Appendix I

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Junction 1 Site access- Mount Pleasant Road T-junction.j9
Path: P:\Eastern\1031-1040\1033 Chase New Homes\1033.0002 Mount Pleasant Road, Saffron Walden\03 Technical\TPL\Modelling\Junction 1 Site access- Mount Pleasant Road T-junction
Report generation date: 23/05/2024 14:39:47

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2023							
Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2029							
Stream B-AC	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream C-AB	0.0	0.00	0.00	A	0.0	0.00	0.00	A
	2029 + COM							
Stream B-AC	0.1	10.12	0.11	B	0.1	10.51	0.06	B
Stream C-AB	0.0	4.77	0.00	A	0.0	4.62	0.02	A
	2029 + COM + DEV							
Stream B-AC	0.3	11.36	0.20	B	0.1	11.28	0.11	B
Stream C-AB	0.0	4.77	0.01	A	0.0	4.61	0.03	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.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	20/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2029	AM	ONE HOUR	07:45	09:15	15
D4	2029	PM	ONE HOUR	16:45	18:15	15
D5	2029 + COM	AM	ONE HOUR	07:45	09:15	15
D6	2029 + COM	PM	ONE HOUR	16:45	18:15	15
D7	2029 + COM + DEV	AM	ONE HOUR	07:45	09:15	15
D8	2029 + COM + DEV	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Mount Pleasant Road East		Major
B	Site Access		Minor
C	Mount Pleasant Road West		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	5.57			175.0	✓	0.00

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	One lane	2.72	22	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	478	0.089	0.224	0.141	0.320
1	B-C	615	0.096	0.243	-	-
1	C-B	675	0.267	0.267	-	-

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	2023	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 (PCU/hr)	Scaling Factor (%)
A		✓	229	100.000
B		✓	0	100.000
C		✓	264	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	229
	B	0	0	0
	C	264	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	479	0.000	0	0.0	0.000	A
C-AB	0	629	0.000	0	0.0	0.000	A
C-A	199			199			
A-B	0			0			
A-C	172			172			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	467	0.000	0	0.0	0.000	A
C-AB	0	620	0.000	0	0.0	0.000	A
C-A	237			237			
A-B	0			0			
A-C	206			206			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	451	0.000	0	0.0	0.000	A
C-AB	0	608	0.000	0	0.0	0.000	A
C-A	291			291			
A-B	0			0			
A-C	252			252			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	451	0.000	0	0.0	0.000	A
C-AB	0	608	0.000	0	0.0	0.000	A
C-A	291			291			
A-B	0			0			
A-C	252			252			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	467	0.000	0	0.0	0.000	A
C-AB	0	620	0.000	0	0.0	0.000	A
C-A	237			237			
A-B	0			0			
A-C	206			206			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	479	0.000	0	0.0	0.000	A
C-AB	0	629	0.000	0	0.0	0.000	A
C-A	199			199			
A-B	0			0			
A-C	172			172			

2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	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 (PCU/hr)	Scaling Factor (%)
A		✓	290	100.000
B		✓	0	100.000
C		✓	366	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	290
	B	0	0	0
	C	366	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	461	0.000	0	0.0	0.000	A
C-AB	0	617	0.000	0	0.0	0.000	A
C-A	276			276			
A-B	0			0			
A-C	218			218			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	445	0.000	0	0.0	0.000	A
C-AB	0	606	0.000	0	0.0	0.000	A
C-A	329			329			
A-B	0			0			
A-C	261			261			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	424	0.000	0	0.0	0.000	A
C-AB	0	590	0.000	0	0.0	0.000	A
C-A	403			403			
A-B	0			0			
A-C	319			319			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	424	0.000	0	0.0	0.000	A
C-AB	0	590	0.000	0	0.0	0.000	A
C-A	403			403			
A-B	0			0			
A-C	319			319			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	445	0.000	0	0.0	0.000	A
C-AB	0	606	0.000	0	0.0	0.000	A
C-A	329			329			
A-B	0			0			
A-C	261			261			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	461	0.000	0	0.0	0.000	A
C-AB	0	617	0.000	0	0.0	0.000	A
C-A	276			276			
A-B	0			0			
A-C	218			218			

2029, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2029	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 (PCU/hr)	Scaling Factor (%)
A		✓	240	100.000
B		✓	0	100.000
C		✓	276	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	240
	B	0	0	0
	C	276	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	A
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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	476	0.000	0	0.0	0.000	A
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	208			208			
A-B	0			0			
A-C	181			181			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	464	0.000	0	0.0	0.000	A
C-AB	0	618	0.000	0	0.0	0.000	A
C-A	248			248			
A-B	0			0			
A-C	216			216			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	447	0.000	0	0.0	0.000	A
C-AB	0	605	0.000	0	0.0	0.000	A
C-A	304			304			
A-B	0			0			
A-C	264			264			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	447	0.000	0	0.0	0.000	A
C-AB	0	605	0.000	0	0.0	0.000	A
C-A	304			304			
A-B	0			0			
A-C	264			264			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	464	0.000	0	0.0	0.000	A
C-AB	0	618	0.000	0	0.0	0.000	A
C-A	248			248			
A-B	0			0			
A-C	216			216			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	476	0.000	0	0.0	0.000	A
C-AB	0	627	0.000	0	0.0	0.000	A
C-A	208			208			
A-B	0			0			
A-C	181			181			

2029, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2029	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 (PCU/hr)	Scaling Factor (%)
A		✓	304	100.000
B		✓	0	100.000
C		✓	384	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	304
	B	0	0	0
	C	384	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	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 (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	457	0.000	0	0.0	0.000	A
C-AB	0	614	0.000	0	0.0	0.000	A
C-A	289			289			
A-B	0			0			
A-C	229			229			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	440	0.000	0	0.0	0.000	A
C-AB	0	602	0.000	0	0.0	0.000	A
C-A	345			345			
A-B	0			0			
A-C	273			273			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	418	0.000	0	0.0	0.000	A
C-AB	0	586	0.000	0	0.0	0.000	A
C-A	423			423			
A-B	0			0			
A-C	335			335			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	418	0.000	0	0.0	0.000	A
C-AB	0	586	0.000	0	0.0	0.000	A
C-A	423			423			
A-B	0			0			
A-C	335			335			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	440	0.000	0	0.0	0.000	A
C-AB	0	602	0.000	0	0.0	0.000	A
C-A	345			345			
A-B	0			0			
A-C	273			273			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	0	457	0.000	0	0.0	0.000	A
C-AB	0	614	0.000	0	0.0	0.000	A
C-A	289			289			
A-B	0			0			
A-C	229			229			

2029 + COM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
A		✓	249	100.000
B		✓	38	100.000
C		✓	278	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	240
	B	31	0	7
	C	276	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	10.12	0.1	B
C-AB	0.00	4.77	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	29	430	0.067	28	0.1	8.963	A
C-AB	2	761	0.003	2	0.0	4.769	A
C-A	207			207			
A-B	7			7			
A-C	181			181			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	416	0.082	34	0.1	9.420	A
C-AB	3	779	0.003	3	0.0	4.664	A
C-A	247			247			
A-B	8			8			
A-C	216			216			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	42	398	0.105	42	0.1	10.112	B
C-AB	4	804	0.004	4	0.0	4.525	A
C-A	303			303			
A-B	10			10			
A-C	264			264			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	42	398	0.105	42	0.1	10.118	B
C-AB	4	804	0.004	4	0.0	4.528	A
C-A	303			303			
A-B	10			10			
A-C	264			264			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	416	0.082	34	0.1	9.427	A
C-AB	3	779	0.003	3	0.0	4.671	A
C-A	247			247			
A-B	8			8			
A-C	216			216			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	29	430	0.067	29	0.1	8.981	A
C-AB	2	761	0.003	2	0.0	4.771	A
C-A	207			207			
A-B	7			7			
A-C	181			181			

2029 + COM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
A		✓	333	100.000
B		✓	20	100.000
C		✓	391	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	29	304
	B	16	0	4
	C	384	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	2
	B	0	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	10.51	0.1	B
C-AB	0.02	4.62	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	15	408	0.037	15	0.0	9.162	A
C-AB	8	800	0.010	8	0.0	4.611	A
C-A	286			286			
A-B	22			22			
A-C	229			229			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	18	390	0.046	18	0.0	9.683	A
C-AB	11	827	0.013	11	0.0	4.480	A
C-A	341			341			
A-B	26			26			
A-C	273			273			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22	364	0.060	22	0.1	10.513	B
C-AB	15	865	0.017	15	0.0	4.313	A
C-A	415			415			
A-B	32			32			
A-C	335			335			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	22	364	0.060	22	0.1	10.514	B
C-AB	15	865	0.017	15	0.0	4.320	A
C-A	415			415			
A-B	32			32			
A-C	335			335			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	18	390	0.046	18	0.0	9.689	A
C-AB	11	827	0.013	11	0.0	4.493	A
C-A	341			341			
A-B	26			26			
A-C	273			273			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	15	408	0.037	15	0.0	9.169	A
C-AB	8	800	0.010	8	0.0	4.617	A
C-A	286			286			
A-B	22			22			
A-C	229			229			

2029 + COM + DEV, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2029 + 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 (PCU/hr)	Scaling Factor (%)
A		✓	256	100.000
B		✓	73	100.000
C		✓	280	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	240
	B	59	0	14
	C	276	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.20	11.36	0.3	B
C-AB	0.01	4.77	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	55	430	0.128	54	0.1	9.577	A
C-AB	4	760	0.005	4	0.0	4.764	A
C-A	207			207			
A-B	12			12			
A-C	181			181			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	66	416	0.158	65	0.2	10.262	B
C-AB	5	777	0.007	5	0.0	4.661	A
C-A	246			246			
A-B	14			14			
A-C	216			216			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	80	397	0.202	80	0.2	11.341	B
C-AB	7	803	0.009	7	0.0	4.524	A
C-A	301			301			
A-B	18			18			
A-C	264			264			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	80	397	0.202	80	0.3	11.359	B
C-AB	7	803	0.009	7	0.0	4.524	A
C-A	301			301			
A-B	18			18			
A-C	264			264			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	66	416	0.158	66	0.2	10.286	B
C-AB	5	777	0.007	5	0.0	4.661	A
C-A	246			246			
A-B	14			14			
A-C	216			216			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	55	430	0.128	55	0.1	9.615	A
C-AB	4	760	0.005	4	0.0	4.766	A
C-A	207			207			
A-B	12			12			
A-C	181			181			

2029 + COM + DEV, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2029 + 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 (PCU/hr)	Scaling Factor (%)
A		✓	359	100.000
B		✓	34	100.000
C		✓	397	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	55	304
	B	28	0	6
	C	384	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	11.28	0.1	B
C-AB	0.03	4.61	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26	402	0.064	25	0.1	9.563	A
C-AB	15	795	0.019	15	0.0	4.614	A
C-A	284			284			
A-B	41			41			
A-C	229			229			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	31	383	0.080	30	0.1	10.220	B
C-AB	20	822	0.025	20	0.0	4.492	A
C-A	337			337			
A-B	49			49			
A-C	273			273			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	356	0.105	37	0.1	11.280	B
C-AB	28	859	0.033	28	0.0	4.333	A
C-A	409			409			
A-B	61			61			
A-C	335			335			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	356	0.105	37	0.1	11.284	B
C-AB	28	859	0.033	28	0.0	4.334	A
C-A	409			409			
A-B	61			61			
A-C	335			335			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	31	383	0.080	31	0.1	10.233	B
C-AB	20	822	0.025	20	0.0	4.494	A
C-A	337			337			
A-B	49			49			
A-C	273			273			

18:00 - 18:15

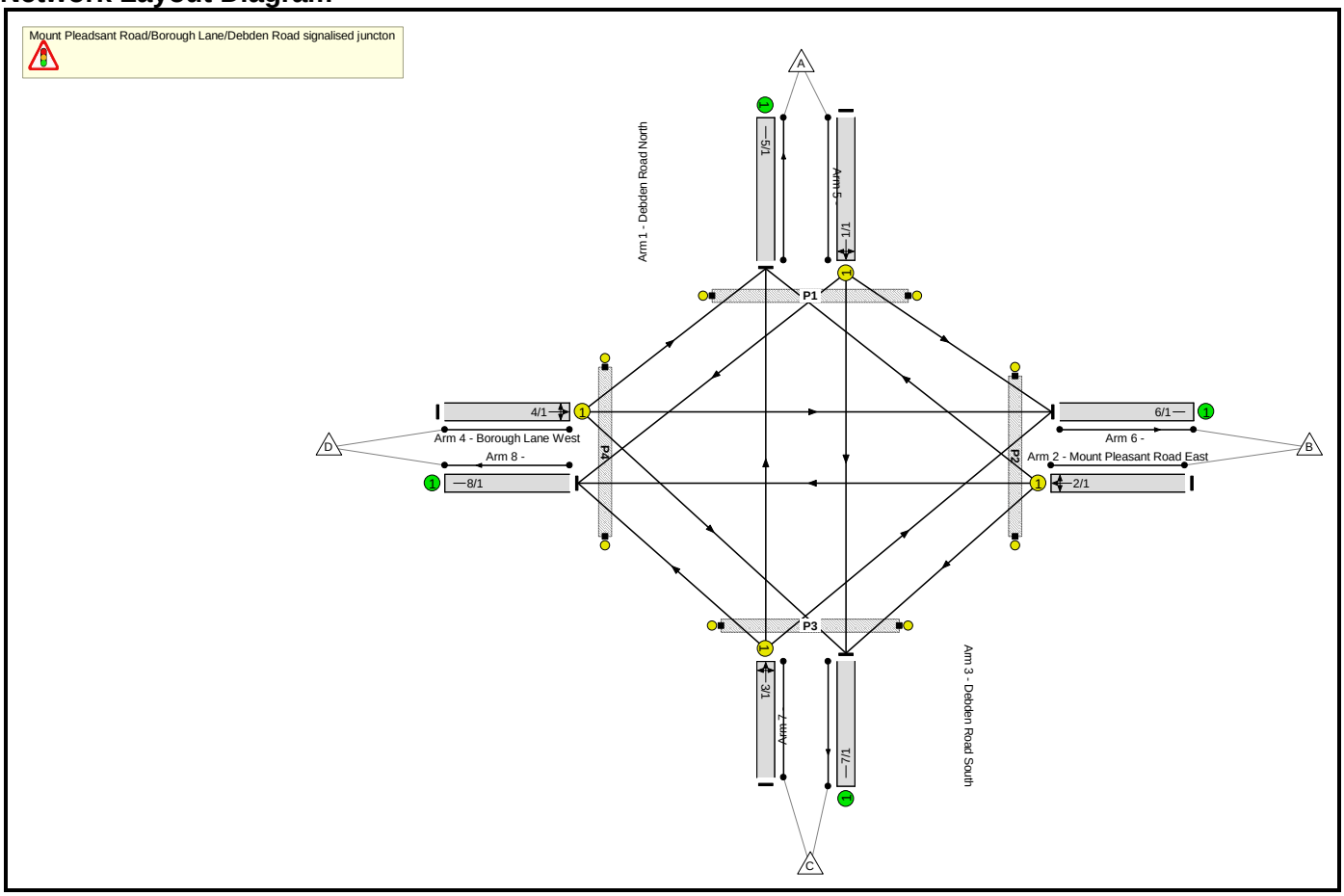
Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	26	401	0.064	26	0.1	9.582	A
C-AB	15	796	0.019	15	0.0	4.614	A
C-A	283			283			
A-B	41			41			
A-C	229			229			

Full Input Data and Results

User and Project Details

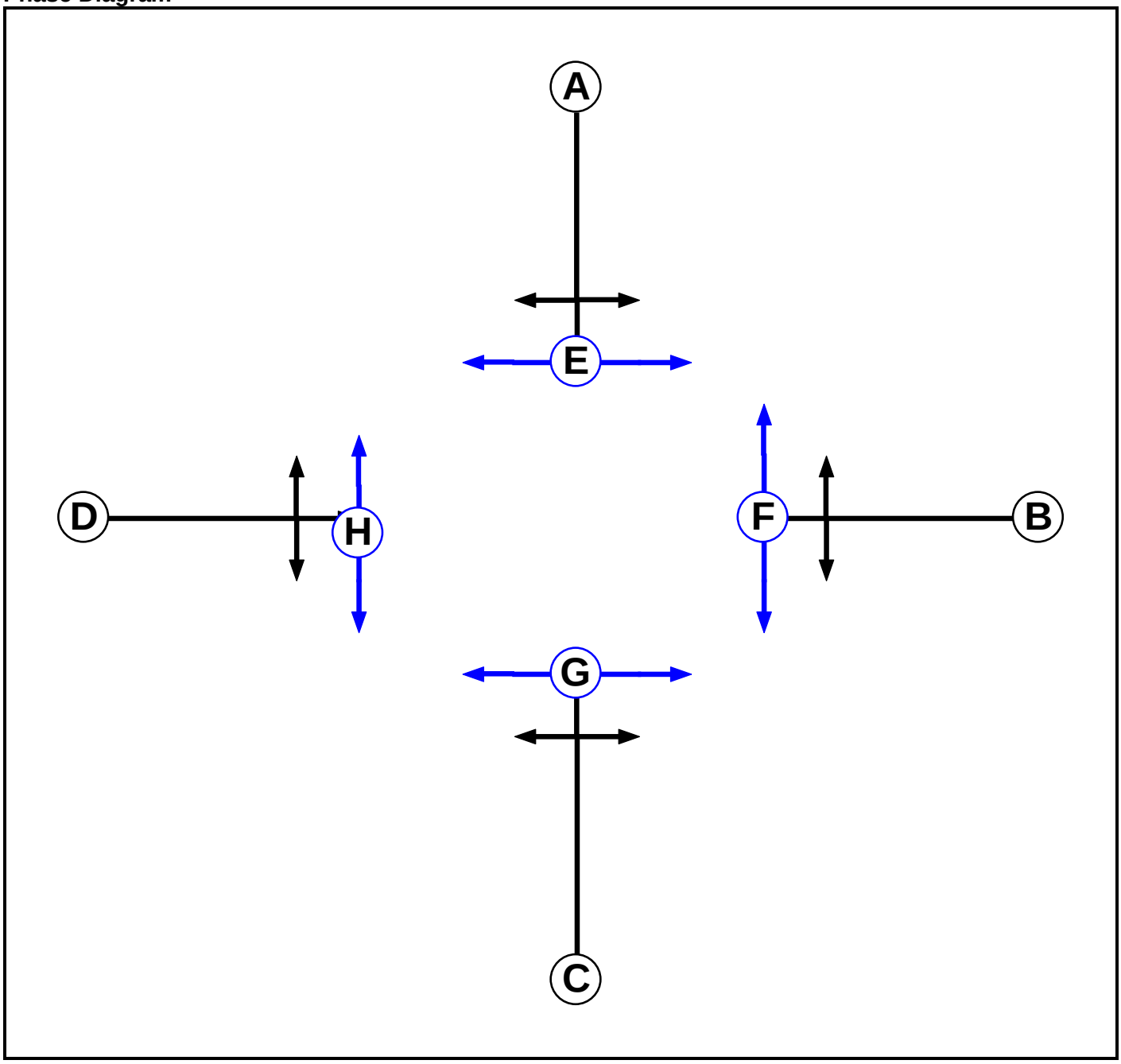
Project:	1033.0002 Mount Pleasant Road, Saffron Walden
Title:	
Location:	
Additional detail:	
File name:	Mount Pleasant Road-Debden Road-Borough Lane.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		5	5
F	Pedestrian		5	5
G	Pedestrian		5	5
H	Pedestrian		5	5

Full Input Data And Results

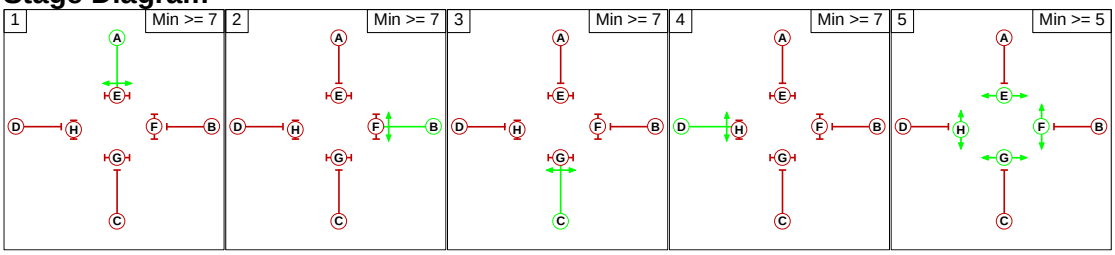
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H
A		5	5	5	5	5	7	5
B	5		5	5	5	5	5	7
C	5	5		5	7	5	5	5
D	5	5	5		5	7	5	5
E	6	6	6	6		-	-	-
F	6	6	6	6	-		-	-
G	6	6	6	6	-	-		-
H	6	6	6	6	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B
3	C
4	D
5	E F G H

