.760	A
C - A29 Realignment Road E	626	157	15	1481	0.423	626	336	0.5	0.7	4.205	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	353	88	44	1332	0.265	353	597	0.4	0.4	3.678	A
B - Site access	53	13	298	1010	0.053	53	100	0.1	0.1	3.760	A
C - A29 Realignment Road E	626	157	15	1481	0.423	626	336	0.7	0.7	4.212	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	289	72	36	1336	0.216	289	488	0.4	0.3	3.436	A
B - Site access	43	11	243	1039	0.042	43	82	0.1	0.0	3.616	A
C - A29 Realignment Road E	511	128	12	1483	0.345	512	275	0.7	0.5	3.715	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	242	60	30	1340	0.180	242	409	0.3	0.2	3.278	A
B - Site access	36	9	204	1061	0.034	36	68	0.0	0.0	3.513	A
C - A29 Realignment Road E	428	107	10	1484	0.289	429	230	0.5	0.4	3.413	A

2038_Option 1, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2038_Option 1	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	234	100.000
B - Site access		ONE HOUR	✓	194	100.000
C - A29 Realignment Road E		ONE HOUR	✓	278	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	10	225
	B - Site access	1	0	193
	C - A29 Realignment Road E	216	62	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.04	0.96
	B - Site access	0.01	0.00	0.99
	C - A29 Realignment Road E	0.78	0.22	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	0
	B - Site access	0	0	0
	C - A29 Realignment Road E	2	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.000	1.004
	B - Site access	1.004	1.000	1.000
	C - A29 Realignment Road E	1.019	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	07:45-08:00	177	177
	08:00-08:15	211	212
	08:15-08:30	258	259
	08:30-08:45	258	259
	08:45-09:00	211	212
	09:00-09:15	177	177
B - Site access	07:45-08:00	146	146
	08:00-08:15	175	175
	08:15-08:30	214	214
	08:30-08:45	214	214
	08:45-09:00	175	175
	09:00-09:15	146	146
C - A29 Realignment Road E	07:45-08:00	209	212
	08:00-08:15	250	254
	08:15-08:30	306	311
	08:30-08:45	306	311
	08:45-09:00	250	254
	09:00-09:15	209	212

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.19	3.36	0.2	A	215	323
B - Site access	0.21	4.37	0.3	A	178	268
C - A29 Realignment Road E	0.21	3.07	0.3	A	255	383

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	177	44	47	1341	0.132	176	163	0.0	0.2	3.089	A
B - Site access	146	37	169	1081	0.135	146	54	0.0	0.2	3.848	A
C - A29 Realignment Road E	209	52	1	1479	0.142	209	313	0.0	0.2	2.832	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	211	53	56	1335	0.158	211	195	0.2	0.2	3.200	A
B - Site access	175	44	202	1063	0.164	175	65	0.2	0.2	4.053	A
C - A29 Realignment Road E	250	62	1	1479	0.169	250	375	0.2	0.2	2.928	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	258	65	69	1328	0.194	258	239	0.2	0.2	3.364	A
B - Site access	214	54	247	1039	0.206	214	79	0.2	0.3	4.363	A
C - A29 Realignment Road E	306	77	1	1479	0.207	306	460	0.2	0.3	3.068	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	258	65	69	1328	0.194	258	239	0.2	0.2	3.364	A
B - Site access	214	54	247	1039	0.206	214	79	0.3	0.3	4.365	A
C - A29 Realignment Road E	306	77	1	1479	0.207	306	460	0.3	0.3	3.068	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	211	53	56	1335	0.158	211	195	0.2	0.2	3.202	A
B - Site access	175	44	202	1063	0.164	175	65	0.3	0.2	4.057	A
C - A29 Realignment Road E	250	62	1	1479	0.169	250	376	0.3	0.2	2.929	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	177	44	47	1341	0.132	177	163	0.2	0.2	3.095	A
B - Site access	146	37	169	1080	0.135	147	54	0.2	0.2	3.855	A
C - A29 Realignment Road E	209	52	1	1479	0.142	209	315	0.2	0.2	2.835	A

