APPENDIX E **– CYCLE CATCHMENT PLAN**

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Development Site
Ipswich Road Access
Top Street Access
Cycle Isochrone Plan
0 to 2.5km
2.5km to 5km
Clopton
Bredfield
Ufford
Burgh
Grundisburgh
Eyke
Hasketon
Woodbridge
Bromeswell
Tuddenham
Great Bealings
Little Bealings
Playford
Westerfield
Rushmere St Andrew
Martlesham
Kesgrave
Martlesham Heath
Sutton
Waldringfield
Shottisham
Brightwell
Newbourne
Hemley
Bucklesham
Main Road
Woodbridge Road
Ipswich Road
Felixstowe Road
Foxhall Road
bing

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APPENDIX F **– A12 / IPSWICH ROAD – ARCADY OUTPUT**

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Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: A12, Ipswich Road Nov 2015_FS.arc8
Path: P:\Gladman SLS\C14106 Gladman Duke's Park Woodbridge\Hydrock Documents\Transport\Junction Models
Report generation date: 18/11/2015 13:19:19

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2015 Base Flows							
Arm 1	0.60	6.66	0.38	A	0.94	7.63	0.49	A
Arm 2	1.08	2.49	0.52	A	1.03	2.47	0.51	A
Arm 3	1.38	2.93	0.58	A	1.08	2.46	0.52	A
	A1 - 2015 With Development							
Arm 1	0.90	7.88	0.47	A	1.11	8.30	0.53	A
Arm 2	1.12	2.54	0.53	A	1.12	2.58	0.53	A
Arm 3	1.41	2.99	0.59	A	1.13	2.57	0.53	A
	A1 - 2025 Base + Com Flows							
Arm 1	1.65	15.50	0.63	C	2.81	19.73	0.74	C
Arm 2	2.08	3.72	0.68	A	1.88	3.54	0.65	A
Arm 3	2.63	4.56	0.72	A	1.77	3.33	0.64	A
	A1 - 2025 Base + Committed + Development							
Arm 1	2.89	22.86	0.75	C	3.79	24.87	0.79	C
Arm 2	2.18	3.84	0.69	A	2.06	3.76	0.67	A
Arm 3	2.71	4.70	0.73	A	1.88	3.53	0.65	A

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

"D1 - 2015 Base Flows, AM " model duration: 07:45 - 09:15
"D2 - 2015 Base Flows, PM" model duration: 16:45 - 18:15
"D3 - 2025 Base + Com Flows, AM" model duration: 07:45 - 09:15
"D4 - 2025 Base + Com Flows, PM" model duration: 16:45 - 18:15
"D5 - 2015 With Development, AM" model duration: 07:45 - 09:15
"D6 - 2015 With Development, PM" model duration: 16:45 - 18:15
"D7 - 2025 Base + Committed + Development, AM" model duration: 07:45 - 09:15
"D8 - 2025 Base + Committed + Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 18/11/2015 13:19:17

File summary

Title	A12 / Ipswich Road Roundabout
Location	Woodbridge
Site Number	
Date	16/05/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	michaelchau
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2015 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 Base Flows, AM	2015 Base Flows	AM		DIRECT	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			3.08	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT		N/A	100.000
2	DIRECT		N/A	100.000
3	DIRECT		N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	204.000	122.000
	2	364.000	0.000	1197.000
	3	199.000	1496.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.63	0.37
	2	0.23	0.00	0.77
	3	0.12	0.88	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.38	6.66	0.60	A
2	0.52	2.49	1.08	A
3	0.58	2.93	1.38	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	326.00	323.63	1491.17	0.00	870.11	0.375	0.59	6.561	A
2	1561.00	1556.71	121.11	0.00	3009.59	0.519	1.07	2.471	A
3	1695.00	1689.52	363.00	0.00	2923.29	0.580	1.37	2.905	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	326.00	325.97	1495.98	0.00	866.72	0.376	0.60	6.656	A
2	1561.00	1560.99	121.99	0.00	3008.76	0.519	1.07	2.486	A
3	1695.00	1694.98	364.00	0.00	2922.33	0.580	1.38	2.932	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	326.00	325.99	1495.99	0.00	866.71	0.376	0.60	6.657	A
2	1561.00	1561.00	122.00	0.00	3008.75	0.519	1.08	2.486	A
3	1695.00	1694.99	364.00	0.00	2922.33	0.580	1.38	2.932	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	326.00	326.00	1496.00	0.00	866.71	0.376	0.60	6.657	A
2	1561.00	1561.00	122.00	0.00	3008.75	0.519	1.08	2.486	A
3	1695.00	1695.00	364.00	0.00	2922.33	0.580	1.38	2.932	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	326.00	326.00	1496.00	0.00	866.71	0.376	0.60	6.657	A
2	1561.00	1561.00	122.00	0.00	3008.75	0.519	1.08	2.486	A
3	1695.00	1695.00	364.00	0.00	2922.33	0.580	1.38	2.932	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	326.00	326.00	1496.00	0.00	866.71	0.376	0.60	6.657	A
2	1561.00	1561.00	122.00	0.00	3008.75	0.519	1.08	2.486	A
3	1695.00	1695.00	364.00	0.00	2922.33	0.580	1.38	2.932	A

(Default Analysis Set) - 2015 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 Base Flows, PM	2015 Base Flows	PM		DIRECT	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			3.12	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT	✓	N/A	100.000
2	DIRECT	✓	N/A	100.000
3	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	271.000	174.000
	2	243.000	0.000	1260.000
	3	153.000	1425.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.61	0.39
	2	0.16	0.00	0.84
	3	0.10	0.90	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.49	7.63	0.94	A
2	0.51	2.47	1.03	A
3	0.52	2.46	1.08	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.00	441.31	1421.12	0.00	919.38	0.484	0.92	7.475	A
2	1503.00	1498.90	172.56	0.00	2961.09	0.508	1.03	2.455	A
3	1578.00	1573.70	242.34	0.00	3039.10	0.519	1.07	2.449	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.00	444.95	1424.99	0.00	916.66	0.485	0.93	7.631	A
2	1503.00	1502.99	173.98	0.00	2959.74	0.508	1.03	2.470	A
3	1578.00	1577.99	243.00	0.00	3038.47	0.519	1.08	2.464	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.00	444.99	1425.00	0.00	916.66	0.485	0.94	7.631	A
2	1503.00	1503.00	174.00	0.00	2959.73	0.508	1.03	2.470	A
3	1578.00	1578.00	243.00	0.00	3038.47	0.519	1.08	2.464	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.00	444.99	1425.00	0.00	916.66	0.485	0.94	7.631	A
2	1503.00	1503.00	174.00	0.00	2959.73	0.508	1.03	2.470	A
3	1578.00	1578.00	243.00	0.00	3038.47	0.519	1.08	2.464	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.00	445.00	1425.00	0.00	916.66	0.485	0.94	7.631	A
2	1503.00	1503.00	174.00	0.00	2959.73	0.508	1.03	2.470	A
3	1578.00	1578.00	243.00	0.00	3038.47	0.519	1.08	2.464	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	445.00	445.00	1425.00	0.00	916.66	0.485	0.94	7.631	A
2	1503.00	1503.00	174.00	0.00	2959.73	0.508	1.03	2.470	A
3	1578.00	1578.00	243.00	0.00	3038.46	0.519	1.08	2.464	A

(Default Analysis Set) - 2025 Base + Com Flows, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Com Flows, AM	2025 Base + Com Flows	AM		DIRECT	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.13	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT	✓	N/A	100.000
2	DIRECT	✓	N/A	100.000
3	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	242.000	145.000
	2	422.000	0.000	1598.000
	3	230.000	1848.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.63	0.37
	2	0.21	0.00	0.79
	3	0.11	0.89	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.63	15.50	1.65	C
2	0.68	3.72	2.08	A
3	0.72	4.56	2.63	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.00	380.78	1838.81	0.00	625.56	0.619	1.56	14.370	B
2	2020.00	2011.77	142.67	0.00	2989.27	0.676	2.06	3.652	A
3	2078.00	2067.67	420.28	0.00	2868.31	0.724	2.58	4.440	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.00	386.74	1847.90	0.00	619.16	0.625	1.62	15.453	C
2	2020.00	2019.93	144.90	0.00	2987.16	0.676	2.07	3.721	A
3	2078.00	2077.89	421.99	0.00	2866.67	0.725	2.61	4.562	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.00	386.93	1847.97	0.00	619.12	0.625	1.64	15.487	C
2	2020.00	2019.98	144.97	0.00	2987.09	0.676	2.08	3.721	A
3	2078.00	2077.97	422.00	0.00	2866.66	0.725	2.62	4.564	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.00	386.97	1847.98	0.00	619.11	0.625	1.65	15.496	C
2	2020.00	2019.99	144.99	0.00	2987.08	0.676	2.08	3.721	A
3	2078.00	2077.98	422.00	0.00	2866.66	0.725	2.62	4.564	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.00	386.98	1847.99	0.00	619.10	0.625	1.65	15.501	C
2	2020.00	2019.99	144.99	0.00	2987.07	0.676	2.08	3.721	A
3	2078.00	2077.99	422.00	0.00	2866.66	0.725	2.62	4.564	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	387.00	386.99	1847.99	0.00	619.10	0.625	1.65	15.502	C
2	2020.00	2020.00	145.00	0.00	2987.07	0.676	2.08	3.721	A
3	2078.00	2077.99	422.00	0.00	2866.66	0.725	2.63	4.564	A