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5
1		5	5	5	7
2	5		5	5	7
3	5	5		5	7
4	5	5	5		7
5	6	6	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Debden Road North)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	4.00
											Arm 7 Ahead	Inf
											Arm 8 Right	6.00
2/1 (Mount Pleasant Road East)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	6.00
											Arm 7 Left	4.00
											Arm 8 Ahead	Inf
3/1 (Debden Road South)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	6.00
											Arm 8 Left	4.00
4/1 (Borough Lane West)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	4.00
											Arm 6 Ahead	Inf
											Arm 7 Right	6.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 AM'	08:00	09:00	01:00	
2: '2023 PM'	17:00	18:00	01:00	
3: '2029 AM'	08:00	09:00	01:00	
4: '2029 PM'	17:00	18:00	01:00	
5: '2029 + Com AM'	08:00	09:00	01:00	
6: '2029 + Com PM'	17:00	18:00	01:00	
7: '2029 + Com + Dev AM'	08:00	09:00	01:00	
8: '2029 + Com + Dev PM'	17:00	18:00	01:00	

Scenario 1: '2023 AM' (FG1: '2023 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	32	169	107	308
	B	60	0	57	215	332
	C	137	13	0	15	165
	D	91	128	23	0	242
	Tot.	288	173	249	337	1047

Traffic Lane Flows

Lane	Scenario 1: 2023 AM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	308
2/1	332
3/1	165
4/1	242
5/1	288
6/1	173
7/1	249
8/1	337

Full Input Data And Results

Lane Saturation Flows

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	10.4 %	1701	1701
				Arm 7 Ahead	Inf	54.9 %		
				Arm 8 Right	6.00	34.7 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	18.1 %	1726	1726
				Arm 7 Left	4.00	17.2 %		
				Arm 8 Ahead	Inf	64.8 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	83.0 %	1817	1817
				Arm 6 Right	6.00	7.9 %		
				Arm 8 Left	4.00	9.1 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	37.6 %	1644	1644
				Arm 6 Ahead	Inf	52.9 %		
				Arm 7 Right	6.00	9.5 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2023 PM' (FG2: '2023 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	59	194	49	302
	B	67	0	21	159	247
	C	180	18	0	10	208
	D	149	194	9	0	352
	Tot.	396	271	224	218	1109

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2023 PM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	302
2/1	247
3/1	208
4/1	352
5/1	396
6/1	271
7/1	224
8/1	218

Lane Saturation Flows

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	19.5 %	1719	1719
				Arm 7 Ahead	Inf	64.2 %		
				Arm 8 Right	6.00	16.2 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	27.1 %	1741	1741
				Arm 7 Left	4.00	8.5 %		
				Arm 8 Ahead	Inf	64.4 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	86.5 %	1842	1842
				Arm 6 Right	6.00	8.7 %		
				Arm 8 Left	4.00	4.8 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	42.3 %	1644	1644
				Arm 6 Ahead	Inf	55.1 %		
				Arm 7 Right	6.00	2.6 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2029 AM' (FG3: '2029 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	34	177	112	323
	B	63	0	60	225	348
	C	143	14	0	16	173
	D	95	134	24	0	253
	Tot.	301	182	261	353	1097

Traffic Lane Flows

Lane	Scenario 3: 2029 AM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	323
2/1	348
3/1	173
4/1	253
5/1	301
6/1	182
7/1	261
8/1	353

Lane Saturation Flows

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	10.5 %	1700	1700
				Arm 7 Ahead	Inf	54.8 %		
				Arm 8 Right	6.00	34.7 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	18.1 %	1725	1725
				Arm 7 Left	4.00	17.2 %		
				Arm 8 Ahead	Inf	64.7 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	82.7 %	1815	1815
				Arm 6 Right	6.00	8.1 %		
				Arm 8 Left	4.00	9.2 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	37.5 %	1644	1644
				Arm 6 Ahead	Inf	53.0 %		
				Arm 7 Right	6.00	9.5 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2029 PM' (FG4: '2029 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	62	204	51	317
	B	70	0	22	167	259
	C	189	19	0	11	219
	D	156	204	9	0	369
	Tot.	415	285	235	229	1164

Traffic Lane Flows

Lane	Scenario 4: 2029 PM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	317
2/1	259
3/1	219
4/1	369
5/1	415
6/1	285
7/1	235
8/1	229

Full Input Data And Results

Lane Saturation Flows

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	19.6 %	1720	1720
				Arm 7 Ahead	Inf	64.4 %		
				Arm 8 Right	6.00	16.1 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	27.0 %	1742	1742
				Arm 7 Left	4.00	8.5 %		
				Arm 8 Ahead	Inf	64.5 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	86.3 %	1840	1840
				Arm 6 Right	6.00	8.7 %		
				Arm 8 Left	4.00	5.0 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	42.3 %	1644	1644
				Arm 6 Ahead	Inf	55.3 %		
				Arm 7 Right	6.00	2.4 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2029 + Com AM' (FG5: '2029 + Com AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	34	189	130	353
	B	63	0	60	225	348
	C	147	14	0	16	177
	D	100	134	24	0	258
	Tot.	310	182	273	371	1136

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2029 + Com AM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	353
2/1	348
3/1	177
4/1	258
5/1	310
6/1	182
7/1	273
8/1	371

Lane Saturation Flows

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	9.6 %	1697	1697
				Arm 7 Ahead	Inf	53.5 %		
				Arm 8 Right	6.00	36.8 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	18.1 %	1725	1725
				Arm 7 Left	4.00	17.2 %		
				Arm 8 Ahead	Inf	64.7 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	83.1 %	1817	1817
				Arm 6 Right	6.00	7.9 %		
				Arm 8 Left	4.00	9.0 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	38.8 %	1639	1639
				Arm 6 Ahead	Inf	51.9 %		
				Arm 7 Right	6.00	9.3 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 6: '2029 +Com PM' (FG6: '2029 + Com PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	62	210	61	333
	B	70	0	22	167	259
	C	200	19	0	11	230
	D	174	204	9	0	387
	Tot.	444	285	241	239	1209

Traffic Lane Flows

Lane	Scenario 6: 2029 +Com PM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	333
2/1	259
3/1	230
4/1	387
5/1	444
6/1	285
7/1	241
8/1	239

Lane Saturation Flows

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	18.6 %	1717	1717
				Arm 7 Ahead	Inf	63.1 %		
				Arm 8 Right	6.00	18.3 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	27.0 %	1742	1742
				Arm 7 Left	4.00	8.5 %		
				Arm 8 Ahead	Inf	64.5 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	87.0 %	1844	1844
				Arm 6 Right	6.00	8.3 %		
				Arm 8 Left	4.00	4.8 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	45.0 %	1631	1631
				Arm 6 Ahead	Inf	52.7 %		
				Arm 7 Right	6.00	2.3 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2029 + Com + Dev AM' (FG7: '2029 + Com + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	34	200	147	381
	B	63	0	60	225	348
	C	150	14	0	16	180
	D	104	134	24	0	262
	Tot.	317	182	284	388	1171

Traffic Lane Flows

Lane	Scenario 7: 2029 + Com + Dev AM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	381
2/1	348
3/1	180
4/1	262
5/1	317
6/1	182
7/1	284
8/1	388

Full Input Data And Results

Lane Saturation Flows

Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	8.9 %	1695	1695
				Arm 7 Ahead	Inf	52.5 %		
				Arm 8 Right	6.00	38.6 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	18.1 %	1725	1725
				Arm 7 Left	4.00	17.2 %		
				Arm 8 Ahead	Inf	64.7 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	83.3 %	1819	1819
				Arm 6 Right	6.00	7.8 %		
				Arm 8 Left	4.00	8.9 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	39.7 %	1634	1634
				Arm 6 Ahead	Inf	51.1 %		
				Arm 7 Right	6.00	9.2 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2029 + Com + Dev PM' (FG8: '2029 + Com + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	62	215	68	345
	B	70	0	22	167	259
	C	211	19	0	11	241
	D	189	204	9	0	402
	Tot.	470	285	246	246	1247

Full Input Data And Results

Traffic Lane Flows

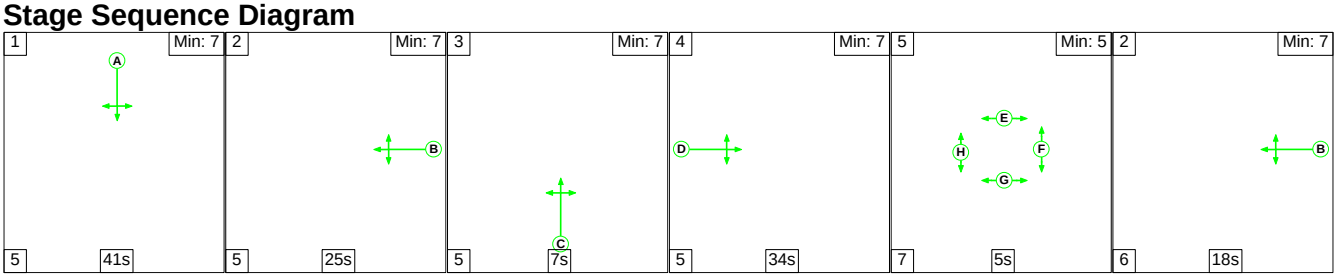
Lane	Scenario 8: 2029 + Com + Dev PM
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	
1/1	345
2/1	259
3/1	241
4/1	402
5/1	470
6/1	285
7/1	246
8/1	246

Lane Saturation Flows

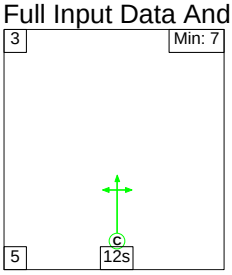
Junction: Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Debden Road North)	3.00	0.00	Y	Arm 6 Left	4.00	18.0 %	1715	1715
				Arm 7 Ahead	Inf	62.3 %		
				Arm 8 Right	6.00	19.7 %		
2/1 (Mount Pleasant Road East)	3.00	0.00	Y	Arm 5 Right	6.00	27.0 %	1742	1742
				Arm 7 Left	4.00	8.5 %		
				Arm 8 Ahead	Inf	64.5 %		
3/1 (Debden Road South)	3.00	0.00	Y	Arm 5 Ahead	Inf	87.6 %	1847	1847
				Arm 6 Right	6.00	7.9 %		
				Arm 8 Left	4.00	4.6 %		
4/1 (Borough Lane West)	3.00	0.00	Y	Arm 5 Left	4.00	47.0 %	1620	1620
				Arm 6 Ahead	Inf	50.7 %		
				Arm 7 Right	6.00	2.2 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2023 AM' (FG1: '2023 AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



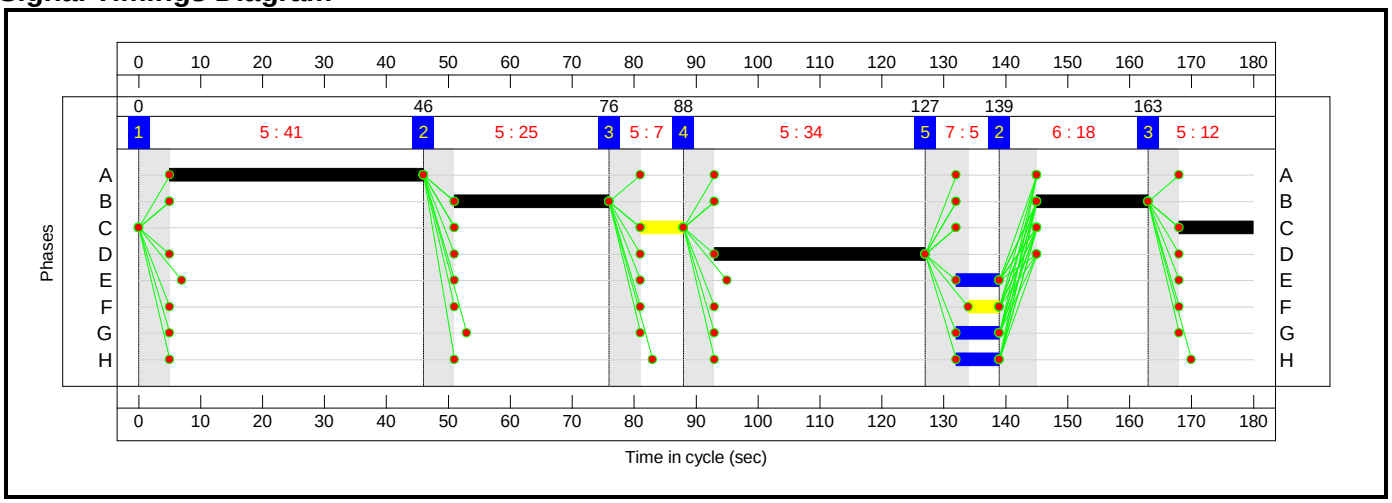
Full Input Data And Results



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	41	25	7	34	5	18	12
Change Point	0	46	76	88	127	139	163

Signal Timings Diagram

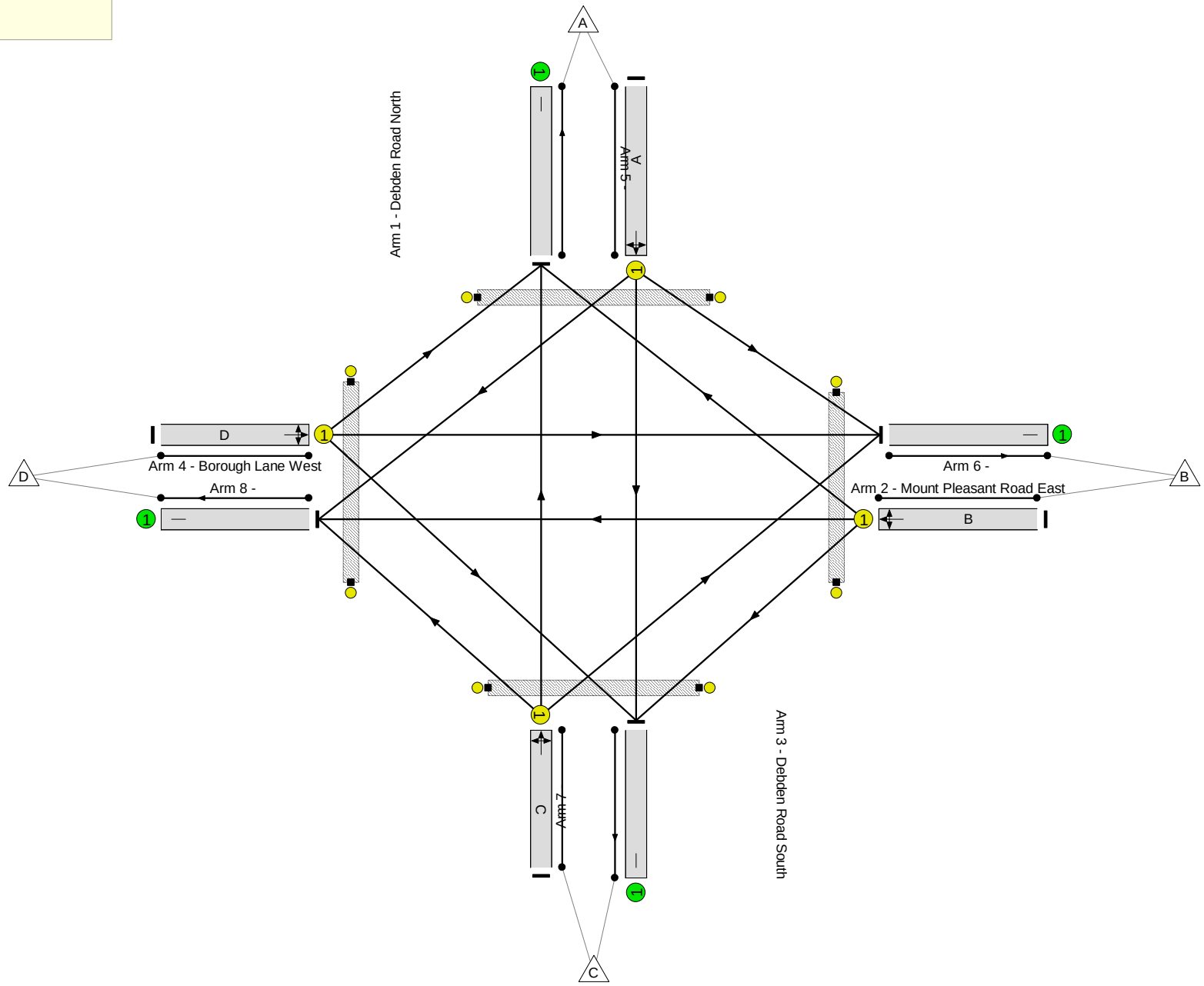


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: 15.6 %
Total Traffic Delay: 21.2 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.8%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	41	-	308	1701	397	77.6%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	43	-	332	1726	431	76.9%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	19	-	165	1817	212	77.8%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	34	-	242	1644	320	75.7%
5/1		U	N/A	N/A	-		-	-	-	288	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	173	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	249	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	337	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

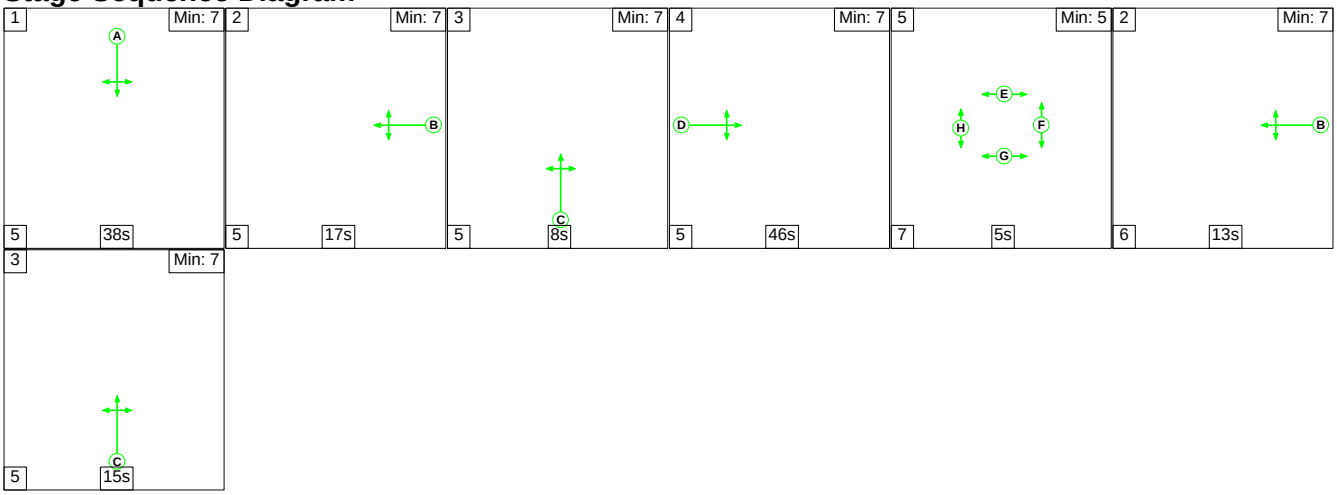
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**14.8**	**6.4**	**0.0**	**21.2**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**14.8**	**6.4**	**0.0**	**21.2**	**-**	**-**	**-**	**-**
1/1	308	308	-	-	-	5.5	1.7	-	7.2	84.1	14.4	1.7	16.0
2/1	332	332	-	-	-	2.9	1.6	-	4.5	48.9	7.7	1.6	9.4
3/1	165	165	-	-	-	1.8	1.6	-	3.4	74.4	4.0	1.6	5.6
4/1	242	242	-	-	-	4.6	1.5	-	6.1	90.8	11.4	1.5	12.9
5/1	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	173	173	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	249	249	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 15.6 Total Delay for Signalled Lanes (pcuHr): 21.22 Cycle Time (s): 180
PRC Over All Lanes (%): 15.6 Total Delay Over All Lanes(pcuHr): 21.22

Full Input Data And Results

Scenario 2: '2023 PM' (FG2: '2023 PM', Plan 1: 'Network Control Plan 1')

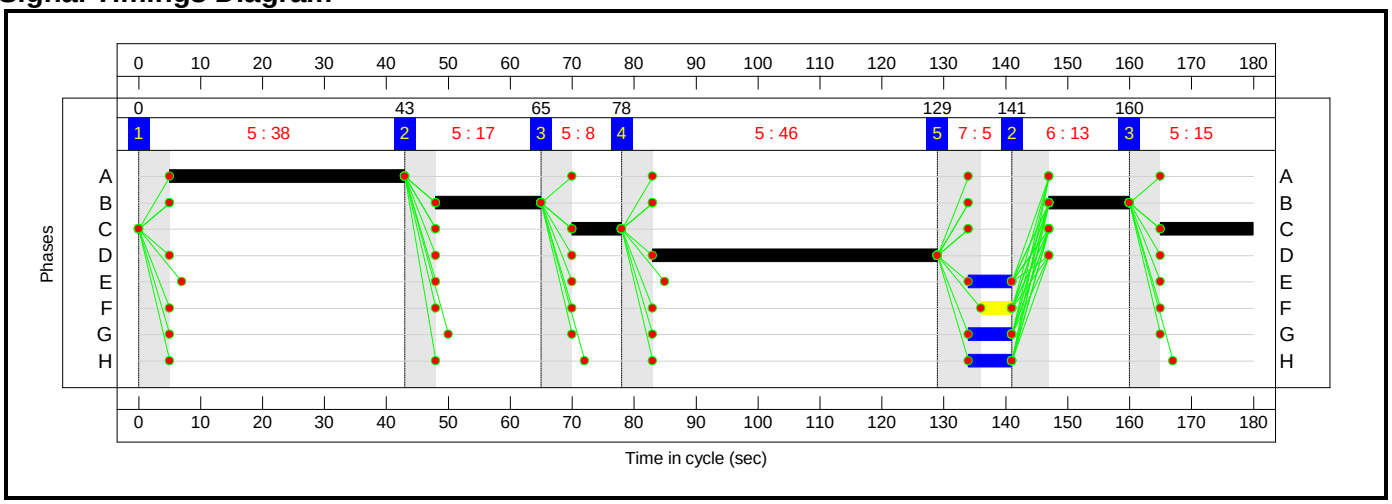
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	38	17	8	46	5	13	15
Change Point	0	43	65	78	129	141	160

