

Junctions 9											
PICADY 9 - Priority Intersection Module											
Version: 9.0.2.5947											
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Filename: Tye Lane - A27.j9

Path: W:\Projects\Fareham\040-049\041 Barratt Homes\041.0071 Land at Tye Lane, Walberton\Modelling\2021 OATA

Report generation date: 08/12/2021 11:35:06

- » Existing Configuration - 2020 Baseline, AM
- » Existing Configuration - 2020 Baseline, PM
- » Existing Configuration - 2023 + Com Dev, AM
- » Existing Configuration - 2023 + Com Dev, PM
- » Existing Configuration - 2023 + Com Dev + Dev, AM
- » Existing Configuration - 2023 + Com Dev + Dev, PM
- » Existing Configuration - 2031 + Com Dev, AM
- » Existing Configuration - 2031 + Com Dev, PM
- » Existing Configuration - 2031 + Com Dev + Dev, AM
- » Existing Configuration - 2031 + Com Dev + Dev, PM

Summary of junction performance

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
Existing Configuration - 2020 Baseline												
Stream B-AC	0.2	13.48	0.19	B	0.44	48 %	0.1	9.16	0.08	A	0.25	135 %
Stream C-AB	0.0	0.00	0.00	A		[Stream B-AC]	0.0	0.00	0.00	A		[Stream B-AC]
Existing Configuration - 2023 + Com Dev												
Stream B-AC	0.3	14.80	0.21	B	0.48	39 %	0.1	9.49	0.08	A	0.25	121 %
Stream C-AB	0.0	0.00	0.00	A		[Stream B-AC]	0.0	0.00	0.00	A		[Stream B-AC]
Existing Configuration - 2023 + Com Dev + Dev												
Stream B-AC	0.5	17.60	0.34	C	0.68	25 %	0.2	10.06	0.14	B	0.41	102 %
Stream C-AB	0.0	0.00	0.00	A		[Stream B-AC]	0.0	0.00	0.00	A		[Stream B-AC]
Existing Configuration - 2031 + Com Dev												
Stream B-AC	0.3	16.03	0.24	C	0.52	32 %	0.1	9.83	0.09	A	0.26	109 %
Stream C-AB	0.0	0.00	0.00	A		[Stream B-AC]	0.0	0.00	0.00	A		[Stream B-AC]
Existing Configuration - 2031 + Com Dev + Dev												
Stream B-AC	0.6	19.37	0.37	C	0.95	20 %	0.2	10.45	0.14	B	0.42	92 %
Stream C-AB	0.0	0.00	0.00	A		[Stream B-AC]	0.0	0.00	0.00	A		[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Tye Lane - The Street
Location	Walberton
Site number	
Date	26/08/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	Barratt Homes
Enumerator	Shannon
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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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)
D1	2020 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2020 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2023 + Com Dev	AM	ONE HOUR	07:45	09:15	15
D4	2023 + Com Dev	PM	ONE HOUR	16:45	18:15	15
D5	2023 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15
D6	2023 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15
D7	2031 + Com Dev	AM	ONE HOUR	07:45	09:15	15
D8	2031 + Com Dev	PM	ONE HOUR	16:45	18:15	15
D9	2031 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15
D10	2031 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Configuration	100.000

Existing Configuration - 2020 Baseline, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.44	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	48	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	A27 (WB)		Major
B	Tye Lane		Minor
C	A27 (EB)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A27 (EB)	7.75				✓	

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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Tye Lane	One lane	2.75	50	100

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
1	B-A	530	0.057	0.143	0.090	0.204
1	B-C	670	0.060	0.152	-	-
1	C-B	632	0.144	0.144	-	-

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)
D1	2020 Baseline	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1677	100.000
B - Tye Lane		✓	57	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
A - A27 (WB)		0	20	1657
B - Tye Lane		0	0	57
C - A27 (EB)		0	0	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
A - A27 (WB)		10	10	10
B - Tye Lane		10	10	10
C - A27 (EB)		10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.19	13.48	0.2	B
C-AB	0.00	0.00	0.0	A
C-A				
AB				
AC				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	43	418	0.103	42	0.1	9.574	A
C-AB	0	393	0.000	0	0.0	0.000	A
C-A	0			0			
AB	15			15			
AC	1247			1247			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	51	381	0.135	51	0.2	10.907	B
C-AB	0	358	0.000	0	0.0	0.000	A
C-A	0			0			
AB	18			18			
AC	1490			1490			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	63	330	0.190	62	0.2	13.446	B
C-AB	0	309	0.000	0	0.0	0.000	A
C-A	0			0			
AB	22			22			
AC	1824			1824			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	63	330	0.190	63	0.2	13.482	B
C-AB	0	309	0.000	0	0.0	0.000	A
C-A	0			0			
AB	22			22			
AC	1824			1824			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	51	381	0.135	52	0.2	10.939	B
C-AB	0	355	0.000	0	0.0	0.000	A
C-A	0			0			
AB	18			18			
AC	1490			1490			

08:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	43	415	0.103	43	0.1	9.505	A
C-AB	0	393	0.000	0	0.0	0.000	A
C-A	0			0			
AB	15			15			
AC	1247			1247			

Existing Configuration - 2020 Baseline, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	135	Stream B-AC

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)
D2	2020 Baseline	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1116	100.000
B - Tye Lane		✓	31	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
	A - A27 (WB)	0	51	1065
	B - Tye Lane	0	0	31
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	9.16	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	23	484	0.048	23	0.1	7.800	A
C-AB	0	454	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	38			38			
A-C	802			802			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	28	460	0.061	28	0.1	8.322	A
C-AB	0	430	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	46			46			
A-C	957			957			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	34	427	0.080	34	0.1	9.161	A
C-AB	0	396	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	56			56			
A-C	1173			1173			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	34	427	0.080	34	0.1	9.164	A
C-AB	0	398	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	56			56			
A-C	1173			1173			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	28	460	0.061	28	0.1	8.327	A
C-AB	0	430	0.000	0	0.0	0.000	A
C-A	0			0			
AB	46			46			
AC	957			957			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	23	484	0.048	23	0.1	7.808	A
C-AB	0	454	0.000	0	0.0	0.000	A
C-A	0			0			
AB	38			38			
AC	802			802			

Existing Configuration - 2023 + Com Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.48	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	39	Stream B-AC

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)
D3	2023 + Com Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1800	100.000
B - Tye Lane		✓	60	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	0	21	1779
	B - Tye Lane	0	0	60
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.21	14.80	0.3	B
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	45	404	0.112	45	0.1	10.005	B
C-AB	0	380	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	16			16			
A-C	1339			1339			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	54	364	0.148	54	0.2	11.588	B
C-AB	0	342	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	19			19			
A-C	1599			1599			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	66	309	0.214	66	0.3	14.756	B
C-AB	0	290	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	23			23			
A-C	1959			1959			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	66	309	0.214	66	0.3	14.802	B
C-AB	0	290	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	23			23			
A-C	1959			1959			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	54	364	0.148	54	0.2	11.631	B
C-AB	0	342	0.000	0	0.0	0.000	A
C-A	0			0			
AB	19			19			
AC	1599			1599			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	45	404	0.112	45	0.1	10.045	B
C-AB	0	360	0.000	0	0.0	0.000	A
C-A	0			0			
AB	16			16			
AC	1339			1339			

Existing Configuration - 2023 + Com Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	121	Stream B-AC

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)
D4	2023 + Com Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1191	100.000
B - Tye Lane		✓	32	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
	A - A27 (WB)	0	53	1138
	B - Tye Lane	0	0	32
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.08	9.49	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	24	476	0.051	24	0.1	7.959	A
C-AB	0	446	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	40			40			
A-C	857			857			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	29	450	0.064	29	0.1	8.540	A
C-AB	0	421	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	48			48			
A-C	1023			1023			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	35	415	0.085	35	0.1	9.486	A
C-AB	0	386	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	58			58			
A-C	1253			1253			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	35	415	0.085	35	0.1	9.490	A
C-AB	0	386	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	58			58			
A-C	1253			1253			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	29	450	0.064	29	0.1	8.545	A
C-AB	0	421	0.000	0	0.0	0.000	A
C-A	0			0			
AB	48			48			
AC	1023			1023			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	24	476	0.051	24	0.1	7.968	A
C-AB	0	446	0.000	0	0.0	0.000	A
C-A	0			0			
AB	40			40			
AC	857			857			

Existing Configuration - 2023 + Com Dev + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.88	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	25	Stream B-AC

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)
D5	2023 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1804	100.000
B - Tye Lane		✓	95	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	0	25	1779
	B - Tye Lane	0	0	95
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.34	17.50	0.5	C
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	72	404	0.177	71	0.2	10.781	B
C-AB	0	379	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	19			19			
A-C	1339			1339			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	85	364	0.235	85	0.3	12.888	B
C-AB	0	341	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	22			22			
A-C	1599			1599			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	105	309	0.339	104	0.5	17.478	C
C-AB	0	289	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	28			28			
A-C	1959			1959			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	105	309	0.339	105	0.5	17.605	C
C-AB	0	289	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	28			28			
A-C	1959			1959			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	85	364	0.235	85	0.3	12.992	B
C-AB	0	341	0.000	0	0.0	0.000	A
C-A	0			0			
AB	22			22			
AC	1599			1599			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	72	404	0.177	72	0.2	10.860	B
C-AB	0	379	0.000	0	0.0	0.000	A
C-A	0			0			
AB	19			19			
AC	1339			1339			

Existing Configuration - 2023 + Com Dev + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.41	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	102	Stream B-AC

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)
D6	2023 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1201	100.000
B - Tye Lane		✓	51	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	0	63	1138
	B - Tye Lane	0	0	51
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.14	10.06	0.2	B
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	38	476	0.081	38	0.1	8.216	A
C-AB	0	445	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	47			47			
A-C	857			857			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	46	450	0.102	46	0.1	8.911	A
C-AB	0	419	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	57			57			
A-C	1023			1023			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	56	414	0.136	56	0.2	10.054	B
C-AB	0	384	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	69			69			
A-C	1253			1253			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	56	414	0.136	56	0.2	10.062	B
C-AB	0	384	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	69			69			
A-C	1253			1253			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	46	450	0.102	46	0.1	8.923	A
C-AB	0	419	0.000	0	0.0	0.000	A
C-A	0			0			
AB	57			57			
AC	1023			1023			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	38	476	0.081	38	0.1	8.239	A
C-AB	0	445	0.000	0	0.0	0.000	A
C-A	0			0			
AB	47			47			
AC	857			857			

Existing Configuration - 2031 + Com Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.52	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	32	Stream B-AC

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)
D7	2031 + Com Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1892	100.000
B - Tye Lane		✓	63	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	0	22	1870
	B - Tye Lane	0	0	63
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.24	16.03	0.3	C
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	47	393	0.121	47	0.1	10.371	B
C-AB	0	370	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	17			17			
A-C	1408			1408			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	57	352	0.161	56	0.2	12.183	B
C-AB	0	330	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	20			20			
A-C	1681			1681			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	69	294	0.236	69	0.3	15.967	C
C-AB	0	275	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	24			24			
A-C	2059			2059			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	69	294	0.236	69	0.3	16.028	C
C-AB	0	275	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	24			24			
A-C	2059			2059			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	57	352	0.161	57	0.2	12.238	B
C-AB	0	330	0.000	0	0.0	0.000	A
C-A	0			0			
AB	20			20			
AC	1681			1681			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	47	393	0.121	46	0.1	10.417	B
C-AB	0	370	0.000	0	0.0	0.000	A
C-A	0			0			
AB	17			17			
AC	1408			1408			

Existing Configuration - 2031 + Com Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.26	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	109	Stream B-AC

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)
D8	2031 + Com Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1258	100.000
B - Tye Lane		✓	34	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	0	56	1202
	B - Tye Lane	0	0	34
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.09	9.53	0.1	A
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	25	469	0.055	25	0.1	8.119	A
C-AB	0	438	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	42			42			
A-C	905			905			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	31	441	0.069	30	0.1	8.763	A
C-AB	0	412	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	50			50			
A-C	1081			1081			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	37	404	0.093	37	0.1	9.624	A
C-AB	0	375	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	62			62			
A-C	1323			1323			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	37	404	0.093	37	0.1	9.630	A
C-AB	0	375	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	62			62			
A-C	1323			1323			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	31	441	0.069	31	0.1	8.771	A
C-AB	0	412	0.000	0	0.0	0.000	A
C-A	0			0			
AB	50			50			
AC	1081			1081			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	25	469	0.055	25	0.1	8.130	A
C-AB	0	438	0.000	0	0.0	0.000	A
C-A	0			0			
AB	42			42			
AC	905			905			

Existing Configuration - 2031 + Com Dev + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.95	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	Stream B-AC