(Default Analysis Set) - 2025 Base + Com Flows, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Com Flows, PM	2025 Base + Com Flows	PM		DIRECT	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.38	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT	✓	N/A	100.000
2	DIRECT	✓	N/A	100.000
3	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	317.000	203.000
	2	291.000	0.000	1624.000
	3	182.000	1730.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.61	0.39
	2	0.15	0.00	0.85
	3	0.10	0.90	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.74	19.73	2.81	C
2	0.65	3.54	1.88	A
3	0.64	3.33	1.77	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.00	509.65	1723.67	0.00	706.56	0.736	2.59	17.476	C
2	1915.00	1907.58	198.96	0.00	2936.19	0.652	1.85	3.474	A
3	1912.00	1905.00	289.87	0.00	2993.48	0.639	1.75	3.286	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.00	519.44	1729.96	0.00	702.13	0.741	2.73	19.570	C
2	1915.00	1914.94	202.78	0.00	2932.59	0.653	1.87	3.536	A
3	1912.00	1911.96	290.99	0.00	2992.40	0.639	1.76	3.331	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.00	519.83	1729.99	0.00	702.11	0.741	2.77	19.675	C
2	1915.00	1914.98	202.93	0.00	2932.45	0.653	1.87	3.537	A
3	1912.00	1911.99	291.00	0.00	2992.40	0.639	1.76	3.331	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.00	519.91	1729.99	0.00	702.11	0.741	2.79	19.708	C
2	1915.00	1914.99	202.97	0.00	2932.41	0.653	1.88	3.537	A
3	1912.00	1911.99	291.00	0.00	2992.40	0.639	1.77	3.331	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.00	519.95	1730.00	0.00	702.10	0.741	2.81	19.723	C
2	1915.00	1915.00	202.98	0.00	2932.40	0.653	1.88	3.537	A
3	1912.00	1912.00	291.00	0.00	2992.40	0.639	1.77	3.331	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.00	519.97	1730.00	0.00	702.10	0.741	2.81	19.733	C
2	1915.00	1915.00	202.99	0.00	2932.40	0.653	1.88	3.537	A
3	1912.00	1912.00	291.00	0.00	2992.39	0.639	1.77	3.331	A

(Default Analysis Set) - 2015 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, AM	2015 With Development	AM		DIRECT	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			3.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT	✓	N/A	100.000
2	DIRECT	✓	N/A	100.000
3	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	279.000	131.000
	2	387.000	0.000	1197.000
	3	201.000	1496.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.68	0.32
	2	0.24	0.00	0.76
	3	0.12	0.88	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.47	7.88	0.90	A
2	0.53	2.54	1.12	A
3	0.59	2.99	1.41	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.00	406.49	1491.07	0.00	870.18	0.471	0.88	7.708	A
2	1584.00	1579.56	129.88	0.00	3001.32	0.528	1.11	2.525	A
3	1697.00	1691.41	385.91	0.00	2901.30	0.585	1.40	2.962	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.00	409.95	1495.98	0.00	866.73	0.473	0.89	7.880	A
2	1584.00	1583.98	130.98	0.00	3000.28	0.528	1.11	2.541	A
3	1697.00	1696.97	387.00	0.00	2900.26	0.585	1.40	2.991	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.00	409.99	1495.99	0.00	866.71	0.473	0.89	7.882	A
2	1584.00	1584.00	131.00	0.00	3000.27	0.528	1.12	2.541	A
3	1697.00	1696.99	387.00	0.00	2900.25	0.585	1.41	2.991	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.00	409.99	1496.00	0.00	866.71	0.473	0.89	7.882	A
2	1584.00	1584.00	131.00	0.00	3000.27	0.528	1.12	2.541	A
3	1697.00	1697.00	387.00	0.00	2900.25	0.585	1.41	2.991	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.00	410.00	1496.00	0.00	866.71	0.473	0.89	7.882	A
2	1584.00	1584.00	131.00	0.00	3000.27	0.528	1.12	2.541	A
3	1697.00	1697.00	387.00	0.00	2900.25	0.585	1.41	2.991	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	410.00	410.00	1496.00	0.00	866.71	0.473	0.90	7.882	A
2	1584.00	1584.00	131.00	0.00	3000.27	0.528	1.12	2.541	A
3	1697.00	1697.00	387.00	0.00	2900.25	0.585	1.41	2.991	A

(Default Analysis Set) - 2015 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, PM	2015 With Development	PM		DIRECT	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			3.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT	✓	N/A	100.000
2	DIRECT	✓	N/A	100.000
3	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	305.000	178.000
	2	300.000	0.000	1260.000
	3	159.000	1425.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.63	0.37
	2	0.19	0.00	0.81
	3	0.10	0.90	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.53	8.30	1.11	A
2	0.53	2.58	1.12	A
3	0.53	2.57	1.13	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	483.00	478.66	1420.95	0.00	919.50	0.525	1.09	8.089	A
2	1560.00	1555.56	176.40	0.00	2957.46	0.527	1.11	2.559	A
3	1584.00	1579.50	299.15	0.00	2984.58	0.531	1.12	2.553	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	483.00	482.94	1424.99	0.00	916.66	0.527	1.10	8.297	A
2	1560.00	1559.98	177.98	0.00	2955.98	0.528	1.11	2.578	A
3	1584.00	1583.98	300.00	0.00	2983.76	0.531	1.13	2.571	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	483.00	482.98	1425.00	0.00	916.66	0.527	1.11	8.299	A
2	1560.00	1559.99	177.99	0.00	2955.96	0.528	1.12	2.578	A
3	1584.00	1584.00	300.00	0.00	2983.76	0.531	1.13	2.571	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	483.00	482.99	1425.00	0.00	916.66	0.527	1.11	8.301	A
2	1560.00	1560.00	178.00	0.00	2955.96	0.528	1.12	2.578	A
3	1584.00	1584.00	300.00	0.00	2983.76	0.531	1.13	2.571	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	483.00	483.00	1425.00	0.00	916.66	0.527	1.11	8.301	A
2	1560.00	1560.00	178.00	0.00	2955.96	0.528	1.12	2.578	A
3	1584.00	1584.00	300.00	0.00	2983.76	0.531	1.13	2.571	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	483.00	483.00	1425.00	0.00	916.66	0.527	1.11	8.301	A
2	1560.00	1560.00	178.00	0.00	2955.95	0.528	1.12	2.578	A
3	1584.00	1584.00	300.00	0.00	2983.76	0.531	1.13	2.571	A

(Default Analysis Set) - 2025 Base + Committed + Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, AM	2025 Base + Committed + Development	AM		DIRECT	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			6.15	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT	✓	N/A	100.000
2	DIRECT	✓	N/A	100.000
3	DIRECT	✓	N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	308.000	154.000
	2	444.000	0.000	1598.000
	3	232.000	1848.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.67	0.33
	2	0.22	0.00	0.78
	3	0.11	0.89	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.75	22.86	2.89	C
2	0.69	3.84	2.18	A
3	0.73	4.70	2.71	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.00	451.62	1838.55	0.00	625.75	0.738	2.59	19.663	C
2	2042.00	2033.42	150.54	0.00	2981.84	0.685	2.14	3.763	A
3	2080.00	2069.36	442.14	0.00	2847.33	0.731	2.66	4.568	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.00	461.25	1847.89	0.00	619.17	0.746	2.78	22.573	C
2	2042.00	2041.92	153.75	0.00	2978.82	0.686	2.16	3.842	A
3	2080.00	2079.88	443.98	0.00	2845.56	0.731	2.69	4.700	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.00	461.78	1847.97	0.00	619.12	0.746	2.84	22.759	C
2	2042.00	2041.98	153.93	0.00	2978.65	0.686	2.17	3.843	A
3	2080.00	2079.96	443.99	0.00	2845.55	0.731	2.70	4.702	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.00	461.89	1847.98	0.00	619.11	0.746	2.86	22.815	C
2	2042.00	2041.99	153.96	0.00	2978.62	0.686	2.17	3.843	A
3	2080.00	2079.98	444.00	0.00	2845.55	0.731	2.70	4.702	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.00	461.94	1847.99	0.00	619.10	0.746	2.88	22.840	C
2	2042.00	2041.99	153.98	0.00	2978.60	0.686	2.17	3.843	A
3	2080.00	2079.99	444.00	0.00	2845.55	0.731	2.71	4.702	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	462.00	461.96	1847.99	0.00	619.10	0.746	2.89	22.856	C
2	2042.00	2042.00	153.99	0.00	2978.59	0.686	2.18	3.843	A
3	2080.00	2079.99	444.00	0.00	2845.55	0.731	2.71	4.702	A

(Default Analysis Set) - 2025 Base + Committed + Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, PM	2025 Base + Committed + Development	PM		DIRECT	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			6.31	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road	
2	2	A12 South West	
3	3	A12 North East	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	9.05	18.00	45.00	31.10	36.00	
2	7.43	12.30	24.00	55.00	32.60	41.00	
3	8.30	12.40	26.00	56.00	36.60	45.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.703	1919.071
2		(calculated)	(calculated)	0.943	3123.776
3		(calculated)	(calculated)	0.960	3271.696

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	DIRECT		N/A	100.000
2	DIRECT		N/A	100.000
3	DIRECT		N/A	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	351.000	207.000
	2	348.000	0.000	1624.000
	3	188.000	1730.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.63	0.37
	2	0.18	0.00	0.82
	3	0.10	0.90	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.79	24.87	3.79	C
2	0.67	3.76	2.06	A
3	0.65	3.53	1.88	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	558.00	544.57	1723.30	0.00	706.82	0.789	3.36	20.759	C
2	1972.00	1963.90	202.02	0.00	2933.31	0.672	2.03	3.685	A
3	1918.00	1910.57	346.57	0.00	2939.06	0.653	1.86	3.475	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	558.00	556.98	1729.96	0.00	702.13	0.795	3.61	24.424	C
2	1972.00	1971.92	206.62	0.00	2928.97	0.673	2.05	3.760	A
3	1918.00	1917.95	347.99	0.00	2937.70	0.653	1.87	3.529	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	558.00	557.66	1729.99	0.00	702.11	0.795	3.70	24.701	C
2	1972.00	1971.98	206.87	0.00	2928.73	0.673	2.05	3.761	A
3	1918.00	1917.98	348.00	0.00	2937.69	0.653	1.87	3.529	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	558.00	557.83	1729.99	0.00	702.11	0.795	3.74	24.792	C
2	1972.00	1971.99	206.94	0.00	2928.67	0.673	2.05	3.762	A
3	1918.00	1917.99	348.00	0.00	2937.69	0.653	1.88	3.529	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	558.00	557.90	1730.00	0.00	702.11	0.795	3.77	24.838	C
2	1972.00	1971.99	206.96	0.00	2928.65	0.673	2.06	3.762	A
3	1918.00	1918.00	348.00	0.00	2937.69	0.653	1.88	3.529	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	558.00	557.93	1730.00	0.00	702.10	0.795	3.79	24.868	C
2	1972.00	1972.00	206.97	0.00	2928.64	0.673	2.06	3.762	A
3	1918.00	1918.00	348.00	0.00	2937.69	0.653	1.88	3.529	A