Signal Timings Diagram

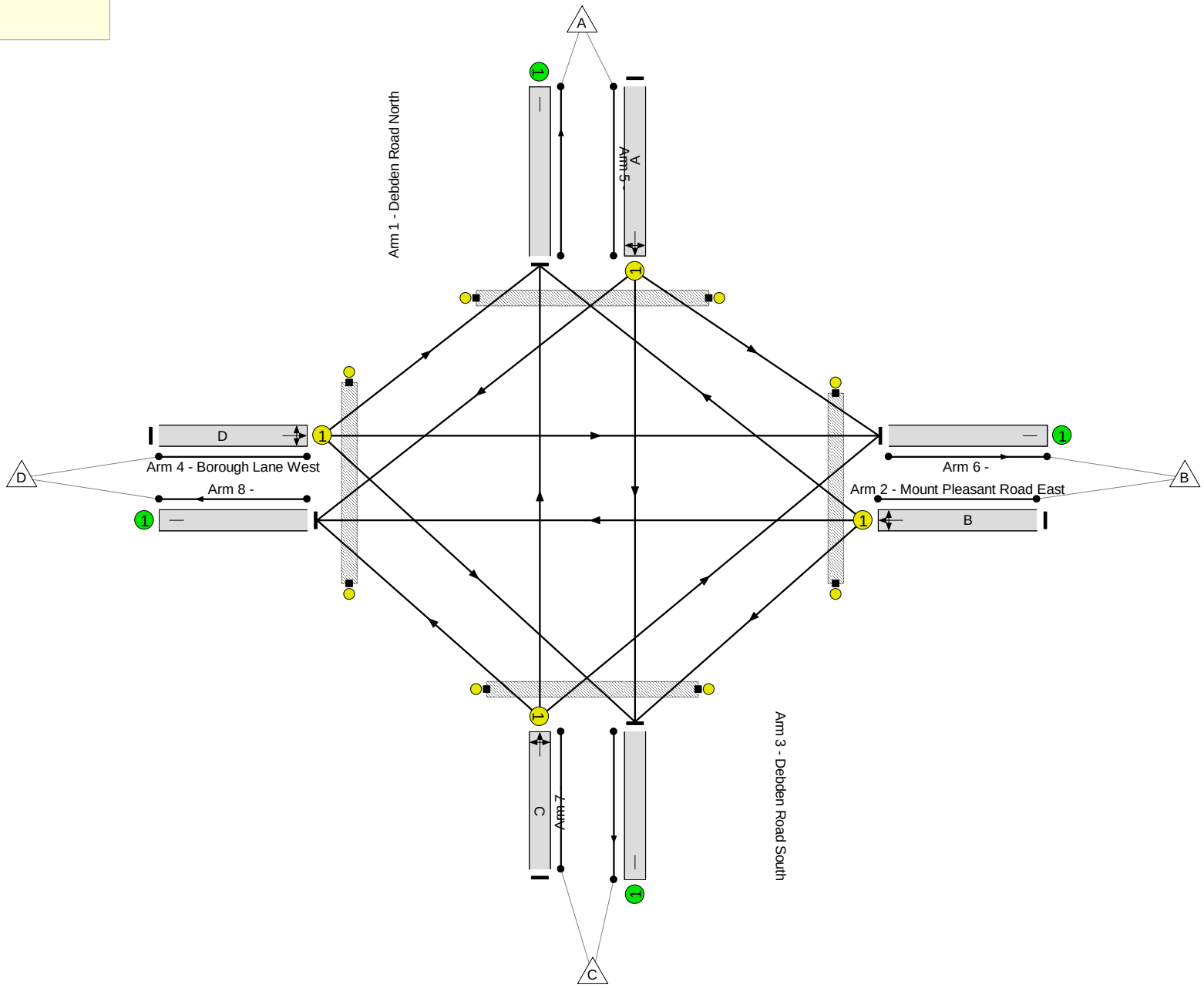


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: 9.8 %
Total Traffic Delay: 24.4 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.0%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.0%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	38	-	302	1719	372	81.1%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	30	-	247	1741	310	79.8%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	23	-	208	1842	256	81.3%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	46	-	352	1644	429	82.0%
5/1		U	N/A	N/A	-		-	-	-	396	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	271	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	224	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

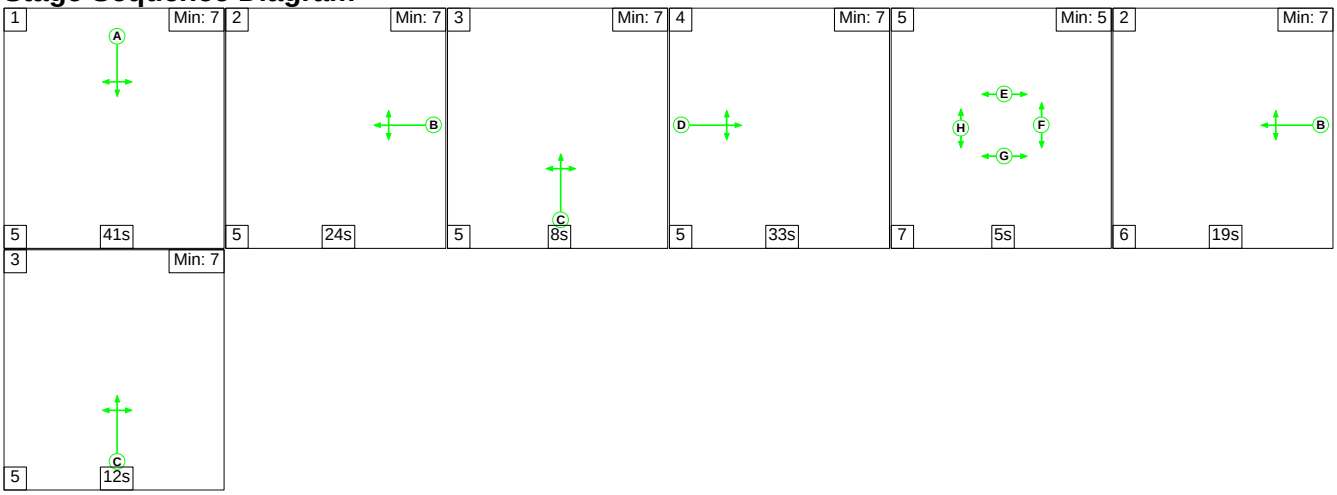
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**16.4**	**8.1**	**0.0**	**24.4**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**16.4**	**8.1**	**0.0**	**24.4**	**-**	**-**	**-**	**-**
1/1	302	302	-	-	-	5.6	2.0	-	7.6	91.2	14.3	2.0	16.4
2/1	247	247	-	-	-	2.5	1.9	-	4.3	62.9	6.4	1.9	8.3
3/1	208	208	-	-	-	2.2	2.0	-	4.2	72.8	5.5	2.0	7.6
4/1	352	352	-	-	-	6.1	2.2	-	8.3	84.6	16.5	2.2	18.7
5/1	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	271	271	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 9.8 Total Delay for Signalled Lanes (pcuHr): 24.44 Cycle Time (s): 180
PRC Over All Lanes (%): 9.8 Total Delay Over All Lanes(pcuHr): 24.44

Full Input Data And Results

Scenario 3: '2029 AM' (FG3: '2029 AM', Plan 1: 'Network Control Plan 1')

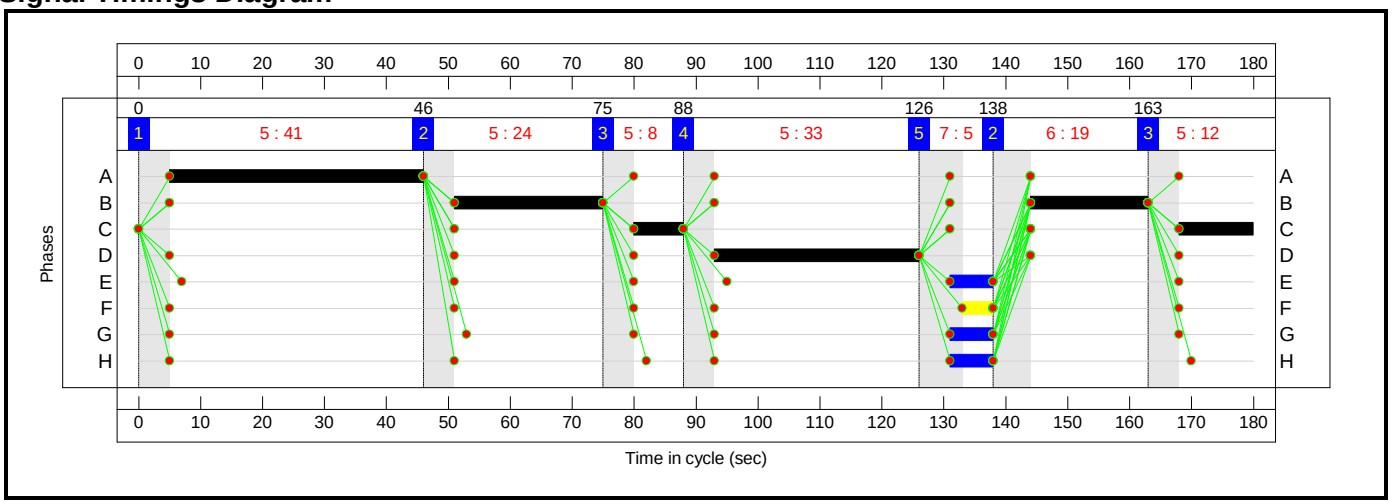
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	41	24	8	33	5	19	12
Change Point	0	46	75	88	126	138	163

Signal Timings Diagram

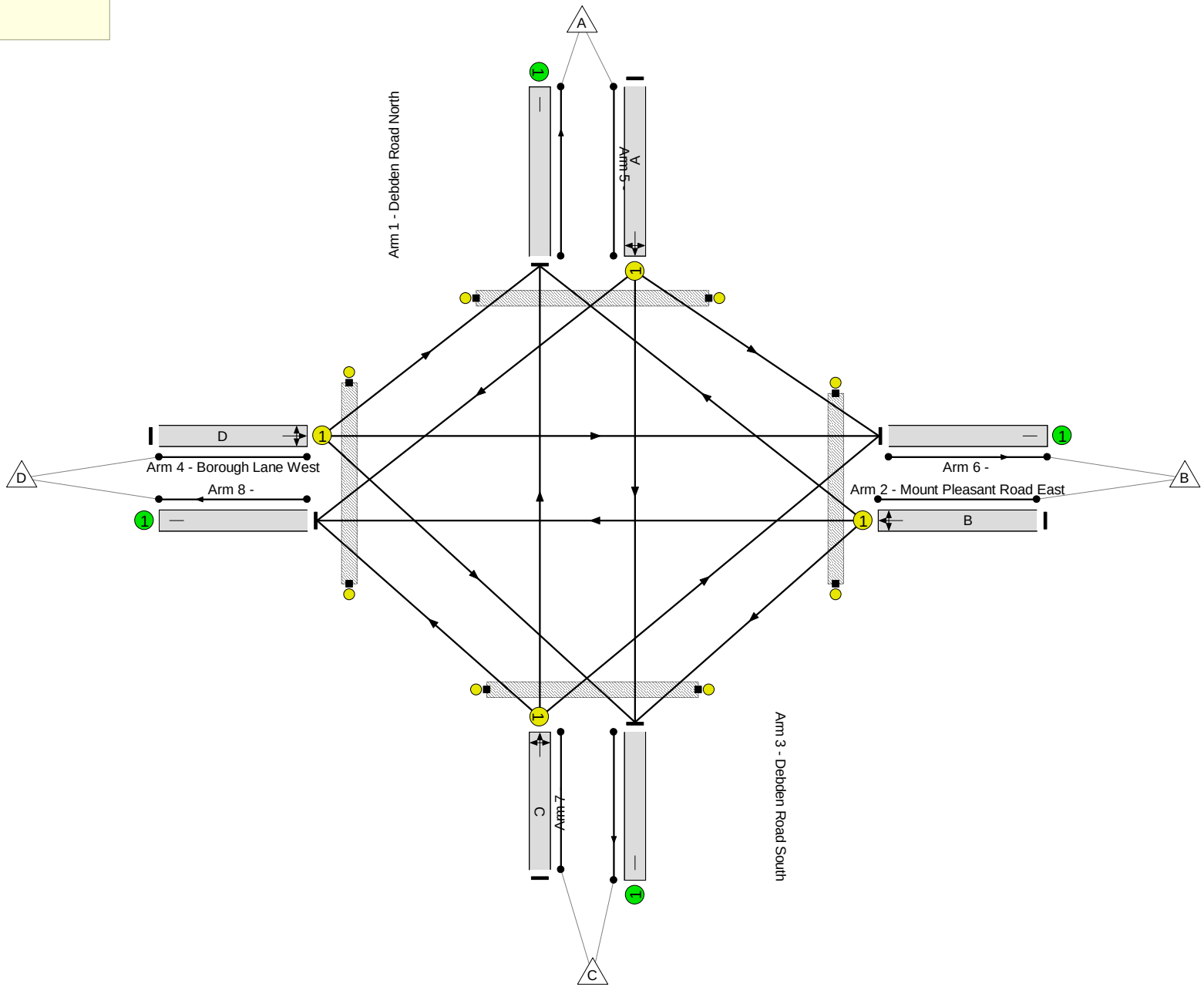


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: 10.5 %
Total Traffic Delay: 23.5 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**81.5%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**81.5%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	41	-	323	1700	397	81.4%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	43	-	348	1725	431	80.7%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	20	-	173	1815	222	78.0%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	33	-	253	1644	311	81.5%
5/1		U	N/A	N/A	-		-	-	-	301	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	261	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

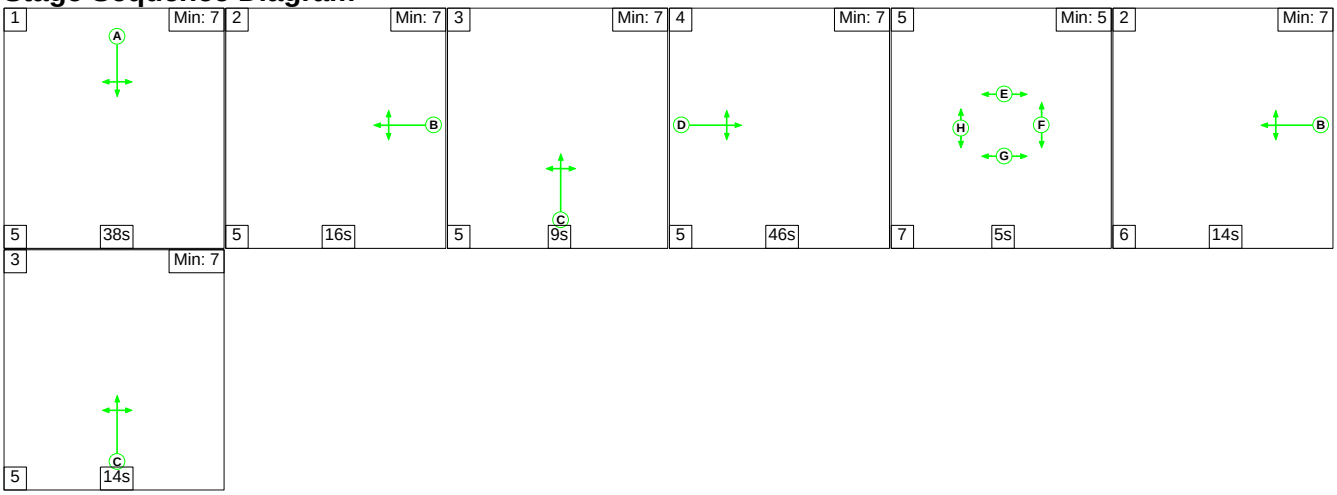
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.7**	**7.8**	**0.0**	**23.5**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**15.7**	**7.8**	**0.0**	**23.5**	**-**	**-**	**-**	**-**
1/1	323	323	-	-	-	5.9	2.1	-	7.9	88.4	15.3	2.1	17.3
2/1	348	348	-	-	-	3.1	2.0	-	5.1	52.3	8.2	2.0	10.2
3/1	173	173	-	-	-	1.8	1.7	-	3.5	72.9	4.2	1.7	5.8
4/1	253	253	-	-	-	4.9	2.1	-	7.0	99.2	12.1	2.1	14.1
5/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 10.5 Total Delay for Signalled Lanes (pcuHr): 23.47 Cycle Time (s): 180
PRC Over All Lanes (%): 10.5 Total Delay Over All Lanes(pcuHr): 23.47

Full Input Data And Results

Scenario 4: '2029 PM' (FG4: '2029 PM', Plan 1: 'Network Control Plan 1')

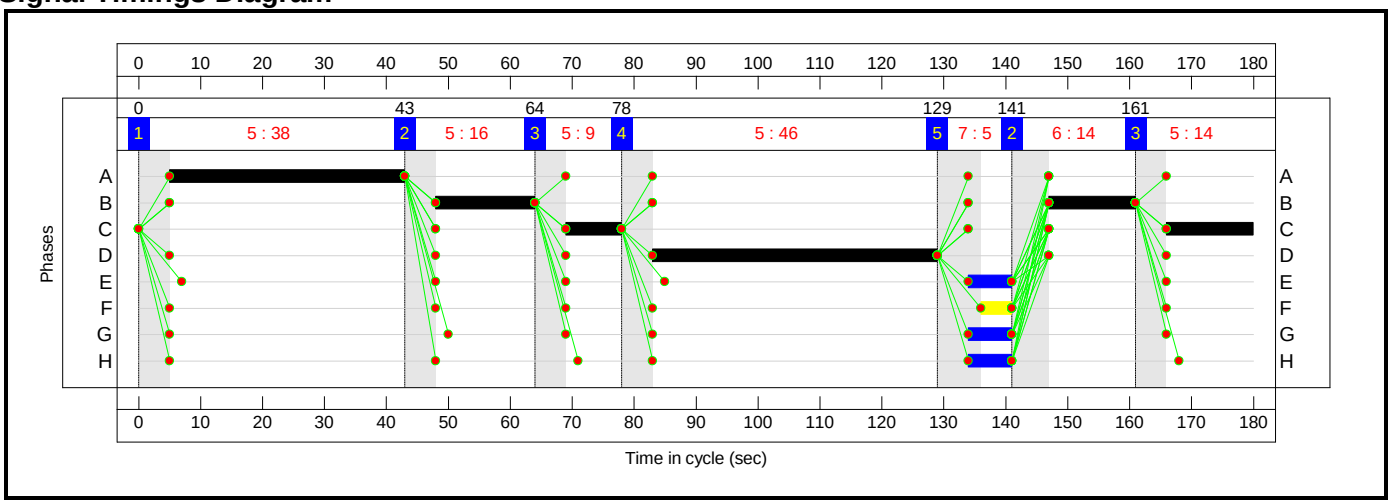
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	38	16	9	46	5	14	14
Change Point	0	43	64	78	129	141	161