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)
D9	2031 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1896	100.000
B - Tye Lane		✓	98	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	0	26	1870
	B - Tye Lane	0	0	98
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.37	19.37	0.6	C
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	74	393	0.188	73	0.2	11.204	B
C-AB	0	369	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	20			20			
A-C	1408			1408			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	88	351	0.251	88	0.3	13.647	B
C-AB	0	330	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	23			23			
A-C	1681			1681			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	108	294	0.367	107	0.6	19.184	C
C-AB	0	275	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	29			29			
A-C	2059			2059			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	108	294	0.367	108	0.6	19.366	C
C-AB	0	275	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	29			29			
A-C	2059			2059			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	88	351	0.251	89	0.3	13.764	B
C-AB	0	330	0.000	0	0.0	0.000	A
C-A	0			0			
AB	23			23			
AC	1681			1681			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	74	393	0.188	74	0.2	11.298	B
C-AB	0	369	0.000	0	0.0	0.000	A
C-A	0			0			
AB	20			20			
AC	1408			1408			

Existing Configuration - 2031 + Com Dev + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Tye Lane/A27	T-Junction	One-way from A to C	0.42	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	92	Stream B-AC

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)
D10	2031 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A27 (WB)		✓	1268	100.000
B - Tye Lane		✓	53	100.000
C - A27 (EB)		✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	0	66	1202
	B - Tye Lane	0	0	53
	C - A27 (EB)	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A27 (WB)	B - Tye Lane	C - A27 (EB)
From	A - A27 (WB)	10	10	10
	B - Tye Lane	10	10	10
	C - A27 (EB)	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.14	10.45	0.2	B
C-AB	0.00	0.00	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	40	468	0.085	40	0.1	8.394	A
C-AB	0	437	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	50			50			
A-C	905			905			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	48	441	0.108	48	0.1	9.154	A
C-AB	0	411	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	59			59			
A-C	1081			1081			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	58	403	0.145	58	0.2	10.435	B
C-AB	0	374	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	73			73			
A-C	1323			1323			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	58	403	0.145	58	0.2	10.445	B
C-AB	0	374	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	73			73			
A-C	1323			1323			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	48	441	0.108	48	0.1	9.166	A
C-AB	0	411	0.000	0	0.0	0.000	A
C-A	0			0			
AB	59			59			
AC	1081			1081			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	40	468	0.085	40	0.1	8.412	A
C-AB	0	437	0.000	0	0.0	0.000	A
C-A	0			0			
AB	50			50			
AC	905			905			

Land West of Tye Lane, Walberton
Transport Assessment

Appendix P

Paul Basham Associates Ltd
Report No. 041.0071/TA/3



Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.0.2.5947 © Copyright TRL Limited, 2017	
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Filename: The Street - Yapton Lane.j9

Path: W:\Projects\Fareham\040-049\041 Barratt Homes\041.0071 Land at Tye Lane, Walberton\Modelling\2021 OATA

Report generation date: 08/12/2021 11:00:30

-
- »Existing Configuration - 2020 Baseline, AM
 - »Existing Configuration - 2020 Baseline, PM
 - »Existing Configuration - 2023 + Com Dev, AM
 - »Existing Configuration - 2023 + Com Dev, PM
 - »Existing Configuration - 2023 + Com Dev + Dev, AM
 - »Existing Configuration - 2023 + Com Dev + Dev, PM
 - »Existing Configuration - 2031 + Com Dev, AM
 - »Existing Configuration - 2031 + Com Dev , PM
 - »Existing Configuration - 2031 + Com Dev + Dev, AM
 - »Existing Configuration - 2031 + Com Dev + Dev , PM

Summary of junction performance

	AM						PM					
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
	Existing Configuration - 2020 Baseline											
1 - Yapton Lane (SB)	0.3	5.60	0.25	A	9.52	38 % [2 - Yapton Lane (NB)]	1.3	10.25	0.58	B	8.21	47 % [1 - Yapton Lane (SB)]
2 - Yapton Lane (NB)	1.8	11.41	0.65	B			0.3	5.32	0.24	A		
3 - The Street	0.2	6.75	0.14	A			0.2	5.33	0.16	A		
	Existing Configuration - 2023 + Com Dev											
1 - Yapton Lane (SB)	0.4	5.97	0.30	A	11.48	24 % [2 - Yapton Lane (NB)]	1.9	12.66	0.66	B	9.73	31 % [1 - Yapton Lane (SB)]
2 - Yapton Lane (NB)	2.5	14.28	0.72	B			0.4	5.67	0.28	A		
3 - The Street	0.2	7.21	0.16	A			0.2	5.56	0.18	A		
	Existing Configuration - 2023 + Com Dev + Dev											
1 - Yapton Lane (SB)	0.4	6.01	0.30	A	11.56	24 % [2 - Yapton Lane (NB)]	1.9	12.76	0.66	B	9.77	31 % [1 - Yapton Lane (SB)]
2 - Yapton Lane (NB)	2.5	14.41	0.72	B			0.4	5.72	0.29	A		
3 - The Street	0.2	7.30	0.17	A			0.2	5.59	0.18	A		
	Existing Configuration - 2031 + Com Dev											
1 - Yapton Lane (SB)	0.5	6.15	0.31	A	13.26	17 % [2 - Yapton Lane (NB)]	2.3	14.59	0.70	B	10.92	23 % [1 - Yapton Lane (SB)]
2 - Yapton Lane (NB)	3.1	16.91	0.76	C			0.4	5.82	0.30	A		
3 - The Street	0.2	7.58	0.17	A			0.2	5.70	0.19	A		
	Existing Configuration - 2031 + Com Dev + Dev											
1 - Yapton Lane (SB)	0.5	6.19	0.32	A	13.37	17 % [2 - Yapton Lane (NB)]	2.3	14.72	0.70	B	10.96	23 % [1 - Yapton Lane (SB)]
2 - Yapton Lane (NB)	3.1	17.06	0.76	C			0.4	5.88	0.30	A		
3 - The Street	0.2	7.67	0.18	A			0.2	5.73	0.19	A		

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	The Street/Yapton Lane Roundabout
Location	
Site number	
Date	26/08/2020
Version	
Status	(new file)
Identifier	
Client	Barratt Homes
Jobnumber	041.0071
Enumerator	Shannon
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

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9		✓	Delay	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)
D1	2020 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2020 Baseline	PM	ONE HOUR	16:45	18:15	15
D3	2023 + Com Dev	AM	ONE HOUR	07:45	09:15	15
D4	2023 + Com Dev	PM	ONE HOUR	16:45	18:15	15
D5	2023 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15
D6	2023 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15
D7	2031 + Com Dev	AM	ONE HOUR	07:45	09:15	15
D8	2031 + Com Dev	PM	ONE HOUR	16:45	18:15	15
D9	2031 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15
D10	2031 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Configuration	100.000

Existing Configuration - 2020 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 88% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	9.52	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		38	2 - Yapton Lane (NB)

Arms

Arms

Arm	Name	Description
1	Yapton Lane (SB)	
2	Yapton Lane (NB)	
3	The Street	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Yapton Lane (SB)	2.60	2.60	4.40	5.4	13.44	15.10	0.0	
2 - Yapton Lane (NB)	3.00	3.00	6.40	5.4	12.20	10.70	0.0	✓
3 - The Street	3.35	3.15	5.20	4.3	14.33	13.60	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Yapton Lane (SB)	0.634	981
2 - Yapton Lane (NB)	0.525	995
3 - The Street	0.528	978

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)
D1	2020 Baseline	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	195	100.000
2 - Yapton Lane (NB)		✓	525	100.000
3 - The Street		✓	81	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	176	19
	2 - Yapton Lane (NB)	458	0	67
	3 - The Street	31	50	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.25	5.60	0.3	A
2 - Yapton Lane (NB)	0.55	11.41	1.8	B
3 - The Street	0.14	6.75	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	147	37	868	0.169	146	0.2	4.980	A
2 - Yapton Lane (NB)	395	14	897	0.441	392	0.8	7.095	A
3 - The Street	61	342	708	0.086	61	0.1	5.556	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	175	45	863	0.203	175	0.3	5.229	A
2 - Yapton Lane (NB)	472	17	895	0.527	471	1.1	8.455	A
3 - The Street	73	411	672	0.108	73	0.1	6.005	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	215	55	857	0.251	214	0.3	5.599	A
2 - Yapton Lane (NB)	578	21	893	0.647	575	1.8	11.227	B
3 - The Street	89	502	624	0.143	89	0.2	6.729	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	215	55	857	0.251	215	0.3	5.604	A
2 - Yapton Lane (NB)	578	21	893	0.647	578	1.8	11.409	B
3 - The Street	89	504	623	0.143	89	0.2	6.747	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	175	45	863	0.203	176	0.3	5.237	A
2 - Yapton Lane (NB)	472	17	895	0.527	475	1.1	8.614	A
3 - The Street	73	414	670	0.109	73	0.1	6.030	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	147	38	868	0.169	147	0.2	4.994	A
2 - Yapton Lane (NB)	395	14	897	0.441	397	0.8	7.218	A
3 - The Street	61	346	706	0.085	61	0.1	5.583	A

Existing Configuration - 2020 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	8.21	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		47	1 - Yapton Lane (SB)

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)
D2	2020 Baseline	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	433	100.000
2 - Yapton Lane (NB)		✓	189	100.000
3 - The Street		✓	118	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	399	34
	2 - Yapton Lane (NB)	143	0	46
	3 - The Street	26	92	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.58	10.25	1.3	B
2 - Yapton Lane (NB)	0.24	5.32	0.3	A
3 - The Street	0.15	5.33	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	326	69	848	0.384	324	0.6	5.831	A
2 - Yapton Lane (NB)	142	25	891	0.160	142	0.2	4.799	A
3 - The Street	89	107	832	0.107	88	0.1	4.835	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	388	83	838	0.464	388	0.9	7.963	A
2 - Yapton Lane (NB)	170	30	888	0.191	170	0.2	5.010	A
3 - The Street	106	128	821	0.129	106	0.1	5.034	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	477	101	828	0.576	475	1.3	10.147	B
2 - Yapton Lane (NB)	208	37	885	0.235	208	0.3	5.317	A
3 - The Street	130	157	806	0.161	130	0.2	5.323	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	477	101	828	0.576	477	1.3	10.253	B
2 - Yapton Lane (NB)	208	37	884	0.235	208	0.3	5.322	A
3 - The Street	130	157	806	0.161	130	0.2	5.326	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	389	83	838	0.464	391	0.9	8.064	A
2 - Yapton Lane (NB)	170	31	888	0.191	170	0.2	5.018	A
3 - The Street	106	128	821	0.129	106	0.1	5.038	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	326	69	848	0.384	327	0.6	5.923	A
2 - Yapton Lane (NB)	142	25	891	0.160	142	0.2	4.812	A
3 - The Street	89	108	832	0.107	89	0.1	4.847	A

Existing Configuration - 2023 + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 90% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	11.48	S

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		24	2 - Yapton Lane (NB)

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)
D3	2023 + Com Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	230	100.000
2 - Yapton Lane (NB)		✓	581	100.000
3 - The Street		✓	84	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	207	23
	2 - Yapton Lane (NB)	511	0	70
	3 - The Street	33	51	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.30	5.97	0.4	A
2 - Yapton Lane (NB)	0.72	14.28	2.5	B
3 - The Street	0.16	7.21	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	173	38	868	0.200	172	0.2	5.189	A
2 - Yapton Lane (NB)	437	17	895	0.489	434	0.9	7.741	A
3 - The Street	63	381	887	0.092	63	0.1	5.759	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	207	46	863	0.240	207	0.3	5.482	A
2 - Yapton Lane (NB)	522	21	893	0.585	521	1.4	9.513	A
3 - The Street	76	458	847	0.117	75	0.1	6.294	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	253	56	856	0.296	253	0.4	5.961	A
2 - Yapton Lane (NB)	640	25	891	0.718	636	2.4	13.868	B
3 - The Street	92	559	594	0.156	92	0.2	7.175	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	253	56	856	0.296	253	0.4	5.969	A
2 - Yapton Lane (NB)	640	25	891	0.718	639	2.5	14.284	B
3 - The Street	92	562	592	0.156	92	0.2	7.207	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	207	46	863	0.240	207	0.3	5.496	A
2 - Yapton Lane (NB)	522	21	893	0.585	528	1.4	9.924	A
3 - The Street	76	463	844	0.117	76	0.1	6.334	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	173	38	867	0.200	173	0.3	5.188	A
2 - Yapton Lane (NB)	437	17	895	0.489	439	1.0	7.932	A
3 - The Street	63	386	885	0.092	63	0.1	5.792	A

Existing Configuration - 2023 + Com Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 85% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	9.73	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		31	1 - Yapton Lane (SB)