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APPENDIX G **– IPSWICH ROAD / TOP STREET – ARCADY OUTPUT**

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Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Ipswich Road, Top Street Nov 2015.arc8
Path: P:\Gladman SLS\C14106 Gladman Duke's Park Woodbridge\Hydrock Documents\Transport\Junction Models
Report generation date: 18/11/2015 13:22:28

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2015 Base Flows							
Arm 1	0.44	3.54	0.31	A	0.59	3.82	0.37	A
Arm 2	0.48	5.06	0.32	A	0.76	6.31	0.43	A
Arm 3	0.78	4.58	0.44	A	0.45	3.80	0.31	A
	A1 - 2015 With Development							
Arm 1	0.57	3.86	0.36	A	0.66	4.02	0.40	A
Arm 2	0.55	5.54	0.36	A	0.82	6.64	0.45	A
Arm 3	0.84	4.77	0.46	A	0.56	4.09	0.36	A
	A1 - 2025 Base + Com Flows							
Arm 1	0.83	4.53	0.45	A	1.04	4.95	0.51	A
Arm 2	0.80	6.34	0.45	A	1.86	10.62	0.65	B
Arm 3	1.14	5.77	0.54	A	0.69	4.78	0.41	A
	A1 - 2025 Base + Committed + Development							
Arm 1	1.04	5.07	0.51	A	1.17	5.29	0.54	A
Arm 2	0.94	7.13	0.49	A	2.04	11.57	0.68	B
Arm 3	1.25	6.06	0.56	A	0.86	5.26	0.46	A

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

"D1 - 2015 Base Flows, AM " model duration: 07:45 - 09:15
"D2 - 2015 Base Flows, PM" model duration: 16:45 - 18:15
"D3 - 2025 Base + Com Flows, AM" model duration: 07:45 - 09:15
"D4 - 2025 Base + Com Flows, PM" model duration: 16:45 - 18:15
"D5 - 2015 With Development, AM" model duration: 07:45 - 09:15
"D6 - 2015 With Development, PM" model duration: 16:45 - 18:15
"D7 - 2025 Base + Committed + Development, AM" model duration: 07:45 - 09:15
"D8 - 2025 Base + Committed + Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 18/11/2015 13:22:26

File summary

Title	(untitled)
Location	
Site Number	
Date	15/05/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	michaelchau
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2015 Base Flows, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 Base Flows, AM	2015 Base Flows	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			4.36	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	409.00	100.000
2	ONE HOUR	✓	311.00	100.000
3	ONE HOUR	✓	557.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	194.000	215.000
	2	211.000	0.000	100.000
	3	411.000	146.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.47	0.53
	2	0.68	0.00	0.32
	3	0.74	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.31	3.54	0.44	A
2	0.32	5.06	0.48	A
3	0.44	4.58	0.78	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	307.92	306.89	109.49	0.00	1499.42	0.205	0.26	3.016	A
2	234.14	233.06	161.32	0.00	1096.30	0.214	0.27	4.165	A
3	419.34	417.71	158.12	0.00	1444.47	0.290	0.41	3.499	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	367.68	367.40	131.11	0.00	1485.97	0.247	0.33	3.218	A
2	279.58	279.27	193.13	0.00	1078.58	0.259	0.35	4.500	A
3	500.73	500.21	189.47	0.00	1425.35	0.351	0.54	3.890	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	450.32	449.87	160.50	0.00	1467.68	0.307	0.44	3.534	A
2	342.42	341.90	236.48	0.00	1054.43	0.325	0.48	5.049	A
3	613.27	612.33	231.96	0.00	1399.44	0.438	0.77	4.568	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	450.32	450.31	160.75	0.00	1467.53	0.307	0.44	3.538	A
2	342.42	342.41	236.72	0.00	1054.30	0.325	0.48	5.056	A
3	613.27	613.25	232.31	0.00	1399.22	0.438	0.78	4.580	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	367.68	368.13	131.49	0.00	1485.73	0.247	0.33	3.224	A
2	279.58	280.09	193.51	0.00	1078.37	0.259	0.35	4.513	A
3	500.73	501.66	190.03	0.00	1425.01	0.351	0.55	3.904	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	307.92	308.20	110.06	0.00	1499.06	0.205	0.26	3.023	A
2	234.14	234.45	162.01	0.00	1095.91	0.214	0.27	4.181	A
3	419.34	419.87	159.07	0.00	1443.89	0.290	0.41	3.516	A

(Default Analysis Set) - 2015 Base Flows, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 Base Flows, PM	2015 Base Flows	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			4.58	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	505.00	100.000
2	ONE HOUR	✓	398.00	100.000
3	ONE HOUR	✓	389.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	215.000	290.000
	2	245.000	0.000	153.000
	3	288.000	101.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.43	0.57
	2	0.62	0.00	0.38
	3	0.74	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.37	3.82	0.59	A
2	0.43	6.31	0.76	A
3	0.31	3.80	0.45	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	380.19	378.86	75.77	0.00	1520.39	0.250	0.33	3.151	A
2	299.64	298.08	217.56	0.00	1064.97	0.281	0.39	4.685	A
3	292.86	291.83	183.49	0.00	1428.99	0.205	0.26	3.162	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	453.98	453.60	90.72	0.00	1511.09	0.300	0.43	3.404	A
2	357.79	357.27	260.49	0.00	1041.06	0.344	0.52	5.265	A
3	349.70	349.41	219.93	0.00	1406.78	0.249	0.33	3.404	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	556.02	555.38	111.08	0.00	1498.43	0.371	0.59	3.816	A
2	438.21	437.25	318.93	0.00	1008.51	0.435	0.76	6.291	A
3	428.30	427.82	269.16	0.00	1376.75	0.311	0.45	3.791	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	556.02	556.01	111.20	0.00	1498.35	0.371	0.59	3.819	A
2	438.21	438.19	319.29	0.00	1008.31	0.435	0.76	6.313	A
3	428.30	428.29	269.74	0.00	1376.40	0.311	0.45	3.796	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	453.98	454.61	90.92	0.00	1510.97	0.300	0.43	3.411	A
2	357.79	358.74	261.06	0.00	1040.74	0.344	0.53	5.287	A
3	349.70	350.17	220.83	0.00	1406.23	0.249	0.33	3.409	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	380.19	380.58	76.11	0.00	1520.18	0.250	0.34	3.161	A
2	299.64	300.17	218.55	0.00	1064.42	0.282	0.39	4.715	A
3	292.86	293.15	184.78	0.00	1428.21	0.205	0.26	3.171	A

(Default Analysis Set) - 2025 Base + Com Flows, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Com Flows, AM	2025 Base + Com Flows	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.47	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	598.00	100.000
2	ONE HOUR	✓	417.00	100.000
3	ONE HOUR	✓	653.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	338.000	260.000
	2	295.000	0.000	122.000
	3	485.000	168.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.57	0.43
	2	0.71	0.00	0.29
	3	0.74	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.45	4.53	0.83	A
2	0.45	6.34	0.80	A
3	0.54	5.77	1.14	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	450.21	448.48	125.93	0.00	1489.19	0.302	0.43	3.453	A
2	313.94	312.31	194.99	0.00	1077.54	0.291	0.41	4.695	A
3	491.61	489.48	220.94	0.00	1406.16	0.350	0.53	3.919	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	537.59	537.03	150.82	0.00	1473.70	0.365	0.57	3.840	A
2	374.87	374.33	233.49	0.00	1056.10	0.355	0.55	5.275	A
3	587.03	586.23	264.81	0.00	1379.41	0.426	0.73	4.534	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	658.41	657.41	184.56	0.00	1452.72	0.453	0.82	4.521	A
2	459.13	458.11	285.83	0.00	1026.95	0.447	0.80	6.317	A
3	718.97	717.36	324.08	0.00	1343.26	0.535	1.14	5.736	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	658.41	658.39	184.96	0.00	1452.47	0.453	0.83	4.533	A
2	459.13	459.11	286.26	0.00	1026.71	0.447	0.80	6.341	A
3	718.97	718.93	324.79	0.00	1342.83	0.535	1.14	5.769	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	537.59	538.58	151.44	0.00	1473.32	0.365	0.58	3.856	A
2	374.87	375.87	234.16	0.00	1055.72	0.355	0.56	5.302	A
3	587.03	588.62	265.90	0.00	1378.74	0.426	0.75	4.566	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	450.21	450.78	126.69	0.00	1488.72	0.302	0.44	3.469	A
2	313.94	314.50	195.99	0.00	1076.99	0.292	0.41	4.726	A
3	491.61	492.44	222.49	0.00	1405.21	0.350	0.54	3.947	A

(Default Analysis Set) - 2025 Base + Com Flows, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Com Flows, PM	2025 Base + Com Flows	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			6.79	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	691.00	100.000
2	ONE HOUR	✓	580.00	100.000
3	ONE HOUR	✓	474.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	350.000	341.000
	2	397.000	0.000	183.000
	3	357.000	117.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.51	0.49
	2	0.68	0.00	0.32
	3	0.75	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.51	4.95	1.04	A
2	0.65	10.62	1.86	B
3	0.41	4.78	0.69	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.22	518.14	87.73	0.00	1512.95	0.344	0.52	3.611	A
2	436.65	433.81	255.69	0.00	1043.73	0.418	0.71	5.876	A
3	356.85	355.44	296.94	0.00	1359.82	0.262	0.35	3.580	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	621.19	620.48	105.06	0.00	1502.17	0.414	0.70	4.079	A
2	521.41	520.10	306.20	0.00	1015.60	0.513	1.04	7.246	A
3	426.12	425.65	356.00	0.00	1323.80	0.322	0.47	4.006	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	760.81	759.46	128.61	0.00	1487.52	0.511	1.04	4.935	A
2	638.59	635.44	374.79	0.00	977.40	0.653	1.83	10.429	B
3	521.88	521.03	434.95	0.00	1275.65	0.409	0.69	4.766	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	760.81	760.78	128.82	0.00	1487.39	0.512	1.04	4.954	A
2	638.59	638.47	375.44	0.00	977.03	0.654	1.86	10.623	B
3	521.88	521.87	437.02	0.00	1274.39	0.410	0.69	4.783	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	621.19	622.52	105.39	0.00	1501.97	0.414	0.71	4.100	A
2	521.41	524.54	307.20	0.00	1015.04	0.514	1.07	7.387	A
3	426.12	426.96	359.04	0.00	1321.95	0.322	0.48	4.025	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	520.22	520.95	88.20	0.00	1512.66	0.344	0.53	3.631	A
2	436.65	438.04	257.08	0.00	1042.96	0.419	0.73	5.964	A
3	356.85	357.33	299.83	0.00	1358.05	0.263	0.36	3.598	A