2038_Option 1, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	3.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2038_Option 1	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	326	100.000
B - Site access		ONE HOUR	✓	97	100.000
C - A29 Realignment Road E		ONE HOUR	✓	527	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	74	252
	B - Site access	10	0	88
	C - A29 Realignment Road E	422	105	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.23	0.77
	B - Site access	0.11	0.00	0.89
	C - A29 Realignment Road E	0.80	0.20	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	0
	B - Site access	0	0	0
	C - A29 Realignment Road E	0	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.001	1.003
	B - Site access	1.003	1.000	1.000
	C - A29 Realignment Road E	1.001	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	16:45-17:00	246	246
	17:00-17:15	293	294
	17:15-17:30	359	360
	17:30-17:45	359	360
	17:45-18:00	293	294
	18:00-18:15	246	246
B - Site access	16:45-17:00	73	73
	17:00-17:15	87	87
	17:15-17:30	106	106
	17:30-17:45	106	106
	17:45-18:00	87	87
	18:00-18:15	73	73
C - A29 Realignment Road E	16:45-17:00	397	397
	17:00-17:15	474	474
	17:15-17:30	580	580
	17:30-17:45	580	580
	17:45-18:00	474	474
	18:00-18:15	397	397

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.28	3.81	0.4	A	299	449
B - Site access	0.10	3.93	0.1	A	89	133
C - A29 Realignment Road E	0.39	3.94	0.6	A	483	725

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	246	61	79	1324	0.185	245	324	0.0	0.2	3.332	A
B - Site access	73	18	189	1070	0.068	72	134	0.0	0.1	3.610	A
C - A29 Realignment Road E	397	99	8	1496	0.265	395	254	0.0	0.4	3.266	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	293	73	94	1315	0.223	293	388	0.2	0.3	3.522	A
B - Site access	87	22	227	1050	0.083	87	161	0.1	0.1	3.738	A
C - A29 Realignment Road E	474	118	9	1495	0.317	473	304	0.4	0.5	3.521	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	359	90	115	1303	0.276	359	475	0.3	0.4	3.812	A
B - Site access	106	27	277	1022	0.104	106	197	0.1	0.1	3.929	A
C - A29 Realignment Road E	580	145	11	1494	0.388	579	372	0.5	0.6	3.935	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	359	90	115	1302	0.276	359	476	0.4	0.4	3.815	A
B - Site access	106	27	278	1022	0.104	106	197	0.1	0.1	3.929	A
C - A29 Realignment Road E	580	145	11	1494	0.388	580	373	0.6	0.6	3.940	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	293	73	94	1315	0.223	294	389	0.4	0.3	3.525	A
B - Site access	87	22	227	1049	0.083	87	161	0.1	0.1	3.740	A
C - A29 Realignment Road E	474	118	9	1495	0.317	474	305	0.6	0.5	3.531	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	246	61	79	1324	0.186	246	326	0.3	0.2	3.342	A
B - Site access	73	18	190	1069	0.068	73	135	0.1	0.1	3.612	A
C - A29 Realignment Road E	397	99	8	1496	0.265	397	255	0.5	0.4	3.279	A

2038_Option 1+Option 2, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	4.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2038_Option 1+Option 2	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	563	100.000
B - Site access		ONE HOUR	✓	194	100.000
C - A29 Realignment Road E		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	13	550
	B - Site access	29	0	165
	C - A29 Realignment Road E	530	59	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.02	0.98
	B - Site access	0.15	0.00	0.85
	C - A29 Realignment Road E	0.90	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	0
	B - Site access	0	0	0
	C - A29 Realignment Road E	1	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.000	1.002
	B - Site access	1.002	1.000	1.000
	C - A29 Realignment Road E	1.015	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	07:45-08:00	424	425
	08:00-08:15	506	507
	08:15-08:30	620	621
	08:30-08:45	620	621
	08:45-09:00	506	507
	09:00-09:15	424	425
B - Site access	07:45-08:00	146	146
	08:00-08:15	175	175
	08:15-08:30	214	214
	08:30-08:45	214	214
	08:45-09:00	175	175
	09:00-09:15	146	146
C - A29 Realignment Road E	07:45-08:00	443	449
	08:00-08:15	529	536
	08:15-08:30	648	657
	08:30-08:45	648	657
	08:45-09:00	529	536
	09:00-09:15	443	449

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.47	5.05	0.9	A	517	775
B - Site access	0.25	5.68	0.3	A	178	268
C - A29 Realignment Road E	0.44	4.42	0.8	A	540	811