Signal Timings Diagram

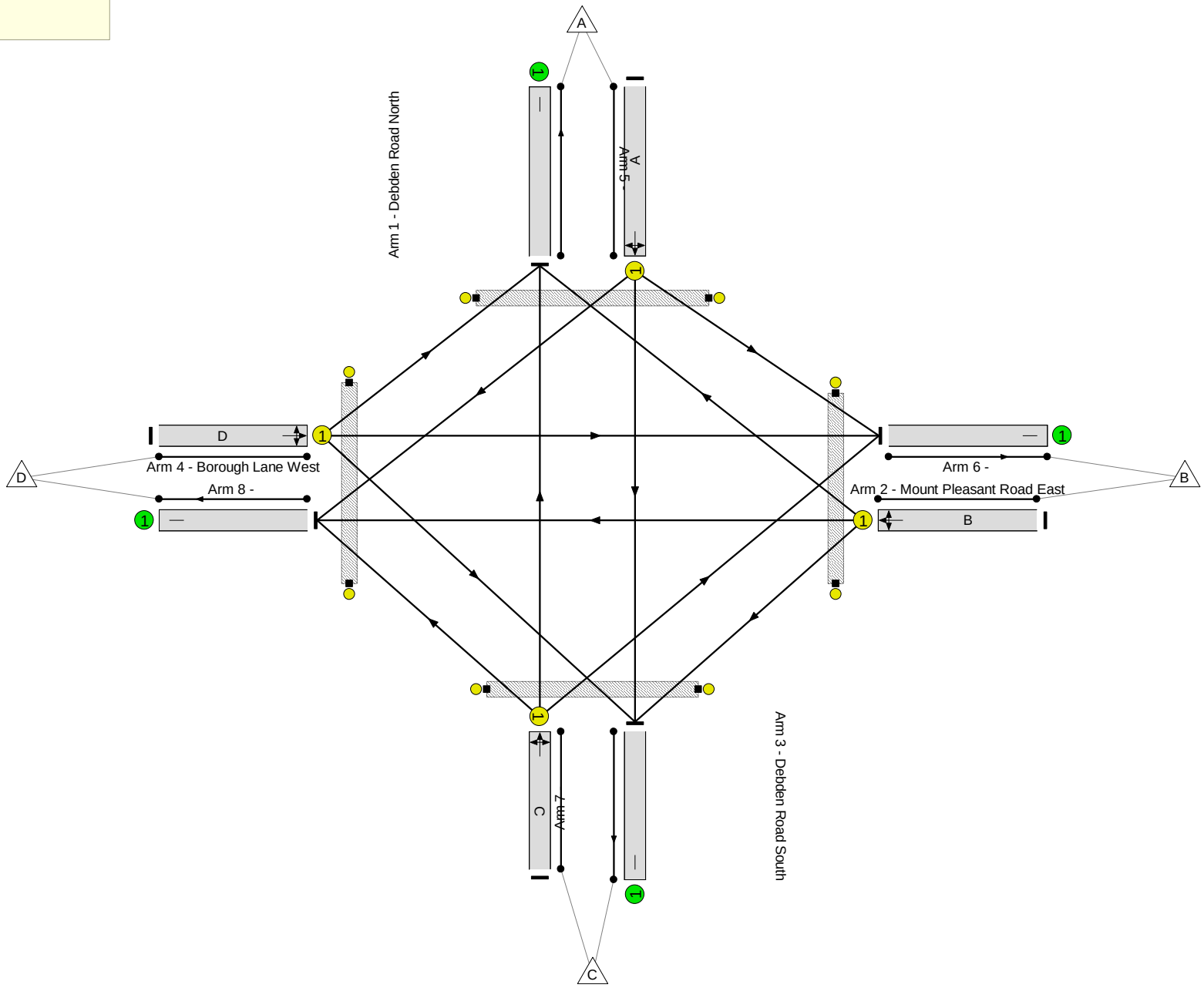


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: 4.7 %
Total Traffic Delay: 27.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.0%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.0%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	38	-	317	1720	373	85.1%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	30	-	259	1742	310	83.6%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	23	-	219	1840	256	85.7%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	46	-	369	1644	429	86.0%
5/1		U	N/A	N/A	-		-	-	-	415	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	235	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	229	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

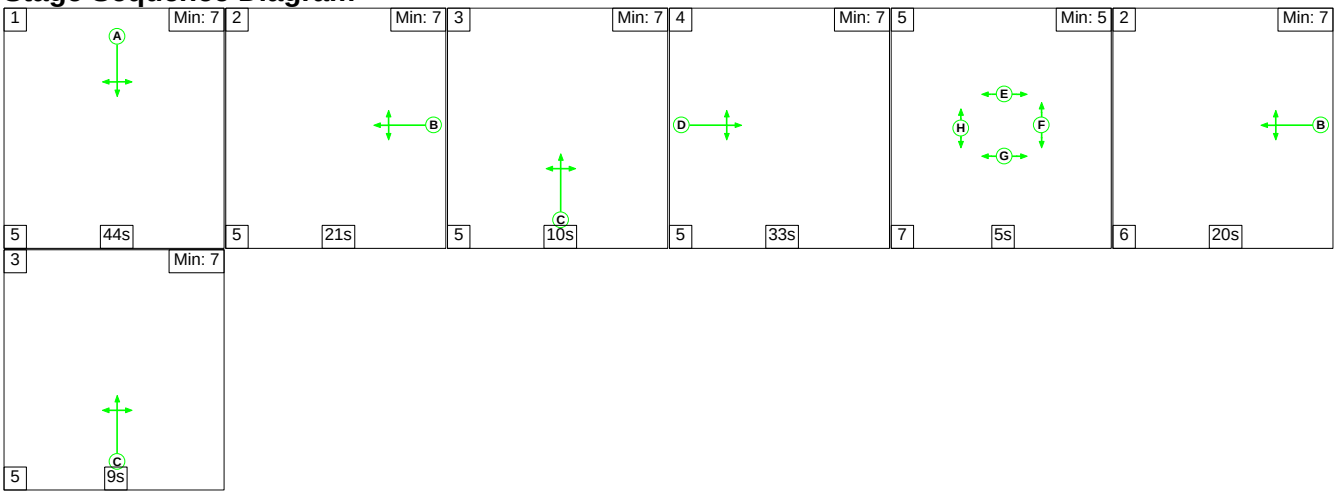
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.4**	**10.4**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**17.4**	**10.4**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
1/1	317	317	-	-	-	6.0	2.6	-	8.6	97.3	15.1	2.6	17.7
2/1	259	259	-	-	-	2.6	2.3	-	4.9	68.7	6.9	2.3	9.2
3/1	219	219	-	-	-	2.3	2.6	-	5.0	81.5	6.0	2.6	8.6
4/1	369	369	-	-	-	6.5	2.8	-	9.3	90.7	17.5	2.8	20.3
5/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	235	235	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	229	229	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 4.7 Total Delay for Signalled Lanes (pcuHr): 27.76 Cycle Time (s): 180
PRC Over All Lanes (%): 4.7 Total Delay Over All Lanes(pcuHr): 27.76

Full Input Data And Results

Scenario 5: '2029 + Com AM' (FG5: '2029 + Com AM', Plan 1: 'Network Control Plan 1')

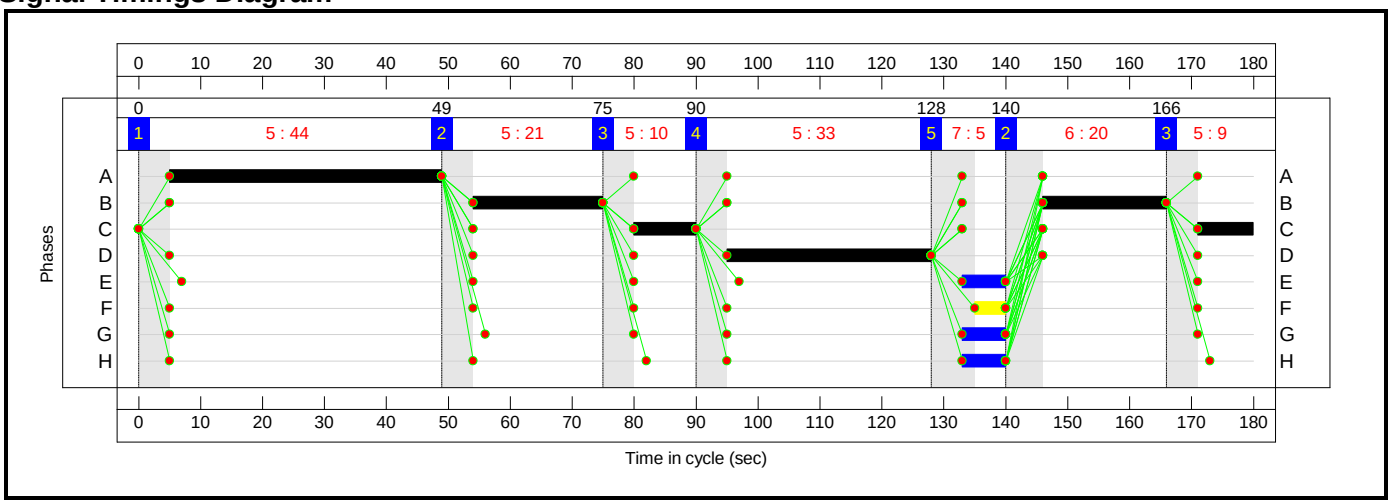
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	44	21	10	33	5	20	9
Change Point	0	49	75	90	128	140	166

Signal Timings Diagram

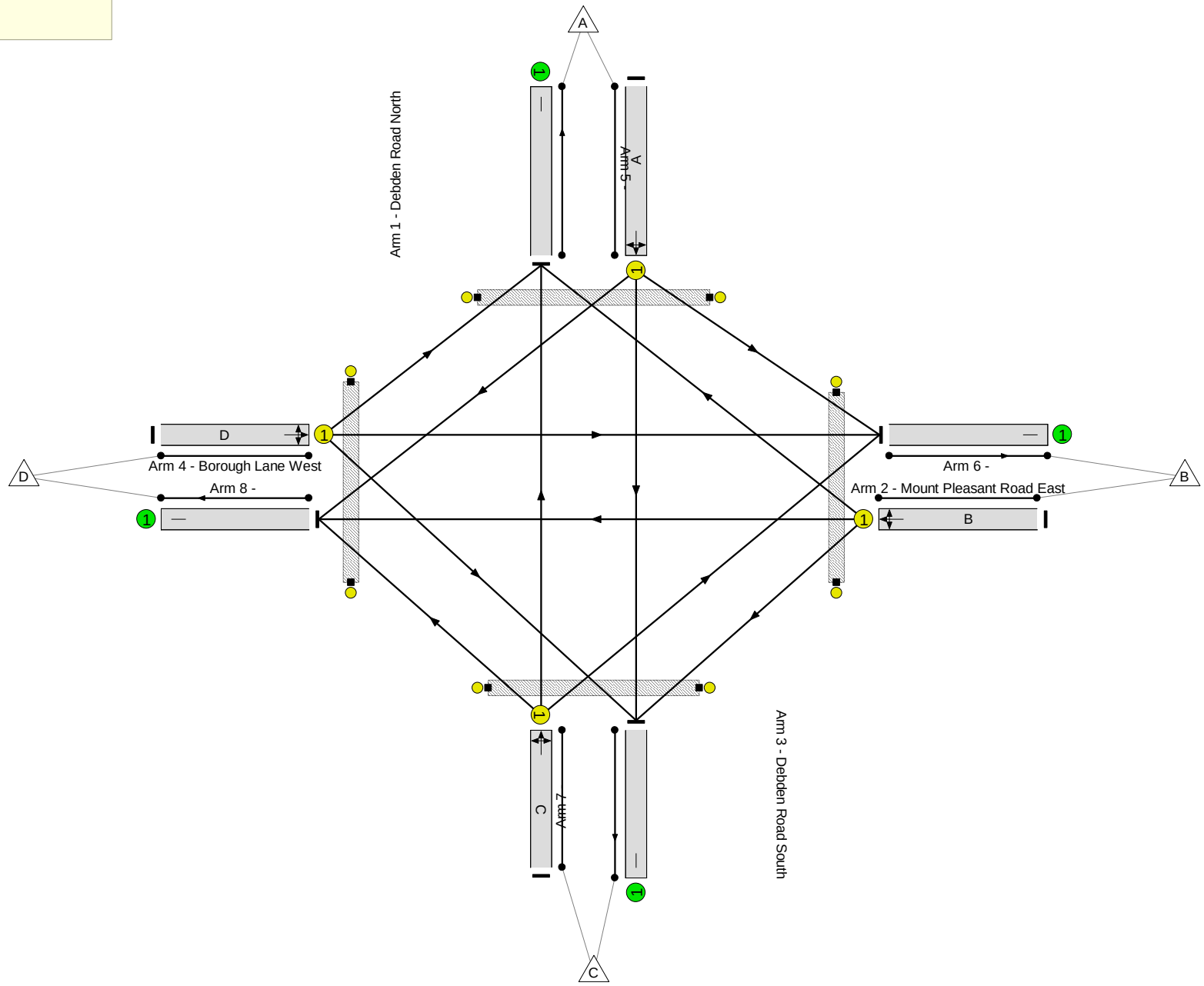


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: 6.6 %
Total Traffic Delay: 25.8 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.4%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.4%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	44	-	353	1697	424	83.2%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	41	-	348	1725	412	84.4%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	19	-	177	1817	212	83.5%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	33	-	258	1639	310	83.3%
5/1		U	N/A	N/A	-		-	-	-	310	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

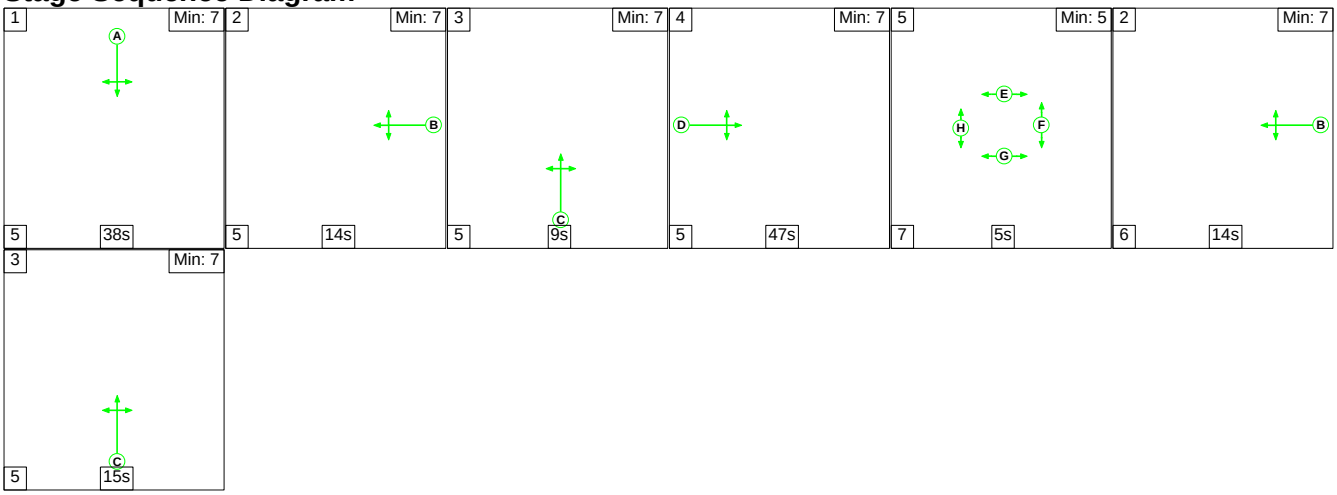
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**16.4**	**9.4**	**0.0**	**25.8**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**16.4**	**9.4**	**0.0**	**25.8**	**-**	**-**	**-**	**-**
1/1	353	353	-	-	-	6.3	2.3	-	8.6	87.6	16.7	2.3	19.0
2/1	348	348	-	-	-	3.2	2.5	-	5.7	58.7	8.4	2.5	10.9
3/1	177	177	-	-	-	1.9	2.2	-	4.2	84.5	4.3	2.2	6.6
4/1	258	258	-	-	-	5.0	2.3	-	7.3	102.3	12.4	2.3	14.7
5/1	310	310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	273	273	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 6.6 Total Delay for Signalled Lanes (pcuHr): 25.76 Cycle Time (s): 180
PRC Over All Lanes (%): 6.6 Total Delay Over All Lanes(pcuHr): 25.76

Full Input Data And Results

Scenario 6: '2029 +Com PM' (FG6: '2029 + Com PM', Plan 1: 'Network Control Plan 1')

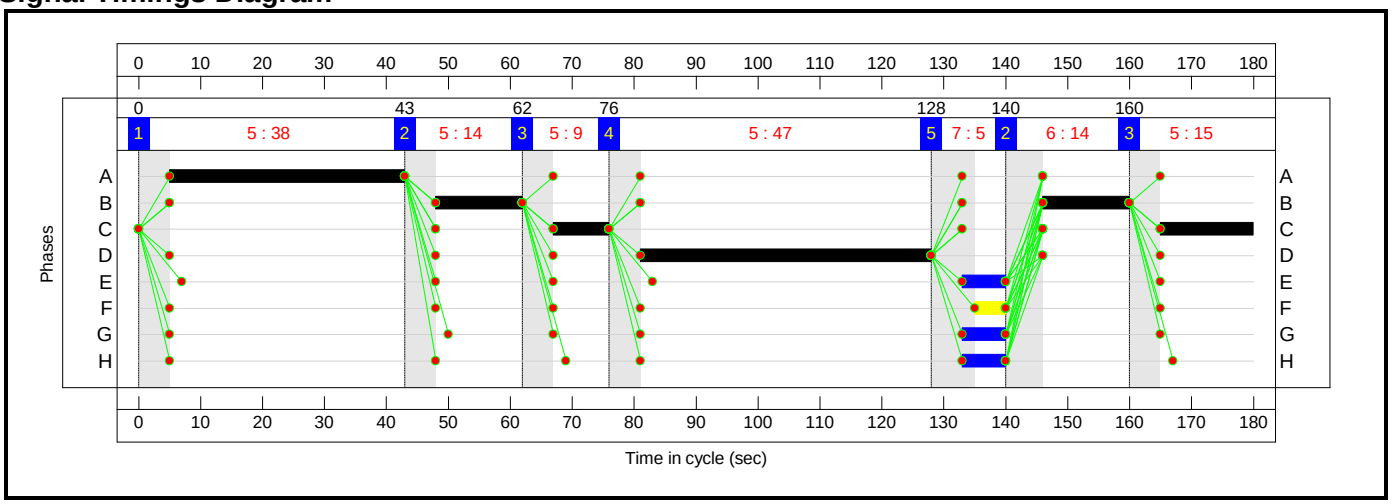
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	38	14	9	47	5	14	15
Change Point	0	43	62	76	128	140	160

Signal Timings Diagram

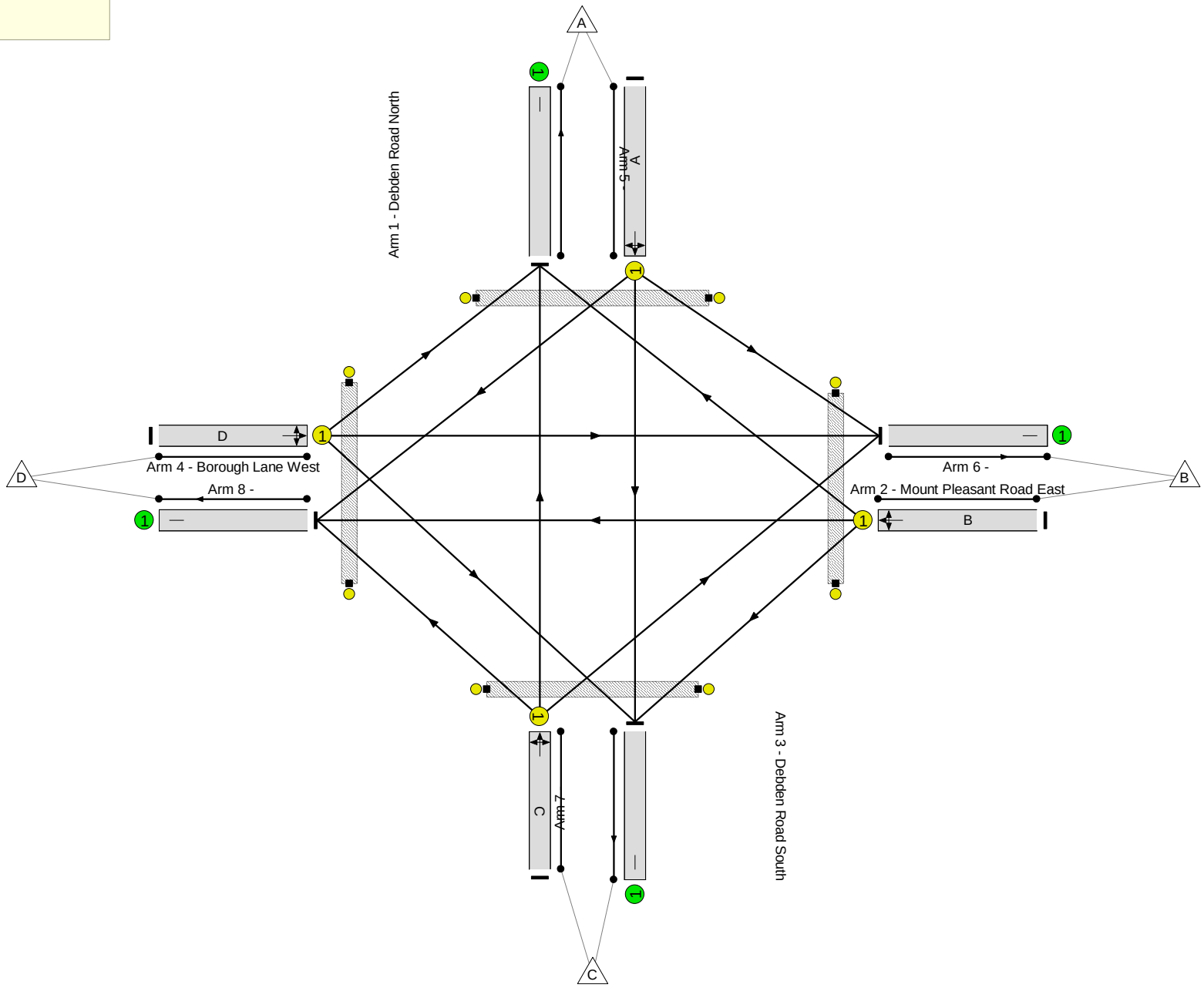


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: 0.5 %
Total Traffic Delay: 31.6 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.5%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.5%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	38	-	333	1717	372	89.5%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	28	-	259	1742	290	89.2%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	24	-	230	1844	266	86.4%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	47	-	387	1631	435	89.0%
5/1		U	N/A	N/A	-		-	-	-	444	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	239	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