(Default Analysis Set) - 2015 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, AM	2015 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			4.63	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	483.00	100.000
2	ONE HOUR	✓	327.00	100.000
3	ONE HOUR	✓	582.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	195.000	288.000
	2	216.000	0.000	111.000
	3	432.000	150.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.40	0.60
	2	0.66	0.00	0.34
	3	0.74	0.26	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.36	3.86	0.57	A
2	0.36	5.54	0.55	A
3	0.46	4.77	0.84	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	363.63	362.35	112.48	0.00	1497.56	0.243	0.32	3.169	A
2	246.18	244.99	216.06	0.00	1065.81	0.231	0.30	4.379	A
3	438.16	436.42	161.83	0.00	1442.21	0.304	0.43	3.573	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.21	433.84	134.70	0.00	1483.73	0.293	0.41	3.429	A
2	293.97	293.60	258.69	0.00	1042.06	0.282	0.39	4.808	A
3	523.21	522.63	193.94	0.00	1422.62	0.368	0.58	3.997	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	531.79	531.17	164.88	0.00	1464.96	0.363	0.57	3.853	A
2	360.03	359.40	316.73	0.00	1009.74	0.357	0.55	5.529	A
3	640.79	639.74	237.40	0.00	1396.12	0.459	0.84	4.752	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	531.79	531.79	165.15	0.00	1464.79	0.363	0.57	3.858	A
2	360.03	360.02	317.09	0.00	1009.53	0.357	0.55	5.542	A
3	640.79	640.78	237.81	0.00	1395.87	0.459	0.84	4.767	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	434.21	434.82	135.11	0.00	1483.48	0.293	0.42	3.434	A
2	293.97	294.59	259.27	0.00	1041.74	0.282	0.40	4.823	A
3	523.21	524.24	194.59	0.00	1422.23	0.368	0.59	4.014	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	363.63	364.00	113.08	0.00	1497.18	0.243	0.32	3.177	A
2	246.18	246.56	217.05	0.00	1065.26	0.231	0.30	4.398	A
3	438.16	438.75	162.86	0.00	1441.57	0.304	0.44	3.593	A

(Default Analysis Set) - 2015 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, PM	2015 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			4.80	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	542.00	100.000
2	ONE HOUR	✓	405.00	100.000
3	ONE HOUR	✓	450.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	219.000	323.000
	2	247.000	0.000	158.000
	3	341.000	109.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.40	0.60
	2	0.61	0.00	0.39
	3	0.76	0.24	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.40	4.02	0.66	A
2	0.45	6.64	0.82	A
3	0.36	4.09	0.56	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	408.05	406.58	81.76	0.00	1516.67	0.269	0.37	3.238	A
2	304.91	303.28	242.30	0.00	1051.19	0.290	0.41	4.804	A
3	338.78	337.55	184.97	0.00	1428.10	0.237	0.31	3.298	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	487.25	486.81	97.90	0.00	1506.63	0.323	0.48	3.527	A
2	364.09	363.52	290.11	0.00	1024.56	0.355	0.55	5.441	A
3	404.54	404.17	221.70	0.00	1405.69	0.288	0.40	3.594	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	596.75	596.01	119.86	0.00	1492.97	0.400	0.66	4.010	A
2	445.91	444.85	355.19	0.00	988.31	0.451	0.81	6.610	A
3	495.46	494.83	271.30	0.00	1375.45	0.360	0.56	4.085	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	596.75	596.74	120.01	0.00	1492.87	0.400	0.66	4.017	A
2	445.91	445.89	355.62	0.00	988.07	0.451	0.82	6.639	A
3	495.46	495.45	271.94	0.00	1375.06	0.360	0.56	4.092	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	487.25	487.98	98.14	0.00	1506.48	0.323	0.48	3.536	A
2	364.09	365.13	290.81	0.00	1024.17	0.355	0.56	5.470	A
3	404.54	405.16	222.68	0.00	1405.10	0.288	0.41	3.604	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	408.05	408.49	82.15	0.00	1516.42	0.269	0.37	3.252	A
2	304.91	305.48	243.44	0.00	1050.56	0.290	0.41	4.836	A
3	338.78	339.16	186.31	0.00	1427.28	0.237	0.31	3.308	A

(Default Analysis Set) - 2025 Base + Committed + Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, AM	2025 Base + Committed + Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			5.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	673.00	100.000
2	ONE HOUR	✓	433.00	100.000
3	ONE HOUR	✓	677.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	339.000	334.000
	2	300.000	0.000	133.000
	3	506.000	171.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.50	0.50
	2	0.69	0.00	0.31
	3	0.75	0.25	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.51	5.07	1.04	A
2	0.49	7.13	0.94	A
3	0.56	6.06	1.25	A

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	506.67	504.62	128.17	0.00	1487.80	0.341	0.51	3.653	A
2	325.99	324.19	250.43	0.00	1046.66	0.311	0.45	4.971	A
3	509.68	507.42	224.61	0.00	1403.92	0.363	0.57	4.006	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	605.01	604.30	153.50	0.00	1472.04	0.411	0.69	4.145	A
2	389.26	388.61	299.90	0.00	1019.11	0.382	0.61	5.703	A
3	608.61	607.73	269.24	0.00	1376.70	0.442	0.79	4.677	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	740.99	739.63	187.82	0.00	1450.69	0.511	1.03	5.054	A
2	476.74	475.47	367.07	0.00	981.70	0.486	0.93	7.092	A
3	745.39	743.59	329.42	0.00	1340.00	0.556	1.24	6.018	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	740.99	740.96	188.26	0.00	1450.41	0.511	1.04	5.074	A
2	476.74	476.71	367.73	0.00	981.33	0.486	0.94	7.133	A
3	745.39	745.35	330.29	0.00	1339.48	0.556	1.25	6.059	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	605.01	606.35	154.17	0.00	1471.62	0.411	0.70	4.168	A
2	389.26	390.51	300.92	0.00	1018.54	0.382	0.62	5.743	A
3	608.61	610.39	270.56	0.00	1375.90	0.442	0.80	4.715	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	506.67	507.40	128.97	0.00	1487.30	0.341	0.52	3.675	A
2	325.99	326.66	251.82	0.00	1045.89	0.312	0.46	5.009	A
3	509.68	510.58	226.32	0.00	1402.88	0.363	0.57	4.038	A

(Default Analysis Set) - 2025 Base + Committed + Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, PM	2025 Base + Committed + Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	(untitled)	Roundabout	1,2,3			7.28	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
1	1	Ipswich Road East	
2	2	Top Street	
3	3	Ipswich Road West	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.50	5.87	20.00	17.00	35.00	30.00	
2	2.86	4.40	12.00	15.00	13.00	28.00	
3	3.79	5.85	15.00	17.00	36.00	35.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.622	1567.527
2		(calculated)	(calculated)	0.557	1186.152
3		(calculated)	(calculated)	0.610	1540.890

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	728.00	100.000
2	ONE HOUR	✓	587.00	100.000
3	ONE HOUR	✓	535.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	354.000	374.000
	2	399.000	0.000	188.000
	3	410.000	125.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.49	0.51
	2	0.68	0.00	0.32
	3	0.77	0.23	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.0	0.0
	2	0.0	0.0	0.0
	3	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.54	5.29	1.17	A
2	0.68	11.57	2.04	B
3	0.46	5.26	0.86	A

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	548.08	545.81	93.72	0.00	1509.23	0.363	0.57	3.729	A
2	441.92	438.95	280.40	0.00	1029.97	0.429	0.74	6.061	A
3	402.78	401.10	298.37	0.00	1358.94	0.296	0.42	3.752	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	654.46	653.64	112.23	0.00	1497.71	0.437	0.77	4.262	A
2	527.70	526.27	335.80	0.00	999.11	0.528	1.10	7.590	A
3	480.95	480.36	357.72	0.00	1322.75	0.364	0.57	4.271	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	801.54	799.97	137.36	0.00	1482.08	0.541	1.16	5.266	A
2	646.30	642.69	410.97	0.00	957.24	0.675	2.00	11.314	B
3	589.05	587.91	436.85	0.00	1274.49	0.462	0.85	5.235	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	801.54	801.51	137.62	0.00	1481.92	0.541	1.17	5.290	A
2	646.30	646.15	411.77	0.00	956.80	0.675	2.04	11.573	B
3	589.05	589.02	439.20	0.00	1273.06	0.463	0.86	5.262	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	654.46	656.01	112.63	0.00	1497.46	0.437	0.78	4.287	A
2	527.70	531.30	337.02	0.00	998.43	0.529	1.14	7.766	A
3	480.95	482.07	361.14	0.00	1320.66	0.364	0.58	4.298	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	548.08	548.91	94.25	0.00	1508.90	0.363	0.57	3.755	A
2	441.92	443.44	282.00	0.00	1029.08	0.429	0.76	6.162	A
3	402.78	403.39	301.42	0.00	1357.08	0.297	0.42	3.779	A

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APPENDIX H **– SITE ACCESS / IPSWICH ROAD –PICADY OUTPUT**

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Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: Site Access, Ipswich Road Nov 2015.arc8
Path: P:\Gladman SLS\C14106 Gladman Duke's Park Woodbridge\Hydrock Documents\Transport\Junction Models
Report generation date: 18/11/2015 13:25:10

» (Default Analysis Set) - 2015 With Development, AM
» (Default Analysis Set) - 2015 With Development, PM
» (Default Analysis Set) - 2025 Base + Committed + Development, AM
» (Default Analysis Set) - 2025 Base + Committed + Development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2015 With Development							
Stream B-C	0.17	7.85	0.15	A	0.08	7.83	0.07	A
Stream B-A	0.08	14.57	0.07	B	0.04	16.49	0.04	C
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.04	6.75	0.04	A	0.13	8.05	0.12	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2025 Base + Committed + Development							
Stream B-C	0.20	8.92	0.17	A	0.09	8.92	0.08	A
Stream B-A	0.11	19.62	0.10	C	0.06	25.05	0.06	D
Stream C-A	-	-	-	-	-	-	-	-
Stream C-B	0.05	7.50	0.05	A	0.15	9.18	0.13	A
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