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)
D4	2023 + Com Dev	PM	ONE HOUR	18:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	492	100.000
2 - Yapton Lane (NB)		✓	225	100.000
3 - The Street		✓	126	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	455	37
	2 - Yapton Lane (NB)	177	0	48
	3 - The Street	31	95	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.66	12.55	1.9	B
2 - Yapton Lane (NB)	0.28	5.67	0.4	A
3 - The Street	0.15	5.56	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	370	71	647	0.437	367	0.8	7.462	A
2 - Yapton Lane (NB)	169	28	690	0.190	168	0.2	4.986	A
3 - The Street	95	133	819	0.115	94	0.1	4.965	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	442	85	638	0.528	441	1.1	9.042	A
2 - Yapton Lane (NB)	202	33	687	0.228	202	0.3	5.257	A
3 - The Street	113	159	805	0.141	113	0.2	5.204	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	542	104	626	0.656	539	1.8	12.417	B
2 - Yapton Lane (NB)	246	41	663	0.281	247	0.4	5.661	A
3 - The Street	139	195	786	0.176	139	0.2	5.557	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	542	105	626	0.656	542	1.9	12.661	B
2 - Yapton Lane (NB)	246	41	663	0.281	246	0.4	5.666	A
3 - The Street	139	195	786	0.177	139	0.2	5.561	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	442	86	638	0.528	445	1.1	9.243	A
2 - Yapton Lane (NB)	202	33	687	0.228	203	0.3	5.265	A
3 - The Street	113	159	805	0.141	113	0.2	5.209	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	370	72	646	0.436	372	0.8	7.509	A
2 - Yapton Lane (NB)	169	28	689	0.190	170	0.2	5.002	A
3 - The Street	95	133	818	0.115	95	0.1	4.975	A

Existing Configuration - 2023 + Com Dev + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 90% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	11.56	S

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		24	2 - Yapton Lane (NB)

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)
D5	2023 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	230	100.000
2 - Yapton Lane (NB)		✓	583	100.000
3 - The Street		✓	90	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	207	23
	2 - Yapton Lane (NB)	511	0	72
	3 - The Street	33	57	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.30	5.01	0.4	A
2 - Yapton Lane (NB)	0.72	14.41	2.5	B
3 - The Street	0.17	7.30	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	173	43	865	0.200	172	0.2	5.190	A
2 - Yapton Lane (NB)	439	17	895	0.490	435	0.9	7.765	A
3 - The Street	68	381	888	0.099	67	0.1	5.801	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	207	51	858	0.241	207	0.3	5.511	A
2 - Yapton Lane (NB)	524	21	893	0.587	522	1.4	9.658	A
3 - The Street	81	458	847	0.125	81	0.1	6.354	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	253	63	852	0.297	253	0.4	6.003	A
2 - Yapton Lane (NB)	642	25	891	0.721	638	2.4	13.960	B
3 - The Street	99	559	594	0.167	99	0.2	7.270	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	253	63	852	0.297	253	0.4	6.011	A
2 - Yapton Lane (NB)	642	25	891	0.721	642	2.5	14.408	B
3 - The Street	99	562	592	0.167	99	0.2	7.303	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	207	51	858	0.241	207	0.3	5.523	A
2 - Yapton Lane (NB)	524	21	893	0.587	528	1.5	9.977	A
3 - The Street	81	463	844	0.125	81	0.1	6.395	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	173	43	865	0.200	173	0.3	5.212	A
2 - Yapton Lane (NB)	439	17	895	0.490	441	1.0	7.959	A
3 - The Street	68	386	885	0.099	68	0.1	5.835	A

Existing Configuration - 2023 + Com Dev + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	9.77	A

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		31	1 - Yapton Lane (SB)

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)
D6	2023 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	492	100.000
2 - Yapton Lane (NB)		✓	230	100.000
3 - The Street		✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	455	37
	2 - Yapton Lane (NB)	177	0	53
	3 - The Street	31	98	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.66	12.75	1.9	B
2 - Yapton Lane (NB)	0.29	5.72	0.4	A
3 - The Street	0.15	5.59	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	370	73	845	0.438	367	0.8	7.484	A
2 - Yapton Lane (NB)	173	28	890	0.195	172	0.2	5.012	A
3 - The Street	97	133	819	0.119	97	0.1	4.981	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	442	88	836	0.529	441	1.1	9.080	A
2 - Yapton Lane (NB)	207	33	887	0.233	207	0.3	5.292	A
3 - The Street	116	159	805	0.144	116	0.2	5.222	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	542	108	824	0.658	539	1.9	12.504	B
2 - Yapton Lane (NB)	253	41	883	0.287	253	0.4	5.710	A
3 - The Street	142	195	786	0.181	142	0.2	5.586	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	542	108	823	0.655	542	1.9	12.755	B
2 - Yapton Lane (NB)	253	41	883	0.287	253	0.4	5.718	A
3 - The Street	142	195	786	0.181	142	0.2	5.590	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	442	88	836	0.529	445	1.1	9.284	A
2 - Yapton Lane (NB)	207	33	887	0.233	207	0.3	5.301	A
3 - The Street	116	159	805	0.144	116	0.2	5.231	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	370	74	845	0.438	372	0.8	7.530	A
2 - Yapton Lane (NB)	173	28	890	0.195	173	0.2	5.031	A
3 - The Street	97	133	818	0.119	97	0.1	4.992	A

Existing Configuration - 2031 + Com Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 90% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	13.26	S

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		17	2 - Yapton Lane (NB)

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)
D7	2031 + Com Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	244	100.000
2 - Yapton Lane (NB)		✓	616	100.000
3 - The Street		✓	90	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	219	25
	2 - Yapton Lane (NB)	542	0	74
	3 - The Street	35	55	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.31	5.15	0.5	A
2 - Yapton Lane (NB)	0.76	16.91	3.1	C
3 - The Street	0.17	7.58	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	154	41	866	0.212	183	0.3	5.263	A
2 - Yapton Lane (NB)	464	19	894	0.519	460	1.1	8.204	A
3 - The Street	68	404	675	0.100	67	0.1	5.915	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	219	49	861	0.255	219	0.3	5.609	A
2 - Yapton Lane (NB)	554	22	892	0.621	552	1.6	10.497	B
3 - The Street	81	485	633	0.128	81	0.1	6.522	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	269	60	854	0.315	268	0.5	6.144	A
2 - Yapton Lane (NB)	676	27	890	0.762	673	3.0	16.165	C
3 - The Street	99	592	576	0.172	99	0.2	7.535	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	269	61	853	0.315	269	0.5	6.155	A
2 - Yapton Lane (NB)	678	28	890	0.762	678	3.1	16.908	C
3 - The Street	99	596	574	0.173	99	0.2	7.579	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	219	50	860	0.255	220	0.3	5.625	A
2 - Yapton Lane (NB)	554	23	892	0.621	559	1.7	10.989	B
3 - The Street	81	492	629	0.129	81	0.1	6.575	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	154	41	866	0.212	184	0.3	5.284	A
2 - Yapton Lane (NB)	464	19	894	0.519	466	1.1	8.454	A
3 - The Street	68	410	672	0.101	68	0.1	5.959	A

Existing Configuration - 2031 + Com Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	10.92	S

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		23	1 - Yapton Lane (SB)

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)
D8	2031 + Com Dev	PM	ONE HOUR	18:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	522	100.000
2 - Yapton Lane (NB)		✓	238	100.000
3 - The Street		✓	135	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	482	40
	2 - Yapton Lane (NB)	187	0	51
	3 - The Street	33	102	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.70	14.59	2.3	B
2 - Yapton Lane (NB)	0.30	5.82	0.4	A
3 - The Street	0.19	5.70	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	393	75	843	0.466	390	0.9	7.575	A
2 - Yapton Lane (NB)	179	30	888	0.202	178	0.3	5.061	A
3 - The Street	102	140	815	0.125	101	0.1	5.035	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	468	92	834	0.563	468	1.3	9.789	A
2 - Yapton Lane (NB)	214	36	885	0.242	214	0.3	5.356	A
3 - The Street	121	168	800	0.152	121	0.2	5.300	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	575	112	821	0.700	571	2.2	14.184	B
2 - Yapton Lane (NB)	262	44	881	0.297	262	0.4	5.807	A
3 - The Street	149	206	780	0.190	148	0.2	5.596	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	575	112	821	0.700	575	2.3	14.594	B
2 - Yapton Lane (NB)	262	44	881	0.297	262	0.4	5.815	A
3 - The Street	149	206	780	0.191	149	0.2	5.699	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	468	92	834	0.563	473	1.3	10.089	B
2 - Yapton Lane (NB)	214	36	885	0.242	214	0.3	5.370	A
3 - The Street	121	168	800	0.152	122	0.2	5.310	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	393	77	843	0.466	395	0.9	8.061	A
2 - Yapton Lane (NB)	179	30	888	0.202	179	0.3	5.082	A
3 - The Street	102	141	814	0.125	102	0.1	5.054	A

Existing Configuration - 2031 + Com Dev + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 90% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	13.37	S

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		17	2 - Yapton Lane (NB)

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)
D9	2031 + Com Dev + Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	244	100.000
2 - Yapton Lane (NB)		✓	618	100.000
3 - The Street		✓	95	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	219	25
	2 - Yapton Lane (NB)	542	0	76
	3 - The Street	35	60	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.32	5.19	0.5	A
2 - Yapton Lane (NB)	0.76	17.08	3.1	C
3 - The Street	0.15	7.67	0.2	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	154	45	863	0.213	183	0.3	5.288	A
2 - Yapton Lane (NB)	465	19	894	0.520	461	1.1	8.231	A
3 - The Street	72	404	675	0.105	71	0.1	5.957	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	219	54	858	0.256	219	0.3	5.634	A
2 - Yapton Lane (NB)	556	22	892	0.623	553	1.6	10.551	B
3 - The Street	85	485	633	0.135	85	0.2	6.575	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	269	66	850	0.316	268	0.5	6.181	A
2 - Yapton Lane (NB)	680	27	890	0.765	675	3.0	16.313	C
3 - The Street	105	592	576	0.181	104	0.2	7.522	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	269	66	850	0.315	269	0.5	6.192	A
2 - Yapton Lane (NB)	680	28	890	0.765	680	3.1	17.081	C
3 - The Street	105	596	574	0.182	105	0.2	7.668	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	219	54	858	0.256	220	0.3	5.648	A
2 - Yapton Lane (NB)	556	23	892	0.623	561	1.7	11.056	B
3 - The Street	85	492	629	0.135	86	0.2	6.630	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	154	45	863	0.213	184	0.3	5.304	A
2 - Yapton Lane (NB)	465	19	894	0.520	466	1.1	8.485	A
3 - The Street	72	410	672	0.105	72	0.1	5.995	A

Existing Configuration - 2031 + Com Dev + Dev , PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 2 have 84% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	The Street/Yapton Lane	Mini-roundabout	1, 2, 3	10.96	S

Junction Network Options

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	Normal/unknown		23	1 - Yapton Lane (SB)

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)
D10	2031 + Com Dev + Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Yapton Lane (SB)		✓	522	100.000
2 - Yapton Lane (NB)		✓	244	100.000
3 - The Street		✓	138	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	0	482	40
	2 - Yapton Lane (NB)	187	0	57
	3 - The Street	33	105	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Yapton Lane (SB)	2 - Yapton Lane (NB)	3 - The Street
From	1 - Yapton Lane (SB)	10	10	10
	2 - Yapton Lane (NB)	10	10	10
	3 - The Street	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1 - Yapton Lane (SB)	0.70	14.72	2.3	B
2 - Yapton Lane (NB)	0.30	5.88	0.4	A
3 - The Street	0.19	5.73	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	393	79	842	0.467	390	0.9	7.898	A
2 - Yapton Lane (NB)	184	30	888	0.207	183	0.3	5.093	A
3 - The Street	104	140	815	0.127	103	0.1	5.054	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	468	94	832	0.564	468	1.3	9.833	A
2 - Yapton Lane (NB)	219	36	885	0.248	219	0.3	5.401	A
3 - The Street	124	168	800	0.155	124	0.2	5.321	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	575	115	819	0.702	571	2.2	14.297	B
2 - Yapton Lane (NB)	269	44	881	0.305	268	0.4	5.870	A
3 - The Street	152	206	780	0.195	152	0.2	5.726	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	575	116	819	0.702	575	2.3	14.716	B
2 - Yapton Lane (NB)	269	44	881	0.305	269	0.4	5.878	A
3 - The Street	152	206	780	0.195	152	0.2	5.729	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	469	95	832	0.564	473	1.3	10.142	B
2 - Yapton Lane (NB)	219	36	885	0.248	220	0.3	5.413	A
3 - The Street	124	168	800	0.155	124	0.2	5.329	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Yapton Lane (SB)	393	79	842	0.467	395	0.9	8.086	A
2 - Yapton Lane (NB)	184	30	888	0.207	184	0.3	5.115	A
3 - The Street	104	141	814	0.126	104	0.1	5.070	A

Land West of Tye Lane, Walberton
Transport Assessment

Appendix Q

Paul Basham Associates Ltd
Report No. 041.0071/TA/3





NOTES:

1. BASED ON TOPOGRAPHICAL SURVEY PROVIDED BY HIGHWAYS AGENCIES ON 11/14/2012.
2. LAND TITLE BOUNDARIES TRANSMPOSED FROM 11A, LAND REGISTRY NAME.
3. ACQUIRED HIGHWAY EXTENTS SUPPLIED BY WQCC AND TRANSMPOSED TO TOPOGRAPHICAL SURVEY.
4. FUNCTION DESIGNATED IN ACCORDANCE WITH 1004R C0123 STANDARDS.
5. NEUGE RASST IN ACCORDANCE WITH C0123 5.5.6.
6. PRGES TRAPSE IN ACCORDANCE WITH C0123 5.25.25.
7. HIGHWAY DESIGNATION IS CURRENTLY UNKNOWN.