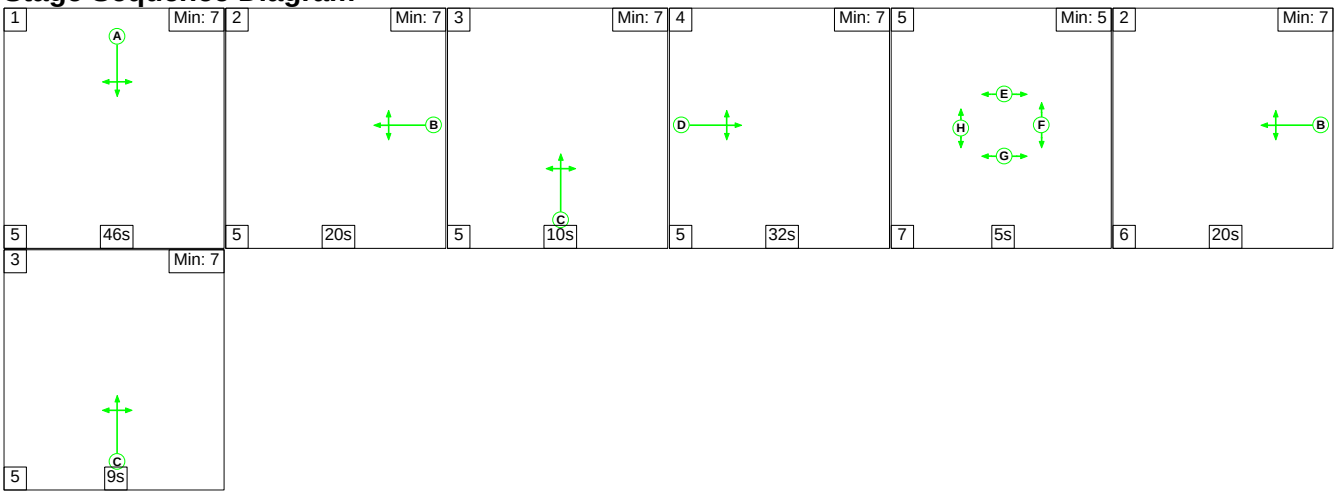
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**18.3**	**13.3**	**0.0**	**31.6**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**18.3**	**13.3**	**0.0**	**31.6**	**-**	**-**	**-**	**-**
1/1	333	333	-	-	-	6.3	3.6	-	9.9	107.5	16.1	3.6	19.7
2/1	259	259	-	-	-	2.7	3.4	-	6.1	84.3	7.0	3.4	10.4
3/1	230	230	-	-	-	2.5	2.7	-	5.2	81.4	6.4	2.7	9.1
4/1	387	387	-	-	-	6.8	3.5	-	10.3	96.2	18.6	3.5	22.1
5/1	444	444	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	239	239	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 0.5 Total Delay for Signalled Lanes (pcuHr): 31.55 Cycle Time (s): 180
PRC Over All Lanes (%): 0.5 Total Delay Over All Lanes(pcuHr): 31.55

Full Input Data And Results

Scenario 7: '2029 + Com + Dev AM' (FG7: '2029 + Com + Dev AM', Plan 1: 'Network Control Plan 1')

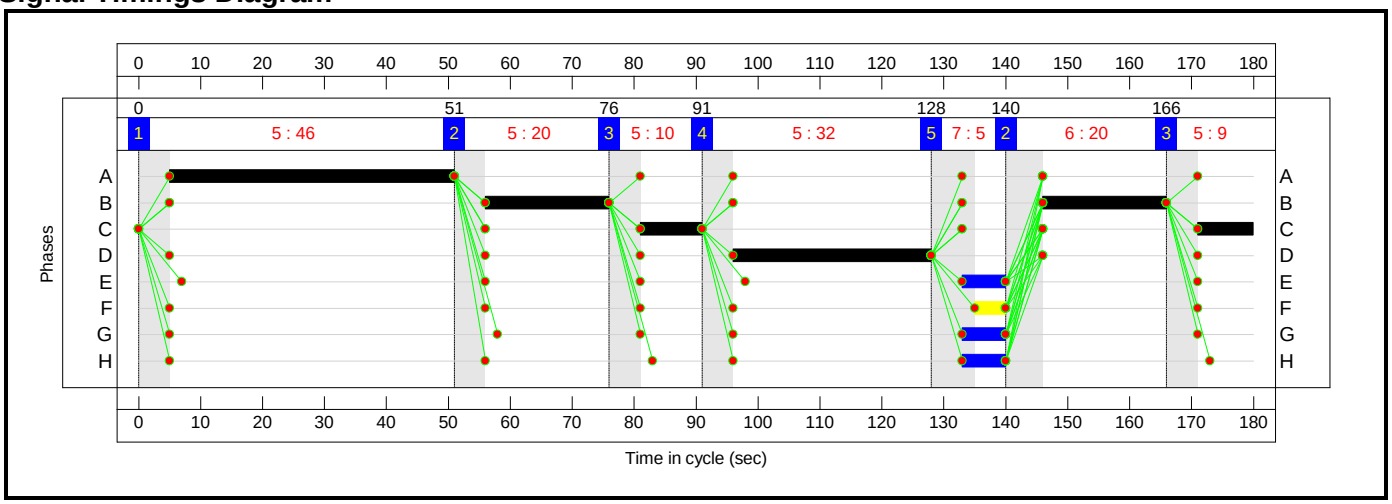
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	46	20	10	32	5	20	9
Change Point	0	51	76	91	128	140	166

Signal Timings Diagram

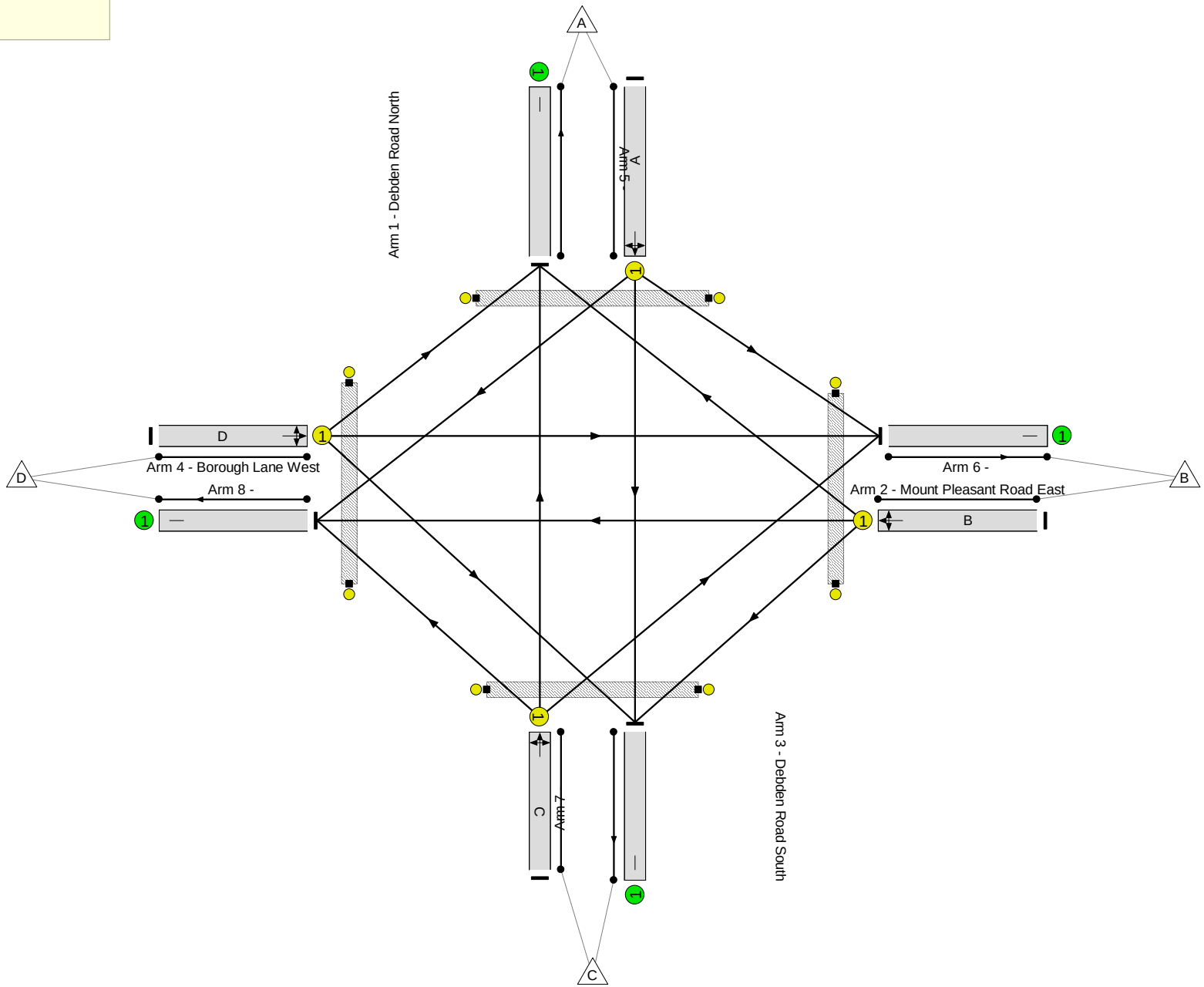


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: 2.9 %
Total Traffic Delay: 28.2 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.5%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.5%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	46	-	381	1695	443	86.1%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	40	-	348	1725	403	86.5%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	19	-	180	1819	212	84.8%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	32	-	262	1634	300	87.5%
5/1		U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	182	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	284	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

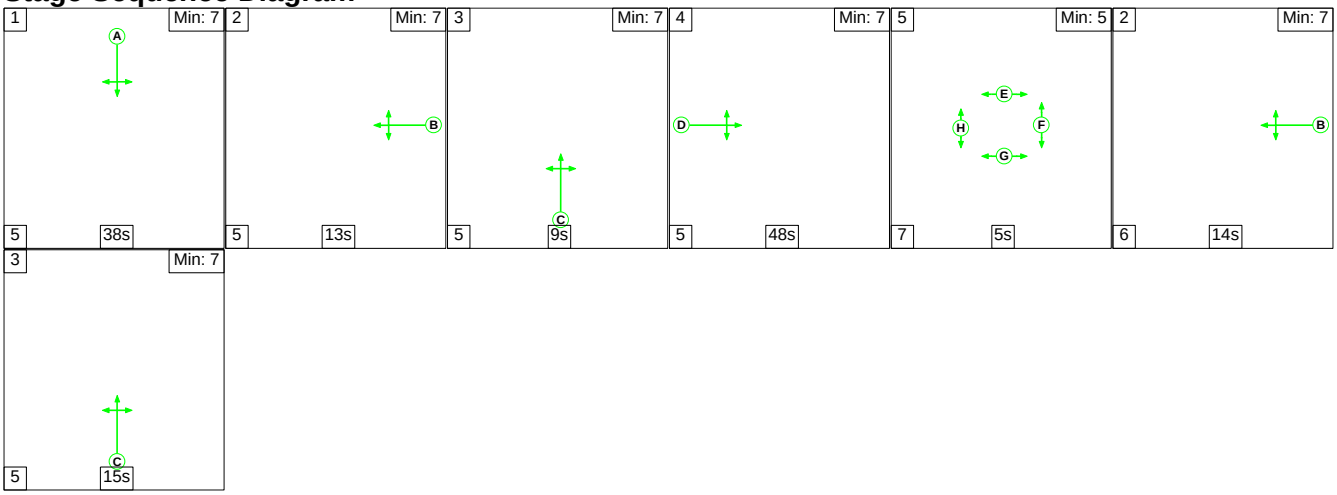
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**17.1**	**11.2**	**0.0**	**28.2**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**17.1**	**11.2**	**0.0**	**28.2**	**-**	**-**	**-**	**-**
1/1	381	381	-	-	-	6.7	2.8	-	9.5	90.2	18.1	2.8	20.9
2/1	348	348	-	-	-	3.2	2.9	-	6.1	63.0	8.3	2.9	11.2
3/1	180	180	-	-	-	1.9	2.4	-	4.4	87.5	4.4	2.4	6.8
4/1	262	262	-	-	-	5.2	3.0	-	8.2	112.8	12.7	3.0	15.7
5/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	284	284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): 2.9 Total Delay for Signalled Lanes (pcuHr): 28.22 Cycle Time (s): 180
PRC Over All Lanes (%): 2.9 Total Delay Over All Lanes(pcuHr): 28.22

Full Input Data And Results

Scenario 8: '2029 + Com + Dev PM' (FG8: '2029 + Com + Dev PM', Plan 1: 'Network Control Plan 1')

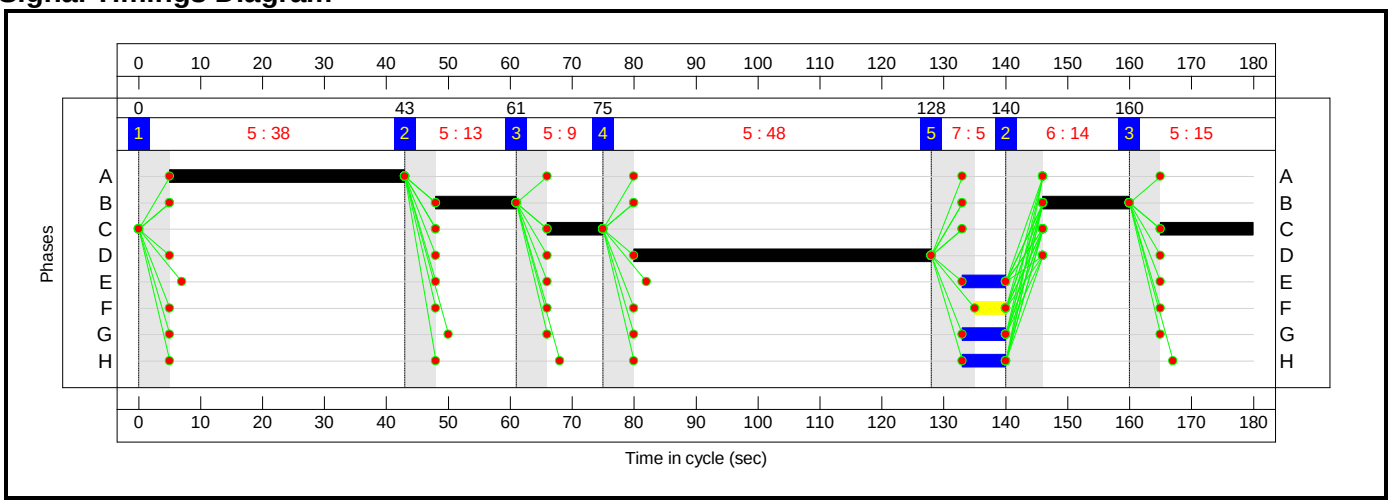
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	5	2	3
Duration	38	13	9	48	5	14	15
Change Point	0	43	61	75	128	140	160

Signal Timings Diagram

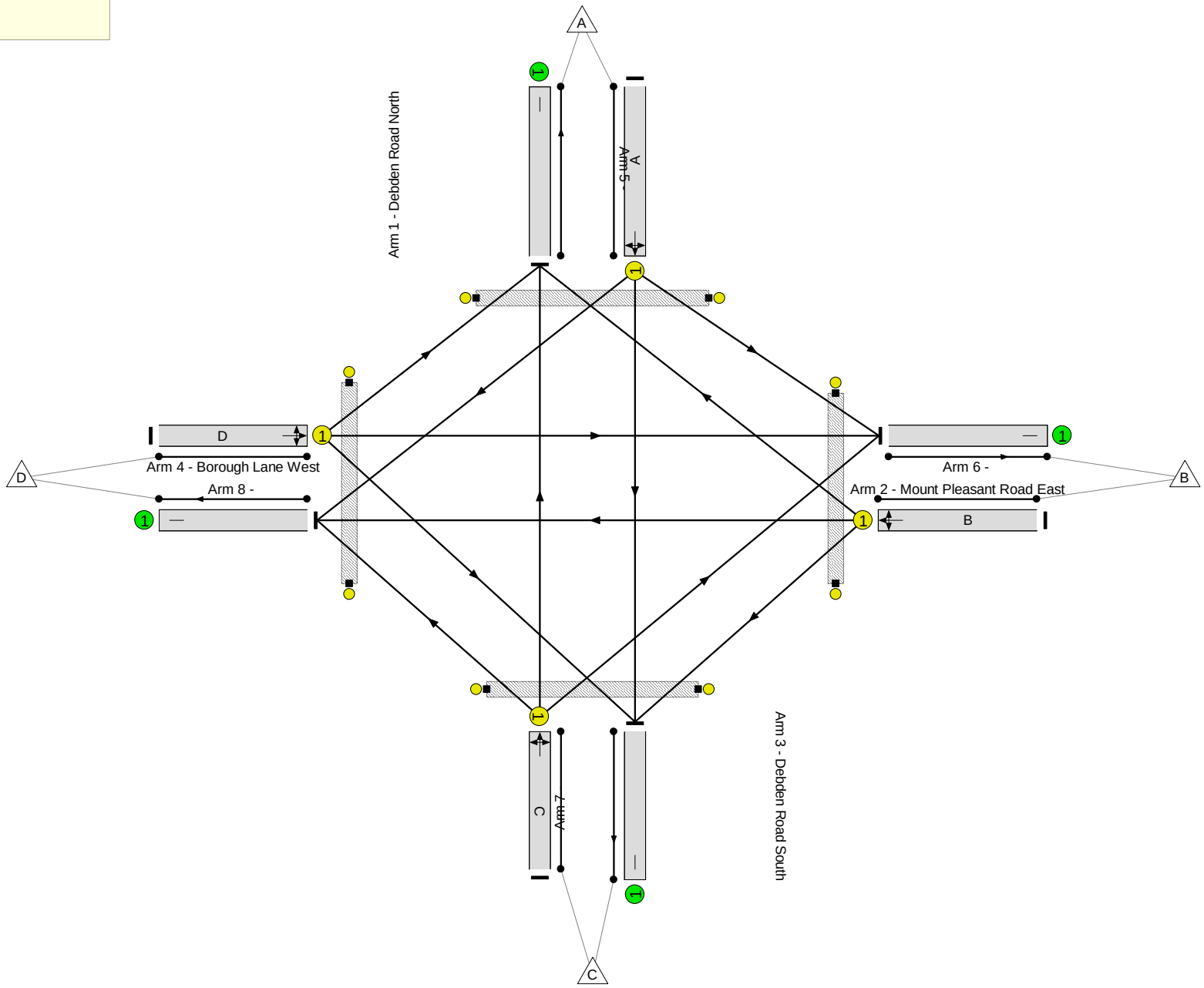


Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton
PRC: -3.2 %
Total Traffic Delay: 36.0 pcuHr
Ave. Route Delay Per Ped: 0.0 s/Ped



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.8%**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**92.8%**
1/1	Debden Road North Left Ahead Right	U	N/A	N/A	A		1	38	-	345	1715	372	92.8%
2/1	Mount Pleasant Road East Right Left Ahead	U	N/A	N/A	B		2	27	-	259	1742	281	92.3%
3/1	Debden Road South Ahead Right Left	U	N/A	N/A	C		2	24	-	241	1847	267	90.3%
4/1	Borough Lane West Left Ahead Right	U	N/A	N/A	D		1	48	-	402	1620	441	91.2%
5/1		U	N/A	N/A	-		-	-	-	470	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	285	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
Ped Link: P1	Debden Road North	-	N/A	-	E		1	7	-	0	-	0	0.0%
Ped Link: P2	Mopunt Pleasant Road East	-	N/A	-	F		1	5	-	0	-	0	0.0%
Ped Link: P3	Debden Road South	-	N/A	-	G		1	7	-	0	-	0	0.0%
Ped Link: P4	Borough Lane West	-	N/A	-	H		1	7	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.0**	**16.9**	**0.0**	**36.0**	**-**	**-**	**-**	**-**
Mount Pleadsant Road/Borough Lane/Debden Road signalised juncton	**-**	**-**	**0**	**0**	**0**	**19.0**	**16.9**	**0.0**	**36.0**	**-**	**-**	**-**	**-**
1/1	345	345	-	-	-	6.6	4.8	-	11.4	119.0	16.9	4.8	21.6
2/1	259	259	-	-	-	2.7	4.3	-	7.0	97.2	7.1	4.3	11.3
3/1	241	241	-	-	-	2.6	3.6	-	6.2	93.2	6.8	3.6	10.5
4/1	402	402	-	-	-	7.1	4.2	-	11.3	101.3	19.4	4.2	23.7
5/1	470	470	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-

C1 PRC for Signalled Lanes (%): -3.2 Total Delay for Signalled Lanes (pcuHr): 35.95 Cycle Time (s): 180
PRC Over All Lanes (%): -3.2 Total Delay Over All Lanes(pcuHr): 35.95

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 3 Peaslands Road- Hop Fields Mini-Roundabout.j9
Path: P:\Eastern\1031-1040\1033 Chase New Homes\1033.0002 Mount Pleasant Road, Saffron Walden\03 Technical\TPL\Modelling\Junction 3 Peaslands Road- Hop Fields Mini-Roundabout
Report generation date: 24/05/2024 08:58:05

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2023							
Arm 1	0.6	6.05	0.36	A	0.3	5.00	0.26	A
Arm 2	0.1	4.99	0.08	A	0.0	4.31	0.01	A
Arm 3	0.6	6.25	0.39	A	0.2	4.53	0.18	A
	2029							
Arm 1	0.6	6.23	0.38	A	0.4	5.10	0.27	A
Arm 2	0.1	5.07	0.08	A	0.0	4.35	0.01	A
Arm 3	0.7	6.45	0.41	A	0.2	4.59	0.19	A
	2029 + COM							
Arm 1	0.7	6.31	0.39	A	0.4	5.12	0.27	A
Arm 2	0.1	5.10	0.08	A	0.0	4.36	0.01	A
Arm 3	0.7	6.47	0.41	A	0.3	4.62	0.20	A
	2029 + COM + PROPOSED DEV							
Arm 1	0.7	6.21	0.40	A	0.4	5.15	0.28	A
Arm 2	0.1	5.13	0.08	A	0.0	4.37	0.01	A
Arm 3	0.7	6.38	0.41	A	0.3	4.66	0.21	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.