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

"D1 - 2015 With Development, AM " model duration: 07:45 - 09:15
"D2 - 2015 With Development, PM" model duration: 16:45 - 18:15
"D3 - 2025 Base + Committed + Development, AM" model duration: 07:45 - 09:15
"D4 - 2025 Base + Committed + Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 18/11/2015 13:25:08

File summary

Title	(untitled)
Location	
Site Number	
Date	14/05/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	michaelchau
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2015 With Development, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, AM	2015 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	8.73	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ipswich Road East		Major
B	B	Site Access		Minor
C	C	Ipswich Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00	✓	3.00	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				7.21	3.01	3.00	3.00	3.00	✓	1.00	12	20

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	452.489	0.081	0.204	0.128	0.291
1	B-C	662.146	0.099	0.251	-	-
1	C-B	671.152	0.254	0.254	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	411.00	100.000
B	ONE HOUR	✓	91.00	100.000
C	ONE HOUR	✓	634.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	5.000	406.000
	B	18.000	0.000	73.000
	C	613.000	21.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.20	0.00	0.80
	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.15	7.85	0.17	A
B-A	0.07	14.57	0.08	B
C-A	-	-	-	-
C-B	0.04	6.75	0.04	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	54.96	54.54	0.00	578.90	0.095	0.10	6.855	A
B-A	13.55	13.38	0.00	325.88	0.042	0.04	11.514	B
C-A	461.50	461.50	0.00	-	-	-	-	-
C-B	15.81	15.70	0.00	592.44	0.027	0.03	6.242	A
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	305.66	305.66	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	65.63	65.52	0.00	562.20	0.117	0.13	7.245	A
B-A	16.18	16.13	0.00	301.13	0.054	0.06	12.631	B
C-A	551.07	551.07	0.00	-	-	-	-	-
C-B	18.88	18.85	0.00	577.16	0.033	0.03	6.447	A
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	364.99	364.99	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	80.37	80.20	0.00	538.72	0.149	0.17	7.849	A
B-A	19.82	19.73	0.00	266.83	0.074	0.08	14.564	B
C-A	674.93	674.93	0.00	-	-	-	-	-
C-B	23.12	23.08	0.00	556.04	0.042	0.04	6.754	A
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	447.01	447.01	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	80.37	80.37	0.00	538.66	0.149	0.17	7.855	A
B-A	19.82	19.82	0.00	266.82	0.074	0.08	14.574	B
C-A	674.93	674.93	0.00	-	-	-	-	-
C-B	23.12	23.12	0.00	556.04	0.042	0.04	6.754	A
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	447.01	447.01	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	65.63	65.79	0.00	562.12	0.117	0.13	7.257	A
B-A	16.18	16.27	0.00	301.11	0.054	0.06	12.644	B
C-A	551.07	551.07	0.00	-	-	-	-	-
C-B	18.88	18.92	0.00	577.16	0.033	0.03	6.448	A
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	364.99	364.99	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	54.96	55.07	0.00	578.79	0.095	0.11	6.874	A
B-A	13.55	13.61	0.00	325.83	0.042	0.04	11.531	B
C-A	461.50	461.50	0.00	-	-	-	-	-
C-B	15.81	15.84	0.00	592.44	0.027	0.03	6.243	A
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	305.66	305.66	0.00	-	-	-	-	-

(Default Analysis Set) - 2015 With Development, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, PM	2015 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	8.69	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ipswich Road East		Major
B	B	Site Access		Minor
C	C	Ipswich Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00	✓	3.00	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				7.21	3.01	3.00	3.00	3.00	✓	1.00	12	20

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	452.489	0.081	0.204	0.128	0.291
1	B-C	662.146	0.099	0.251	-	-
1	C-B	671.152	0.254	0.254	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	591.00	100.000
B	ONE HOUR	✓	41.00	100.000
C	ONE HOUR	✓	601.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	13.000	578.000
	B	8.000	0.000	33.000
	C	548.000	53.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.20	0.00	0.80
	C	0.91	0.09	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	7.83	0.08	A
B-A	0.04	16.49	0.04	C
C-A	-	-	-	-
C-B	0.12	8.05	0.13	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.66	0.00	549.17	0.045	0.05	6.862	A
B-A	6.02	5.94	0.00	298.49	0.020	0.02	12.303	B
C-A	412.56	412.56	0.00	-	-	-	-	-
C-B	39.90	39.60	0.00	557.97	0.072	0.08	6.942	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	435.15	435.15	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.62	0.00	526.97	0.056	0.06	7.238	A
B-A	7.19	7.16	0.00	268.50	0.027	0.03	13.773	B
C-A	492.64	492.64	0.00	-	-	-	-	-
C-B	47.65	47.56	0.00	536.00	0.089	0.10	7.370	A
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	519.61	519.61	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.26	0.00	496.04	0.073	0.08	7.829	A
B-A	8.81	8.76	0.00	227.11	0.039	0.04	16.483	C
C-A	603.36	603.36	0.00	-	-	-	-	-
C-B	58.35	58.22	0.00	505.62	0.115	0.13	8.043	A
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	636.39	636.39	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.33	0.00	496.01	0.073	0.08	7.831	A
B-A	8.81	8.81	0.00	227.08	0.039	0.04	16.493	C
C-A	603.36	603.36	0.00	-	-	-	-	-
C-B	58.35	58.35	0.00	505.62	0.115	0.13	8.048	A
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	636.39	636.39	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.74	0.00	526.93	0.056	0.06	7.243	A
B-A	7.19	7.24	0.00	268.44	0.027	0.03	13.787	B
C-A	492.64	492.64	0.00	-	-	-	-	-
C-B	47.65	47.77	0.00	536.00	0.089	0.10	7.377	A
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	519.61	519.61	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.89	0.00	549.12	0.045	0.05	6.867	A
B-A	6.02	6.05	0.00	298.38	0.020	0.02	12.317	B
C-A	412.56	412.56	0.00	-	-	-	-	-
C-B	39.90	39.98	0.00	557.97	0.072	0.08	6.950	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	435.15	435.15	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base + Committed + Development, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, AM	2025 Base + Committed + Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.37	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ipswich Road East		Major
B	B	Site Access		Minor
C	C	Ipswich Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00	✓	3.00	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				7.21	3.01	3.00	3.00	3.00	✓	1.00	12	20

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	452.489	0.081	0.204	0.128	0.291
1	B-C	662.146	0.099	0.251	-	-
1	C-B	671.152	0.254	0.254	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	600.00	100.000
B	ONE HOUR	✓	91.00	100.000
C	ONE HOUR	✓	783.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	5.000	595.000
	B	18.000	0.000	73.000
	C	762.000	21.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.20	0.00	0.80
	C	0.97	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.17	8.92	0.20	A
B-A	0.10	19.62	0.11	C
C-A	-	-	-	-
C-B	0.05	7.50	0.05	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	54.96	54.51	0.00	542.66	0.101	0.11	7.369	A
B-A	13.55	13.35	0.00	282.49	0.048	0.05	13.366	B
C-A	573.67	573.67	0.00	-	-	-	-	-
C-B	15.81	15.69	0.00	556.24	0.028	0.03	6.657	A
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	447.95	447.95	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	65.63	65.50	0.00	518.55	0.127	0.14	7.944	A
B-A	16.18	16.11	0.00	249.30	0.065	0.07	15.433	C
C-A	685.02	685.02	0.00	-	-	-	-	-
C-B	18.88	18.85	0.00	533.94	0.035	0.04	6.988	A
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	534.89	534.89	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	80.37	80.16	0.00	484.23	0.166	0.20	8.905	A
B-A	19.82	19.67	0.00	203.33	0.097	0.11	19.586	C
C-A	838.98	838.98	0.00	-	-	-	-	-
C-B	23.12	23.08	0.00	503.10	0.046	0.05	7.499	A
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	655.11	655.11	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	80.37	80.37	0.00	484.12	0.166	0.20	8.916	A
B-A	19.82	19.81	0.00	203.31	0.097	0.11	19.617	C
C-A	838.98	838.98	0.00	-	-	-	-	-
C-B	23.12	23.12	0.00	503.10	0.046	0.05	7.499	A
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	655.11	655.11	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	65.63	65.83	0.00	518.42	0.127	0.15	7.959	A
B-A	16.18	16.33	0.00	249.27	0.065	0.07	15.463	C
C-A	685.02	685.02	0.00	-	-	-	-	-
C-B	18.88	18.92	0.00	533.94	0.035	0.04	6.992	A
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	534.89	534.89	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	54.96	55.09	0.00	542.51	0.101	0.11	7.389	A
B-A	13.55	13.63	0.00	282.44	0.048	0.05	13.398	B
C-A	573.67	573.67	0.00	-	-	-	-	-
C-B	15.81	15.84	0.00	556.24	0.028	0.03	6.663	A
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	447.95	447.95	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base + Committed + Development, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, PM	2025 Base + Committed + Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.44	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Ipswich Road East		Major
B	B	Site Access		Minor
C	C	Ipswich Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.50		0.00	✓	3.00	75.00		

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				7.21	3.01	3.00	3.00	3.00	✓	1.00	12	20