..... PROPOSED AERIS

..... ROAD MASSINGS

FOR INFORMATION
ONLY

DATE	NO.	NAME	ADDRESS	CITY	STATE	ZIP	PHONE	TELETYPE	TELEX	TELEFAX	EMAIL	WWW	OTHER
12/22/2001	1	JOHN DOE	1234 MAIN ST	ANYTOWN	CA	90210	(415) 555-1234				john.doe@anytown.com	www.anytown.com	
12/23/2001	2	JANE DOE	5678 MAIN ST	ANYTOWN	CA	90210	(415) 555-5678				jane.doe@anytown.com	www.anytown.com	
12/24/2001	3	JOHN DOE	9012 MAIN ST	ANYTOWN	CA	90210	(415) 555-9012				john.doe@anytown.com	www.anytown.com	
12/25/2001	4	JANE DOE	3456 MAIN ST	ANYTOWN	CA	90210	(415) 555-3456				jane.doe@anytown.com	www.anytown.com	
12/26/2001	5	JOHN DOE	7890 MAIN ST	ANYTOWN	CA	90210	(415) 555-7890				john.doe@anytown.com	www.anytown.com	
12/27/2001	6	JANE DOE	1122 MAIN ST	ANYTOWN	CA	90210	(415) 555-1122				jane.doe@anytown.com	www.anytown.com	
12/28/2001	7	JOHN DOE	3344 MAIN ST	ANYTOWN	CA	90210	(415) 555-3344				john.doe@anytown.com	www.anytown.com	
12/29/2001	8	JANE DOE	5566 MAIN ST	ANYTOWN	CA	90210	(415) 555-5566				jane.doe@anytown.com	www.anytown.com	
12/30/2001	9	JOHN DOE	7788 MAIN ST	ANYTOWN	CA	90210	(415) 555-7788				john.doe@anytown.com	www.anytown.com	
12/31/2001	10	JANE DOE	9900 MAIN ST	ANYTOWN	CA	90210	(415) 555-9900				jane.doe@anytown.com	www.anytown.com	

APC CONSULTING

Third Floor
The Hydramk Building
52-56 Eastonell Street

ECM FIVE
Tel: 020 7620 4088
Web: www.fine-ecm.co.uk

Start

MINISTRE SOUTH EAST

Print This

ROBERT W. WILSON, JR.

1000

PROPOSED A27 / TYLE LANE
JUNCTION

AI Scale	Date	Designed by
----------	------	-------------

15051	JUNE 2021	MTH
Drawn by	Checked by	Approved by

Sampling number	HHH	DV	KM	Mean
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Land West of Tye Lane, Walberton
Transport Assessment

Appendix R

Paul Basham Associates Ltd
Report No. 041.0071/TA/3



Basic Results Summary

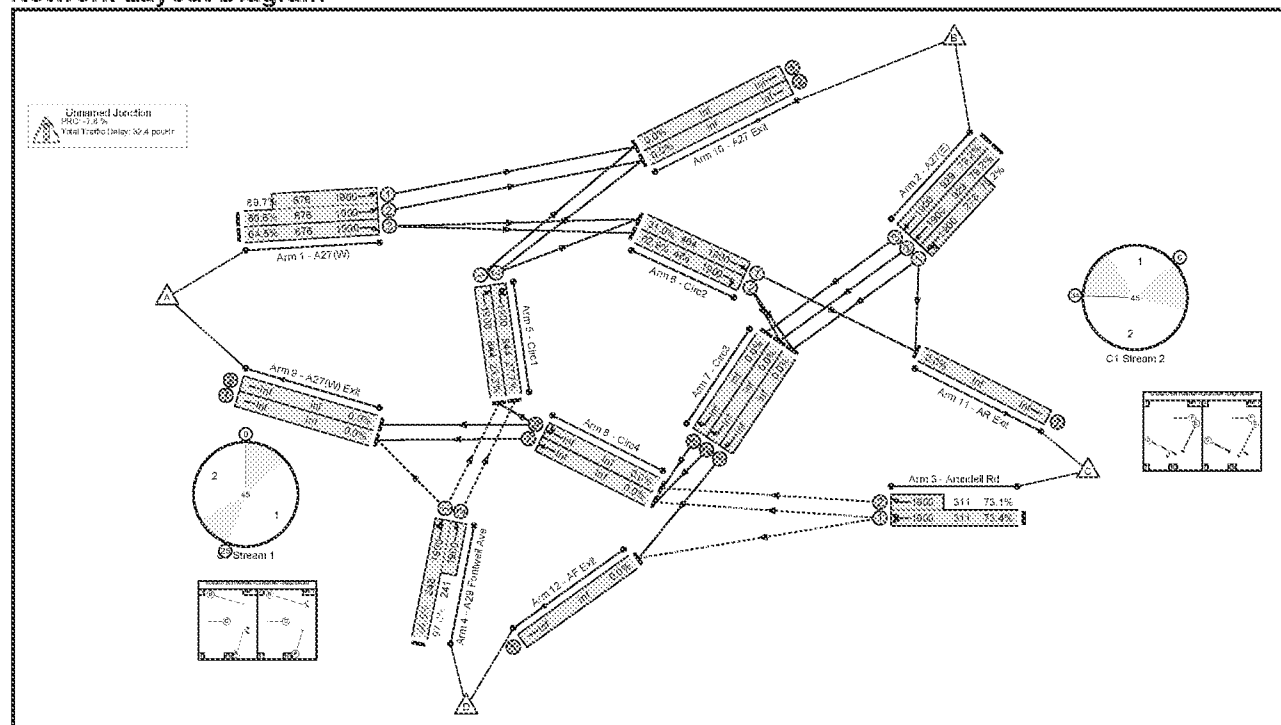
Basic Results Summary

User and Project Details

Project:	Land West of Tye Lane, Walberton
Title:	A27_A29 Fontwell West Roundabout
Location:	
Additional detail:	
File name:	A27_A29 Fontell West Rbt (With Linden Improvements).lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2031 With Mit + Linden AM' (FG1: '2031 With Mit + Linden AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



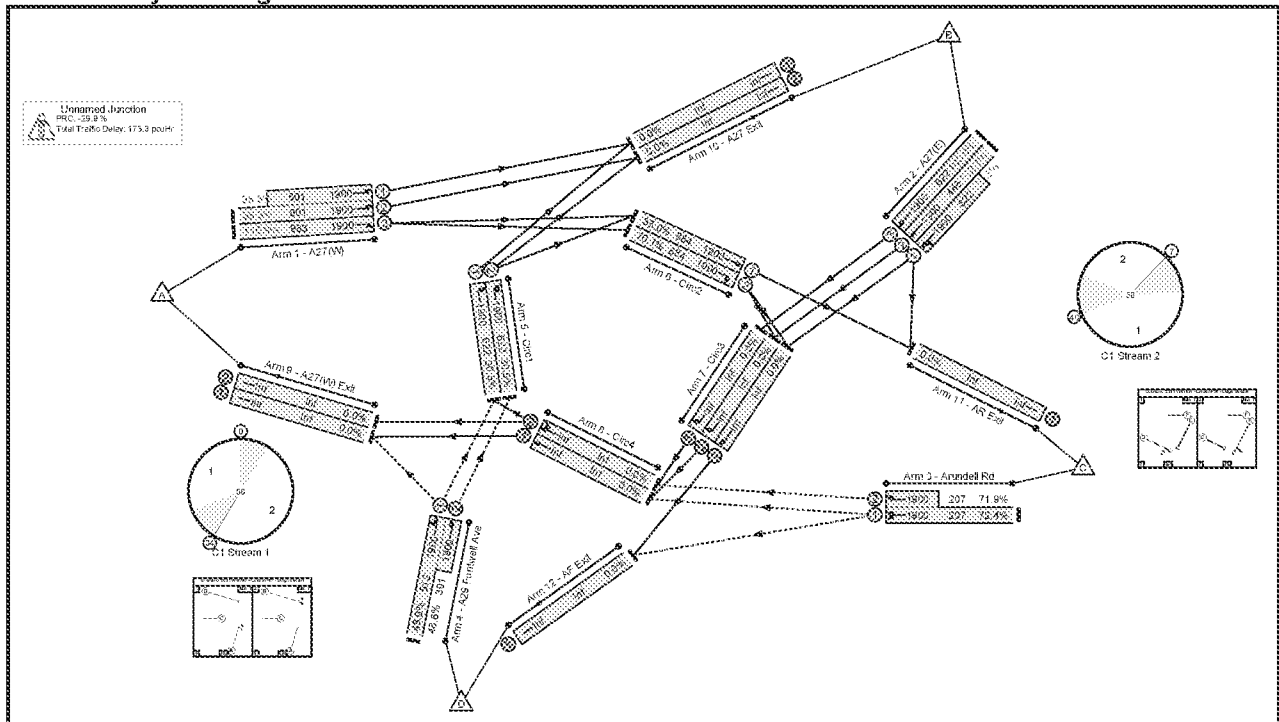
Basic Results Summary
Network Results

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 (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	97.0%	1846	0	0	32.4	-	-
	-	-	-	-	-	-	-	-	-	-	97.0%	1846	0	0	32.4	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	15	-	1211	1900:1900	676+676	89.6% 89.7%	-	-	-	8.7	25.9	11.2
1/3	A27(W) Ahead	U	B	-	1	15	-	436	1900	676	64.5%	-	-	-	2.4	19.6	5.4
2/2+2/1	A27(E) Ahead Left	U	E	-	1	21	-	955	1900:1900	929+276	79.2% 79.2%	-	-	-	4.2	16.0	9.4
2/3	A27(E) Ahead	U	E	-	1	21	-	736	1900	929	79.2%	-	-	-	3.8	18.8	9.4
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	455	1900:1900	311+311	73.4% 73.1%	910	0	0	2.4	18.7	3.8
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	468	1900:1900	248+241	84.6% 87.0%	936	0	0	8.5	65.4	9.7
5/1	Circ1 Right	U	A	-	1	19	-	196	1900	844	23.2%	-	-	-	0.4	6.8	0.6
5/2	Circ1 Right Right2	U	A	-	1	19	-	234	1900	844	27.7%	-	-	-	0.5	7.5	0.8
6/1	Circ2 Ahead	U	D	-	1	10	-	144	1900	464	31.0%	-	-	-	0.3	8.2	1.6
6/2	Circ2 Right	U	D	-	1	10	-	292	1900	464	62.9%	-	-	-	1.2	14.3	4.2
C1 Stream: 1 PRC for Signalled Lanes (%): 0.3																	
C1 Total Delay for Signalled Lanes (pcu-hr): 11.93 Cycle Time (s): 45																	
Total Delay for Signalled Lanes (pcu-hr): 9.57 Cycle Time (s): 45																	
Total Delay Over All Lanes(pcu-hr): 32.36																	

Basic Results Summary

Scenario 2: '2031 With Mit + Linden PM' (FG2: '2031 With Mit + Linden PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