File summary

File Description

Title	(untitled)

Location	
Site number	
Date	19/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			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	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2029	AM	ONE HOUR	07:45	09:15	15
D4	2029	PM	ONE HOUR	16:45	18:15	15
D5	2029 + COM	AM	ONE HOUR	07:45	09:15	15
D6	2029 + COM	PM	ONE HOUR	16:45	18:15	15
D7	2029 + COM + PROPOSED DEV	AM	ONE HOUR	07:45	09:15	15
D8	2029 + COM + PROPOSED DEV	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, 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 3 have 92% 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	untitled	Mini-roundabout	1, 2, 3	6.06	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Peaslands Road West	
2	Hop Fields North	
3	Peaslands Road East	

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	3.00	3.00	3.00	0.0	5.00	2.00	0.0	
2	3.00	3.00	3.00	0.0	5.00	2.00	0.0	
3	3.00	3.00	3.00	0.0	5.00	2.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.590	985
2	0.590	985
3	0.590	985

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	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	320	100.000
2		✓	57	100.000
3		✓	339	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	11	309
	2	30	0	27
	3	316	23	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	4
	2	0	0	0
	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.36	6.05	0.6	A
2	0.08	4.99	0.1	A
3	0.39	6.25	0.6	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	241	17	975	0.247	240	0.3	5.076	A
2	43	231	848	0.051	43	0.1	4.467	A
3	255	22	972	0.263	254	0.4	5.144	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	288	21	973	0.296	287	0.4	5.453	A
2	51	277	821	0.062	51	0.1	4.675	A

3	305	27	969	0.315	304	0.5	5.564	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	352	25	970	0.363	352	0.6	6.041	A
2	63	340	784	0.080	63	0.1	4.987	A
3	373	33	965	0.387	373	0.6	6.233	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	352	25	970	0.363	352	0.6	6.053	A
2	63	340	784	0.080	63	0.1	4.990	A
3	373	33	965	0.387	373	0.6	6.248	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	288	21	973	0.296	288	0.4	5.469	A
2	51	278	821	0.062	51	0.1	4.679	A
3	305	27	969	0.315	305	0.5	5.582	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	241	17	975	0.247	241	0.3	5.100	A
2	43	233	847	0.051	43	0.1	4.475	A
3	255	23	972	0.263	256	0.4	5.171	A

2023, 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 3 have 97% 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	untitled	Mini-roundabout	1, 2, 3	4.79	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	229	100.000
2		✓	10	100.000
3		✓	163	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	16	213
	2	5	0	5
	3	153	10	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	**2**	**3**

From	1	0	0	1
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.26	5.00	0.3	A
2	0.01	4.31	0.0	A
3	0.18	4.53	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	172	7	980	0.176	172	0.2	4.487	A
2	8	160	891	0.008	7	0.0	4.075	A
3	123	4	983	0.125	122	0.1	4.220	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	206	9	980	0.210	206	0.3	4.693	A
2	9	191	872	0.010	9	0.0	4.171	A
3	147	4	982	0.149	146	0.2	4.347	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	252	11	978	0.258	252	0.3	4.998	A
2	11	234	847	0.013	11	0.0	4.307	A
3	179	5	982	0.183	179	0.2	4.527	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	252	11	978	0.258	252	0.3	5.002	A
2	11	235	846	0.013	11	0.0	4.308	A
3	179	6	982	0.183	179	0.2	4.529	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	206	9	980	0.210	206	0.3	4.701	A
2	9	192	872	0.010	9	0.0	4.172	A
3	147	5	982	0.149	147	0.2	4.349	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	172	8	980	0.176	173	0.2	4.500	A
2	8	161	890	0.008	8	0.0	4.078	A
3	123	4	983	0.125	123	0.1	4.226	A

2029, 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 3 have 92% 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	untitled	Mini-roundabout	1, 2, 3	6.24	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	335	100.000
2		✓	59	100.000
3		✓	355	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	12	323
	2	31	0	28
	3	331	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3

From	1	0	0	4
	2	0	0	0
	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.38	6.23	0.6	A
2	0.08	5.07	0.1	A
3	0.41	6.45	0.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	252	18	974	0.259	251	0.4	5.157	A
2	44	242	842	0.053	44	0.1	4.510	A
3	267	23	971	0.275	266	0.4	5.234	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	301	22	972	0.310	301	0.5	5.564	A
2	53	290	814	0.065	53	0.1	4.731	A
3	319	28	968	0.330	319	0.5	5.691	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	369	26	969	0.381	368	0.6	6.213	A
2	65	355	775	0.084	65	0.1	5.066	A
3	391	34	965	0.405	390	0.7	6.432	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	369	26	969	0.381	369	0.6	6.225	A
2	65	356	775	0.084	65	0.1	5.069	A
3	391	34	965	0.405	391	0.7	6.447	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	301	22	972	0.310	302	0.5	5.582	A
2	53	291	813	0.065	53	0.1	4.738	A
3	319	28	968	0.330	320	0.5	5.714	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	252	18	974	0.259	253	0.4	5.185	A
2	44	244	841	0.053	44	0.1	4.518	A
3	267	23	971	0.275	268	0.4	5.264	A

2029, 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 3 have 97% 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	untitled	Mini-roundabout	1, 2, 3	4.87	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	241	100.000
2		✓	10	100.000
3		✓	172	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	17	224
	2	5	0	5
	3	161	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	**2**	**3**

From	1	0	0	1
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.27	5.10	0.4	A
2	0.01	4.35	0.0	A
3	0.19	4.59	0.2	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	181	8	980	0.185	181	0.2	4.540	A
2	8	168	886	0.009	7	0.0	4.098	A
3	129	4	983	0.132	129	0.2	4.253	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	217	10	979	0.221	216	0.3	4.763	A
2	9	201	866	0.010	9	0.0	4.199	A
3	155	4	982	0.157	154	0.2	4.390	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	265	12	978	0.271	265	0.4	5.095	A
2	11	246	840	0.013	11	0.0	4.344	A
3	189	5	982	0.193	189	0.2	4.584	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	265	12	978	0.271	265	0.4	5.099	A
2	11	247	839	0.013	11	0.0	4.345	A
3	189	6	982	0.193	189	0.2	4.586	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	217	10	979	0.221	217	0.3	4.769	A
2	9	202	866	0.010	9	0.0	4.201	A
3	155	5	982	0.157	155	0.2	4.392	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	181	8	980	0.185	182	0.2	4.552	A
2	8	169	885	0.009	8	0.0	4.102	A
3	129	4	983	0.132	130	0.2	4.260	A

2029 + COM, 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 3 have 92% 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	untitled	Mini-roundabout	1, 2, 3	6.29	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	342	100.000
2		✓	59	100.000
3		✓	357	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	12	330
	2	31	0	28
	3	333	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	**2**	**3**

From	1	0	0	4
	2	0	0	0
	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.39	6.31	0.7	A
2	0.08	5.10	0.1	A
3	0.41	6.47	0.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	257	18	974	0.264	256	0.4	5.195	A
2	44	247	839	0.053	44	0.1	4.527	A
3	269	23	971	0.277	267	0.4	5.245	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	307	22	972	0.316	307	0.5	5.617	A
2	53	296	810	0.065	53	0.1	4.755	A
3	321	28	968	0.331	320	0.5	5.707	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	377	26	969	0.388	376	0.7	6.291	A
2	65	363	771	0.084	65	0.1	5.099	A
3	393	34	965	0.407	392	0.7	6.454	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	377	26	969	0.388	377	0.7	6.307	A
2	65	363	770	0.084	65	0.1	5.102	A
3	393	34	965	0.407	393	0.7	6.472	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	307	22	972	0.316	308	0.5	5.638	A
2	53	297	809	0.066	53	0.1	4.760	A
3	321	28	968	0.331	322	0.5	5.728	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	257	18	974	0.264	258	0.4	5.222	A
2	44	249	838	0.053	44	0.1	4.538	A
3	269	23	971	0.277	269	0.4	5.277	A

2029 + COM, 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 3 have 97% 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	untitled	Mini-roundabout	1, 2, 3	4.90	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	244	100.000
2		✓	10	100.000
3		✓	178	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	17	227
	2	5	0	5
	3	167	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	**2**	**3**

From	1	0	0	1
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.27	5.12	0.4	A
2	0.01	4.36	0.0	A
3	0.20	4.62	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	184	8	980	0.187	183	0.2	4.553	A
2	8	170	885	0.009	7	0.0	4.104	A
3	134	4	983	0.136	133	0.2	4.276	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	219	10	979	0.224	219	0.3	4.780	A
2	9	204	865	0.010	9	0.0	4.207	A
3	160	4	982	0.163	160	0.2	4.419	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	269	12	978	0.275	268	0.4	5.119	A
2	11	250	838	0.013	11	0.0	4.354	A
3	196	5	982	0.200	196	0.3	4.623	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	269	12	978	0.275	269	0.4	5.123	A
2	11	250	837	0.013	11	0.0	4.355	A
3	196	6	982	0.200	196	0.3	4.624	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	219	10	979	0.224	220	0.3	4.788	A
2	9	204	864	0.010	9	0.0	4.208	A
3	160	5	982	0.163	160	0.2	4.423	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	184	8	980	0.187	184	0.2	4.565	A
2	8	171	884	0.009	8	0.0	4.109	A
3	134	4	983	0.136	134	0.2	4.284	A

2029 + COM + PROPOSED 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 3 have 92% 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	untitled	Mini-roundabout	1, 2, 3	6.21	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	349	100.000
2		✓	59	100.000
3		✓	359	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	12	337
	2	31	0	28
	3	335	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			

From		1	2	3
	1	0	0	1
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.40	6.21	0.7	A
2	0.08	5.13	0.1	A
3	0.41	6.38	0.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	263	18	974	0.270	261	0.4	5.087	A
2	44	252	836	0.053	44	0.1	4.545	A
3	270	23	971	0.278	269	0.4	5.161	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	314	22	972	0.323	313	0.5	5.513	A
2	53	303	806	0.066	53	0.1	4.778	A
3	323	28	968	0.333	322	0.5	5.620	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	384	26	969	0.396	384	0.7	6.197	A
2	65	370	766	0.085	65	0.1	5.132	A
3	395	34	965	0.410	394	0.7	6.362	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	384	26	969	0.396	384	0.7	6.212	A
2	65	371	766	0.085	65	0.1	5.135	A
3	395	34	965	0.410	395	0.7	6.379	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	314	22	972	0.323	314	0.5	5.534	A
2	53	304	806	0.066	53	0.1	4.783	A
3	323	28	968	0.333	323	0.5	5.642	A

09:00 - 09:15

	Total Demand	Circulating flow	Capacity		Throughput	End queue		

Arm	(PCU/hr)	(PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(PCU)	Delay (s)	LOS
1	263	18	974	0.270	263	0.4	5.114	A
2	44	254	835	0.053	44	0.1	4.554	A
3	270	23	971	0.278	271	0.4	5.191	A

2029 + COM + PROPOSED 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 3 have 97% 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	untitled	Mini-roundabout	1, 2, 3	4.93	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	247	100.000
2		✓	10	100.000
3		✓	184	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	17	230
	2	5	0	5
	3	173	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			

		1	2	3
From	1	0	0	1
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.28	5.15	0.4	A
2	0.01	4.37	0.0	A
3	0.21	4.66	0.3	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	186	8	980	0.190	185	0.2	4.563	A
2	8	172	883	0.009	7	0.0	4.110	A
3	139	4	983	0.141	138	0.2	4.301	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	222	10	979	0.227	222	0.3	4.797	A
2	9	207	863	0.010	9	0.0	4.215	A
3	165	4	982	0.168	165	0.2	4.448	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	272	12	978	0.278	272	0.4	5.143	A
2	11	253	836	0.013	11	0.0	4.365	A
3	203	5	982	0.206	202	0.3	4.662	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	272	12	978	0.278	272	0.4	5.147	A
2	11	253	835	0.013	11	0.0	4.366	A
3	203	6	982	0.206	203	0.3	4.664	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	222	10	979	0.227	222	0.3	4.806	A
2	9	207	863	0.010	9	0.0	4.218	A
3	165	5	982	0.168	166	0.2	4.452	A

18:00 - 18:15

	Total Demand	Circulating flow	Capacity		Throughput	End queue		

Arm	(PCU/hr)	(PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(PCU)	Delay (s)	LOS
1	186	8	980	0.190	186	0.2	4.578	A
2	8	173	883	0.009	8	0.0	4.115	A
3	139	4	983	0.141	139	0.2	4.307	A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Junction 4 Peaslands Road -Thaxted Road Mini-Roundabout.j9
Path: P:\Eastern\1031-1040\1033 Chase New Homes\1033.0002 Mount Pleasant Road, Saffron Walden\03 Technical\TPL\Modelling\Junction 4 Peaslands Road- Thaxted Road Mini-Roundabout
Report generation date: 24/05/2024 09:04:32

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2023							
Arm 1	1.0	9.44	0.48	A	3.2	21.67	0.77	C
Arm 2	2.0	14.73	0.66	B	1.3	11.89	0.56	B
Arm 3	2.7	18.87	0.73	C	2.1	14.86	0.68	B
	2029							
Arm 1	1.1	10.04	0.51	B	4.2	27.25	0.82	D
Arm 2	2.3	16.62	0.70	C	1.5	13.18	0.60	B
Arm 3	3.3	22.25	0.77	C	2.5	17.10	0.72	C
	2029 + COM							
Arm 1	1.1	10.12	0.51	B	4.3	28.07	0.82	D
Arm 2	2.3	16.70	0.70	C	1.5	13.45	0.61	B
Arm 3	3.5	23.30	0.78	C	2.6	17.46	0.73	C
	2029 + COM + PROPOSED DEV							
Arm 1	1.1	9.98	0.52	A	4.4	28.55	0.83	D
Arm 2	2.3	16.43	0.70	C	1.6	13.76	0.61	B
Arm 3	3.7	23.84	0.79	C	2.7	17.74	0.73	C

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

File summary

File Description

Title	(untitled)
Location	

Site number	
Date	16/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			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	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2029	AM	ONE HOUR	07:45	09:15	15
D4	2029	PM	ONE HOUR	16:45	18:15	15
D5	2029 + COM	AM	ONE HOUR	07:45	09:15	15
D6	2029 + COM	PM	ONE HOUR	16:45	18:15	15
D7	2029 + COM + PROPOSED DEV	AM	ONE HOUR	07:45	09:15	15
D8	2029 + COM + PROPOSED DEV	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	14.93	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Thaxsted Road North Thaxsted Road North Thaxsted Road North	
2	Thaxsted Road South	
3	Peasland Road West	

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	2.50	2.50	3.50	1.0	10.00	2.00	0.0	
2	3.00	3.00	4.50	2.0	8.50	6.00	0.0	
3	3.00	3.00	3.00	0.0	13.50	2.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.580	886
2	0.607	877
3	0.590	871

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	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	333	100.000
2		✓	445	100.000
3		✓	488	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	133	200
	2	214	0	231
	3	290	198	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	5	0	3
	3	1	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.48	9.44	1.0	A
2	0.66	14.73	2.0	B
3	0.73	18.87	2.7	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	251	148	800	0.313	249	0.5	6.705	A
2	335	149	786	0.426	332	0.8	8.183	A
3	367	160	777	0.473	364	0.9	8.892	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	299	177	783	0.382	299	0.6	7.648	A
2	400	179	768	0.521	399	1.1	10.089	B
3	439	192	758	0.579	437	1.4	11.464	B

08:15 - 08:30

	Total Demand	Circulating flow	Capacity		Throughput	End queue		

Arm	(PCU/hr)	(PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(PCU)	Delay (s)	LOS
1	367	216	760	0.482	365	0.9	9.359	A
2	490	219	744	0.659	487	1.9	14.369	B
3	537	234	733	0.733	532	2.6	17.990	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	367	218	759	0.483	367	1.0	9.441	A
2	490	220	743	0.659	490	2.0	14.728	B
3	537	236	732	0.734	537	2.7	18.867	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	299	180	781	0.383	301	0.6	7.735	A
2	400	181	767	0.521	403	1.2	10.366	B
3	439	194	757	0.580	444	1.5	12.020	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	251	150	799	0.314	251	0.5	6.783	A
2	335	151	785	0.427	337	0.8	8.366	A
3	367	162	776	0.474	369	0.9	9.168	A

2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	16.65	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	505	100.000
2		✓	356	100.000
3		✓	473	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	238	267
	2	166	0	190
	3	215	258	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	1	0
	2	2	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.77	21.67	3.2	C
2	0.56	11.89	1.3	B
3	0.68	14.86	2.1	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	380	192	774	0.491	376	1.0	9.015	A
2	268	199	756	0.354	266	0.5	7.416	A
3	356	124	798	0.446	353	0.8	8.072	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	454	231	752	0.604	452	1.5	11.984	B
2	320	239	732	0.437	319	0.8	8.827	A
3	425	149	784	0.543	424	1.2	10.017	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	556	282	722	0.770	550	3.1	20.263	C
2	392	291	701	0.559	390	1.3	11.687	B
3	521	182	764	0.682	517	2.1	14.453	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	556	284	721	0.771	555	3.2	21.670	C
2	392	294	699	0.561	392	1.3	11.893	B
3	521	183	764	0.682	521	2.1	14.865	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	454	234	750	0.605	461	1.6	12.762	B
2	320	243	729	0.439	322	0.8	9.008	A
3	425	150	783	0.543	429	1.2	10.321	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	380	195	772	0.492	383	1.0	9.336	A
2	268	202	754	0.355	269	0.6	7.544	A
3	356	125	797	0.447	358	0.8	8.262	A

2029, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	17.05	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	349	100.000
2		✓	466	100.000
3		✓	510	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	140	209
	2	224	0	242
	3	303	207	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	5	0	3
	3	1	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.51	10.04	1.1	B
2	0.70	16.62	2.3	C
3	0.77	22.25	3.3	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	263	154	796	0.330	261	0.5	6.902	A
2	351	156	782	0.448	348	0.8	8.545	A
3	384	167	773	0.497	380	1.0	9.346	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	314	185	778	0.403	313	0.7	7.959	A
2	419	187	763	0.549	417	1.2	10.766	B
3	458	201	753	0.609	456	1.6	12.396	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	384	225	755	0.509	383	1.0	9.925	A
2	513	229	738	0.695	509	2.2	16.065	C
3	562	245	727	0.772	555	3.2	20.780	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	384	228	754	0.510	384	1.1	10.037	B
2	513	230	737	0.696	513	2.3	16.616	C
3	562	247	726	0.774	561	3.3	22.252	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	314	189	776	0.404	315	0.7	8.070	A
2	419	189	762	0.549	423	1.3	11.151	B
3	458	203	751	0.610	465	1.7	13.234	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	263	157	795	0.331	264	0.5	6.994	A
2	351	158	781	0.449	353	0.9	8.767	A
3	384	169	771	0.498	386	1.0	9.694	A

2029, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	19.89	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	530	100.000
2		✓	375	100.000
3		✓	497	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	249	281
	2	175	0	200
	3	226	271	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	1	0
	2	2	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.82	27.25	4.2	D
2	0.60	13.18	1.5	B
3	0.72	17.10	2.5	C

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	399	202	768	0.519	395	1.1	9.578	A
2	282	209	750	0.376	280	0.6	7.732	A
3	374	131	794	0.471	371	0.9	8.477	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	476	243	745	0.640	474	1.7	13.216	B
2	337	251	725	0.465	336	0.9	9.376	A
3	447	157	779	0.574	445	1.3	10.785	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	584	296	714	0.817	575	3.9	24.519	C
2	413	305	692	0.597	411	1.5	12.865	B
3	547	192	758	0.722	543	2.5	16.436	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	584	298	713	0.819	582	4.2	27.251	D
2	413	309	690	0.599	413	1.5	13.180	B
3	547	193	758	0.722	547	2.5	17.103	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	476	246	743	0.641	486	1.9	14.543	B
2	337	258	721	0.468	339	0.9	9.639	A
3	447	158	778	0.574	451	1.4	11.233	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	399	205	767	0.520	402	1.1	10.000	A
2	282	213	748	0.378	283	0.6	7.889	A
3	374	132	793	0.472	376	0.9	8.714	A