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	452.489	0.081	0.204	0.128	0.291
1	B-C	662.146	0.099	0.251	-	-
1	C-B	671.152	0.254	0.254	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	788.00	100.000
B	ONE HOUR	✓	41.00	100.000
C	ONE HOUR	✓	816.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	13.000	775.000
	B	8.000	0.000	33.000
	C	763.000	53.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.20	0.00	0.80
	C	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	8.92	0.09	A
B-A	0.06	25.05	0.06	D
C-A	-	-	-	-
C-B	0.13	9.18	0.15	A
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.64	0.00	511.60	0.049	0.05	7.389	A
B-A	6.02	5.92	0.00	247.52	0.024	0.02	14.890	B
C-A	574.43	574.43	0.00	-	-	-	-	-
C-B	39.90	39.57	0.00	520.24	0.077	0.08	7.484	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	583.46	583.46	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.61	0.00	481.83	0.062	0.07	7.959	A
B-A	7.19	7.15	0.00	207.62	0.035	0.04	17.954	C
C-A	685.92	685.92	0.00	-	-	-	-	-
C-B	47.65	47.55	0.00	490.95	0.097	0.11	8.117	A
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	696.71	696.71	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.24	0.00	439.91	0.083	0.09	8.916	A
B-A	8.81	8.71	0.00	152.55	0.058	0.06	25.008	D
C-A	840.08	840.08	0.00	-	-	-	-	-
C-B	58.35	58.19	0.00	450.45	0.130	0.15	9.173	A
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	853.29	853.29	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.33	0.00	439.83	0.083	0.09	8.921	A
B-A	8.81	8.80	0.00	152.50	0.058	0.06	25.052	D
C-A	840.08	840.08	0.00	-	-	-	-	-
C-B	58.35	58.35	0.00	450.45	0.130	0.15	9.181	A
A-B	14.31	14.31	0.00	-	-	-	-	-
A-C	853.29	853.29	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.76	0.00	481.75	0.062	0.07	7.966	A
B-A	7.19	7.29	0.00	207.54	0.035	0.04	17.984	C
C-A	685.92	685.92	0.00	-	-	-	-	-
C-B	47.65	47.80	0.00	490.95	0.097	0.11	8.127	A
A-B	11.69	11.69	0.00	-	-	-	-	-
A-C	696.71	696.71	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.90	0.00	511.52	0.049	0.05	7.400	A
B-A	6.02	6.07	0.00	247.39	0.024	0.03	14.922	B
C-A	574.43	574.43	0.00	-	-	-	-	-
C-B	39.90	40.00	0.00	520.24	0.077	0.08	7.496	A
A-B	9.79	9.79	0.00	-	-	-	-	-
A-C	583.46	583.46	0.00	-	-	-	-	-

APPENDIX I **– SITE ACCESS / TOP STREET – PICADY OUTPUT**

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Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]

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Filename: Site Access, Top Street Nov 2015.arc8
Path: P:\Gladman SLS\C14106 Gladman Duke's Park Woodbridge\Hydrock Documents\Transport\Junction Models
Report generation date: 17/11/2015 13:29:36

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2015 With Development							
Stream B-AC	0.08	9.51	0.08	A	0.03	9.54	0.03	A
Stream C-AB	0.01	6.54	0.01	A	0.02	6.59	0.02	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
	A1 - 2025 Base + Committed + Development							
Stream B-AC	0.10	11.18	0.09	B	0.04	11.59	0.04	B
Stream C-AB	0.01	7.11	0.01	A	0.02	7.10	0.02	A
Stream C-A	-	-	-	-	-	-	-	-
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-

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

"D1 - 2015 With Development, AM " model duration: 07:45 - 09:15
"D2 - 2015 With Development, PM" model duration: 16:45 - 18:15
"D3 - 2025 Base + Committed + Development, AM" model duration: 07:45 - 09:15
"D4 - 2025 Base + Committed + Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 17/11/2015 13:29:35

File summary

Title	Top Street / Site Access
Location	Woodbridge
Site Number	
Date	16/07/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	michaelchau
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2015 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, AM	2015 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.22	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Top Street North		Major
B	B	Site Access		Minor
C	C	Top Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	115.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.75										43	17

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	487.318	0.085	0.215	0.135	0.307
1	B-C	618.754	0.091	0.229	-	-
1	C-B	640.561	0.237	0.237	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	339.00	100.000
B	ONE HOUR	✓	28.00	100.000
C	ONE HOUR	✓	349.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	6.000	333.000
	B	17.000	0.000	11.000
	C	346.000	3.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.61	0.00	0.39
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	9.51	0.08	A
C-AB	0.01	6.54	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	21.08	20.88	0.00	448.69	0.047	0.05	8.411	A
C-AB	2.26	2.25	0.00	580.66	0.004	0.00	6.223	A
C-A	260.48	260.48	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	250.70	250.70	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.12	0.00	432.27	0.058	0.06	8.840	A
C-AB	2.70	2.70	0.00	569.23	0.005	0.00	6.353	A
C-A	311.04	311.04	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	299.36	299.36	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.75	0.00	409.37	0.075	0.08	9.506	A
C-AB	3.32	3.31	0.00	553.54	0.006	0.01	6.542	A
C-A	380.94	380.94	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	366.64	366.64	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	0.00	409.37	0.075	0.08	9.509	A
C-AB	3.32	3.32	0.00	553.54	0.006	0.01	6.542	A
C-A	380.94	380.94	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	366.64	366.64	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.25	0.00	432.27	0.058	0.06	8.846	A
C-AB	2.70	2.71	0.00	569.23	0.005	0.00	6.353	A
C-A	311.04	311.04	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	299.36	299.36	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.13	0.00	448.69	0.047	0.05	8.420	A
C-AB	2.26	2.27	0.00	580.66	0.004	0.00	6.225	A
C-A	260.48	260.48	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	250.70	250.70	0.00	-	-	-	-	-

(Default Analysis Set) - 2015 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2015 With Development, PM	2015 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	8.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Top Street North		Major
B	B	Site Access		Minor
C	C	Top Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	115.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.75										43	17

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	487.318	0.085	0.215	0.135	0.307
1	B-C	618.754	0.091	0.229	-	-
1	C-B	640.561	0.237	0.237	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	351.00	100.000
B	ONE HOUR	✓	12.00	100.000
C	ONE HOUR	✓	513.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	12.000	339.000
	B	7.000	0.000	5.000
	C	505.000	8.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.58	0.00	0.42
	C	0.98	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.03	9.54	0.03	A
C-AB	0.02	6.59	0.02	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	9.03	8.95	0.00	437.53	0.021	0.02	8.400	A
C-AB	6.06	6.02	0.00	580.52	0.010	0.01	6.266	A
C-A	380.15	380.15	0.00	-	-	-	-	-
A-B	9.03	9.03	0.00	-	-	-	-	-
A-C	255.22	255.22	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	10.79	10.77	0.00	418.03	0.026	0.03	8.839	A
C-AB	7.27	7.26	0.00	569.60	0.013	0.01	6.401	A
C-A	453.91	453.91	0.00	-	-	-	-	-
A-B	10.79	10.79	0.00	-	-	-	-	-
A-C	304.75	304.75	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	13.21	13.18	0.00	390.63	0.034	0.03	9.538	A
C-AB	8.95	8.94	0.00	554.99	0.016	0.02	6.592	A
C-A	555.87	555.87	0.00	-	-	-	-	-
A-B	13.21	13.21	0.00	-	-	-	-	-
A-C	373.25	373.25	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	13.21	13.21	0.00	390.63	0.034	0.03	9.538	A
C-AB	8.95	8.95	0.00	554.99	0.016	0.02	6.594	A
C-A	555.87	555.87	0.00	-	-	-	-	-
A-B	13.21	13.21	0.00	-	-	-	-	-
A-C	373.25	373.25	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	10.79	10.82	0.00	418.02	0.026	0.03	8.842	A
C-AB	7.27	7.28	0.00	569.60	0.013	0.01	6.401	A
C-A	453.91	453.91	0.00	-	-	-	-	-
A-B	10.79	10.79	0.00	-	-	-	-	-
A-C	304.75	304.75	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	9.03	9.06	0.00	437.52	0.021	0.02	8.403	A
C-AB	6.06	6.07	0.00	580.52	0.010	0.01	6.266	A
C-A	380.15	380.15	0.00	-	-	-	-	-
A-B	9.03	9.03	0.00	-	-	-	-	-
A-C	255.22	255.22	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base + Committed + Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, AM	2025 Base + Committed + Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	10.79	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Top Street North		Major
B	B	Site Access		Minor
C	C	Top Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	115.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.75										43	17

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	487.318	0.085	0.215	0.135	0.307
1	B-C	618.754	0.091	0.229	-	-
1	C-B	640.561	0.237	0.237	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	511.00	100.000
B	ONE HOUR	✓	28.00	100.000
C	ONE HOUR	✓	460.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	6.000	505.000
	B	17.000	0.000	11.000
	C	457.000	3.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.61	0.00	0.39
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	11.18	0.10	B
C-AB	0.01	7.11	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	21.08	20.87	0.00	410.75	0.051	0.05	9.229	A
C-AB	2.26	2.25	0.00	550.22	0.004	0.00	6.569	A
C-A	344.05	344.05	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	380.19	380.19	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.11	0.00	386.62	0.065	0.07	9.957	A
C-AB	2.71	2.70	0.00	532.98	0.005	0.01	6.788	A
C-A	410.82	410.82	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	453.98	453.98	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.73	0.00	352.77	0.087	0.09	11.174	B
C-AB	3.32	3.32	0.00	509.35	0.007	0.01	7.113	A
C-A	503.15	503.15	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	556.02	556.02	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	0.00	352.77	0.087	0.10	11.181	B
C-AB	3.32	3.32	0.00	509.35	0.007	0.01	7.113	A
C-A	503.15	503.15	0.00	-	-	-	-	-
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	556.02	556.02	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.27	0.00	386.62	0.065	0.07	9.965	A
C-AB	2.71	2.71	0.00	532.98	0.005	0.01	6.790	A
C-A	410.82	410.82	0.00	-	-	-	-	-
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	453.98	453.98	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.14	0.00	410.75	0.051	0.05	9.241	A
C-AB	2.26	2.27	0.00	550.22	0.004	0.00	6.569	A
C-A	344.05	344.05	0.00	-	-	-	-	-
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	380.19	380.19	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base + Committed + Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base + Committed + Development, PM	2025 Base + Committed + Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	9.77	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	Top Street North		Major
B	B	Site Access		Minor
C	C	Top Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	115.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	2.75										43	17