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	424	108	44	1345	0.315	422	419	0.0	0.5	3.893	A
B - Site access	146	37	412	951	0.154	146	54	0.0	0.2	4.468	A
C - A29 Realignment Road E	443	111	22	1469	0.302	442	536	0.0	0.4	3.497	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	506	127	53	1340	0.378	506	502	0.5	0.6	4.313	A
B - Site access	175	44	494	907	0.193	175	65	0.2	0.2	4.912	A
C - A29 Realignment Road E	529	132	26	1467	0.361	529	642	0.4	0.6	3.838	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	620	155	65	1333	0.465	619	615	0.6	0.9	5.036	A
B - Site access	214	54	605	848	0.252	214	79	0.2	0.3	5.668	A
C - A29 Realignment Road E	648	162	32	1463	0.443	648	786	0.6	0.8	4.409	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	620	155	65	1333	0.465	620	616	0.9	0.9	5.050	A
B - Site access	214	54	606	848	0.252	214	80	0.3	0.3	5.680	A
C - A29 Realignment Road E	648	162	32	1463	0.443	648	787	0.8	0.8	4.418	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	506	127	53	1340	0.378	507	504	0.9	0.6	4.329	A
B - Site access	175	44	496	906	0.193	175	65	0.3	0.2	4.926	A
C - A29 Realignment Road E	529	132	27	1467	0.361	530	644	0.8	0.6	3.848	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	424	106	45	1345	0.315	425	422	0.6	0.5	3.915	A
B - Site access	146	37	415	950	0.154	147	54	0.2	0.2	4.486	A
C - A29 Realignment Road E	443	111	22	1469	0.302	444	539	0.6	0.4	3.515	A

2038_Option 1+Option 2, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	Site Access roundabout	Standard Roundabout		A, B, C	5.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2038_Option 1+Option 2	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A29 Realignment Road W		ONE HOUR	✓	502	100.000
B - Site access		ONE HOUR	✓	97	100.000
C - A29 Realignment Road E		ONE HOUR	✓	798	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	99	403
	B - Site access	26	0	70
	C - A29 Realignment Road E	721	77	0

Proportions

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	0.00	0.20	0.80
	B - Site access	0.27	0.00	0.73
	C - A29 Realignment Road E	0.90	0.10	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A29 Realignment Road W	B - Site access	C - A29 Realignment Road E
From	A - A29 Realignment Road W	0	0	0
	B - Site access	0	0	0
	C - A29 Realignment Road E	0	0	0

Average PCU Per Veh

		To		
		A - A29 Realignment Road W	B - Site access	C - A2 Realignm Road
From	A - A29 Realignment Road W	1.000	1.000	1.001
	B - Site access	1.001	1.000	1.000
	C - A29 Realignment Road E	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A29 Realignment Road W	16:45-17:00	378	378
	17:00-17:15	451	451
	17:15-17:30	552	553
	17:30-17:45	552	553
	17:45-18:00	451	451
	18:00-18:15	378	378
B - Site access	16:45-17:00	73	73
	17:00-17:15	87	87
	17:15-17:30	106	106
	17:30-17:45	106	106
	17:45-18:00	87	87
	18:00-18:15	73	73
C - A29 Realignment Road E	16:45-17:00	601	601
	17:00-17:15	717	718
	17:15-17:30	879	879
	17:30-17:45	879	879
	17:45-18:00	717	718
	18:00-18:15	601	601

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A29 Realignment Road W	0.42	4.68	0.7	A	460	691
B - Site access	0.11	4.35	0.1	A	89	133
C - A29 Realignment Road E	0.59	5.95	1.4	A	732	1098

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	378	94	58	1338	0.282	376	560	0.0	0.4	3.736	A
B - Site access	73	18	302	1010	0.072	72	133	0.0	0.1	3.840	A
C - A29 Realignment Road E	601	150	20	1490	0.403	598	354	0.0	0.7	4.026	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	451	113	70	1331	0.339	451	671	0.4	0.5	4.086	A
B - Site access	87	22	361	978	0.089	87	159	0.1	0.1	4.039	A
C - A29 Realignment Road E	717	179	24	1487	0.482	716	425	0.7	0.9	4.665	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	552	138	85	1322	0.418	552	821	0.5	0.7	4.667	A
B - Site access	106	27	443	935	0.114	106	194	0.1	0.1	4.344	A
C - A29 Realignment Road E	879	220	29	1484	0.592	877	520	0.9	1.4	5.905	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	552	138	85	1322	0.418	552	822	0.7	0.7	4.677	A
B - Site access	106	27	443	935	0.114	106	195	0.1	0.1	4.346	A
C - A29 Realignment Road E	879	220	29	1484	0.592	879	520	1.4	1.4	5.945	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	451	113	70	1331	0.339	452	673	0.7	0.5	4.098	A
B - Site access	87	22	362	977	0.089	87	159	0.1	0.1	4.042	A
C - A29 Realignment Road E	717	179	24	1487	0.482	719	426	1.4	0.9	4.700	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A29 Realignment Road W	378	94	58	1338	0.282	378	563	0.5	0.4	3.752	A
B - Site access	73	18	303	1009	0.072	73	133	0.1	0.1	3.845	A
C - A29 Realignment Road E	601	150	20	1489	0.403	602	356	0.9	0.7	4.061	A

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