2029 + COM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	17.54	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	349	100.000
2		✓	467	100.000
3		✓	517	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	140	209
	2	224	0	243
	3	305	212	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	**2**	**3**
From	**1**	0	3	3
	2	5	0	3
	3	1	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.51	10.12	1.1	B
2	0.70	16.70	2.3	C
3	0.78	23.30	3.5	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	263	158	794	0.331	261	0.5	6.927	A
2	352	156	782	0.449	348	0.8	8.560	A
3	389	167	773	0.504	385	1.0	9.469	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	314	190	776	0.405	313	0.7	8.003	A
2	420	187	763	0.550	418	1.2	10.794	B
3	465	201	753	0.617	462	1.6	12.654	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	384	231	752	0.511	383	1.1	10.008	B
2	514	229	738	0.697	510	2.3	16.135	C
3	569	245	727	0.783	562	3.4	21.606	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	384	233	750	0.512	384	1.1	10.124	B
2	514	230	737	0.697	514	2.3	16.696	C
3	569	247	726	0.784	569	3.5	23.297	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	314	194	773	0.406	315	0.7	8.119	A
2	420	189	762	0.551	424	1.3	11.181	B
3	465	203	751	0.619	472	1.7	13.590	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	263	161	792	0.332	264	0.5	7.024	A
2	352	158	781	0.450	353	0.9	8.783	A
3	389	169	771	0.505	392	1.1	9.838	A

2029 + COM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	20.38	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	532	100.000
2		✓	379	100.000
3		✓	501	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	249	283
	2	175	0	204
	3	227	274	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	1	0
	2	2	0	1
	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.82	28.07	4.3	D
2	0.61	13.45	1.5	B
3	0.73	17.46	2.6	C

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	401	204	767	0.522	396	1.1	9.647	A
2	285	211	749	0.381	283	0.6	7.794	A
3	377	131	794	0.475	374	0.9	8.534	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	478	245	743	0.643	476	1.7	13.372	B
2	341	253	723	0.471	340	0.9	9.488	A
3	450	157	779	0.578	449	1.3	10.899	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	586	299	712	0.823	577	4.0	25.106	D
2	417	307	691	0.604	415	1.5	13.116	B
3	552	192	758	0.727	547	2.5	16.744	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	586	302	711	0.824	585	4.3	28.065	D
2	417	311	688	0.606	417	1.5	13.454	B
3	552	193	758	0.728	551	2.6	17.460	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	478	249	741	0.645	488	1.9	14.787	B
2	341	260	719	0.474	343	0.9	9.766	A
3	450	158	778	0.579	455	1.4	11.372	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	401	207	765	0.523	404	1.1	10.085	B
2	285	215	747	0.382	287	0.6	7.958	A
3	377	132	793	0.475	379	0.9	8.780	A

2029 + COM + PROPOSED DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	17.64	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	350	100.000
2		✓	468	100.000
3		✓	524	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	140	210
	2	224	0	244
	3	307	217	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	1	0
	2	2	0	1

	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.52	9.98	1.1	A
2	0.70	16.43	2.3	C
3	0.79	23.84	3.7	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	263	162	792	0.333	262	0.5	6.792	A
2	352	157	782	0.451	349	0.8	8.381	A
3	394	167	773	0.510	390	1.0	9.357	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	315	194	773	0.407	314	0.7	7.860	A
2	421	188	763	0.552	419	1.2	10.581	B
3	471	201	753	0.626	469	1.6	12.605	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	385	236	749	0.515	384	1.0	9.865	A
2	515	230	737	0.699	511	2.2	15.878	C
3	577	245	727	0.794	570	3.5	21.967	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	385	239	747	0.516	385	1.1	9.985	A
2	515	231	737	0.699	515	2.3	16.430	C
3	577	247	726	0.795	576	3.7	23.836	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	315	198	771	0.408	316	0.7	7.977	A
2	421	190	762	0.552	425	1.3	10.960	B
3	471	203	751	0.627	479	1.7	13.603	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	263	164	790	0.333	264	0.5	6.882	A
2	352	159	781	0.451	354	0.8	8.597	A

3	394	169	771	0.511	397	1.1	9.729	A

2029 + COM + PROPOSED DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	20.72	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	533	100.000
2		✓	384	100.000
3		✓	504	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	249	284
	2	175	0	209
	3	228	276	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	1	0
	2	2	0	1

	3	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.83	28.55	4.4	D
2	0.61	13.76	1.6	B
3	0.73	17.74	2.7	C

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	401	206	766	0.524	397	1.1	9.690	A
2	289	212	749	0.386	287	0.6	7.863	A
3	379	131	794	0.478	376	0.9	8.577	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	479	247	742	0.646	476	1.8	13.465	B
2	345	254	723	0.478	344	0.9	9.612	A
3	453	157	779	0.582	451	1.4	10.985	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	587	301	711	0.826	577	4.1	25.453	D
2	423	308	690	0.613	420	1.5	13.398	B
3	555	192	758	0.732	550	2.6	16.983	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	587	304	709	0.827	586	4.4	28.554	D
2	423	312	688	0.615	423	1.6	13.764	B
3	555	193	758	0.732	555	2.7	17.737	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	479	251	740	0.647	489	1.9	14.937	B
2	345	261	719	0.480	348	1.0	9.909	A
3	453	158	778	0.582	458	1.4	11.478	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	401	209	764	0.525	404	1.1	10.134	B
2	289	215	746	0.387	290	0.7	8.034	A

3	379	132	793	0.478	381	0.9	8.831	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk

Filename: Junction 5 London Road-Debden Road- High Street mini-roundabout.j9
Path: P:\Eastern\1031-1040\1033 Chase New Homes\1033.0002 Mount Pleasant Road, Saffron Walden\03 Technical\TPL\Modelling\Junction 5 London Road- Debden Road- High Street Mini-Roundabout
Report generation date: 24/05/2024 09:11:10

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2023							
Arm 1	2.9	16.93	0.74	C	14.6	65.64	0.97	F
Arm 2	3.8	36.72	0.81	E	1.0	14.85	0.51	B
Arm 3	2.3	18.05	0.69	C	1.8	13.41	0.64	B
	2029							
Arm 1	3.6	19.77	0.78	C	24.8	100.56	1.02	F
Arm 2	5.5	51.62	0.87	F	1.2	16.09	0.54	C
Arm 3	2.7	21.10	0.73	C	2.1	15.11	0.68	C
	2029 + COM							
Arm 1	3.7	20.34	0.79	C	31.6	121.68	1.04	F
Arm 2	7.3	65.79	0.91	F	1.3	16.60	0.56	C
Arm 3	2.9	22.52	0.74	C	2.1	15.57	0.69	C
	2029 + COM + PROPOSED DEV							
Arm 1	3.7	20.23	0.79	C	37.8	140.44	1.06	F
Arm 2	10.1	85.27	0.95	F	1.3	16.50	0.57	C
Arm 3	3.0	22.83	0.76	C	2.2	15.74	0.69	C

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

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

File summary

File Description

Title	(untitled)

Location	
Site number	
Date	13/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			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	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2029	AM	ONE HOUR	07:45	09:15	15
D4	2029	PM	ONE HOUR	16:45	18:15	15
D5	2029 + COM	AM	ONE HOUR	07:45	09:15	15
D6	2029 + COM	PM	ONE HOUR	16:45	18:15	15
D7	2029 + COM + PROPOSED DEV	AM	ONE HOUR	07:45	09:15	15
D8	2029 + COM + PROPOSED DEV	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	22.46	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	London Road North	
2	Debden Road South	
3	London Road West	

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	3.00	3.00	3.00	0.0	14.00	12.00	0.0	
2	3.00	3.00	3.50	2.5	9.00	5.50	0.0	
3	3.00	3.00	3.00	0.0	17.00	17.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.596	904
2	0.602	771
3	0.658	897

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	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	584	100.000
2		✓	356	100.000
3		✓	421	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	154	430
	2	309	0	47
	3	362	59	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	4
	3	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.74	16.93	2.9	C
2	0.81	36.72	3.8	E
3	0.69	18.05	2.3	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	440	44	877	0.501	436	1.0	8.479	A
2	268	321	578	0.463	265	0.8	11.416	B
3	317	230	745	0.425	314	0.8	8.770	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	525	53	872	0.602	523	1.5	10.763	B
2	320	385	540	0.593	318	1.4	16.148	C
3	378	276	715	0.529	377	1.2	11.215	B

08:15 - 08:30

	Total Demand	Circulating flow	Capacity		Throughput	End queue		

Arm	(PCU/hr)	(PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(PCU)	Delay (s)	LOS
1	643	64	865	0.743	638	2.8	16.247	C
2	392	470	489	0.802	384	3.5	32.190	D
3	464	333	677	0.684	459	2.2	17.167	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	643	65	865	0.743	643	2.9	16.933	C
2	392	473	487	0.806	391	3.8	36.722	E
3	464	339	673	0.688	463	2.3	18.053	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	525	54	872	0.602	530	1.6	11.236	B
2	320	390	536	0.597	329	1.6	18.119	C
3	378	285	709	0.534	383	1.2	11.821	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	440	45	877	0.501	442	1.1	8.735	A
2	268	325	575	0.466	271	0.9	11.970	B
3	317	235	742	0.427	319	0.8	9.040	A

2023, 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 3 have 83% 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	untitled	Mini-roundabout	1, 2, 3	41.38	E

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	763	100.000
2		✓	234	100.000
3		✓	440	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	356	407
	2	195	0	39
	3	387	53	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3

From	1	0	2	2
	2	3	0	0
	3	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.97	65.64	14.6	F
2	0.51	14.85	1.0	B
3	0.64	13.41	1.8	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	574	40	880	0.653	567	1.8	11.482	B
2	176	302	589	0.299	174	0.4	8.859	A
3	331	145	801	0.414	328	0.7	7.661	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	686	47	875	0.784	680	3.4	18.200	C
2	210	363	553	0.380	210	0.6	10.717	B
3	396	175	782	0.506	394	1.0	9.367	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	840	58	869	0.967	808	11.4	45.306	E
2	258	431	512	0.503	256	1.0	14.332	B
3	484	213	756	0.641	482	1.7	13.117	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	840	58	869	0.967	827	14.6	65.641	F
2	258	441	506	0.509	257	1.0	14.850	B
3	484	215	755	0.641	484	1.8	13.409	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	686	48	875	0.784	728	4.1	29.974	D
2	210	388	538	0.391	212	0.7	11.377	B
3	396	177	780	0.507	398	1.1	9.598	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	574	40	880	0.653	583	2.0	12.699	B
2	176	311	584	0.302	177	0.4	9.081	A
3	331	148	799	0.414	333	0.7	7.820	A

2029, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	28.51	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	612	100.000
2		✓	373	100.000
3		✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	161	451
	2	323	0	50
	3	379	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	4
	3	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.78	19.77	3.6	C
2	0.87	51.62	5.5	F
3	0.73	21.10	2.7	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	461	46	876	0.526	456	1.1	8.914	A
2	281	336	569	0.494	277	1.0	12.242	B
3	332	240	739	0.449	329	0.8	9.219	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	550	55	870	0.632	548	1.7	11.624	B
2	335	404	528	0.635	332	1.7	18.207	C
3	396	288	707	0.561	395	1.3	12.119	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	674	68	863	0.781	667	3.4	18.634	C
2	411	492	475	0.864	398	4.8	41.462	E
3	486	345	670	0.725	480	2.6	19.610	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	674	68	863	0.781	673	3.6	19.770	C
2	411	496	473	0.869	408	5.5	51.620	F
3	486	353	664	0.731	485	2.7	21.104	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	550	56	870	0.632	557	1.9	12.330	B
2	335	410	524	0.640	350	1.9	22.199	C
3	396	303	697	0.569	402	1.4	13.105	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	461	47	876	0.526	463	1.2	9.234	A
2	281	342	566	0.496	284	1.0	13.010	B
3	332	246	735	0.452	334	0.9	9.569	A

2029, 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 3 have 83% 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	untitled	Mini-roundabout	1, 2, 3	60.63	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	800	100.000
2		✓	245	100.000
3		✓	462	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	373	427
	2	204	0	41
	3	407	55	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3

From	1	0	2	2
	2	3	0	0
	3	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	1.02	100.56	24.8	F
2	0.54	16.09	1.2	C
3	0.68	15.11	2.1	C

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	602	41	879	0.685	594	2.1	12.529	B
2	184	317	581	0.318	183	0.5	9.228	A
3	348	152	797	0.437	345	0.8	8.004	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	719	49	874	0.823	711	4.2	21.415	C
2	220	379	543	0.406	219	0.7	11.371	B
3	415	183	776	0.535	414	1.1	9.999	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	881	60	868	1.015	830	17.0	60.131	F
2	270	443	505	0.534	268	1.1	15.456	C
3	509	223	750	0.678	505	2.0	14.658	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	881	61	867	1.015	849	24.8	100.555	F
2	270	453	498	0.541	270	1.2	16.094	C
3	509	224	749	0.679	508	2.1	15.106	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	719	50	874	0.823	796	5.7	58.946	F
2	220	425	516	0.427	222	0.8	12.624	B
3	415	185	775	0.536	419	1.2	10.323	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	602	42	879	0.685	616	2.3	14.618	B
2	184	329	574	0.322	186	0.5	9.539	A
3	348	155	795	0.438	349	0.8	8.202	A

2029 + COM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	33.27	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	617	100.000
2		✓	391	100.000
3		✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	166	451
	2	341	0	50
	3	379	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	5
	2	0	0	4
	3	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.79	20.34	3.7	C
2	0.91	65.79	7.3	F
3	0.74	22.52	2.9	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	465	46	876	0.530	460	1.2	8.988	A
2	294	336	569	0.517	290	1.0	12.793	B
3	332	253	730	0.455	329	0.9	9.411	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	555	55	870	0.637	552	1.8	11.778	B
2	352	404	528	0.665	348	1.9	19.700	C
3	396	304	697	0.569	394	1.4	12.522	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	679	67	863	0.787	672	3.5	19.094	C
2	430	491	476	0.905	414	6.0	49.024	E
3	486	361	659	0.737	480	2.7	20.656	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	679	68	863	0.787	679	3.7	20.336	C
2	430	496	473	0.911	425	7.3	65.790	F
3	486	371	652	0.744	485	2.9	22.520	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	555	57	870	0.638	562	1.9	12.540	B
2	352	411	524	0.671	372	2.2	26.418	D
3	396	324	683	0.580	402	1.5	13.817	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	465	47	876	0.531	467	1.2	9.322	A
2	294	342	566	0.520	299	1.1	13.749	B
3	332	260	725	0.458	334	0.9	9.812	A

2029 + COM, 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 3 have 83% 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	untitled	Mini-roundabout	1, 2, 3	72.29	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	818	100.000
2		✓	255	100.000
3		✓	462	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	391	427
	2	214	0	41
	3	407	55	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3

From	1	0	2	2
	2	3	0	0
	3	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	1.04	121.68	31.6	F
2	0.56	16.60	1.3	C
3	0.69	15.57	2.1	C

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	616	41	879	0.701	607	2.3	13.084	B
2	192	317	581	0.331	190	0.5	9.398	A
3	348	159	792	0.439	345	0.8	8.091	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	735	49	874	0.841	726	4.7	23.284	C
2	229	379	543	0.422	228	0.7	11.679	B
3	415	192	770	0.539	414	1.2	10.162	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	901	60	868	1.038	838	20.4	68.521	F
2	281	437	508	0.553	279	1.2	15.952	C
3	509	234	743	0.685	505	2.1	15.075	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	901	61	867	1.038	856	31.6	121.676	F
2	281	447	502	0.559	281	1.3	16.604	C
3	509	235	742	0.686	508	2.1	15.570	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	735	50	874	0.842	833	7.3	85.248	F
2	229	435	510	0.450	231	0.9	13.309	B
3	415	194	769	0.540	419	1.2	10.507	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS

1	616	42	879	0.701	635	2.5	16.106	C
2	192	331	572	0.336	193	0.5	9.781	A
3	348	162	790	0.440	349	0.8	8.298	A

2029 + COM + PROPOSED DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	39.06	E

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	621	100.000
2		✓	408	100.000
3		✓	441	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	170	451
	2	358	0	50
	3	379	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	2	2
	2	3	0	0

	3	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.79	20.23	3.7	C
2	0.95	85.27	10.1	F
3	0.76	22.83	3.0	C

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	468	46	876	0.534	463	1.1	8.797	A
2	307	336	569	0.540	303	1.2	13.641	B
3	332	265	722	0.460	329	0.8	9.182	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	558	55	870	0.641	556	1.8	11.575	B
2	367	404	528	0.694	363	2.2	21.776	C
3	396	318	687	0.577	394	1.3	12.356	B

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	684	67	863	0.792	677	3.5	18.956	C
2	449	491	476	0.945	427	7.8	58.736	F
3	486	374	650	0.747	480	2.7	20.716	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	684	68	863	0.792	683	3.7	20.229	C
2	449	496	473	0.950	440	10.1	85.271	F
3	486	386	642	0.756	485	3.0	22.829	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	558	57	870	0.642	566	1.9	12.334	B
2	367	411	524	0.700	397	2.6	34.070	D
3	396	348	668	0.594	402	1.5	13.990	B

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	468	47	876	0.534	470	1.2	9.123	A
2	307	342	566	0.543	313	1.3	14.886	B

3	332	274	716	0.464	335	0.9	9.605	A

2029 + COM + PROPOSED 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 3 have 83% of the total flow for the roundabout for one or more time segments]
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	82.58	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	833	100.000
2		✓	262	100.000
3		✓	462	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	406	427
	2	221	0	41
	3	407	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	0
	2	0	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	1.06	140.44	37.8	F
2	0.57	16.50	1.3	C
3	0.69	15.74	2.2	C

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	627	41	879	0.713	618	2.4	13.332	B
2	197	317	581	0.340	195	0.5	9.291	A
3	348	165	788	0.441	345	0.8	8.062	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	749	49	874	0.857	738	5.1	24.615	C
2	236	378	544	0.433	235	0.7	11.611	B
3	415	198	766	0.542	414	1.2	10.166	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	917	60	868	1.057	844	23.5	75.501	F
2	288	432	511	0.564	286	1.2	15.882	C
3	509	242	738	0.690	505	2.1	15.217	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	917	61	867	1.057	860	37.8	140.439	F
2	288	441	506	0.570	288	1.3	16.497	C
3	509	243	737	0.691	508	2.2	15.738	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	749	50	874	0.857	851	12.2	112.176	F
2	236	436	509	0.463	237	0.9	13.337	B
3	415	200	765	0.543	419	1.2	10.522	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	627	42	879	0.714	665	2.6	19.564	C
2	197	341	566	0.348	199	0.5	9.835	A
3	348	168	786	0.442	349	0.8	8.272	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947

Filename: Junction 6 London Road-Borough Lane Mini-Roundabout.j9
Path: P:\Eastern\1031-1040\1033 Chase New Homes\1033.0002 Mount Pleasant Road, Saffron Walden\03 Technical\TPL\Modelling\Junction 6 London Road-Borough Lane Mini-Roundabout
Report generation date: 12/01/2024 14:41:29

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2023							
Arm 1	1.5	10.59	0.59	B	1.6	11.22	0.61	B
Arm 2	0.9	12.03	0.48	B	0.7	10.56	0.42	B
Arm 3	1.9	11.56	0.65	B	2.3	12.63	0.70	B
	2029							
Arm 1	1.7	11.52	0.62	B	1.8	12.43	0.65	B
Arm 2	1.1	13.19	0.51	B	0.8	11.46	0.45	B
Arm 3	2.2	12.69	0.68	B	2.7	14.25	0.73	B
	2029 + DEV							
Arm 1	1.7	11.57	0.62	B	1.9	12.71	0.65	B
Arm 2	1.1	13.79	0.53	B	0.9	11.66	0.46	B
Arm 3	2.2	12.78	0.69	B	2.8	14.88	0.74	B

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	13/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			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	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2029	AM	ONE HOUR	07:45	09:15	15
D4	2029	PM	ONE HOUR	16:45	18:15	15
D5	2029 + DEV	AM	ONE HOUR	07:45	09:15	15
D6	2029 + DEV	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	11.30	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	London Road North	
2	Borough Lane South	
3	London Road West	

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	3.00	3.00	3.50	1.0	7.00	5.00	0.0	
2	3.00	3.00	4.50	2.0	7.50	5.50	0.0	
3	3.00	3.00	3.00	0.0	13.00	13.00	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.597	965
2	0.607	888
3	0.599	955

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	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	465	100.000
2		✓	254	100.000
3		✓	556	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	14	451
	2	24	0	230
	3	408	148	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	5
	2	0	0	3
	3	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.59	10.59	1.5	B
2	0.48	12.03	0.9	B
3	0.65	11.56	1.9	B