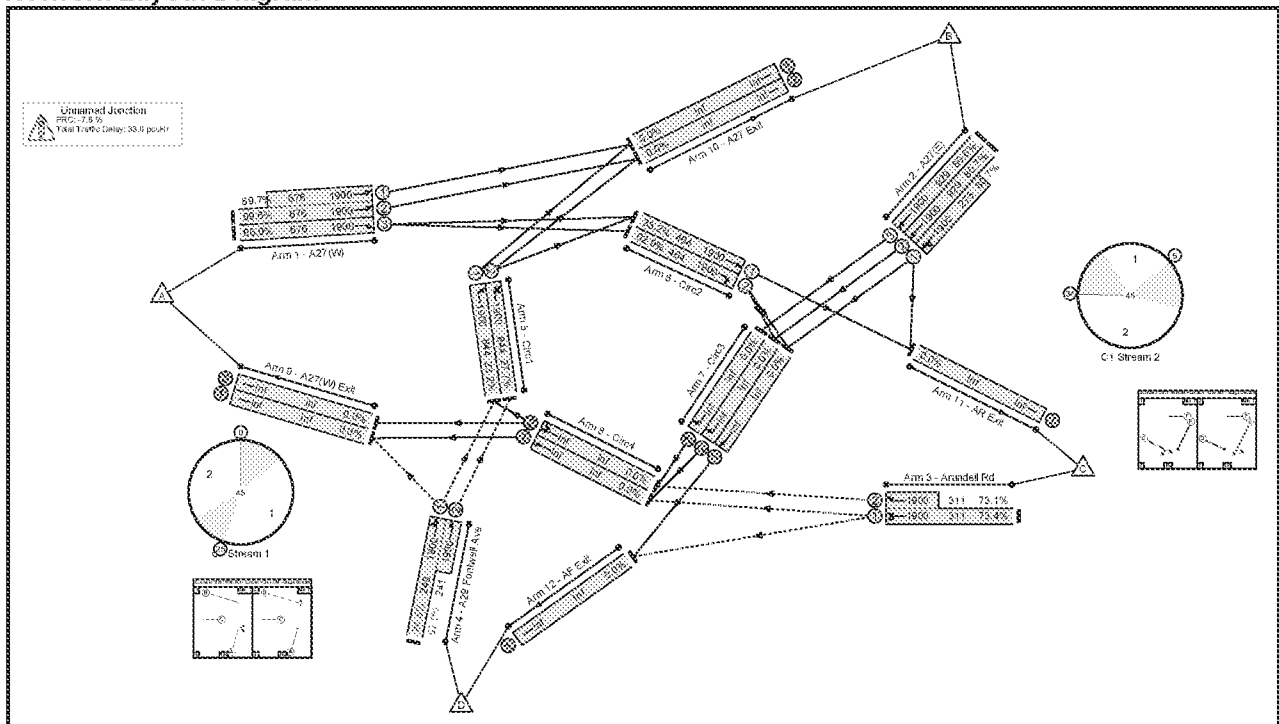
Network Results

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 (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	116.9%	1476	0	0	173.3	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	116.9%	1476	0	0	173.3	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	29	-	1574	1900:1900	801+801	99.3% 99.3%	-	-	-	19.2	43.8	28.0
1/3	A27(W) Ahead	U	B	-	1	29	-	1149	1900	983	110.3%	-	-	-	95.3	298.5	107.6
2/2+2/1	A27(E) Ahead Left	U	E	-	1	18	-	1093	1900:1900	446+622	102.3% 102.3%	-	-	-	29.8	98.2	34.2
2/3	A27(E) Ahead	U	E	-	1	18	-	641	1900	622	103.0%	-	-	-	22.2	124.7	28.8
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	299	1900:1900	207+207	72.4% 71.9%	598	0	0	2.2	25.9	2.6
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	439	1900:1900	512+391	48.6% 48.6%	878	0	0	1.3	10.5	3.0
5/1	Circ1 Right	U	A	-	1	18	-	190	1900	622	30.5%	-	-	-	0.7	13.1	2.6
5/2	Circ1 Right Right2	U	A	-	1	18	-	190	1900	622	30.5%	-	-	-	0.7	14.1	2.6
6/1	Circ2 Ahead	U	D	-	1	26	-	362	1900	884	35.0%	-	-	-	0.3	3.5	1.1
6/2	Circ2 Right	U	D	-	1	26	-	787	1900	884	76.1%	-	-	-	1.7	9.2	5.9
C1 Stream: 1 PRC for Signalled Lanes (%): -29.9 C1 Stream: 2 PRC for Signalled Lanes (%): -14.4 PRC Over All Lanes (%): -29.9 Total Delay for Signalled Lanes (pcu/hr): 115.87 Total Delay for Signalled Lanes (pcu/hr): 54.04 Total Delay Over All Lanes (pcu/hr): 173.34 Cycle Time (s): 58 Cycle Time (s): 58																	

Basic Results Summary

Scenario 3: '2031 With Mit + Linden + Dev AM' (FG5: '2031 With Mit + Linden + Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



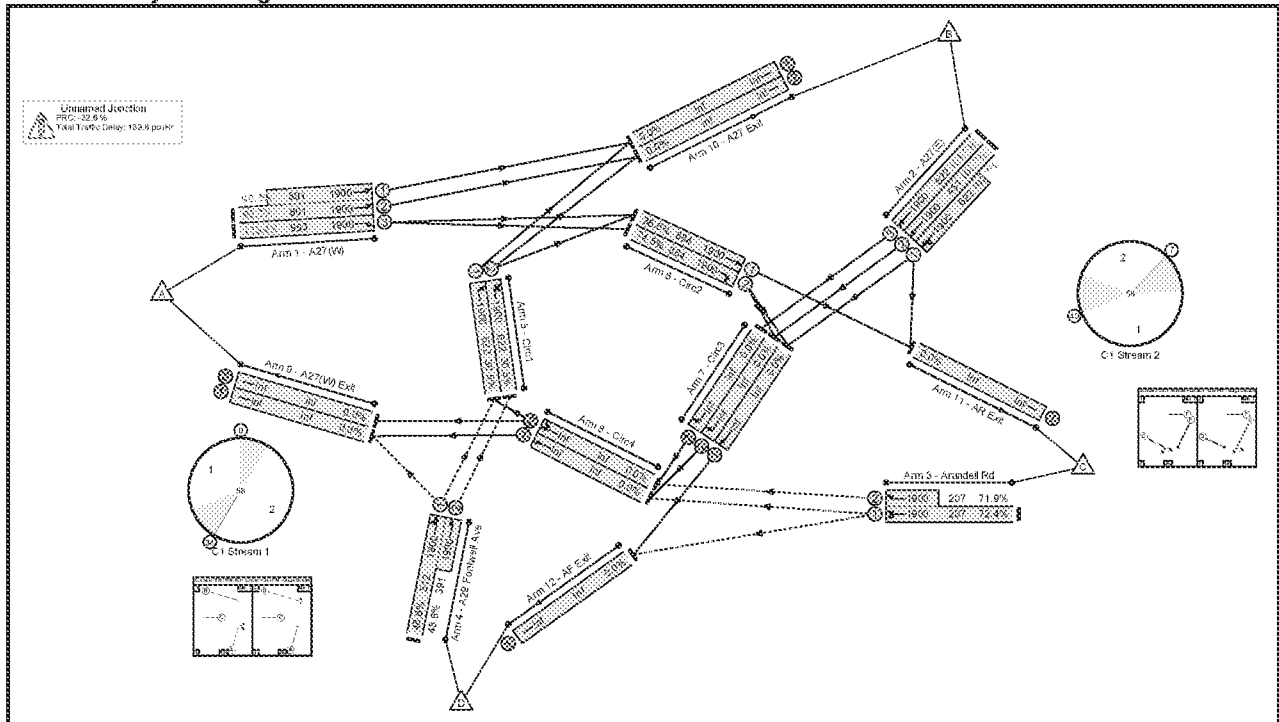
Basic Results Summary
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	97.0%	1846	0	0	33.0	-	-
	-	-	-	-	-	-	-	-	-	-	97.0%	1846	0	0	33.0	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	15	-	1211	1900:1900	676+676	89.6 : 89.7%	-	-	-	8.7	25.9	11.2
1/3	A27(W) Ahead	U	B	-	1	15	-	445	1900	676	66.0%	-	-	-	2.5	20.0	5.5
2/2+2/1	A27(E) Ahead Left	U	E	-	1	21	-	972	1900:1900	929+275	80.7 : 80.7%	-	-	-	4.5	16.6	9.8
2/3	A27(E) Ahead	U	E	-	1	21	-	749	1900	929	80.6%	-	-	-	4.1	19.5	9.7
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	455	1900:1900	311+311	73.4 : 73.1%	910	0	0	2.4	18.7	3.8
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	468	1900:1900	248+241	84.5 : 87.0%	936	0	0	8.5	65.4	9.7
5/1	Circ1 Right	U	A	-	1	19	-	196	1900	844	23.2%	-	-	-	0.4	6.8	0.6
5/2	Circ1 Right Right2	U	A	-	1	19	-	234	1900	844	27.7%	-	-	-	0.5	7.5	0.8
6/1	Circ2 Ahead	U	D	-	1	10	-	154	1900	464	33.2%	-	-	-	0.4	8.4	1.9
6/2	Circ2 Right	U	D	-	1	10	-	292	1900	464	62.9%	-	-	-	1.2	14.2	4.2
C1 Stream: 1 PRC for Signalled Lanes (%): 0.3																	
C1 Stream: 2 PRC for Signalled Lanes (%): 11.5																	
PRC Over All Lanes (%): -7.8																	
Total Delay for Signalled Lanes (pcu/hr): 12.03																	
Total Delay for Signalled Lanes (pcu/hr): 10.06																	
Total Delay Over All Lanes (pcu/hr): 32.96																	
Cycle Time (s): 45																	
Cycle Time (s): 45																	

Basic Results Summary

Scenario 4: '2031 With Mit + Linden + Dev PM' (FG6: '2031 With Mit + Linden + Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners in Intergreen (pcu)	Total Delay (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	119.4%	1476	0	0	189.8	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	119.4%	1476	0	0	189.8	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	29	-	1574	1900:1900	801+801	99.3% 99.3%	-	-	-	19.2	43.8	28.0
1/3	A27(W) Ahead	U	B	-	1	29	-	1173	1900	983	119.4%	-	-	-	107.7	330.4	120.1
2/2+2/1	A27(E) Ahead Left	U	E	-	1	18	-	1102	1900:1900	451+822	102.7% 102.7%	-	-	-	31.2	101.9	35.5
2/3	A27(E) Ahead	U	E	-	1	18	-	648	1900	622	104.1%	-	-	-	25.0	138.8	31.5
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	299	1900:1900	207+207	72.4% 71.9%	598	0	0	2.2	25.9	2.6
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	439	1900:1900	512+391	48.6% 48.6%	878	0	0	1.3	10.5	3.0
5/1	Circ1 Right	U	A	-	1	18	-	190	1900	622	30.5%	-	-	-	0.7	13.1	2.6
5/2	Circ1 Right Right2	U	A	-	1	18	-	190	1900	622	30.5%	-	-	-	0.7	14.1	2.6
6/1	Circ2 Ahead	U	D	-	1	26	-	386	1900	884	36.6%	-	-	-	0.3	3.6	1.2
6/2	Circ2 Right	U	D	-	1	26	-	787	1900	884	74.5%	-	-	-	1.6	6.7	5.7
C1 Stream: 1 PRC for Signalled Lanes (%): -32.6 C1 Stream: 2 PRC for Signalled Lanes (%): -15.7 PRC Over All Lanes (%): -32.6 Total Delay for Signalled Lanes (pcu-hr): 128.26 Total Delay for Signalled Lanes (pcu-hr): 58.08 Total Delay Over All Lanes (pcu-hr): 189.77 Cycle Time (s): 58 Cycle Time (s): 58																	

Basic Results Summary

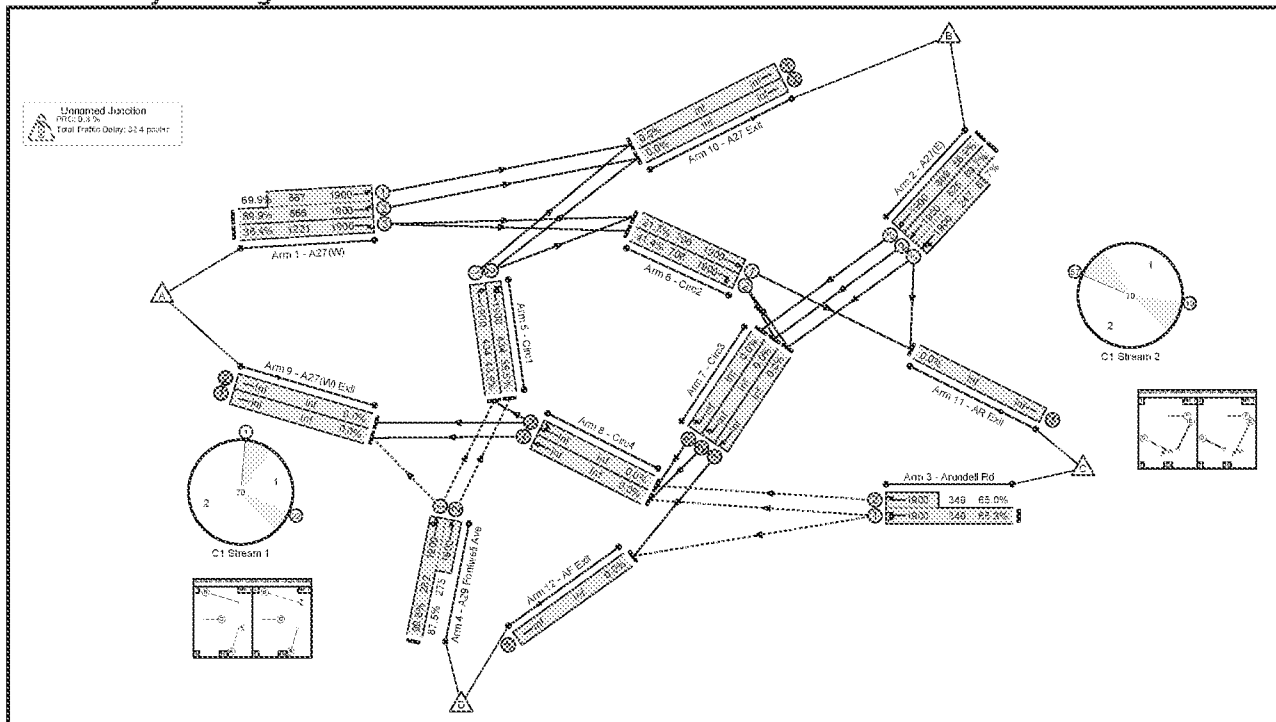
Basic Results Summary

User and Project Details

Project:	Land West of Tye Lane, Walberton
Title:	A27_A29 Fontwell West Roundabout
Location:	
Additional detail:	
File name:	A27_A29 Fontell West Rbt (With Linden Improvements) Tye Lane Mitigation (70 seconds).lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2031 With Mit + Linden + Dev AM' (FG5: '2031 With Mit + Linden + Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