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	487.318	0.085	0.215	0.135	0.307
1	B-C	618.754	0.091	0.229	-	-
1	C-B	640.561	0.237	0.237	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	513.00	100.000
B	ONE HOUR	✓	12.00	100.000
C	ONE HOUR	✓	712.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	12.000	501.000
	B	7.000	0.000	5.000
	C	704.000	8.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.58	0.00	0.42
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
	C	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.04	11.59	0.04	B
C-AB	0.02	7.10	0.02	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	9.03	8.94	0.00	393.71	0.023	0.02	9.354	A
C-AB	6.09	6.04	0.00	552.91	0.011	0.01	6.582	A
C-A	529.94	529.94	0.00	-	-	-	-	-
A-B	9.03	9.03	0.00	-	-	-	-	-
A-C	377.18	377.18	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	10.79	10.76	0.00	364.86	0.030	0.03	10.167	B
C-AB	7.31	7.30	0.00	537.10	0.014	0.01	6.794	A
C-A	632.77	632.77	0.00	-	-	-	-	-
A-B	10.79	10.79	0.00	-	-	-	-	-
A-C	450.39	450.39	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	13.21	13.16	0.00	323.83	0.041	0.04	11.586	B
C-AB	9.04	9.03	0.00	516.09	0.018	0.02	7.099	A
C-A	774.88	774.88	0.00	-	-	-	-	-
A-B	13.21	13.21	0.00	-	-	-	-	-
A-C	551.61	551.61	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	13.21	13.21	0.00	323.83	0.041	0.04	11.589	B
C-AB	9.04	9.04	0.00	516.09	0.018	0.02	7.099	A
C-A	774.88	774.88	0.00	-	-	-	-	-
A-B	13.21	13.21	0.00	-	-	-	-	-
A-C	551.61	551.61	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	10.79	10.83	0.00	364.85	0.030	0.03	10.169	B
C-AB	7.31	7.32	0.00	537.10	0.014	0.01	6.797	A
C-A	632.77	632.77	0.00	-	-	-	-	-
A-B	10.79	10.79	0.00	-	-	-	-	-
A-C	450.39	450.39	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	9.03	9.06	0.00	393.70	0.023	0.02	9.359	A
C-AB	6.09	6.10	0.00	552.91	0.011	0.01	6.583	A
C-A	529.94	529.94	0.00	-	-	-	-	-
A-B	9.03	9.03	0.00	-	-	-	-	-
A-C	377.18	377.18	0.00	-	-	-	-	-

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APPENDIX J **– ACCIDENT DATA**

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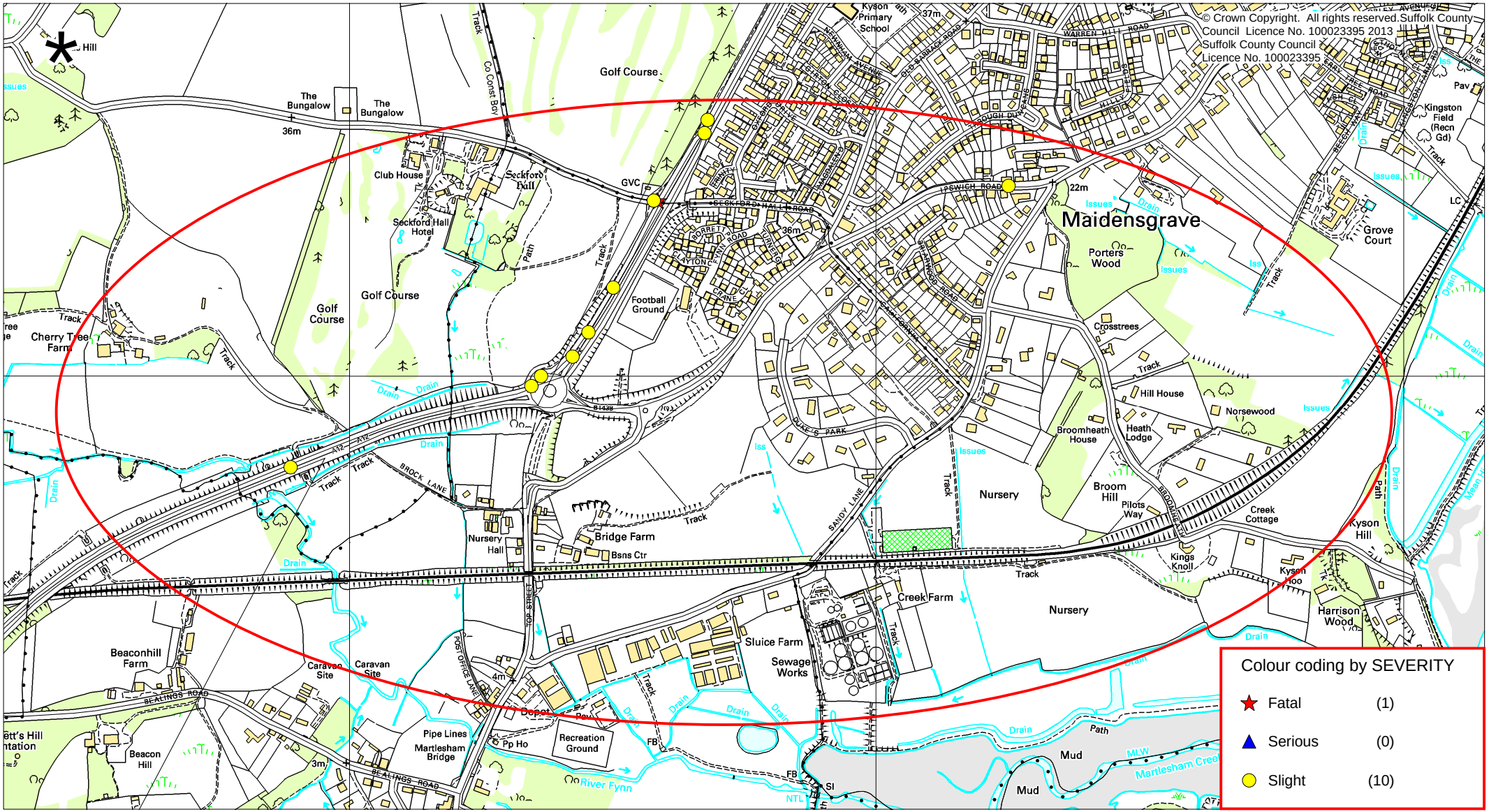

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MChau_Woodbridge_010111-010114_Location Plan

Selected Range of Accidents between dates 01/01/2011 and 01/01/2014
Selected using Manual Selection

SCALE	1 : 10000
DATE	16/06/2014
DRAWING No.	
DRAWN BY	SW

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0098511 04/03/2011 Friday Time 1849 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: street lights present and lit
Special Conditions None Road Type Roundabout

V2 A MOTORCYCLIST APPROACHED THE ROUNDABOUT FROM NORTHBOUND A12 AND MARTLESHAM, DESCRIBED AT SPEED. V1 DRIVER ENTERED THE ROUNDABOUT FROM A12 SOUTHBOUND AND DIRECTION OF WOODBRIDGE FAILING TO SEE THE ONCOMING MOTORCYLIST.V2 IMPACTS TO V1 FRONT OFFSID
E. MINOR INJURY RESULT.

Occurred on A12 SECKFORD ROUNDABOUT

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Careless/Reckless/In a hurry	Vehicle 2	Possible
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead other
No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 29 Breath test Negative
Vehicle direction S to N

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Motor Cycle over 50 cc and up to 125cc Going ahead other
No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 19 Breath test Negative
Vehicle direction S to N

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 19 Male Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0386811 29/09/2011 Thursday Time 0610 Vehicles 2 Casualties 1 Slight
Fog or mist Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Single 2 lanes

TRAVELLING A12 NORTHBOUND AFTER SECKFORD HULL TURNOFF WHERE ROAD GOES INTO SINGLE CARRIAGEWAY. FOG PRESENT IN EARLY MORNING LEADING TO REDUCED VISIBILITY. DRIVER V1 CLEARED WINDSCREEN WITH WIPERS AND IMMEDIATELY SAW CYCLIST THAT HAD NOT BEEN PREVIO USLY VISIBLE. V1 SWERVED TO AVOID BUT N/S WING MIRROR STRUCT CRASH HELMET OF CYCLIST.

CYCLIST HAD REPORTED THIS AT WOODBRIDGE POLICE STATION THE TWO BOOKS SHOULD TIE UP

Occurred on A12 BETWEEN WOODBRIDGE AND WYVALE

Causation

	Factor:	Participant:	Confidence:
1st:	Rain, sleet, snow, or fog	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Van or Goods 3.5 tonnes mgw and under Going ahead other
No skidding, jack-knifing or overturning
First point of impact Nearside Age of Driver 47 Breath test Not requested
Vehicle direction SW to NE

Journey Purpose: Journey as part of work Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Pedal Cycle Going ahead other
No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 46 Breath test Not requested
Vehicle direction SW to NE

Journey Purpose: Journey as part of work Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 46 Male Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0503211 08/12/2011 Thursday Time 1604 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Roundabout

V1 TRVG N/B ON THE A12 TWDS THE SECKFORD ROUNDABOUT INTENDING TO GO STRAIGHT OVER INTO WOODBRIDGE. V2 TRVG FROM WOODBRIDGE AROUND THE SECKFORD ROUNDABOUT INTENDING TO CONTINUE ON THE A12 N/B. V1 FAILED TO SEE V2 AND PULLED OUT ONTO THE ROUNDABOUT C
OLLIDING INTO THE FRONT N/S OF V2 CAUSING DAMAGE AND MINOR INJURY.

Occurred on A12 SECKFORD ROUNDABOUT, WOODBRIDGE

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead other
No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 19 Breath test Negative
Vehicle direction W to E

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Car Going ahead other
No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 23 Breath test Negative
Vehicle direction E to N

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 23 Female Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0511611 12/12/2011 Monday Time 1723 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Darkness: no street lighting
Special Conditions None Road Type Single 2 lanes

V1 & V2 HAVE BEEN TRAVELLING NORTH BOUND ON THE A12 AT SECKFORD. TRAFFIC AHEAD OF V2 HAS SLOWED AND V2 DRIVER BRAKED ALMOST TO A STOP AND ILLUMINATED HIS HAZZARD WARNING LIGHTS. V1 HAS FAILED TO STOP IN TIME AND HAS COLLIDED WITH THE REAR OFFSIDE O
F V2 CAUSING IT TO LEAVE THE CARRIAGEWAY TO THE NEARSIDE WHERE IT HAS ENTERED A DITCH AND ROLLED ONTO ITS OFF SIDE.