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	350	111	899	0.389	347	0.7	6.807	A
2	191	337	684	0.280	190	0.4	7.459	A
3	419	18	944	0.443	415	0.8	7.113	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	418	133	886	0.472	417	0.9	8.028	A
2	228	404	643	0.355	228	0.6	8.893	A
3	500	22	942	0.530	498	1.2	8.505	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	512	162	868	0.590	510	1.5	10.461	B
2	280	494	588	0.475	278	0.9	11.877	B
3	612	26	939	0.652	609	1.9	11.367	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	512	163	868	0.590	512	1.5	10.594	B
2	280	496	587	0.476	280	0.9	12.026	B
3	612	26	939	0.652	612	1.9	11.559	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	418	134	885	0.472	420	1.0	8.150	A
2	228	408	641	0.356	230	0.6	9.021	A
3	500	22	942	0.531	503	1.2	8.675	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	350	112	898	0.390	351	0.7	6.909	A
2	191	341	682	0.281	192	0.4	7.564	A
3	419	18	944	0.443	420	0.8	7.242	A

2023, 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 3 have 82% 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	untitled	Mini-roundabout	1, 2, 3	11.76	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	466	100.000
2		✓	226	100.000
3		✓	602	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	19	447
	2	9	0	217
	3	411	191	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	2
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.61	11.22	1.6	B
2	0.42	10.56	0.7	B
3	0.70	12.63	2.3	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	351	143	880	0.399	348	0.7	6.864	A
2	170	334	686	0.248	169	0.3	6.950	A
3	453	7	951	0.477	450	0.9	7.176	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	419	171	863	0.485	418	0.9	8.220	A
2	203	401	645	0.315	203	0.5	8.132	A
3	541	8	950	0.570	540	1.3	8.790	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	513	209	840	0.611	511	1.6	11.047	B
2	249	490	591	0.421	248	0.7	10.458	B
3	663	10	949	0.698	659	2.2	12.331	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	513	210	840	0.611	513	1.6	11.223	B
2	249	492	590	0.422	249	0.7	10.562	B
3	663	10	949	0.698	663	2.3	12.627	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	419	173	862	0.486	421	1.0	8.370	A
2	203	404	643	0.316	204	0.5	8.223	A
3	541	8	950	0.570	545	1.4	9.021	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	351	144	879	0.399	352	0.7	6.979	A
2	170	338	683	0.249	171	0.3	7.028	A
3	453	7	951	0.477	455	0.9	7.333	A

2029, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	12.36	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	487	100.000
2		✓	266	100.000
3		✓	582	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	15	472
	2	25	0	241
	3	427	155	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	5
	2	0	0	3
	3	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.62	11.52	1.7	B
2	0.51	13.19	1.1	B
3	0.68	12.69	2.2	B

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	367	116	896	0.409	364	0.7	7.052	A
2	200	353	674	0.297	199	0.4	7.745	A
3	438	19	944	0.464	435	0.9	7.383	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	438	139	882	0.496	437	1.0	8.449	A
2	239	423	631	0.379	238	0.6	9.390	A
3	523	22	942	0.556	522	1.3	8.981	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	536	170	864	0.621	534	1.7	11.337	B
2	293	517	574	0.510	291	1.0	12.978	B
3	641	27	939	0.683	637	2.2	12.411	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	536	171	863	0.621	536	1.7	11.523	B
2	293	520	573	0.511	293	1.1	13.193	B
3	641	28	939	0.683	641	2.2	12.686	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	438	140	881	0.497	440	1.1	8.606	A
2	239	427	629	0.380	241	0.6	9.561	A
3	523	23	942	0.556	527	1.3	9.204	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	367	117	895	0.410	368	0.7	7.173	A
2	200	357	672	0.298	201	0.4	7.867	A
3	438	19	944	0.464	440	0.9	7.538	A

2029, 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 3 have 82% 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	untitled	Mini-roundabout	1, 2, 3	13.11	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	489	100.000
2		✓	237	100.000
3		✓	632	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	20	469
	2	9	0	228
	3	431	201	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	2
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.65	12.43	1.8	B
2	0.45	11.46	0.8	B
3	0.73	14.25	2.7	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	368	150	876	0.420	365	0.7	7.150	A
2	178	350	676	0.264	177	0.4	7.199	A
3	476	7	951	0.500	472	1.0	7.502	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	440	180	858	0.513	438	1.1	8.721	A
2	213	420	633	0.337	212	0.5	8.546	A
3	568	8	950	0.598	566	1.5	9.390	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	538	220	834	0.646	535	1.8	12.169	B
2	261	514	577	0.453	260	0.8	11.316	B
3	696	10	949	0.733	691	2.6	13.796	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	538	221	833	0.646	538	1.8	12.427	B
2	261	516	575	0.454	261	0.8	11.460	B
3	696	10	949	0.733	696	2.7	14.251	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	440	182	856	0.513	443	1.1	8.925	A
2	213	424	631	0.338	214	0.5	8.672	A
3	568	8	950	0.598	573	1.5	9.715	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	368	152	874	0.421	370	0.8	7.288	A
2	178	354	673	0.265	179	0.4	7.293	A
3	476	7	951	0.500	478	1.0	7.694	A

2029 + DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	12.55	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2029 + 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 (PCU/hr)	Scaling Factor (%)
1		✓	487	100.000
2		✓	277	100.000
3		✓	584	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	15	472
	2	25	0	252
	3	427	157	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	5
	2	0	0	3
	3	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.62	11.57	1.7	B
2	0.53	13.79	1.1	B
3	0.69	12.78	2.2	B

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	367	117	895	0.410	364	0.7	7.064	A
2	209	353	674	0.309	207	0.5	7.879	A
3	440	19	944	0.466	436	0.9	7.405	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	438	141	881	0.497	437	1.0	8.465	A
2	249	423	631	0.394	248	0.7	9.628	A
3	525	22	942	0.558	523	1.3	9.017	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	536	172	863	0.622	534	1.7	11.380	B
2	305	517	574	0.531	303	1.1	13.536	B
3	643	27	939	0.685	639	2.2	12.498	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	536	173	862	0.622	536	1.7	11.569	B
2	305	520	573	0.532	305	1.1	13.788	B
3	643	28	939	0.685	643	2.2	12.779	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	438	142	880	0.497	440	1.1	8.628	A
2	249	427	629	0.396	251	0.7	9.823	A
3	525	23	942	0.558	529	1.4	9.246	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	367	119	894	0.410	368	0.7	7.188	A
2	209	357	672	0.310	209	0.5	8.011	A
3	440	19	944	0.466	441	0.9	7.563	A

2029 + 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 3 have 82% 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	untitled	Mini-roundabout	1, 2, 3	13.54	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2029 + 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 (PCU/hr)	Scaling Factor (%)
1		✓	489	100.000
2		✓	242	100.000
3		✓	642	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	20	469
	2	9	0	233
	3	431	211	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	0	2
	2	0	0	0
	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.65	12.71	1.9	B
2	0.46	11.66	0.9	B
3	0.74	14.88	2.8	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	368	158	871	0.423	365	0.7	7.210	A
2	182	350	676	0.270	181	0.4	7.254	A
3	483	7	951	0.508	479	1.0	7.617	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	440	189	852	0.516	438	1.1	8.832	A
2	218	420	633	0.344	217	0.5	8.637	A
3	577	8	950	0.607	575	1.5	9.608	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	538	231	827	0.651	535	1.8	12.427	B
2	266	513	577	0.462	265	0.8	11.510	B
3	707	10	949	0.745	702	2.8	14.357	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	538	232	827	0.651	538	1.9	12.711	B
2	266	516	575	0.463	266	0.9	11.662	B
3	707	10	949	0.745	707	2.8	14.885	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	440	191	851	0.517	443	1.1	9.052	A
2	218	425	631	0.345	219	0.5	8.770	A
3	577	8	950	0.607	582	1.6	9.974	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	368	160	870	0.423	370	0.8	7.355	A
2	182	354	673	0.271	183	0.4	7.353	A
3	483	7	951	0.508	485	1.1	7.820	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947

Filename: Junction 7 London Road- Newport Road- Audley End Road mini-roundabout.j9
Path: P:\Eastern\1031-1040\1033 Chase New Homes\1033.0002 Mount Pleasant Road, Saffron Walden\03 Technical\TPL\Modelling\Junction 7 London Road- Newport Road- Audley End Road Mini-Roundabout
Report generation date: 24/05/2024 09:23:35

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2023							
Arm 1	5.6	28.18	0.85	D	4.8	24.70	0.84	C
Arm 2	10.0	94.20	0.95	F	3.1	31.60	0.77	D
Arm 3	0.9	8.29	0.46	A	1.1	9.32	0.54	A
	2029							
Arm 1	7.7	37.33	0.90	E	6.5	32.53	0.88	D
Arm 2	16.8	143.98	1.02	F	4.1	40.72	0.82	E
Arm 3	1.0	8.69	0.49	A	1.3	10.19	0.57	B
	2029 + COM							
Arm 1	8.7	41.76	0.91	E	6.9	34.28	0.89	D
Arm 2	18.3	154.57	1.04	F	4.6	44.39	0.84	E
Arm 3	1.0	8.73	0.49	A	1.4	10.48	0.58	B
	2029 + COM + PROPOSED DEV							
Arm 1	9.8	46.55	0.93	E	7.3	35.85	0.89	E
Arm 2	19.9	165.63	1.05	F	5.0	48.30	0.85	E
Arm 3	1.0	8.75	0.49	A	1.4	10.80	0.59	B

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

File summary

File Description

Title	(untitled)
Location	

Site number	
Date	13/10/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			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	2023	AM	ONE HOUR	07:45	09:15	15
D2	2023	PM	ONE HOUR	16:45	18:15	15
D3	2029	AM	ONE HOUR	07:45	09:15	15
D4	2029	PM	ONE HOUR	16:45	18:15	15
D5	2029 + COM	AM	ONE HOUR	07:45	09:15	15
D6	2029 + COM	PM	ONE HOUR	16:45	18:15	15
D7	2029 + COM + PROPOSED DEV	AM	ONE HOUR	07:45	09:15	15
D8	2029 + COM + PROPOSED DEV	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2023, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	40.41	E

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	London Road North	
2	Newport Road South	
3	Audley End Road West	

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	3.00	3.00	4.00	2.0	12.50	11.50	0.0	
2	3.00	3.00	3.00	0.0	11.00	8.00	0.0	
3	3.00	3.00	3.00	0.0	18.50	18.50	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.609	930
2	0.591	680
3	0.734	1060

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	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	685	100.000
2		✓	367	100.000
3		✓	354	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	292	393
	2	277	0	90
	3	283	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	8	2
	2	8	0	0
	3	3	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.85	28.18	5.6	D
2	0.95	94.20	10.0	F
3	0.46	8.29	0.9	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	516	53	898	0.575	510	1.4	9.580	A
2	276	293	507	0.545	271	1.2	15.898	C
3	267	205	910	0.293	265	0.4	5.797	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	616	64	891	0.691	612	2.2	13.323	B
2	330	351	472	0.699	326	2.3	25.338	D
3	318	246	880	0.362	318	0.6	6.662	A

08:15 - 08:30

	Total Demand	Circulating flow	Capacity		Throughput	End queue		

Arm	(PCU/hr)	(PCU/hr)	(PCU/hr)	RFC	(PCU/hr)	(PCU)	Delay (s)	LOS
1	754	78	882	0.855	742	5.2	24.932	C
2	404	426	428	0.944	383	7.6	64.696	F
3	390	289	848	0.459	389	0.9	8.136	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	754	78	882	0.855	753	5.6	28.180	D
2	404	432	425	0.952	395	10.0	94.201	F
3	390	298	842	0.463	390	0.9	8.293	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	616	64	891	0.691	628	2.4	14.948	B
2	330	361	467	0.707	359	2.8	41.647	E
3	318	271	862	0.369	319	0.6	6.929	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	516	54	897	0.575	520	1.4	10.067	B
2	276	298	503	0.549	282	1.3	17.669	C
3	267	213	904	0.295	267	0.4	5.895	A

2023, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	21.92	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023	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 (PCU/hr)	Scaling Factor (%)
1		✓	665	100.000
2		✓	337	100.000
3		✓	406	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	364	301
	2	282	0	55
	3	325	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	2	0
	2	2	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.84	24.70	4.8	C
2	0.77	31.60	3.1	D
3	0.54	9.32	1.1	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	501	61	893	0.561	496	1.3	9.048	A
2	254	224	547	0.464	250	0.9	12.195	B
3	306	209	907	0.337	304	0.5	5.953	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	598	73	886	0.675	595	2.0	12.379	B
2	303	269	521	0.582	301	1.4	16.506	C
3	365	252	875	0.417	364	0.7	7.029	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	732	89	876	0.836	722	4.5	22.349	C
2	371	327	487	0.763	365	2.9	28.706	D
3	447	305	836	0.535	445	1.1	9.170	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	732	89	876	0.836	731	4.8	24.697	C
2	371	331	484	0.766	370	3.1	31.601	D
3	447	310	833	0.537	447	1.1	9.323	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	598	73	885	0.675	608	2.2	13.584	B
2	303	275	517	0.586	309	1.5	18.124	C
3	365	259	870	0.419	367	0.7	7.173	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	501	61	893	0.561	504	1.3	9.448	A
2	254	228	545	0.466	256	0.9	12.776	B
3	306	214	903	0.339	307	0.5	6.046	A

2029, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	57.97	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	717	100.000
2		✓	384	100.000
3		✓	370	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	306	411
	2	290	0	94
	3	296	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	8	2
	2	8	0	0
	3	3	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.90	37.33	7.7	E
2	1.02	143.98	16.8	F
3	0.49	8.69	1.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	540	55	896	0.602	534	1.5	10.211	B
2	289	306	499	0.579	284	1.4	17.292	C
3	279	214	903	0.308	277	0.5	5.969	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	645	66	889	0.725	640	2.6	14.836	B
2	345	367	463	0.746	340	2.8	29.676	D
3	333	257	872	0.381	332	0.6	6.934	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	789	81	880	0.897	772	6.8	30.811	D
2	423	443	418	1.011	389	11.2	85.951	F
3	407	294	845	0.482	406	1.0	8.525	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	789	81	880	0.897	786	7.7	37.325	E
2	423	451	413	1.023	400	16.8	143.981	F
3	407	302	838	0.486	407	1.0	8.693	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	645	67	889	0.725	664	2.9	17.878	C
2	345	380	455	0.759	396	4.0	80.128	F
3	333	299	841	0.396	334	0.7	7.413	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	540	56	896	0.603	545	1.6	10.872	B
2	289	312	495	0.584	299	1.6	20.322	C
3	279	226	895	0.311	279	0.5	6.103	A

2029, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	28.05	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2029	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 (PCU/hr)	Scaling Factor (%)
1		✓	698	100.000
2		✓	354	100.000
3		✓	426	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	382	316
	2	296	0	58
	3	341	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	**2**	**3**
From	**1**	0	2	0
	2	2	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.88	32.53	6.5	D
2	0.82	40.72	4.1	E
3	0.57	10.19	1.3	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	525	64	891	0.590	520	1.4	9.659	A
2	267	235	541	0.493	263	1.0	12.988	B
3	321	220	899	0.357	319	0.5	6.177	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	627	76	883	0.710	624	2.4	13.802	B
2	318	282	513	0.621	316	1.6	18.327	C
3	383	264	866	0.442	382	0.8	7.419	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	769	93	873	0.880	754	5.9	27.697	D
2	390	341	478	0.816	381	3.7	35.005	E
3	469	319	826	0.568	467	1.3	9.961	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	769	94	873	0.880	766	6.5	32.527	D
2	390	347	475	0.821	388	4.1	40.716	E
3	469	325	822	0.571	469	1.3	10.186	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	627	77	883	0.711	643	2.6	16.044	C
2	318	291	508	0.627	328	1.8	21.259	C
3	383	274	859	0.446	385	0.8	7.620	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	525	64	891	0.590	530	1.5	10.206	B
2	267	240	538	0.495	270	1.0	13.792	B
3	321	225	895	0.358	322	0.6	6.292	A

2029 + COM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	62.78	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	729	100.000
2		✓	386	100.000
3		✓	372	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	**2**	**3**
From	**1**	0	313	416
	2	292	0	94
	3	298	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	**2**	**3**
From	**1**	0	8	2
	2	8	0	0
	3	3	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.91	41.76	8.7	E
2	1.04	154.57	18.3	F
3	0.49	8.73	1.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	549	55	896	0.612	542	1.6	10.455	B
2	291	310	497	0.585	285	1.4	17.567	C
3	280	216	902	0.310	278	0.5	5.991	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	655	66	889	0.737	651	2.8	15.453	C
2	347	371	460	0.754	341	2.9	30.588	D
3	334	258	871	0.384	334	0.6	6.972	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	803	81	880	0.912	783	7.6	33.387	D
2	425	447	416	1.023	389	11.9	90.154	F
3	410	294	844	0.485	408	1.0	8.572	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	803	81	880	0.912	798	8.7	41.764	E
2	425	456	411	1.035	399	18.3	154.571	F
3	410	302	839	0.488	410	1.0	8.733	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	655	67	889	0.737	678	3.1	19.367	C
2	347	387	451	0.769	403	4.4	92.138	F
3	334	305	837	0.400	336	0.7	7.500	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	549	56	896	0.613	555	1.7	11.198	B
2	291	316	493	0.590	302	1.6	21.021	C
3	280	228	893	0.314	281	0.5	6.136	A

2029 + COM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	29.85	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2029 + COM	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 (PCU/hr)	Scaling Factor (%)
1		✓	704	100.000
2		✓	360	100.000
3		✓	431	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	385	319
	2	302	0	58
	3	346	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	2	0
	2	2	0	0
	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.89	34.28	6.9	D
2	0.84	44.39	4.6	E
3	0.58	10.48	1.4	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	530	64	891	0.595	524	1.4	9.772	A
2	271	238	539	0.503	267	1.0	13.261	B
3	324	224	896	0.362	322	0.6	6.253	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	633	76	883	0.716	629	2.4	14.074	B
2	324	285	511	0.633	321	1.7	18.958	C
3	387	269	863	0.449	386	0.8	7.545	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	775	93	873	0.888	760	6.2	28.795	D
2	396	344	476	0.832	387	4.1	37.359	E
3	475	324	822	0.577	472	1.3	10.228	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	775	94	873	0.888	772	6.9	34.275	D
2	396	350	473	0.838	394	4.6	44.395	E
3	475	331	817	0.581	474	1.4	10.483	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	633	77	883	0.717	650	2.7	16.593	C
2	324	294	506	0.640	334	1.9	22.500	C
3	387	280	854	0.453	390	0.8	7.776	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	530	64	891	0.595	535	1.5	10.349	B
2	271	242	537	0.505	274	1.1	14.136	B
3	324	230	891	0.364	326	0.6	6.374	A

2029 + COM + PROPOSED DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	67.94	F

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	740	100.000
2		✓	388	100.000
3		✓	373	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	319	421
	2	294	0	94
	3	299	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	8	2
	2	8	0	0

	3	3	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.93	46.55	9.8	E
2	1.05	165.63	19.9	F
3	0.49	8.75	1.0	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	557	55	896	0.622	550	1.7	10.684	B
2	292	313	495	0.591	286	1.5	17.849	C
3	281	217	901	0.312	279	0.5	6.008	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	665	66	889	0.748	660	2.9	16.059	C
2	349	376	458	0.762	343	3.0	31.549	D
3	335	260	870	0.386	335	0.6	6.998	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	815	81	880	0.925	793	8.4	36.007	E
2	427	451	413	1.034	389	12.6	94.506	F
3	411	294	844	0.487	409	1.0	8.597	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	815	81	880	0.926	809	9.8	46.553	E
2	427	460	408	1.048	398	19.9	165.629	F
3	411	302	839	0.490	411	1.0	8.749	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	665	67	889	0.748	691	3.3	21.069	C
2	349	393	447	0.780	409	4.9	105.955	F
3	335	310	833	0.403	336	0.7	7.570	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	557	56	896	0.622	563	1.8	11.518	B
2	292	320	490	0.596	305	1.6	21.861	C

3	281	231	891	0.315	282	0.5	6.165	A

2029 + COM + PROPOSED DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	31.64	D

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2029 + COM + PROPOSED 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 (PCU/hr)	Scaling Factor (%)
1		✓	709	100.000
2		✓	366	100.000
3		✓	436	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	0	388	321
	2	308	0	58
	3	351	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	2	0
	2	2	0	0

	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1	0.89	35.85	7.3	E
2	0.85	48.30	5.0	E
3	0.59	10.80	1.4	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	534	64	891	0.599	528	1.5	9.867	A
2	276	239	538	0.512	271	1.0	13.511	B
3	328	228	893	0.368	326	0.6	6.328	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	637	76	883	0.721	633	2.5	14.307	B
2	329	287	510	0.645	326	1.7	19.572	C
3	392	274	859	0.456	391	0.8	7.677	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	781	93	873	0.894	764	6.5	29.758	D
2	403	346	475	0.848	392	4.4	39.751	E
3	480	330	818	0.587	478	1.4	10.511	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	781	94	873	0.894	778	7.3	35.850	E
2	403	352	472	0.854	401	5.0	48.305	E
3	480	337	813	0.591	480	1.4	10.801	B

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	637	77	883	0.722	655	2.8	17.092	C
2	329	297	504	0.652	341	2.0	23.830	C
3	392	287	850	0.461	394	0.9	7.940	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1	534	64	891	0.599	539	1.6	10.472	B
2	276	244	536	0.514	279	1.1	14.473	B

3	328	235	888	0.370	329	0.6	6.458	A