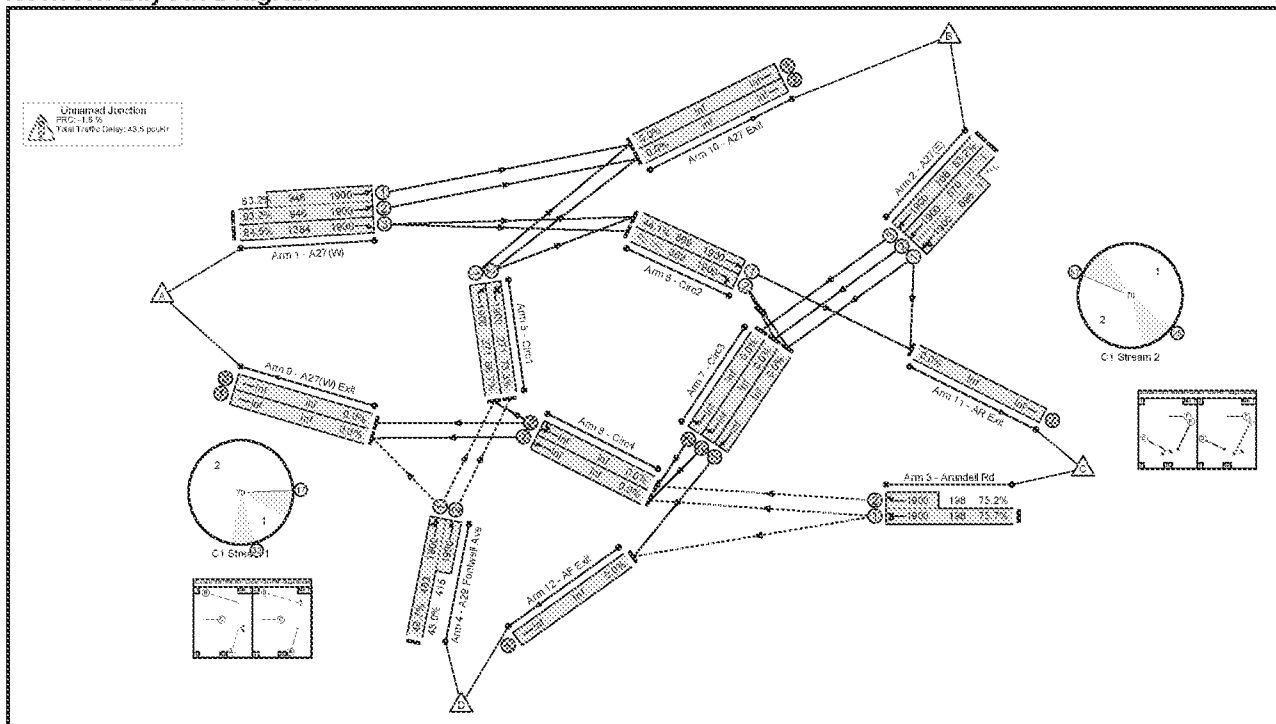
Basic Results Summary
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	89.7%	1846	0	0	32.4	-	-
	-	-	-	-	-	-	-	-	-	-	89.7%	1846	0	0	32.4	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	44	-	1211	1900:1900	866+867	69.9 : 69.9%	-	-	-	3.4	10.0	7.2
1/3	A27(W) Ahead	U	B	-	1	44	-	444	1900	1221	36.4%	-	-	-	1.0	8.1	4.2
2/2+2/1	A27(E) Ahead Left	U	E	-	1	31	-	962	1900:1900	825+247	89.7 : 89.7%	-	-	-	8.2	30.9	16.8
2/3	A27(E) Ahead	U	E	-	1	31	-	755	1900	869	86.9%	-	-	-	6.7	32.1	16.4
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	455	1900:1900	349+349	65.3 : 65.0%	910	0	0	2.6	20.6	4.5
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	468	1900:1900	282+275	80.6 : 87.5%	936	0	0	4.5	34.5	6.8
5/1	Circ1 Right	U	A	-	1	15	-	189	1900	434	43.5%	-	-	-	1.2	22.3	1.6
5/2	Circ1 Right Right2	U	A	-	1	15	-	241	1900	434	55.5%	-	-	-	1.8	26.3	2.5
6/1	Circ2 Ahead	U	D	-	1	25	-	152	1900	706	21.5%	-	-	-	1.0	22.6	2.7
6/2	Circ2 Right	U	D	-	1	25	-	292	1900	706	41.4%	-	-	-	2.1	25.9	5.8
C1 Stream: 1 PRC for Signalled Lanes (%): 28.8 Total Delay for Signalled Lanes (pou/Hr): 7.29 Cycle Time (s): 70																	
C1 Stream: 2 PRC for Signalled Lanes (%): 0.3 Total Delay for Signalled Lanes (pou/Hr): 18.05 Cycle Time (s): 70																	
PRC Over All Lanes (%): 0.3 Total Delay Over All Lanes (pou/Hr): 32.42																	

Basic Results Summary

Scenario 2: '2031 With Mit + Linden + Dev PM' (FG6: '2031 With Mit + Linden + Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	91.7%	1476	0	0	43.5	-	-
	-	-	-	-	-	-	-	-	-	-	91.7%	1476	0	0	43.5	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	50	-	1574	1900:1900	946+946	83.2% 83.2%	-	-	-	4.4	10.0	9.4
1/3	A27(W) Ahead	U	B	-	1	50	-	1170	1900	1384	84.5%	-	-	-	4.8	14.9	18.6
2/2+2/1	A27(E) Ahead Left	U	E	-	1	25	-	1160	1900:1900	570+696	91.7% 91.7%	-	-	-	11.5	35.6	16.7
2/3	A27(E) Ahead	U	E	-	1	25	-	567	1900	706	83.2%	-	-	-	5.6	34.6	12.6
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	299	1900:1900	196+198	75.7% 75.2%	598	0	0	2.6	30.9	2.9
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	439	1900:1900	483+415	49.7% 46.0%	878	0	0	1.5	12.0	3.1
5/1	Circ1 Right	U	A	-	1	9	-	181	1900	271	66.7%	-	-	-	2.0	39.7	4.3
5/2	Circ1 Right Right2	U	A	-	1	9	-	199	1900	271	73.3%	-	-	-	2.5	44.8	5.0
6/1	Circ2 Ahead	U	D	-	1	31	-	383	1900	869	44.1%	-	-	-	1.3	12.0	5.8
6/2	Circ2 Right	U	D	-	1	31	-	787	1900	869	60.6%	-	-	-	7.4	33.7	19.4
C1 Stream: 1 PRC for Signalled Lanes (%): 6.5																	
C1 Stream: 2 PRC for Signalled Lanes (%): -1.8																	
PRC Over All Lanes (%): -1.8																	
Total Delay for Signalled Lanes (pou/Hr): 13.69																	
Total Delay for Signalled Lanes (pou/Hr): 25.76																	
Total Delay Over All Lanes(pou/Hr): 43.48																	

Basic Results Summary

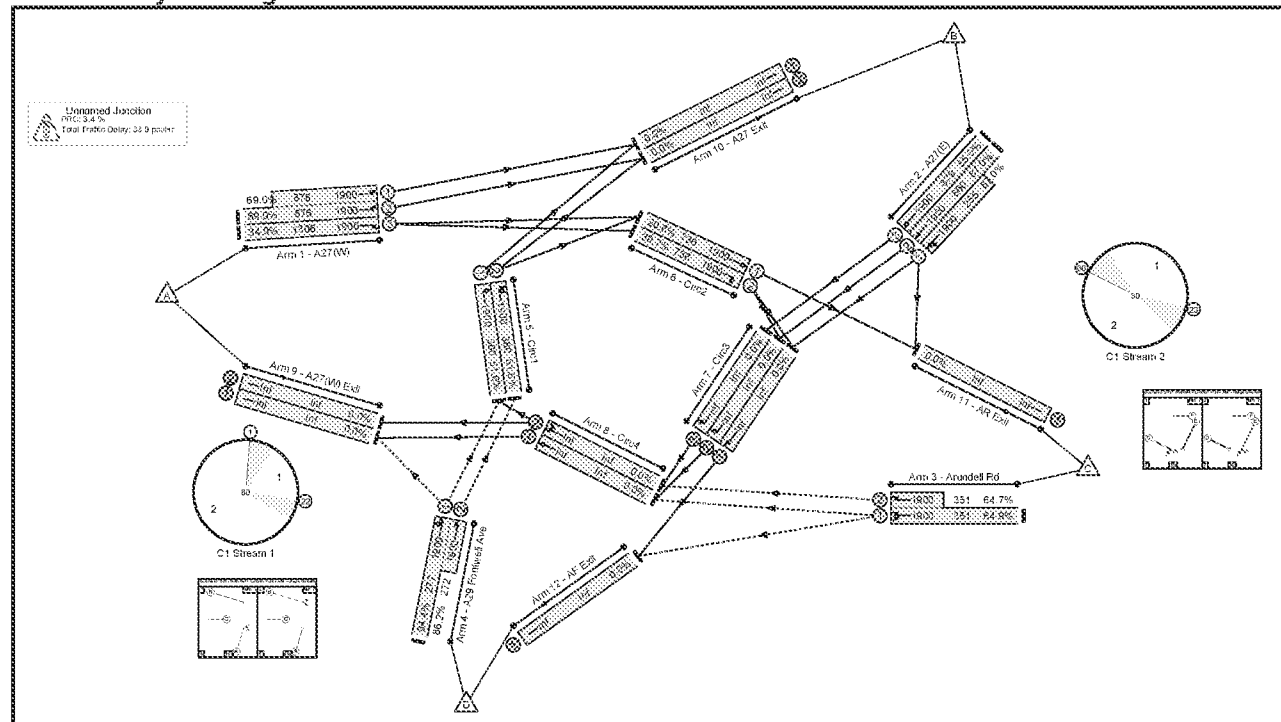
Basic Results Summary

User and Project Details

Project:	Land West of Tye Lane, Walberton
Title:	A27_A29 Fontwell West Roundabout
Location:	
Additional detail:	
File name:	A27_A29 Fontell West Rbt (With Linden Improvements) Tye Lane Mitigation (70 seconds + 15m).lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2031 With Mit + Linden + Dev AM' (FG5: '2031 With Mit + Linden + Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