Occurred on A12 SECKFORD HALL

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Sudden braking	Vehicle 1	Very Likely
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead other
No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 39 Breath test Negative
Vehicle direction SW to NE

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Van or Goods 3.5 tonnes mgw and under Going ahead other
Overturned
First point of impact Back Age of Driver 50 Breath test Negative
Vehicle direction SW to NE

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 50 Female Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0078212 19/02/2012 Sunday Time 1600 Vehicles 3 Casualties 1 Fatal
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Dual 2 lanes

V1 HAS EXITED SECKFORD HALL RD ONTO MAIN A12 N/BOUND CARRIAGEWAY WITH THE INTENTION OF THEN TURNING RIGHT AND HEADING TOWARDS MARTLESHAM. V1 HAS COLLIDED WITH V2 WHO WAS RIDING IN LANE 1 OF THE N/BOUND CARRIAGEWAY. V3 WAS FURTHER AHEAD OF THE JUNCTIO
N AHEAD OF V2 AND NOT DIRECTLY INVOLVED IN THE COLLISION. RIDER OF V2 SUFFERED SERIOUS HEAD INJURIES AND DIED AT THE SCENE. DRIVER OF V1 ARRESTED ON SUSPICION OF CAUSING DEATH BY DANGEROUS DRIVING.

Occurred on THE A12 N/BOUND AT THE J/W THE C327 SECKFORD HALL RD IN WOODBRIDGE.

Causation

	Factor:	Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:	Dazzling sun	Vehicle 1	Possible
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Starting
No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 57 Breath test Negative
Vehicle direction W to E

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Motorcycle over 500cc Going ahead other
Skidded
First point of impact Front Age of Driver 33 Breath test Not provided (medical)
Vehicle direction S to N

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 33 Male Driver/rider Severity: Fatal

Vehicle Reference 3 Motorcycle over 500cc Going ahead other
No skidding, jack-knifing or overturning
First point of impact Did not impact Age of Driver 39 Breath test Negative
Vehicle direction S to N

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0264412 02/07/2012 Monday Time 2159 Vehicles 1 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Darkness: street lights present and lit
Special Conditions None Road Type Dual 2 lanes
V1 EXITS SECKFORD ROUNDABOUT ON A12 NORTHBOUND DUAL CARRIAGEWAY TOWARDS LOWESTOFT DIRECTION LOSES CONTROL OF THE VEHICLE IN WET CONDITIONS AND SPINS INTO CENTRAL RESERVATION BARRIER AND REBOUNDS

THE DRIVER SUFFERS SLIGHT INJURIES

Occurred on ON A12 APPROX 50 METRES NORTH OF SECKFORD ROUNDABOUT BY LAMP POST 606

Causation

	Factor:	Participant:	Confidence:
1st:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely
2nd:	Travelling too fast for conditions	Vehicle 1	Very Likely
3rd:	Loss of control	Vehicle 1	
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead other
No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 41 Breath test Negative
Vehicle direction SW to NE

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 41 Female Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0442812 28/10/2012 Sunday Time 1400 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single 2 lanes
V2 WAITING AT THE JUNCTION. V1 WAITING BEHIND V2 WHEN V1 SAW THE RAOD CLEAR MOVED FORWARD BEFORE V2 HAD MOVED OFF HITTING THE REAR OF V2 CAUSING MINOR DAMAGE.

V2 PASSENGER SUFFERED SLIGHT INJURIES

Occurred on AT THE JUNCTION OF SECKFORD HALL ROAD AND A12 NORTHBOUND

Causation

	Factor:	Participant:	Confidence:
1st:	Junction restart	Vehicle 1	Possible
2nd:	Failed to look properly	Vehicle 1	Possible
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Waiting to turn left
No skidding, jack-knifing or overturning
First point of impact Front Age of Driver 47 Breath test Negative
Vehicle direction W to NE
Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Car Waiting to turn left
No skidding, jack-knifing or overturning
First point of impact Back Age of Driver 49 Breath test Negative
Vehicle direction W to NE
Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 42 Female Passenger Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

0500512 02/12/2012 Sunday Time 0350 Vehicles 1 Casualties 1 Slight
Other Road surface Frost/Ice Darkness: no street lighting
Special Conditions None Road Type Dual 2 lanes
SINGLE VEH RTC ON A12 WITH V1 SLIDING ON FREEZING ICE AND COLLIDING WITH CENTRAL CRASH BARRIER. V1 SUFFERED BACK PAIN.

Occurred on THE A12 AT WOODBRIDGE APPROX 300M WEST OF R/ABOUT WITH B1438.

Causation

	Factor:	Participant:	Confidence:
1st:	Loss of control	Vehicle 1	Very Likely
2nd:	Inexperienced or learner driver/rider	Vehicle 1	Possible
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead other
Skidded
First point of impact Front Age of Driver 18 Breath test Negative
Vehicle direction SW to NE

Journey Purpose: Journey as part of work Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 18 Female Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

SCEA7016713 10/03/2013 Sunday Time 1036 Vehicles 1 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Daylight:street lights present
Special Conditions None Road Type Dual 2 lanes
V1 AFTER LEAVING ROUNDABOUT, ACCELERATED BUT LOST TRACTION DUE TO SLIPPERY ROAD SURFACE AND COLLIDED WITH CENTRAL CRASH BARRIER.

THE DRIVER SUFFERED SLIGHT INJURIES

Occurred on ON A12 NORTHBOUND APPROX 100 METRES NORTH OF ROUNDABOUT WITH IPSWICH ROAD

Causation

	Factor:	Participant:	Confidence:
1st:	Slippery road (due to weather)	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead other
Skidded
First point of impact Front Age of Driver 58 Breath test Negative
Vehicle direction SW to NE

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 58 Female Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

SCEA7257113 04/07/2013 Thursday Time 1155 Vehicles 2 Casualties 1 Slight
Fine without high winds Road surface Dry Daylight: no street lighting
Special Conditions None Road Type Single 2 lanes
VEH 1 (GOODS VEHICLE) OVER TAKES PARKED CAR INTO PATH OF ONCOMING VEH 2 (CAR) AND STRIKES ITS DRIVERS DOOR MIRROR CAUSING IT TO FOLD BACK AND SMASH GLASS (OF MIRROR) OVER DRIVER AND CAUSE MINOR (VERY) CUTS FOR FOREARM (WINDOW WAS OPEN AT THE TIME).

Occurred on JUST BEFORE FORD GARAGE ON IPSWICH ROAD, WOODBRIDGE

Causation

	Factor:	Participant:	Confidence:
1st:	Disobeyed double white line	Vehicle 1	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 1	Possible
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Goods over 3.5 tonnes and under 7.5 ton Going ahead other
No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver Breath test Driver not contacted
Vehicle direction W to E

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Car Going ahead other
No skidding, jack-knifing or overturning
First point of impact Offside Age of Driver 63 Breath test Negative
Vehicle direction E to W

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 63 Female Driver/rider Severity: Slight

Accidents between dates **01/01/2011 and 01/01/2014** (36) months
Selection: **Notes:**

SCEA7492313 11/10/2013 Friday Time 1955 Vehicles 1 Casualties 1 Slight
Raining without high winds Road surface Wet/Damp Darkness: no street lighting
Special Conditions None Road Type Dual 2 lanes
DURING HEAVY RAIN V1 LOST CONTROL AND OVER CORRECTED AND HIT CENTRAL RESERVATION. V1 DRIVER SUFFERED SLIGHT INJURIES

Occurred on ON WOODBRIDGE BYPASS APPROX 200 METRES NORTH OF SECKFORD ROUNDABOUT

Causation

	Factor:	Participant:	Confidence:
1st:	Loss of control	Vehicle 1	Very Likely
2nd:	Slippery road (due to weather)	Vehicle 1	Very Likely
3rd:	Inexperience with type of vehicle	Vehicle 1	
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead other
Skidded
First point of impact Front Age of Driver 30 Breath test Negative
Vehicle direction SW to NE

Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 30 Female Driver/rider Severity: Slight

Accidents between dates **01/01/2011** **and** **01/01/2014** (36) months
Selection: **Notes:**

Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only (excluding 2-wheels)	0	0	8	8
2-wheeled motor vehicles	1	0	1	2
Pedal cycles	0	0	1	1
Horses & other	0	0	0	0
Total	1	0	10	11

Casualties:

	Fatal	Serious	Slight	Total
Vehicle Driver	0	0	7	7
Passenger	0	0	1	1
Motorcyclist	1	0	1	2
Cyclist	0	0	1	1
Pedestrian	0	0	0	0
Other	0	0	0	0
Total	1	0	10	11

Accidents between dates **01/01/2011** **and** **01/01/2014** (36) months

Selection:

Notes:

Police Ref.	Date	Cas.	Sev.	Cycs	Peds	Ch	OAPs	Vis.	Manv.	Road Cond.	Time	Location
0098511	04/03/2011	1	Slight	0	0	0	0	Dark	No turn	Dry	1849	A12 SECKFORD ROUNDABOUT
0386811	29/09/2011	1	Slight	1	0	0	0	Dark	No turn	Wet/Damp	0610	A12 BETWEEN WOODBRIDGE AND WYVALE
0503211	08/12/2011	1	Slight	0	0	0	0	Dark	No turn	Wet/Damp	1604	A12 SECKFORD ROUNDABOUT, WOODBRIDGE
0511611	12/12/2011	1	Slight	0	0	0	0	Dark	No turn	Dry	1723	A12 SECKFORD HALL
0078212	19/02/2012	1	Fatal	0	0	0	0	Light	No turn	Dry	1600	THE A12 N/BOUND AT THE J/W THE C327 SECKFORD HALL RD IN WO
0264412	02/07/2012	1	Slight	0	0	0	0	Dark	No turn	Wet/Damp	2159	ON A12 APPROX 50 METRES NORTH OF SECKFORD ROUNDABOUT B
0442812	28/10/2012	1	Slight	0	0	0	0	Light	Left	Dry	1400	AT THE JUNCTION OF SECKFORD HALL ROAD AND A12 NORTHBOUN
0500512	02/12/2012	1	Slight	0	0	0	0	Dark	No turn	Frost/Ice	0350	THE A12 AT WOODBRIDGE APPROX 300M WEST OF R/ABOUT WITH B
SCEA7016713	10/03/2013	1	Slight	0	0	0	0	Light	No turn	Wet/Damp	1036	ON A12 NORTHBOUND APPROX 100 METRES NORTH OF
SCEA7257113	04/07/2013	1	Slight	0	0	0	1	Light	No turn	Dry	1155	JUST BEFORE FORD GARAGE ON IPSWICH ROAD, WOODBRIDGE
SCEA7492313	11/10/2013	1	Slight	0	0	0	0	Dark	No turn	Wet/Damp	1955	ON WOODBRIDGE BYPASS APPROX 200 METRES NORTH OF SECKFO
Column Totals		11		1	0	0	1					
No. of Accidents				1	0	0	1					

Total number of accidents listed: 11