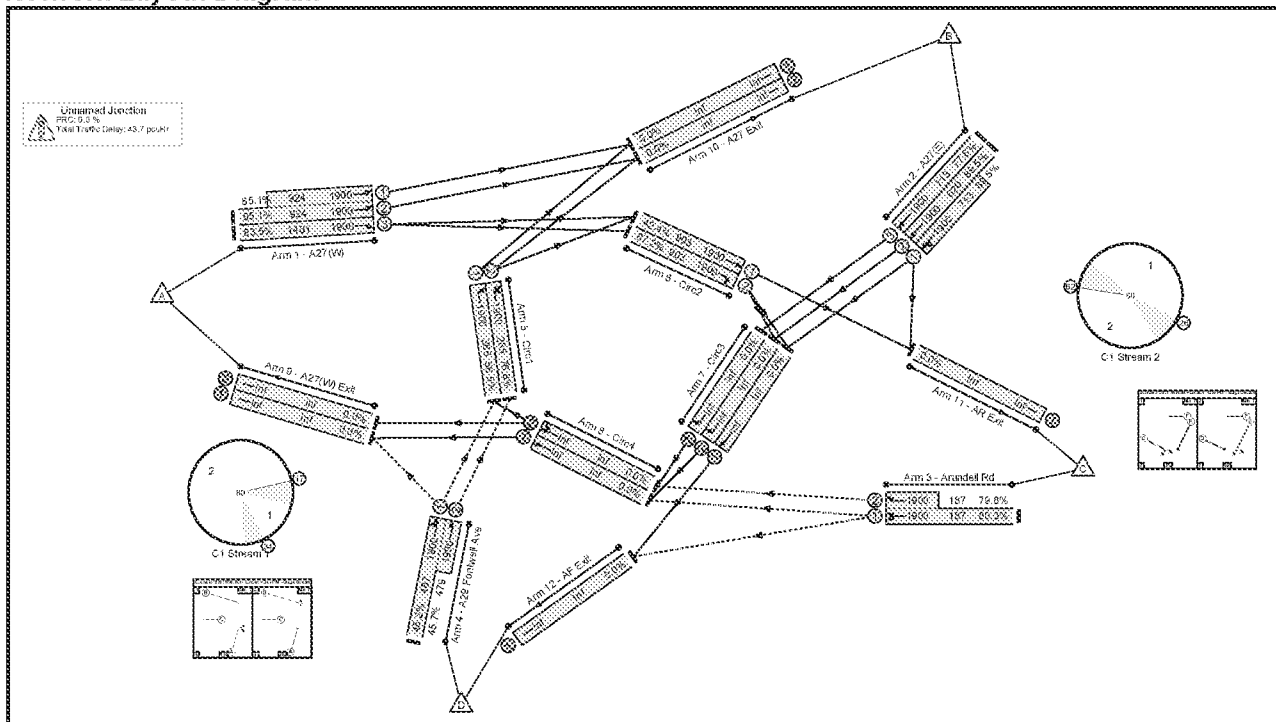
Basic Results Summary
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	87.0%	1846	0	0	33.9	-	-
	-	-	-	-	-	-	-	-	-	-	87.0%	1846	0	0	33.9	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	54	-	1211	1900:1900	876+878	69.0% 69.0%	-	-	-	3.0	9.0	7.2
1/3	A27(W) Ahead	U	B	-	1	54	-	444	1900	1306	34.0%	-	-	-	0.9	7.2	4.2
2/2+2/1	A27(E) Ahead Left	U	E	-	1	36	-	970	1900:1900	860+255	87.0% 87.0%	-	-	-	8.0	29.6	17.8
2/3	A27(E) Ahead	U	E	-	1	36	-	747	1900	879	85.0%	-	-	-	6.7	32.2	17.2
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	455	1900:1900	351+351	64.9% 64.7%	910	0	0	2.9	23.1	5.0
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	468	1900:1900	277+272	84.4% 86.2%	936	0	0	5.0	38.3	7.5
5/1	Circ1 Right	U	A	-	1	15	-	196	1900	380	51.6%	-	-	-	1.6	29.5	2.3
5/2	Circ1 Right Right2	U	A	-	1	15	-	234	1900	380	61.6%	-	-	-	2.1	32.3	3.1
6/1	Circ2 Ahead	U	D	-	1	30	-	152	1900	736	20.6%	-	-	-	1.2	27.6	3.1
6/2	Circ2 Right	U	D	-	1	30	-	292	1900	736	39.7%	-	-	-	2.5	31.1	6.6
C1 Stream: 1 PRC for Signalled Lanes (%): 30.4 Total Delay for Signalled Lanes (pcu/hr): 7.63 Cycle Time (s): 80																	
C1 Stream: 2 PRC for Signalled Lanes (%): 3.4 Total Delay for Signalled Lanes (pcu/hr): 18.34 Cycle Time (s): 80																	
PRC Over All Lanes (%): 3.4 Total Delay Over All Lanes(pcu/hr): 33.87																	

Basic Results Summary

Scenario 2: '2031 With Mit + Linden + Dev PM' (FG6: '2031 With Mit + Linden + Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell West Roundabout	-	-	-	-	-	-	-	-	-	-	89.5%	1476	0	0	43.7	-	-
	-	-	-	-	-	-	-	-	-	-	89.5%	1476	0	0	43.7	-	-
1/2+1/1	A27(W) Ahead	U	B	-	1	58	-	1574	1900:1900	924+924	85.1% 85.1%	-	-	-	4.9	11.1	10.5
1/3	A27(W) Ahead	U	B	-	1	58	-	1170	1900	1401	83.5%	-	-	-	4.8	14.8	20.0
2/2+2/1	A27(E) Ahead Left	U	E	-	1	29	-	1193	1900:1900	620+713	89.5% 89.5%	-	-	-	11.6	35.1	17.3
2/3	A27(E) Ahead	U	E	-	1	29	-	554	1900	713	77.8%	-	-	-	5.1	33.2	12.5
3/1+3/2	Arundell Rd Ahead Ahead2	O	-	-	-	-	-	299	1900:1900	167+187	80.3% 79.8%	598	0	0	3.2	38.3	3.6
4/1+4/2	A29 Fontwell Ave Ahead Left	O	-	-	-	-	-	439	1900:1900	487+479	45.2% 45.7%	878	0	0	1.5	12.1	3.1
5/1	Circ1 Right	U	A	-	1	11	-	161	1900	285	56.5%	-	-	-	1.7	37.4	4.0
5/2	Circ1 Right Right2	U	A	-	1	11	-	219	1900	285	76.8%	-	-	-	3.0	49.7	6.2
6/1	Circ2 Ahead	U	D	-	1	37	-	383	1900	903	42.4%	-	-	-	1.4	12.9	6.4
6/2	Circ2 Right	U	D	-	1	37	-	787	1900	903	87.2%	-	-	-	6.6	30.2	20.3
C1 Stream: 1 PRC for Signalled Lanes (%): 5.7 Total Delay for Signalled Lanes (pou/Hr): 14.37 Cycle Time (s): 80																	
C1 Stream: 2 PRC for Signalled Lanes (%): 0.5 Total Delay for Signalled Lanes (pou/Hr): 24.69 Cycle Time (s): 80																	
PRC Over All Lanes (%): 0.5 Total Delay Over All Lanes (pou/Hr): 43.72																	

Land West of Tye Lane, Walberton
Transport Assessment

Appendix S

Paul Basham Associates Ltd
Report No. 041.0071/TA/3



Basic Results Summary

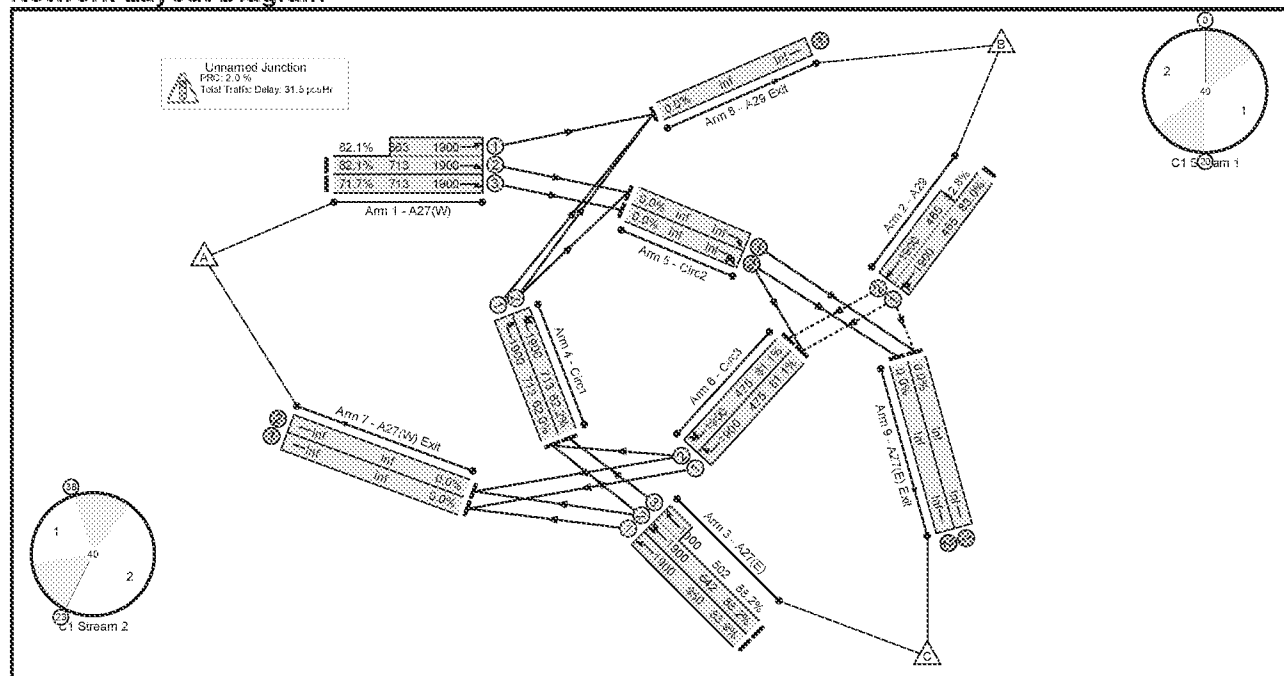
Basic Results Summary

User and Project Details

Project:	Land West of Tye Lane, Walberton
Title:	A27_A29 Fontwell Roundabout East
Location:	
Additional detail:	
File name:	A27_A29 Fontwell East Rbt.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2031 with Mit + Linden AM' (FG1: '2031 with Mit + Linden AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



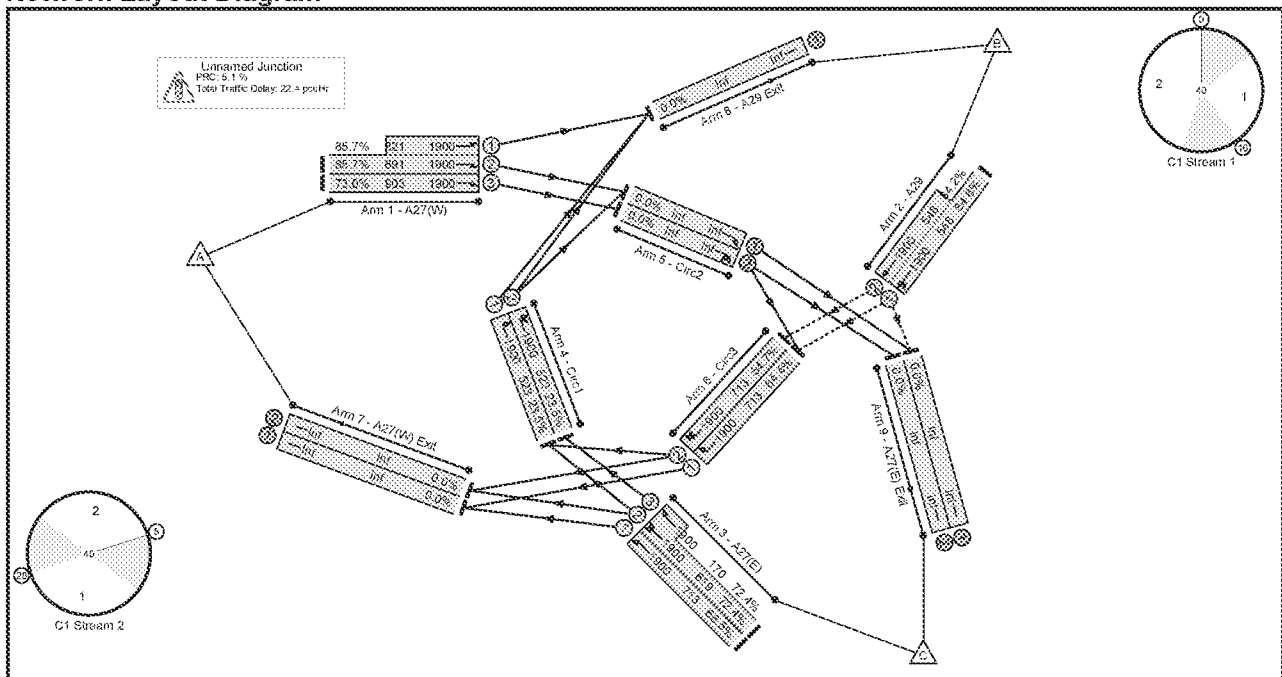
Basic Results Summary
Network Results

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 (pcu-hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell Roundabout East	-	-	-	-	-	-	-	-	-	-	88.2%	1542	0	0	31.5	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	88.2%	1542	0	0	31.5	-	-
1/2+1/1	A27(W) Ahead Ahead2	U	B	-	1	14	-	1129	1900:1900	713+863	82.1% 82.1%	-	-	-	5.7	18.3	8.1
1/3	A27(W) Ahead	U	B	-	1	14	-	511	1900	713	71.7%	-	-	-	2.8	19.5	6.1
2/1+2/2	A29 Ahead Left	O	-	-	-	-	-	771	1900:1900	465+465	83.0% 82.8%	1542	0	0	3.8	17.6	6.1
3/1	A27(E) Ahead	U	E	-	1	19	-	797	1900	950	83.9%	-	-	-	4.4	20.0	10.0
3/2+3/3	A27(E) Ahead Ahead2	U	E	-	1	19	-	1009	1900:1900	842+502	88.2% 88.2%	-	-	-	5.7	20.2	10.8
4/1	Circ1 Right	U	A	-	1	14	-	442	1900	713	62.0%	-	-	-	1.5	12.5	2.1
4/2	Circ1 Right Right2	U	A	-	1	14	-	443	1900	713	62.2%	-	-	-	1.5	12.5	2.1
6/1	Circ3 Right	U	D	-	1	9	-	385	1900	475	81.1%	-	-	-	3.0	28.5	6.2
6/2	Circ3 Right Right2	U	D	-	1	9	-	385	1900	475	81.1%	-	-	-	3.0	28.5	6.2
C1 Stream: 1 PRC for Signalled Lanes (%): 9.6 C1 Stream: 2 PRC for Signalled Lanes (%): 2.0 PRC Over All Lanes (%): 2.0 Total Delay for Signalled Lanes (pcu-hr): 11.58 Total Delay for Signalled Lanes (pcu-hr): 16.18 Total Delay Over All Lanes (pcu-hr): 31.54 Cycle Time (s): 40 Cycle Time (s): 40																	

Basic Results Summary

Scenario 2: '2031 with Mit + Linden PM' (FG2: '2031 with Mit + Linden PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



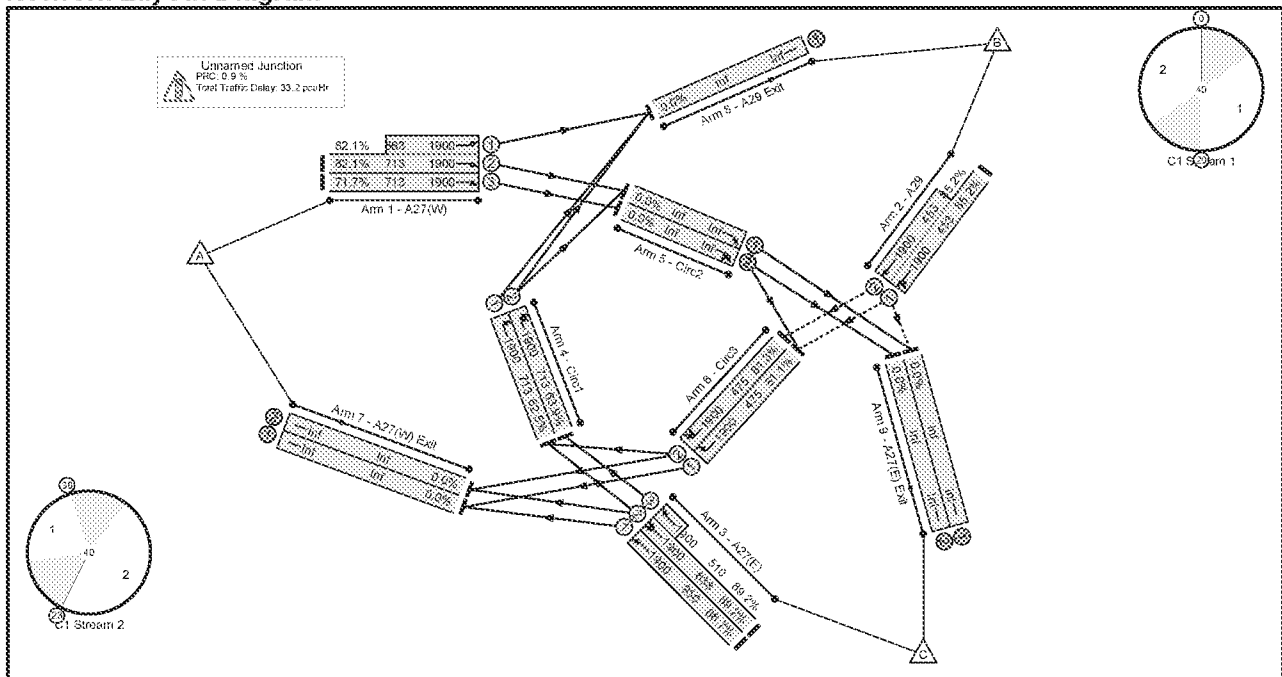
Basic Results Summary
Network Results

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 (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell Roundabout East	-	-	-	-	-	-	-	-	-	-	85.7%	1848	0	0	22.4	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	85.7%	1848	0	0	22.4	-	-
1/2+1/1	A27(W) Ahead Ahead2	U	B	-	1	18	-	1295	1900:1900	691+821	85.7% 85.7%	-	-	-	5.9	16.5	9.4
1/3	A27(W) Ahead	U	B	-	1	18	-	659	1900	903	73.0%	-	-	-	2.9	15.6	7.2
2/1+2/2	A29 Ahead Left	O	-	-	-	-	-	924	1900:1900	548+546	84.6% 84.2%	1848	0	0	4.9	19.2	7.1
3/1	A27(E) Ahead	U	E	-	1	14	-	488	1900	713	66.5%	-	-	-	2.5	18.5	5.5
3/2+3/3	A27(E) Ahead Ahead2	U	E	-	1	14	-	571	1900:1900	619+170	72.4% 72.4%	-	-	-	2.9	18.3	5.8
4/1	Circ1 Right	U	A	-	1	10	-	123	1900	523	23.5%	-	-	-	0.3	7.6	1.3
4/2	Circ1 Right Right2	U	A	-	1	10	-	123	1900	523	23.5%	-	-	-	0.3	8.7	1.3
6/1	Circ3 Right	U	D	-	1	14	-	459	1900	713	64.4%	-	-	-	1.3	10.4	2.6
6/2	Circ3 Right Right2	U	D	-	1	14	-	461	1900	713	64.7%	-	-	-	1.3	10.4	2.6
C1 Stream: 1 PRC for Signalled Lanes (%): 5.1 C1 Stream: 2 PRC for Signalled Lanes (%): 24.3 PRC Over All Lanes (%): 5.1 Total Delay for Signalled Lanes (pcu-hr): 9.38 Total Delay for Signalled Lanes (pcu-hr): 8.06 Total Delay Over All Lanes (pcu-hr): 22.36 Cycle Time (s): 40 Cycle Time (s): 40																	

Basic Results Summary

Scenario 3: '2031 with Mit + Linden + Dev AM' (FG5: '2031 + Mit + Linden + Dev AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



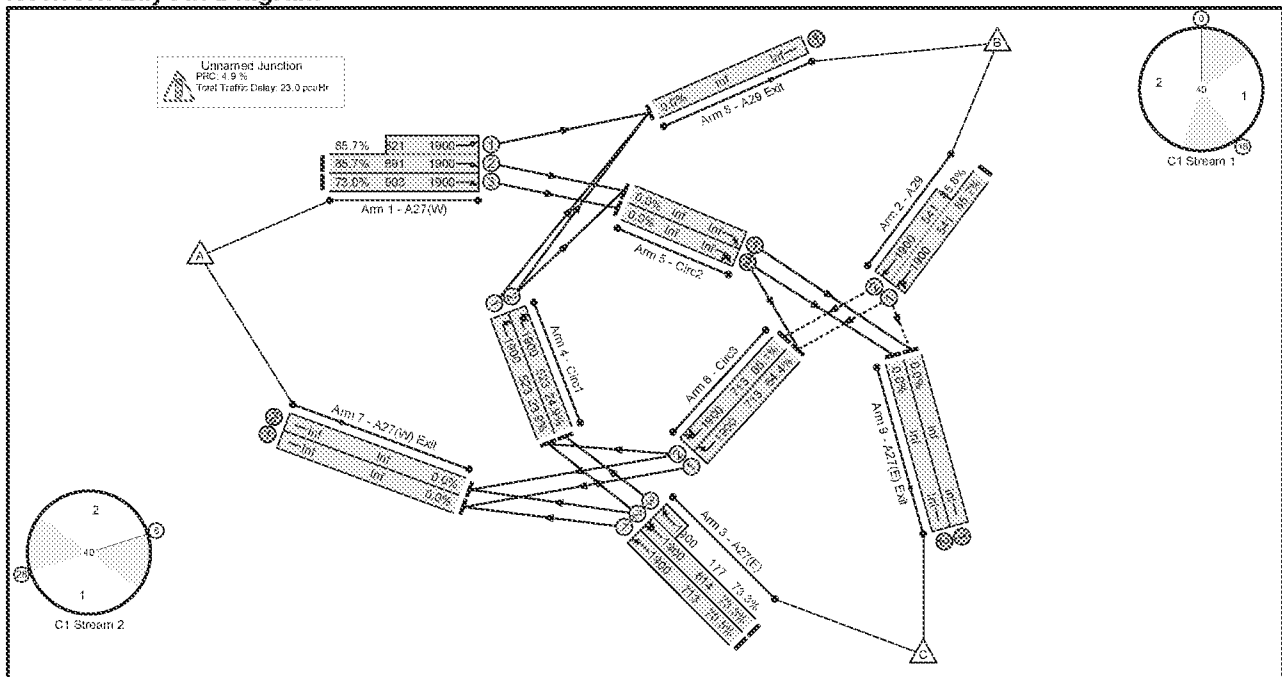
Basic Results Summary
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners in Intergreen (pcu)	Total Delay (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell Roundabout East	-	-	-	-	-	-	-	-	-	-	89.2%	1544	0	0	33.2	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	89.2%	1544	0	0	33.2	-	-
1/2+1/1	A27(W) Ahead Ahead2	U	B		1	14	-	1129	1900:1900	713+863	82.1% 82.1%	-	-	-	5.7	18.3	8.1
1/3	A27(W) Ahead	U	B		1	14	-	511	1900	713	71.7%	-	-	-	2.8	19.5	6.1
2/1+2/2	A29 Ahead Left	O	-		-	-	-	772	1900:1900	453+453	85.2% 85.2%	1544	0	0	4.2	19.8	6.6
3/1	A27(E) Ahead	U	E		1	19	-	824	1900	950	86.7%	-	-	-	5.1	22.4	11.1
3/2+3/3	A27(E) Ahead Ahead2	U	E		1	19	-	1024	1900:1900	638+510	89.2% 89.2%	-	-	-	6.1	21.3	11.6
4/1	Circ1 Right	U	A		1	14	-	445	1900	713	62.5%	-	-	-	1.6	12.7	2.2
4/2	Circ1 Right Right2	U	A		1	14	-	455	1900	713	63.9%	-	-	-	1.6	13.0	2.2
6/1	Circ3 Right	U	D		1	9	-	385	1900	475	81.1%	-	-	-	3.0	28.2	6.2
6/2	Circ3 Right Right2	U	D		1	9	-	386	1900	475	81.3%	-	-	-	3.0	28.4	6.3
C1 Stream: 1 PRC for Signalled Lanes (%): 9.6 C1 Stream: 2 PRC for Signalled Lanes (%): 0.9 PRC Over All Lanes (%): 0.9 Total Delay for Signalled Lanes (pcu-hr): 11.73 Total Delay for Signalled Lanes (pcu-hr): 17.26 Total Delay Over All Lanes (pcu-hr): 33.23 Cycle Time (s): 40 Cycle Time (s): 40																	

Basic Results Summary

Scenario 4: '2031 with Mit + Linden + Dev PM' (FG6: '2031 + Mit + Linden + Dev PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners in Intergreen (pcu)	Total Delay (pcu/hr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: A27_A29 Fontwell Roundabout East	-	-	-	-	-	-	-	-	-	-	85.8%	1854	0	0	23.0	-	-
Unnamed Junction	-	-	-	-	-	-	-	-	-	-	85.8%	1854	0	0	23.0	-	-
1/2+1/1	A27(W) Ahead Ahead2	U	B	-	1	18	-	1295	1900:1900	691+821	85.7 : 85.7%	-	-	-	5.9	16.5	9.4
1/3	A27(W) Ahead	U	B	-	1	18	-	659	1900	903	73.0%	-	-	-	2.9	15.6	7.2
2/1+2/2	A29 Ahead Left	O	-	-	-	-	-	927	1900:1900	541+541	85.7 : 85.8%	1854	0	0	5.2	20.3	7.4
3/1	A27(E) Ahead	U	E	-	1	14	-	502	1900	713	70.5%	-	-	-	2.7	19.1	5.8
3/2+3/3	A27(E) Ahead Ahead2	U	E	-	1	14	-	580	1900:1900	614+177	73.3 : 73.3%	-	-	-	3.0	18.5	5.9
4/1	Circ1 Right	U	A	-	1	10	-	125	1900	523	23.9%	-	-	-	0.3	7.6	1.3
4/2	Circ1 Right Right2	U	A	-	1	10	-	130	1900	523	24.9%	-	-	-	0.3	8.8	1.3
6/1	Circ3 Right	U	D	-	1	14	-	459	1900	713	64.4%	-	-	-	1.3	10.5	2.6
6/2	Circ3 Right Right2	U	D	-	1	14	-	464	1900	713	65.1%	-	-	-	1.4	10.7	2.7
C1 Stream: 1 PRC for Signalled Lanes (%): 5.1 C1 Stream: 2 PRC for Signalled Lanes (%): 22.9 PRC Over All Lanes (%): 4.9 Total Delay for Signalled Lanes (pcu-hr): 9.41 Total Delay for Signalled Lanes (pcu-hr): 8.36 Total Delay Over All Lanes (pcu-hr): 23.01 Cycle Time (s): 40 Cycle Time (s): 40																	